

Alison Guth

From: Wenonah Haire [wenonahh@ccppcrafts.com]
Sent: Thursday, July 30, 2009 5:50 PM
To: Alison Guth
Subject: Re: Low Inflow Protocol Trigger

The position that we take is that we are also impartial to a 1 or 2 foot low inflow protocol. Our only concern is that when reservoirs drop low enough to expose archaeological sites we be notified of this and consultation would occur as to whether or not SCE&G should send someone to monitor the site for its protection.

On Thu, Jul 30, 2009 at 5:10 PM, Alison Guth <Alison.Guth@kleinschmidtusa.com> wrote:

Hello Wenonah,

In reference to Alan's voicemail message, below is the wording from the Settlement Agreement on the Low Inflow Protocol. Call us with any questions! Alison

1. OPERATIONS

1.1. Low Inflow Protocol and Operations during Maintenance Activities and Emergency Situations

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Maintenance, Emergency, and Low Inflow Protocol (Appendix A-13).

All signatories concur with all implementation procedures, and practices contained within the Maintenance, Emergency and Low Inflow Protocol (MELIP) Program (Appendix A-13). Although, consensus was not reached on a MELIP reservoir trigger, in the interest of compromise and subject to all conditions contained in the CRSA, the signatories offered to accept either a 1 foot or 2 foot below target elevation trigger for implementation of the MELIP. However, the issue of a MELIP trigger is so important to the signatories that they have expressed a desire for the opportunity to lobby for and provide justification for triggers outside of the 1 to 2 foot alternatives. All signatories understand this will be left unresolved and evaluated by the FERC during its National Environmental Policy Act (NEPA) analysis.

In the interest of moving the FERC relicensing process forward, signatories agree to provide supporting data and/or justifications for either a 1 or 2 foot trigger or their justified alternative trigger to the FERC by September 22, 2009. This information is in addition to any other information that is filed in support of the NEPA process or FERC regulations.

All signatories agree that they will rely on their engineering, scientific and economic data and opinions to support the FERC process. This does not prohibit individuals from signatory organizations from seeking support from outside

parties for their positions.

Those stakeholders endorsing a reservoir trigger level of 1 foot below target elevation include:

- SCE&G
- Lake Murray Association
- Lake Murray Homeowners Coalition
- Capitol City Lake Murray Country
- Lake Murray Chamber of Commerce
- Lake Watch
- Lake Murray Power Squadron
- Lake Murray Docks
- City of Columbia Fire and Rescue

Those stakeholders endorsing a reservoir trigger level of 2 feet below target elevation include:

- American Whitewater
- Midlands Striper Club
- Riverbanks Zoo and Garden
- South Carolina Department of Natural Resources
- American Rivers
- Coastal Conservation League
- South Carolina Wildlife Federation
- National Marine Fisheries Service
- U.S. Fish and Wildlife Service
- City of Columbia Parks and Recreation

Those stakeholders that are impartial to a 1 or 2 foot trigger include:

- South Carolina Department of Archives and History

Alison Guth
Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-462-5620

Fax 803-462-5619

Alison Guth

From: Ed Diebold [ediebold@riverbanks.org]
Sent: Friday, July 24, 2009 8:39 AM
To: Alison Guth
Cc: Satch Krantz
Subject: Settlement Agreement Signature Page - Riverbanks

Hi Alison,



Signature Page -
Riverbanks -2...

I have attached the Settlement Agreement signature page for Riverbanks. There are two versions – one is a .jpg file and the other is a .pdf file. Please use whichever you'd like.

Let me know if there is anything else that you need from us.

Best Wishes,

Ed



Signature Page -
Riverbanks - ...

Ed Diebold, Director of Animal Collections & Conservation
P.O. Box 1060, Columbia, SC 29202-1060
803.978.1122
803.253.6381 FAX
ediebold@riverbanks.org
www.riverbanks.org



image001.jpg (5
KB)

Alison Guth

From: David Price [PRICEDC@dhec.sc.gov]
Sent: Thursday, July 23, 2009 1:53 PM
To: Alison Guth
Cc: Impscommander@yahoo.com
Subject: Re: Attendance to the Settlement Agreement Signing

Alison, Jeff Langlois will be signing for the Lake Murray Power Squadron. He is LMPS's current Squadron Commander. His e-mail address is Impscommander@yahoo.com . I believe you already have his name on the signature page.

Thanks

David

>>> "Alison Guth" <Alison.Guth@KleinschmidtUSA.com> 7/23/2009 10:59 AM

>>> >>>

Hello All,

We are looking forward to tomorrow and it looks like it will be a good turn-out to the Comprehensive Relicensing Settlement Agreement signing. I the following people have RSVP'ed that they will be in attendance:

Alan Stuart
Bret Hoffman
Shane Boring
Jeni Hand
Bill Argentieri
Ray Ammarell
Jim Landreth
David Hancock
Tom Bowles
Robert Yanity
Mike Summer
Bertina Floyd
Charlene Coleman
Don Tyler
Gerrit Jobsis
Randy Mahan
Milton Quattlebaum
Reed Bull
Tim Flach
Ron Scott
Tom Ruple
Joy Downs
Van Hoffman
Beth Trump
Bob Perry
Mark Giffin
Bob Keener
Karen Kustafik
Don Winslow
Ed Diebold
Suzanne Rhodes
Patrick Moore

Many thanks to everyone for their contributions and hard work in this process. We shall see many of you tomorrow.
Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Bob Perry [PerryB@dnr.sc.gov]
Sent: Thursday, July 23, 2009 12:51 PM
To: Alison Guth; Alan Stuart
Cc: RMAHAN@scana.com; BARGENTIERI@scana.com
Subject: RE: Attendance to the Settlement Agreement Signing

Hi Alison,

As you may know DNR is working diligently with SCE&G. It now appears DNR may sign the Settlement Agreement conditional on final approval by Director Frampton next Monday morning when he returns from Prince Edward Island. I have been advised his opportunity to sign has been extended to him for no later than Tuesday morning. Accordingly I am asking you add Vivianne Vejdani, Bill Marshall and Dick Christie the list for this Friday if it is not too late. These staff had worked hard on the task and I know they will appreciate being able to be there. Thanks and we will look forward to seeing you then.

Bob

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, July 23, 2009 11:00 AM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Lee (Skeet) Mills; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-choke.com; Van Hoffman; Vivianne Vejdani; schneider@scetv.org; Wenonah Haire; Jon Quebbeman
Subject: Attendance to the Settlement Agreement Signing

Hello All,

We are looking forward to tomorrow and it looks like it will be a good turn-out to the Comprehensive Relicensing Settlement Agreement signing. The following people have RSVP'ed that they will be in attendance:

Alan Stuart
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Bob Perry
Mark Giffin
Bob Keener
Karen Kustafik
Don Winslow
Ed Diebold
Suzanne Rhodes
Patrick Moore

Many thanks to everyone for their contributions and hard work in this process. We shall see many of you tomorrow. Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Thursday, July 23, 2009 10:19 AM
To: BARGENTIERI@scana.com
Cc: Alan Stuart; Alison Guth; Patrick Moore; Matt Rice
Subject: American Rivers signature page and news release



AR signature
page.pdf (8 KB)

Bill,

Attached is a scan of American Rivers' signature to the Saluda Settlement. I will bring the original with me tomorrow. I am also forwarding a copy of our news release which went out this morning.

See you tomorrow!

Gerrit

Gerrit Jöbsis, American Rivers
Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, SC 29205
(P) 803.771.7114 (F) 803.771.7580
gjobsis@americanrivers.org

Celebrate a summer of free-flowing rivers - read more about our [dam removal successes](http://www.AmericanRivers.org/DamSuccesses) at www.AmericanRivers.org/DamSuccesses

From: Caitlin Jennings
Sent: Thursday, July 23, 2009 9:58 AM
To: Everyone
Subject: News: Landmark hydro agreement will boost safety and health of Saluda and Congaree rivers

Landmark hydro agreement will boost safety and health of Saluda and Congaree rivers

American Rivers signs settlement agreement for Saluda Hydroelectric Project

July 23, 2009

Contacts:

Gerrit Jöbssis, American Rivers, 803-771-7114



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Cai



image002.gif (137 B)

lin Jennings

, American Rivers, 202-243-7023

Columbia, SC: Water quality, public safety, fish and wildlife, and recreation on the Saluda and Congaree rivers will get a major boost thanks to a settlement agreement American Rivers negotiated with the South Carolina Electric and Gas Company (SCE&G) for the Saluda Hydroelectric Project, also known as the Lake Murray Dam. American Rivers and several other partners will sign the agreement at a ceremony tomorrow.

“Our four years of hard work helping to craft this agreement have paid off. The agreement will breathe new life into the Saluda and Congaree Rivers,” said Rebecca Wodder, president of American Rivers. “This agreement is among the best outcomes we have seen for a hydropower project in the Southeast, and it is a real victory for healthy rivers and for local communities.”

The pact is one of the final steps toward obtaining a federal operating license for SCE&G’s Saluda Hydroelectric Project. Over 1.5 miles long and 200 feet high, it was the world’s largest earthen fill dam at the time of its completion in 1929. The dam controls virtually all flow to 10 miles of the lower Saluda River through the heart of the Midlands. The Saluda Dam also controls one-third of the flow in the Congaree River, water that helps nourish extensive floodplain forests in Congaree National Park. On its upstream side, the Saluda Dam creates Lake Murray, a 48,000 acre impoundment located in Richland, Lexington, Saluda, and Newberry counties. Some 30,000 Midlands residents live around the lake. The river supports a trout fishery and is known regionally for its challenging whitewater. The lower Saluda was South Carolina’s first State Scenic River.

Highlights of the hydropower agreement include:

- More natural river flows: SCE&G will operate the dam to support natural, seasonal flows that benefit the health of the river and its web of life.
- Protection and restoration measures for striped bass and other fish, as well as rare freshwater mussels, rocky

shoal spider lilies, and shortnose sturgeon

- Special water releases 51 days per year to support whitewater paddling and wade fishing, and up to 11 days per year to support whitewater rescue training for the Columbia Fire Department and other entities.
- An improved warning system to alert the public of pending hydroelectric generation and posting of the planned generation schedule on the web.
- More public recreation areas downstream of the dam and at Lake Murray.
- A commitment to keep Lake Murray full for a longer period of time which benefits lake recreation and allows SCE&G to release more water downstream.

“The measures we secured in this agreement are coming in the nick of time,” said Wodder. “As the Southeast U.S. experiences increased temperatures, drought, and flooding, communities will need more than ever the clean water and flood protection benefits that healthy rivers provide. By helping nature, we’re actually helping ourselves.”

“We applaud South Carolina Electric and Gas Company for its stewardship of the Saluda and Congaree rivers now, and for the duration of the new operating license.”

The Southeast regional office of American Rivers has been working on a number of fronts to protect and restore the Saluda and Congaree rivers for the people of South Carolina. In addition to negotiating the landmark hydropower agreement, American Rivers named an upstream section of the Saluda River one of America’s Most Endangered Rivers for 2009 because of the threat of sewage pollution, an issue unrelated to dam operations. American Rivers also initiated the Congaree River Blue Trail, the first water trail in South Carolina to be designated a National Recreation Trail.

For more information about the Saluda Hydro Project visit www.hydroreform.org/projects/saluda-p-516.

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American Rivers is the leading conservation organization fighting for healthy rivers so communities can thrive. American Rivers protects and restores America's rivers for the benefit of people, wildlife and nature. Founded in 1973, American Rivers has more than 65,000 members and supporters, with offices in Washington, DC and nationwide.

Caitlin Jennings

Communications Associate

cjennings@americanrivers.org

202.243.7023

American Rivers

Celebrate a summer of free-flowing rivers - read more about our **dam removal successes** at www.AmericanRivers.org/DamSuccesses

Alison Guth

From: Dobrasko, Rebekah [Dobrasko@SCDAH.STATE.SC.US]
Sent: Wednesday, July 22, 2009 11:35 AM
To: Alison Guth
Cc: BARGENTIERI@scana.com
Subject: RE: Settlement Agreement Signatory Page

Alison,

My scanner is acting up, and the fax machine on your end is not picking up. So, I have dropped the hard copy of this in the mail; just wanted to let you know!

Rebekah

Rebekah Dobrasko, Supervisor
Compliance, Tax Incentives, and Survey

State Historic Preservation Office
South Carolina Department of Archives and History
8301 Parklane Road
Columbia, SC 29223

803.896.6183 [telephone]
803.896.6167 [fax]

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, July 16, 2009 3:56 PM
To: Dobrasko, Rebekah
Cc: BARGENTIERI@scana.com
Subject: Settlement Agreement Signatory Page

Hello Rebekah,

As discussed yesterday, attached is a PDF of your signature page for the Settlement Agreement. Please print this off, sign, email me a scanned copy before Friday and just drop the original hard copy in the mail to me at the address below. Feel free to call or email if you have any questions. Thanks! Alison

<<SHPO Signing Page.pdf>>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Wednesday, July 22, 2009 8:14 AM
To: Alison Guth
Subject: Re: Updated: Settlement Agreement Signing



Prescott_Brownell.v
cf (483 B)

Good morning Alison,

I will not attend the meeting on Friday after all. I have been informed that NOAA Fisheries will elect not to sign the settlement agreement. However, we are drafting a letter of support for instream flow and water quality conditions, and the sturgeon program included in the settlement. The letter will be addressed to SCE&G and all stakeholders.

Have a good meeting on Friday!

Prescott

Alison Guth wrote:

When: Friday, July 24, 2009 11:00 AM-1:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello Everyone,

Please note that the time of the Settlement Agreement signing has been updated to 11:00 am through 1:00 pm on July 24th. As Alan noted yesterday, everyone is encouraged to attend, whether signing or not signing. However, I do need a head-count by Monday morning at the latest in order to coordinate lunch. Please RSVP for yourself, and anyone who may be attending with you, if you have not done so. Thanks, Alison

Previous Message:

Hello Everyone,

Although we have discussed this previously, I wanted to send out an Outlook Reminder for July 24th for the signing of the Settlement Agreement. I will keep you posted as to the exact times of the meeting. Thanks, Alison

Alison Guth

From: Elymay2@aol.com
Sent: Tuesday, July 21, 2009 5:43 PM
To: Alison Guth
Subject: Re: Signatory Llist

Alison

I thought I sent this to you last week. I just found it in my to be sent box. I think Dave called and told you this week to put me on the list Friday. However as my previous email discussed. I am hearing that the signing is being delayed for some. Is this true?.

Last Week

I am having a little confusion. I see we are listed as signees to the list. I am not sure how you got the information that we were signing but I think that has not been decided yet.

Also I am not sure what the mechanism is to describe our organization so I am writing it here. I tried to call you and there seems to be some confusion so thought this was the best method.

The Lake Murray Association Inc. "The Voice of Lake Murray" is a 501-C3 organization chartered in 1997 to represent the "users" of Lake Murray. The LMA is an educational organization as well as a proactive group representing approximately 4000 people currently. Over the 15 years of its organization LMA has represented over 10,000 people who used the lake. Lake Murray is an urban lake and the residents as well as the users are often relocated thus the fluctuation in membership. LMA produces a 12 page newsletter 4 times per year to its membership as well as holds 4 public meetings annually in each of the 4 counties that surrounds the lake. The association is active in water testing, safety education, water quality education, nuisance aquatic weed control, as well as tremendous concern for high water levels to enhance recreation and ensure safety particularly during the spring, summer and fall season.

A Good Credit Score is 700 or Above. [See yours in just 2 easy steps!](#)

Alison Guth

From: Alison Guth
Sent: Tuesday, July 21, 2009 4:54 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Draft meeting notes

Hello All,

Attached are the draft meeting notes from June 17th and July 15th. Please review and have any comments back to me by next Tuesday. Thanks! Alison



2009-6-17 draft
Meeting Minute...



2009-7-15 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Tuesday, July 21, 2009 11:34 AM
To: Alison Guth
Subject: FW: Signing Documents



Sig for Kleinschmidt
Associate...

Hi Alison,

Signature page attached, hard copy in the mail.

See you Friday,

Patrick

Internal Virus Database is out-of-date.
Checked by AVG.
Version: 7.5.560 / Virus Database: 270.12.11/2089 - Release Date: 4/30/2009 5:53 PM

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Subject: June 12 Meeting notes

Hello All,

Attached are the draft meeting notes from the June 12 Water Quality Settlement Agreement Meeting. Please have any comments back to me by next Tuesday. Thanks, Alison



2009-6-12 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Bob Perry [PerryB@dnr.sc.gov]
Sent: Monday, July 20, 2009 2:02 PM
To: Alison Guth
Cc: Dick Christie; Vivianne Vejdani; Bill Marshall; Alan Stuart
Subject: RE: Updated: Settlement Agreement Signing

Alison, I regret to advise that DNR staff will not be attending this Friday. Thank you, Bob

Alan, please call me later today if you have a chance. Thanks. 734-3766

-----Original Appointment-----

From: Bob Perry
Sent: Thursday, July 16, 2009 3:27 PM
To: 'Alison Guth'
Cc: 'Dick Christie'; Vivianne Vejdani; Bill Marshall
Subject: Accepted: Updated: Settlement Agreement Signing
When: Friday, July 24, 2009 11:00 AM-1:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

Alison, I am responding in the affirmative and request that I bring along DNR Chief-of-Staff Don Winslow as Director Frampton will be in Canada attending a meeting. Thanks, Bob

Alison Guth

From: Alison Guth
Sent: Monday, July 20, 2009 11:43 AM
To: 'Patrick Moore'
Subject: RE: Signing Documents

Hey Patrick,

Hope you are doing well. I have attached the signatory page for CCL. If you would have Dana sign it and then scan it and email it back to me, and then drop the hard copy in the mail to me at the below address. Other than Settlement Agreement and signatory requirements at the beginning of the Settlement, there are no other requirements that I know of. Thanks, Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

-----Original Message-----

From: Patrick Moore [mailto:PatrickM@scccl.org]
Sent: Monday, July 20, 2009 10:34 AM
To: Alison Guth
Subject: Signing Documents

Hi Alison,

Happy signature week! I was wondering what all you need from me before Friday. The signature page and a signing statement? Are the requirements for these documents laid out anywhere?

Thanks,

Patrick

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.560 / Virus Database: 270.12.11/2089 - Release Date: 4/30/2009 5:53 PM

Alison Guth

From: Alison Guth
Sent: Thursday, July 16, 2009 3:56 PM
To: 'Rebekah Dobrasko'
Cc: BARGENTIERI@scana.com
Subject: Settlement Agreement Signatory Page

Hello Rebekah,

As discussed yesterday, attached is a PDF of your signature page for the Settlement Agreement. Please print this off, sign, email me a scanned copy before Friday and just drop the original hard copy in the mail to me at the address below. Feel free to call or email if you have any questions. Thanks! Alison



SHPO Signing
Page.pdf (10 KB)

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Settlement Agreement Signing
Location: Lake Murray Training Center

Start: Fri 7/24/2009 11:00 AM
End: Fri 7/24/2009 1:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: All RCG & TWC Members

Optional Attendees: 'Tim Vinson'; 'Scott, Ron'; 'Vivianne Vejdani'; 'Dobrasko, Rebekah'; Shane Boring; 'MAHAN, RANDOLPH R'; 'Matt Rice'; 'BICKLEY, RHETT'; Dave Anderson; 'Larry Turner'; 'ARGENTIERI, WILLIAM R'; 'James Glover'; 'QUATTLEBAUM, MILTON'; 'Mark Giffin'; Alan Stuart; 'BOOZER, THOMAS C'; 'Gina Kirkland'; 'STUTTS, BRANDON G'; 'Tony Bebbber'; 'AMMARELL, RAYMOND R'; 'Amy Bennett'; BOWLES, THOMAS M

Hello Everyone,

Please note that the time of the Settlement Agreement signing has been updated to 11:00 am through 1:00 pm on July 24th. As Alan noted yesterday, everyone is encouraged to attend, whether signing or not signing. However, I do need a head-count by Monday morning at the latest in order to coordinate lunch. Please RSVP for yourself, and anyone who may be attending with you, if you have not done so. Thanks, Alison

Previous Message:

Hello Everyone,

Although we have discussed this previously, I wanted to send out an Outlook Reminder for July 24th for the signing of the Settlement Agreement. I will keep you posted as to the exact times of the meeting. Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Tuesday, July 14, 2009 3:24 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: 6-11 meeting notes

Hello All,

Attached are the meeting notes from the 6-11-09 Fish and Wildlife Settlement Agreement Meeting. Please provide any comments on these notes back to me by July 28. Thanks, Alison



2009-6-11 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Monday, July 13, 2009 10:23 AM
To: Alison Guth; Gerrit Jobsis (American Rivers)
Subject: RE: 2' LIP

Hi Alison,

CCL endorses a 2 foot trigger. Thanks for all your hard work.

Patrick

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Friday, July 10, 2009 3:21 PM
To: Gerrit Jobsis (American Rivers); Patrick Moore
Subject: 2' LIP

Hey Gerrit,

American Rivers is listed under the entities endorsing the 2' trigger. I don't have CCL on there yet because I don't believe I received an email back noting to add them, but that is something we can add together on the 15th. Thanks! Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Internal Virus Database is out-of-date.
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Internal Virus Database is out-of-date.
Checked by AVG.
Version: 7.5.560 / Virus Database: 270.12.11/2089 - Release Date: 4/30/2009 5:53 PM

Alison Guth

From: Miriam Atria [miriam@lakemurraycountry.com]
Sent: Friday, July 10, 2009 2:24 PM
To: Alison Guth
Subject: RE: Signatory list

Our organization's name is Capital City/Lake Murray Country Regional Tourism Board and Miriam Atria, President CEO will be signed on the "1 foot" wording!

Miriam Atria

President/CEO

(803) 781-5940 or 781-2105

(803) 781-6197 (Fax)

miriam@lakemurraycountry.com



image001.jpg (2
KB)

...A Regional Tourism District

Promoting Columbia, Lexington, Newberry, Richland and Saluda



image002.jpg (1
KB)

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Tuesday, June 23, 2009 1:43 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman;

Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Signatory list

Hello All,

As we are finishing up with the final formatting of the Settlement Agreement, I wanted to send out the list of signatories that we currently have on the Settlement Agreement. If you do not see your organization/entity on the list and your organization/entity is planning on signing the agreement, please let me know and I will add them. I just want to make sure that I have not missed anyone. Also, if you have not let me know who will be signing for your organization (listed in bold), please do so. Thanks! Alison

American Rivers:
Date: _____

Signature: _____

Rebecca R. Wodder,

President

American Whitewater:
Date: _____

Signature: _____

N. Charlene Coleman

Adventure Carolina:
Date: _____

Signature: _____

Richard B. Mikell

Capitol City/Lake Murray Country Tourism:
_____ **Date:** _____

Signature:

Yet to be determined

Catawba Indian Nation:
Date: _____

Signature: _____

Yet to be determined

City of Columbia Fire and Rescue:
_____ Date: _____

Signature:

Yet to be determined

City of Columbia Parks and Recreation:
_____ Date: _____

Signature:

Yet to be determined

Coastal Conservation League:
Date: _____

Signature: _____

Dana Beach,
Executive Director

Eastern Band of Cherokee Indians:
_____ Date: _____

Signature:

The Honorable Principal Chief Michell Hicks

Lake Murray Association:
Date: _____

Signature: _____

Dave Landis,
President

Lake Murray Docks, Inc.:
Date: _____

Signature: _____

James L. Leslie, Jr.

President

Lake Murray Homeowners Coalition:
_____ **Date:** _____

Signature: _____

Yet to be determined

Lake Murray Power Squadron:
Date: _____

Signature: _____

Jeff Langlois

Commander

Lake Watch:
Date: _____

Signature: _____

Yet to be determined

League of Women Voters:
Date: _____

Signature: _____

Yet to be determined

Lexington County:
Date: _____

Signature: _____

Yet to be determined

Midlands Striper Club:

Signature: _____ **Date:** _____

B. Reed Bull, Jr.

National Park Service:
Date: _____

Signature: _____

Yet to be determined

NOAA, National Marine Fisheries Service, Southeast Region: Signature:
_____ Date: _____

Dr. Roy E. Crabtree
Regional Administrator

Newberry County:
Date: _____

Signature: _____

Yet to be determined

Riverbanks Zoo and Garden Signature:
_____ Date: _____

Ed Diebold
Director of Animal Collections & Conservation

Saluda County:

Signature: _____ **Date:** _____

Yet to be determined

Saluda River Chapter of Trout Unlimited: Signature:
_____ Date: _____

Michael G. Waddell

South Carolina Council Trout Unlimited:
Date: _____

Signature: _____

Malcolm W. Leaphart Jr.
Relicensing Coordinator

South Carolina Department of Archives and History:
_____ Date: _____

Signature:

Elizabeth M. Johnson

Deputy State Historic Preservation Officer

South Carolina Department of Natural Resources:
_____ Date: _____

Signature:

John E. Frampton

Director

South Carolina Electric & Gas Company:
_____ Date: _____

Signature:

James M. Landreth

Vice President – Fossil & Hydro Operations

South Carolina Wildlife Federation:
_____ Date: _____

Signature:

Ben Gregg

SCWF Executive Director

U.S. Fish and Wildlife Service:
Date: _____

Signature: _____

Sam Hamilton,
Regional Director

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

_____ Information from ESET NOD32 Antivirus, version of virus signature database 4181 (20090623)

The message was checked by ESET NOD32 Antivirus.

<http://www.eset.com>

_____ Information from ESET NOD32 Antivirus, version of virus signature database 4232
(20090710) _____

The message was checked by ESET NOD32 Antivirus.

<http://www.eset.com>

Alison Guth

From: Alison Guth
Sent: Friday, July 10, 2009 12:01 PM
To: 'Patrick Moore'
Subject: RE: Documents for review on the 15th

Hey Patrick,

Appendix A-11, the Flow Release Program, is included within the Word Document. Let me know if you still have trouble finding it. ~ Alison

-----Original Message-----

From: Patrick Moore [mailto:PatrickM@scccl.org]
Sent: Friday, July 10, 2009 11:50 AM
To: Alison Guth
Cc: Gerrit Jobsis
Subject: RE: Documents for review on the 15th

Hi Alison,

I am looking for A-11 as we review the final agreement but don't see it on the website. Could you point me in the right direction?

Thanks,

Patrick Moore

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Wednesday, July 08, 2009 4:54 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam

Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Documents for review on the 15th

Hello All,

Attached is the link to the Settlement Agreement webpage which includes the files for review at the July 15th meeting. These documents contain both editorial changes and changes in response to stakeholder requests. Please shoot me an email if you have any questions. Thanks! Alison

<http://www.saludahydrorellicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Internal Virus Database is out-of-date.

Checked by AVG.

Version: 7.5.560 / Virus Database: 270.12.11/2089 - Release Date: 4/30/2009 5:53 PM

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Checked by AVG.

Version: 7.5.560 / Virus Database: 270.12.11/2089 - Release Date: 4/30/2009 5:53 PM

Alison Guth

From: Alison Guth
Sent: Thursday, July 09, 2009 9:15 AM
To: 'Suzanne Rhodes'
Cc: Shane Boring; Alan Stuart; BARGENTIERI@scana.com
Subject: RE: Documents for review on the 15th

Hello Susan,

Nothing has been changed within that table since it was first sent out, other than un-highlighting those three birds which were highlighted for some unknown reason. Purple Martin is still discussed earlier within the brochure. Thanks, Alison

-----Original Message-----

From: Suzanne Rhodes [mailto:suzrhodes@juno.com]
Sent: Wednesday, July 08, 2009 8:29 PM
To: Alison Guth
Subject: Re: Documents for review on the 15th

I think Purple Martins used to be on page A-10-8, or the equivalent in the more recent documents?

HIGHEST CONSERVATION CONCERN

HIGH CONSERVATION CONCERN

MODERATE CONSERVATION CONCERN

Birds

Birds

Birds

American Coot

Acadian Flycatcher

Chestnut-sided Warbler

American Kestral

Bald Eagle

Common Loon

Black Duck

Black-throated Blue Warbler

Dark-eyed Junco

Black-throated Green Warbler

Blue-winged Teal

Golden-crowned Kinglet

Brown-headed Nuthatch

Forster's Tern

Great Blue Heron

Common Loon

Redhead

Great Egret

Eastern Meadowlark

Spotted Sandpiper

Greater Yellowlegs

Eastern Wood Peewee

Fish

Green Heron

Field Sparrow

Carolina Darter

Horned Grebe

Kentucky Warbler

Mussels

Louisiana Waterthrush

Lesser Scaup

Rayed Pink Fatmucket

Pectoral Sandpiper

Lesser Yellowlegs

Red-breasted Nuthatch

Little Blue Heron

Ringneck

Loggerhead Shrike

Scarlet Tanager

Mallard

Wood Duck

Painted Bunting

Fish

Pied-billed Grebe

Flat Bullhead

Prairie Warbler

Snail Bullhead

Solitary Sandpiper

Rosyface Chub

Swaison's Warbler

V-lip Redhorse

Western Sandpiper

White Catfish

Wood Stork

Mussels

Wood Thrush

Atlantic Spike

Fish

Carolina Lance

American Eel

Carolina Slabshell

Blueback Herring

Eastern Creekshell

Mussels

Variable Spike

Yellow Lampmussel

Savannah Liliput

Creeper

----- Original Message -----

Hello All,

Attached is the link to the Settlement Agreement webpage which includes the files for review at the July 15th meeting. These documents contain both editorial changes and changes in response to stakeholder requests. Please shoot me an email if you have any questions. Thanks! Alison

<http://www.saludahydrorellicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Suzanne Rhodes [suzrhodes@juno.com]
Sent: Wednesday, July 08, 2009 8:29 PM
To: Alison Guth
Subject: Re: Documents for review on the 15th

I think Purple Martins used to be on page A-10-8, or the equivalent in the more recent documents?

HIGHEST CONSERVATION CONCERN

HIGH CONSERVATION CONCERN

MODERATE CONSERVATION CONCERN

Birds

Birds

Birds

American Coot

Acadian Flycatcher

Chestnut-sided Warbler

American Kestrel

Bald Eagle

Common Loon

Black Duck

Black-throated Blue Warbler

Dark-eyed Junco

Black-throated Green Warbler

Blue-winged Teal

Golden-crowned Kinglet

Brown-headed Nuthatch

Forster's Tern

Great Blue Heron

Common Loon

Redhead

Great Egret

Eastern Meadowlark

Spotted Sandpiper

Greater Yellowlegs

Eastern Wood Peewee

Fish

Green Heron

Field Sparrow

Carolina Darter

Horned Grebe

Kentucky Warbler

Mussels

Louisiana Waterthrush

Lesser Scaup

Rayed Pink Fatmucket

Pectoral Sandpiper

Lesser Yellowlegs

Red-breasted Nuthatch

Little Blue Heron

Ringneck

Loggerhead Shrike

Scarlet Tanager

Mallard

Wood Duck

Painted Bunting

Fish

Pied-billed Grebe

Flat Bullhead

Prairie Warbler

Snail Bullhead

Solitary Sandpiper

Rosyface Chub

Swaison's Warbler

V-lip Redhorse

Western Sandpiper

White Catfish

Wood Stork

Mussels

Wood Thrush

Atlantic Spike

Fish

Carolina Lance

American Eel

Carolina Slabshell

Blueback Herring

Eastern Creekshell

Mussels

Variable Spike

Yellow Lampmussel

Savannah Liliput

Creeper

----- Original Message -----

Hello All,

Attached is the link to the Settlement Agreement webpage which includes the files for review at the July 15th meeting. These documents contain both editorial changes and changes in response to stakeholder requests. Please shoot me an

email if you have any questions. Thanks! Alison

<http://www.saludahydrolicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Settlement Agreement Meeting
Location: Lake Murray Training Center

Start: Wed 7/15/2009 9:30 AM
End: Wed 7/15/2009 3:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: All RCG & TWC Members

Optional Attendees: Alan Stuart; 'QUATTLEBAUM, MILTON'; 'BICKLEY, RHETT'; Dave Anderson; Shane Boring; 'Gina Kirkland'; 'Gerrit Jobsis'; 'tpowers@newberrycounty.net'; 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; 'Tim Vinson'; 'Larry Turner'; 'SUMMER, STEPHEN E'; 'Dobrasko, Rebekah'; 'Kustafik, Karen'; 'Bob Perry'; 'SUMMER, MICHAEL C'; 'James %22Will%22 Dillman'; 'Vivianne Vejdani'; 'James Glover'; 'Matt Rice'; 'BOOZER, THOMAS C'; 'Mark Giffin'; 'Bill Marshall'; 'HOFFMAN, VAN B'; 'AMMARELL, RAYMOND R'; 'David Price'; 'Tony Bebber'; Amy Bennett

Hello All,

Just a reminder of the Settlement Agreement meeting scheduled for July 15th at 9:30. If you have not already RSVP'ed for this meeting, please do so. We will be reviewing a few editorial changes to the Settlement Agreement documents that I will be sending out for your review this afternoon. We will also be reviewing any other edits that organizations may have to the documents at the meeting. Thanks, Alison

Previous Message:

Hello All,

We will be holding a meeting to discuss any last minute revisions to the Settlement Agreement on Wednesday, July 15th. This meeting will begin at 9:30 and will be held at the Lake Murray training center. If you recall, this meeting was originally scheduled for July 14th but was changed due to a lack of meeting space. Please RSVP for this meeting a week prior to the event date. Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Tuesday, July 07, 2009 8:54 AM
To: 'Jeff_Duncan@nps.gov'
Subject: RE: Final Settlement Agreement

Hello Jeff,

As of now, the 24th of July is the date that we need the signature (either sent in, or signed in person) as agreed upon by the Settlement Agreement group discussions. However, we will discuss further at the July 15th Settlement Agreement meeting the potential for signing after that date.

Thanks, Alison

-----Original Message-----

From: Jeff_Duncan@nps.gov [mailto:Jeff_Duncan@nps.gov]
Sent: Monday, June 29, 2009 2:58 PM
To: Alison Guth
Cc: Bill_Hulslander@nps.gov
Subject: Re: Final Settlement Agreement

Alison--

Is the July 24 meeting the only time and place at which the settlement agreement can be signed? If NPS opts to sign the agreement, there may be additional hoops we have to jump through depending upon who signs, who needs to be briefed, legal review, etc. that will likely take longer.

Thanks, Jeff

Jeffrey R. Duncan, Ph.D.
Southeastern Rivers Program
National Park Service
175 Hamm Rd. Suite C, Chattanooga, TN 37405
Ph. (423) 987-6127 Fax. (888) 854-2849

"Alison Guth"
<Alison.Guth@KleinschmidtUSA.com>
06/24/2009 04:56 PM AST
To
<DILLMAJW@dhec.sc.gov>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>,"

"Bill East" <billeast@sc.rr.com>,
 "Bill Hulslander"
 <bill_hulslander@nps.gov>, "Bill
 Marshall" <marshallb@dnr.sc.gov>,
 "Bill Mathias" <bill25@sc.rr.com>,
 "Bob Perry " <perryb@dnr.sc.gov>,
 <bseibels@yahoo.com>, "Brandon
 Stutts " <bstutts@scana.com>, "Bret
 Hoffman"
 <bret.hoffman@kleinschmidtusa.com>,
 "Brett Bursey"
 <network@scpronet.com>,
 <btrump@scana.com>, "Bud Badr"
 <badrb@dnr.sc.gov>, "Buddy Baker "
 <BakerB@dnr.sc.gov>, "Chad Altman"
 <altmankc@dhec.sc.gov>, "Charlene
 Coleman" <cheetahrk@yahoo.com>,
 "Charles Floyd"
 <jcharlesfloyd@sc.rr.com>, "Charlie
 Compton" <ccompton@lex-co.com>,
 "Charlie Rentz"
 <flyhotair@greenwood.net>, "Chris
 Page" <pagec@dnr.sc.gov>,
 <ccantley@scdah.state.sc.us>,
 "Chuck Hightower "
 <HIGHTOCW@dhec.sc.gov>, "Daniel
 Tufford" <tufford@sc.edu>, "Dave
 Anderson"
 <dave.anderson@kleinschmidtusa.com>
 , "Dave Landis"
 <dlandis1@sc.rr.com>, "David Allen"
 <david.allen@scbar.org >, "David
 Hancock" <dhancock@scana.com>,
 "David Jones" <djones@scprt.com>,
 "David Price"
 <pricedc@dhec.sc.gov>, "Dee Dee
 Simmons "
 <dsimmons@thefittscompany.com>,
 <dchristie@comporium.net>, "Don
 Tyler" <tyle6544@bellsouth.net>,
 "Donald Eng" <dengff@aol.com>, "Ed
 Diebold" <ediebold@riverbanks.org>,
 "Edward Schnepel"
 <eschnepel@sc.rr.com>,
 <aregaf@dnr.sc.gov>, "George Duke"
 <kayakduke@bellsouth.net>, "Gerrit
 Jobsis \"(American Rivers)\"
 <gjobsis@americanrivers.org>, "Gina
 Kirkland" <kirklagl@dhec.sc.gov>,
 "Guy Jones" <guyjones@sc.rr.com>,
 "Hal Beard" <beardh@dnr.sc.gov>,
 "Hank McKellar"
 <McKellarH@dnr.sc.gov>, "J.
 Hamilton Hagood"
 <jhamilton@scana.com>, "James
 Leslie " <jlesliejr@bellsouth.net>,
 "Jay Schabacher "
 <Jayschab@aol.com>, "Jeff Duncan"
 <jeff_duncan@nps.gov>,
 <pricej@biol.sc.edu>, "Jim
 Devereaux" <jdevereaux@scana.com>,
 "Jim Glover"
 <GloverJB@dhec.sc.gov>, "Jim Ruane

" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins "
<jbhuggins@lexhealth.org>, "John and Rob Altenberg"
<seatowlakemurray@seatow.com>, <johned44@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik"
<kakustafik@columbiasc.net>, "Ken Styer " <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey"
<dvklmass@bellsouth.net >, <turnerle@dhec.sc.gov>, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester "
<linda_lester11@yahoo.com>, "Linda Schneider " <wendy0815@sc.rr.com>, <mwleapjr@att.net>, <mdavis@scprt.com>, <giffinma@dhec.sc.gov>, "Matthew Rice " <mrice@americanrivers.org>, "Michael Murrell"
<mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, <msummer@scana.com>, "Mike Waddell" <mwaddell@esri.sc.edu>, <mquattlebaum@scana.com>, "Miriam Atria"
<miriam@lakemurraycountry.com>, "Norm Nicholson"
<larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore "
<PatrickM@scccl.org>, <LakeMurrayLOA@windstream.net>, "Prescott Brownell"
<prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell"
<rammarell@scana.com>, "Rebekah Dobrasko"
<dobrasko@scdah.state.sc.us>, <rull@davisfloyd.com>, <Rparsons12@windstream.net>, "Rhett Bickley" <rbickley@lex-co.com>, <rkidder1@sc.rr.com>, "Richard Mikell"
<adventurec@mindspring.com>, <SKEENER@sc.rr.com>, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker"
<royparker38@earthlink.net>,"

<ryanity@scana.com>, "S padget"
<s.padget@saludacounty.sc.gov>,
"Sandra Reinhardt"
<sandrar@www.ccppcrafts.com>, "Sean
Norris" <snorris@trcsolutions.com>,
"Shane Boring"
<shane.boring@kleinschmidtusa.com>,
"Sheri Armstrong "
<sarmstrong@lex-co.com>, "Skeet
Mills " <MillsL@dnr.sc.gov>,
<lakewatchman@yahoo.com>, "Steve
Summer" <summer@scana.com>,
"Suzanne Rhodes"
<suzrhodes@juno.com>, "Theresa
Powers"
<tpowers@newberrycounty.net>,
"Theresa Thom"
<theresa_thom@nps.gov>, "Tim
Vinson" <vinsont@dnr.sc.gov>,
<tbowles@scana.com>, "Tom Ruple"
<truple@sc.rr.com>, "Tommy Boozer"
<tboozer@scana.com>, "Tony Bebbber"
<tbebbber@scprt.com>,
<tylehowe@nc-chokekee.com>, "Van
Hoffman" <vhoffman@scana.com>,
"Vivianne Vejdani "
<vejdani@dnr.sc.gov>,
<schneider@scetv.org>, "Wenonah
Haire"
<wenonahh@www.ccppcrafts.com>, "Jon
Quebbeman"
<Jon.Quebbeman@KleinschmidtUSA.com>
cc

Subject
Final Settlement Agreement

Good Morning Everyone,

Attached below is the link to three versions of the Final Settlement Agreement Document for consideration and potential signing:

a complete PDF version,
a Word version track-change format,
and a Word version with all tracked changes accepted.

Since 6/17/09, when the draft Settlement document was last distributed, there have been a few proposed changes made by both stakeholders and SCE&G. Many of these are for formatting or consistency, but are shown in the track-changed versions and can be discussed further in the meeting on July 15th.

Please note that the Word versions of this document do not contain all of the appendices, as some of the appendices are in PDF format (such as the recreation plan). However, the PDF version of the Settlement does contain all of the appendices.

Note that the Mussel Plan is not included as we are awaiting revisions to this document from USFWS and DNR. This document will be sent under separate cover ASAP.

Please send me any comments that you may have on the Settlement by July 13 and be prepared to discuss them on July 15th. Thanks, Alison

<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, July 02, 2009 4:58 PM
To: Alison Guth; 'Bob Perry '; 'Tommy Boozer'; 'Tony Bebber'; 'dchristie@comporium.net'; 'Suzanne Rhodes'; Alan Stuart; RMAHAN@scana.com; 'msummer@scana.com'; BARGENTIERI@scana.com; Vivianne Vejdani ; Alan Stuart; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Hand; Karen Kustafik; Malcolm Leaphart (mwleapjr@att.net); Matthew Rice ; Mike Waddell; Patrick Moore ; Randy Mahan
Subject: 5-19-09 Notes

Hello All,

Attached are the meeting notes from the May 19th morning and afternoon meetings. Please provide any comments back to me by July 16. Thanks and happy 4th! Alison



2009-5-19 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, June 30, 2009 3:08 PM
To: 'Bob Perry '; 'Tommy Boozer'; 'Tony Bebbler'; 'dchristie@comporium.net'; 'Suzanne Rhodes'; Alan Stuart; RMAHAN@scana.com; 'msummer@scana.com'; BARGENTIERI@scana.com; Alison Guth
Subject: 4-20-09 meeting notes

Hello All,

Attached are the draft meeting notes from the 4-20-09 meeting. Please have any comments/additions back to me by July 14th. Thanks! Alison



2009-4-20 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Settlement Agreement Signing
Location: Lake Murray Training Center

Start: Fri 7/24/2009 11:00 AM
End: Fri 7/24/2009 1:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: All RCG & TWC Members

Optional Attendees: 'Tim Vinson'; 'Scott, Ron'; 'Vivianne Vejdani'; 'Dobrasko, Rebekah'; Shane Boring; 'MAHAN, RANDOLPH R'; 'Matt Rice'; 'BICKLEY, RHETT'; Dave Anderson; 'Larry Turner'; 'ARGENTIERI, WILLIAM R'; 'James Glover'; 'QUATTLEBAUM, MILTON'; 'Mark Giffin'; Alan Stuart; 'BOOZER, THOMAS C'; 'Gina Kirkland'; 'STUTTS, BRANDON G'; 'Tony Bebbber'; 'AMMARELL, RAYMOND R'; 'Amy Bennett'; BOWLES, THOMAS M

Hello Everyone,

Please note that the time of the Settlement Agreement signing has been updated to 11:00 am through 1:00 pm on July 24th. As Alan noted yesterday, everyone is encouraged to attend, whether signing or not signing. However, I do need a head-count by Monday morning at the latest in order to coordinate lunch. Please RSVP for yourself, and anyone who may be attending with you, if you have not done so. Thanks, Alison

Previous Message:

Hello Everyone,

Although we have discussed this previously, I wanted to send out an Outlook Reminder for July 24th for the signing of the Settlement Agreement. I will keep you posted as to the exact times of the meeting. Thanks, Alison

Alison Guth

From: Jeff Langlois [Impscommander@yahoo.com]
Sent: Friday, June 26, 2009 9:27 AM
To: Alison Guth

Alison,

I am the present commander of Lake Murray Power Squadron and I will be your contact person and the signee on the agreement. Our stand now is approve the 1' drop before we all must feel the pain. Please forward emails to my squadron email address.

Jeff Langlois
Commander

Impscommander@yahoo.com

Alison Guth

From: Alison Guth
Sent: Wednesday, June 24, 2009 4:57 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Final Settlement Agreement

Good Morning Everyone,

Attached below is the link to three versions of the Final Settlement Agreement Document for consideration and potential signing:

a complete PDF version,
a Word version track-change format,
and a Word version with all tracked changes accepted.

Since 6/17/09, when the draft Settlement document was last distributed, there have been a few proposed changes made by both stakeholders and SCE&G. Many of these are for formatting or consistency, but are shown in the track-changed versions and can be discussed further in the meeting on July 15th.

Please note that the Word versions of this document do not contain all of the appendices, as some of the appendices are in PDF format (such as the recreation plan). However, the PDF version of the Settlement does contain all of the appendices.

Note that the Mussel Plan is not included as we are awaiting revisions to this document from USFWS and DNR. This document will be sent under separate cover ASAP.

Please send me any comments that you may have on the Settlement by July 13 and be prepared to discuss them on July 15th. Thanks, Alison

<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Wednesday, June 24, 2009 3:17 PM
To: Alison Guth
Subject: Re: Mussel plan



ecblank.gif (109 B)

I do have suggested revisions to the plan. I am coordinating with DNR. I would rather you left it out of today's version and just left a place holder while I am waiting to hear from DNR. It looks like we can have it finalized before Friday.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson



pic21538.gif (1 KB)

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

06/24/2009 03:05 PM



graycol.gif (169 B)

To

"Amanda Hill" <amanda_hill@fws.gov>

cc

<BARGENTIERI@scana.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>

Subject

Mussel plan

Hey Amanda,

Bill and Alan let me know that you were working on the mussel plan. I was going to include the draft as proposed in the copy of the Settlement that I sent out today. However, if you have the version that you are working on before 4:00 I may be able to include it in the Settlement. Otherwise, we will just send it out separately and discuss it more on the 15th. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, June 24, 2009 3:05 PM
To: 'Amanda Hill'
Cc: BARGENTIERI@scana.com; Alan Stuart
Subject: Mussel plan

Hey Amanda,

Bill and Alan let me know that you were working on the mussel plan. I was going to include the draft as proposed in the copy of the Settlement that I sent out today. However, if you have the version that you are working on before 4:00 I may be able to include it in the Settlement. Otherwise, we will just send it out separately and discuss it more on the 15th.
Thanks, Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Bertina Floyd [BertFloyd@sc.rr.com]
Sent: Wednesday, June 24, 2009 11:25 AM
To: Alison Guth
Subject: Re: Signatory list

Alison,

The Lake Murray Homeowners Coalition is a potential signatory and will not make our final decision to sign until the final settlement is reviewed. The agreement would be signed on behalf of the organization as indicated below:

Bertina Floyd, Chairperson

Regards,

Bert

----- Original Message -----

From: [Alison Guth](#)
To: [Bertina Floyd](#)
Sent: Tuesday, June 23, 2009 9:22 PM
Subject: FW: Signatory list

-----Original Message-----

From: Alison Guth
Sent: Tuesday, June 23, 2009 1:43 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester; Linda Schneider; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong; Skeet Mills; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani; Wendy Schneider (schneider@scetv.org); Wenonah Haire; Jon Quebbeman

Subject: Signatory list

Hello All,

As we are finishing up with the final formatting of the Settlement Agreement, I wanted to send out the list of signatories that we currently have on the Settlement Agreement. If you do not see your organization/entity on the list and your organization/entity is planning on signing the agreement, please let me know and I will add them. I just want to make sure that I have not missed anyone. Also, if you have not let me know who will be signing for your

organization (listed in bold), please do so. Thanks! Alison

American Rivers:
Date: _____

Signature: _____

Rebecca R. Wodder,
President

American Whitewater:
Date: _____

Signature: _____

N. Charlene Coleman

Adventure Carolina:
Date: _____

Signature: _____

Richard B. Mikell

Capitol City/Lake Murray Country Tourism:
_____ **Date:** _____

Signature:

Yet to be determined

Catawba Indian Nation:
Date: _____

Signature: _____

Yet to be determined

City of Columbia Fire and Rescue:
_____ **Date:** _____

Signature:

Yet to be determined

City of Columbia Parks and Recreation:
_____ **Date:** _____

Signature:

Yet to be determined

Coastal Conservation League:
Date: _____

Signature: _____

Dana Beach,
Executive Director

Eastern Band of Cherokee Indians:
_____ Date: _____

Signature: _____

The Honorable Principal Chief Michell
Hicks

Lake Murray Association:
Date: _____

Signature: _____

Dave Landis,
President

Lake Murray Docks, Inc.:
Date: _____

Signature: _____

James L. Leslie, Jr.
President

Lake Murray Homeowners Coalition:
_____ **Date:** _____

Signature: _____

Yet to be determined

Lake Murray Power Squadron:
Date: _____

Signature: _____

Jeff Langlois
Commander

Lake Watch:
Date: _____

Signature: _____

Yet to be determined

League of Women Voters:
Date: _____

Signature: _____

Yet to be determined

Lexington County:

Signature: _____

Date: _____

Yet to be determined

Midlands Striper Club:

Signature: _____ Date:

B. Reed Bull, Jr.

National Park Service:

Signature: _____

Date: _____

Yet to be determined

NOAA, National Marine Fisheries Service, Southeast Region:

Signature:

_____ Date: _____

Dr. Roy E. Crabtree

Regional Administrator

Newberry County:

Signature: _____

Date: _____

Yet to be determined

Riverbanks Zoo and Garden

Signature:

_____ Date: _____

Ed Diebold

Director of Animal
Collections &
Conservation

Saluda County:

Signature: _____ **Date:**

Yet to be determined

Saluda River Chapter of Trout Unlimited:

Signature:

_____ Date: _____

Michael G. Waddell

South Carolina Council Trout Unlimited:
Date: _____

Signature: _____

Malcolm W. Leaphart Jr.
Relicensing Coordinator

South Carolina Department of Archives and History:
_____ Date: _____

Signature:

Elizabeth M. Johnson
Deputy State Historic
Preservation Officer

South Carolina Department of Natural Resources:
_____ Date: _____

Signature:

John E. Frampton
Director

South Carolina Electric & Gas Company:
_____ Date: _____

Signature:

James M. Landreth
Vice President – Fossil &
Hydro Operations

South Carolina Wildlife Federation:
_____ Date: _____

Signature:

Ben Gregg
SCWF Executive Director

U.S. Fish and Wildlife Service:
Date: _____

Signature: _____

Sam Hamilton,
Regional Director

Alison Guth
Licensing Coordinator
Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Tuesday, June 23, 2009 5:34 PM
To: Alison Guth; DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman
Subject: RE: Signatory list

Alison,

This should be called the list of "potential" signatories. American Rivers will not make its final decision to sign until the final settlement is reviewed.

Gerrit

Gerrit Jöbsis, American Rivers
Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, S.C. 29205
803.771.7114 (t) 803.771.7580 (f)
gjobsis@americanrivers.org

June is National Rivers Month! Celebrate by cleaning up your river. Go to www.AmericanRivers.org/cleanup to find out how.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Tuesday, June 23, 2009 1:43 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mqattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Signatory list

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Sam Hamilton,
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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Ed Diebold [ediebold@riverbanks.org]
Sent: Tuesday, June 23, 2009 4:11 PM
To: Alison Guth
Subject: RE: Signatory list

Hey Alison,

Can you please change the signature line for the Riverbanks Zoo & Garden to Satch Krantz, Executive Director?

Thank you,

Ed



image001.jpg (5 KB)

Ed Diebold, Director of Animal Collections & Conservation
P.O. Box 1060, Columbia, SC 29202-1060
803.978.1122
803.253.6381 FAX
ediebold@riverbanks.org
www.riverbanks.org

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204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Tuesday, June 23, 2009 1:58 PM
To: Alison Guth
Subject: Re: Signatory list

Alison

The league is reconsidering being a signatory based recent changes to the settlement. We are talking to bill a tomorrow. Until those issues are resolved, please don't represent to the group that we will be signing. I will let u know if we reach agreement. Thanks. Patrick.

Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
To: DILLMAJW@dhec.sc.gov <DILLMAJW@dhec.sc.gov>; Alan Axson <cfdwaxson@columbiasc.net>; Alan Stuart <alan.stuart@kleinschmidtusa.com>; Alison Guth <alison.guth@kleinschmidtusa.com>; Amanda Hill <amanda_hill@fws.gov>; Amy Bennett <BENNETAM@dhec.sc.gov>; Bertina Floyd <bertfloyd@sc.rr.com>; Bill Argentieri <bargentieri@scana.com>; Bill Brebner <yaccove@bellsouth.net>; Bill East <billeast@sc.rr.com>; Bill Hulslander <bill_hulslander@nps.gov>; Bill Marshall <marshallb@dnr.sc.gov>; Bill Mathias <bill25@sc.rr.com>; Bob Perry <perryb@dnr.sc.gov>; bseibels@yahoo.com <bseibels@yahoo.com>; Brandon Stutts <bstutts@scana.com>; Bret Hoffman <bret.hoffman@kleinschmidtusa.com>; Brett Bursey <network@scpronet.com>; btrump@scana.com <btrump@scana.com>; Bud Badr <badrb@dnr.sc.gov>; Buddy Baker <BakerB@dnr.sc.gov>; Chad Altman <altmankc@dhec.sc.gov>; Charlene Coleman <cheetahrk@yahoo.com>; Charles Floyd <jcharlesfloyd@sc.rr.com>; Charlie Compton <cocompton@lex-co.com>; Charlie Rentz <flyhotair@greenwood.net>; Chris Page <pagec@dnr.sc.gov>; ccantley@scdah.state.sc.us <ccantley@scdah.state.sc.us>; Chuck Hightower <HIGHTOCW@dhec.sc.gov>; Daniel Tufford <tufford@sc.edu>; Dave Anderson <dave.anderson@kleinschmidtusa.com>; Dave Landis <dlandis1@sc.rr.com>; David Allen <david.allen@scbar.org>; David Hancock <dhancock@scana.com>; David Jones <djones@scprt.com>; David Price <pricedc@dhec.sc.gov>; Dee Dee Simmons <dsimmons@thefittscompany.com>; dchristie@comporium.net <dchristie@comporium.net>; Don Tyler <tyl6544@bellsouth.net>; Donald Eng <dengff@aol.com>; Ed Diebold <ediebold@riverbanks.org>; Edward Schnepel <eschnepel@sc.rr.com>; aregaf@dnr.sc.gov <aregaf@dnr.sc.gov>; George Duke <kayakduke@bellsouth.net>; Gerrit Jobsis (American Rivers) <gjobsis@americanrivers.org>; Gina Kirkland <kirklagl@dhec.sc.gov>; Guy Jones <guyjones@sc.rr.com>; Hal Beard <beardh@dnr.sc.gov>; Hank McKellar <McKellarH@dnr.sc.gov>; J. Hamilton Hagood <jhamilton@scana.com>; James Leslie <jlesliejr@bellsouth.net>; Jay Schabacher <Jayschab@aol.com>; Jeff Duncan <jeff_duncan@nps.gov>; pricej@biol.sc.edu <pricej@biol.sc.edu>; Jim Devereaux <jdevereaux@scana.com>; Jim Glover <GloverJB@dhec.sc.gov>; Jim Ruane <jimruane@comcast.net>; JoAnn Butler <jbutler@scana.com>; Joe Logan <dianlog8@aol.com>; Joel Huggins <jbhuggins@lexhealth.org>; John and Rob Altenberg <seatowlakemurray@seatow.com>; johned44@bellsouth.net <johned44@bellsouth.net>; John Frick <jsfrick@mindspring.com>; Jon Leader <leader@sc.edu>; Joy Downs <elymay2@aol.com>; Karen Kustafik <kakustafik@columbiasc.net>; Ken Styer <kstyer@smeinc.com>; Ken Uschelbec <colkenu@aol.com>; Kenneth Fox <skfox@sc.rr.com>; Kristina Massey <dvklmass@bellsouth.net>; turnerle@dhec.sc.gov <turnerle@dhec.sc.gov>; Lee Barber <lbarber@sc.rr.com>; Linda Lester <linda_lester11@yahoo.com>; Linda Schneider <wendy0815@sc.rr.com>; mwleapjr@att.net <mwleapjr@att.net>; mdavis@scprt.com <mdavis@scprt.com>; giffinma@dhec.sc.gov <giffinma@dhec.sc.gov>; Matthew Rice <mrice@americanrivers.org>; Michael Murrell <mdmurr@sc.rr.com>; Mike Duffy <mikeduffy@sc.rr.com>; Mike Sloan <lucky8lady@aol.com>; msummer@scana.com <msummer@scana.com>; Mike Waddell <mwaddell@esri.sc.edu>; mquattlebaum@scana.com <mquattlebaum@scana.com>; Miriam Atria <miriam@lakemurraycountry.com>; Norm Nicholson <larana@mindspring.com>; Norman Ferris <norm@sc.rr.com>; Parkin Hunter <parkin@parkinhunter.com>; Patrick Moore; LakeMurrayLOA@windstream.net <LakeMurrayLOA@windstream.net>; Prescott Brownell <prescott.brownell@noaa.gov>; Randal Shealy <r1shealy@aol.com>; Randy Mahan <rmahan@scana.com>; Ray Ammarell <rammarell@scana.com>; Rebekah Dobrasko <dobrasko@scdah.state.sc.us>; rbull@davisfloyd.com <rbull@davisfloyd.com>; Rparsons12@windstream.net <Rparsons12@windstream.net>; Rhett Bickley <rbickley@lex-co.com>; rkidder1@sc.rr.com <rkidder1@sc.rr.com>; Richard Mikell <adventurec@mindspring.com>; SKEENER@sc.rr.com <SKEENER@sc.rr.com>; Robert Lavisky <rlavisky@alltel.net>; Ron Ahle <ahler@dnr.sc.gov>; Ronald Scott <rscott@lex-co.com>; Roy Parker <royparker38@earthlink.net>; ryanity@scana.com <ryanity@scana.com>; S padget <s.padget@saludacounty.sc.gov>; Sandra Reinhardt <sandrar@www.ccppcrafts.com>; Sean Norris <snorris@trcsolutions.com>; Shane Boring

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Sent: Tue Jun 23 13:42:49 2009

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Newberry County:

Signature:

_____ **Date:** _____

Yet to be determined

Riverbanks Zoo and Garden

Signature:

_____ Date: _____

Ed Diebold
Director of Animal
Collections & Conservation

Saluda County:

Signature:

_____ **Date:** _____

Yet to be determined

Saluda River Chapter of Trout Unlimited:

Signature:

_____ Date: _____

Michael G. Waddell

South Carolina Council Trout Unlimited:

Signature:

_____ Date: _____

Malcolm W. Leaphart Jr.
Relicensing Coordinator

South Carolina Department of Archives and History:
_____ Date: _____

Signature:

Elizabeth M. Johnson
Deputy State Historic
Preservation Officer

South Carolina Department of Natural Resources:
_____ Date: _____

Signature:

John E. Frampton
Director

South Carolina Electric & Gas Company:
_____ Date: _____

Signature:

James M. Landreth
Vice President – Fossil &
Hydro Operations

South Carolina Wildlife Federation:
_____ Date: _____

Signature:

Ben Gregg
SCWF Executive Director

U.S. Fish and Wildlife Service:
_____ Date: _____

Signature:

Sam Hamilton,
Regional Director

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072

Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Tuesday, June 23, 2009 11:02 AM
To: Alison Guth
Subject: Re: In support of 1 or 2 ft trigger? MELIP Trigger Wording

Alison,



graycol.gif (169 B)

The USFWS is conducting internal review of the Settlement Agreement. If we sign, we will support a 2ft trigger. If we do not, we may support the 2ft or an alternative trigger level.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson



pic21538.gif (1 KB)

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

06/18/2009 01:51 PM



MELIP wording.doc
(26 KB)

<DILLMAJW@dhec.sc.gov>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <bill east@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, "Bob Perry" <perryb@dnr.sc.gov>, <bseibels@yahoo.com>, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <bret.hoffman@kleinschmidtusa.com>, "Brett Bursey" <network@scpronet.com>, <btrump@scana.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Chad Altman" <altmankc@dhec.sc.gov>, "Charlene Coleman" <cheetahtk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <cocompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, <ccantley@scdah.state.sc.us>, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <dave.anderson@kleinschmidtusa.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons" <dsimmons@thefittscompany.com>, <dchristie@comporium.net>, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, <aregaf@dnr.sc.gov>, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis \ (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, "J. Hamilton Hagood" <jhamilton@scana.com>, "James Leslie" <jlesliejr@bellsouth.net>, "Jay Schabacher" <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, <pricej@biol.sc.edu>, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Ruane" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins" <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, <johnd44@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Ken Styer" <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvlkmas@bellsouth.net>, <turnerle@dhec.sc.gov>, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester" <linda_lester11@yahoo.com>, "Linda Schneider" <wendy0815@sc.rr.com>, <mwleapjr@att.net>, <mdavis@scprt.com>, <giffinma@dhec.sc.gov>, "Matthew Rice" <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, <msummer@scana.com>, "Mike Waddell" <mwaddell@esri.sc.edu>, <mquattlebaum@scana.com>, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore" <PatrickM@scccl.org>, <LakeMurrayLOA@windstream.net>, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rammarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, <rull@dnr.sc.gov>, <Rparsons12@windstream.net>, "Rhett Bickley" <rbickley@lex-co.com>, <rkidder1@sc.rr.com>, "Richard Mikell" <adventurec@mindspring.com>, <SKEENER@sc.rr.com>, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, <ryanity@scana.com>, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.ccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Sheri Armstrong" <sarmstrong@lex-co.com>, "Skeet Mills" <MillsL@dnr.sc.gov>, <lakewatchman@yahoo.com>, "Steve Summer" <ssummer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, <tbowles@scana.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbler" <tbebbler@scprt.com>, <tylehowe@nc-cherokee.com>, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vejdani" <vejdani@dnr.sc.gov>, <schneider@scetv.org>, "Wenonah Haire" <wenonahh@www.ccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>

cc

Subject

In support of 1 or 2 ft trigger? MELIP Trigger Wording

Hello All,

I have attached to this email the LIP Trigger wording developed through group discussions. You will notice that there are spaces provided for organizations/entities to support a 1 ft trigger, 2 ft trigger or those that are impartial to either. I would like to include the signatory organization names in these spaces in the Settlement Agreement that I issue on Tuesday. Therefore, please respond back to this email in order to let me know if your organization/entity supports the 1 ft trigger, 2 ft trigger, or is impartial to either. I will only need one response per signatory/organization, preferably by the individual who will be signing for that organization/entity or is acting on behalf of that individual. Please send me your response by Monday. Thanks, Alison

(See attached file: MELIP wording.doc)



ecblank.gif (109 B)

Alison Guth

From: Alan Stuart
Sent: Tuesday, June 23, 2009 9:39 AM
To: Alan Stuart; Alison Guth; 'Will Dillman (DILLMAJW@dhec.sc.gov)'; 'Alan Axson'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Perry'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Chad Altman'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'J. Hamilton Hagood'; 'James Leslie'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart (mwleapjr@att.net)'; 'Mark Davis (mdavis@scprt.com)'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore'; 'Phil Hamby (LakeMurrayLOA@windstream.net)'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Regis Parsons (Rparsons12@windstream.net)'; 'Rhett Bickley'; 'Richard Kidder (rkidder1@sc.rr.com)'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'Tyler Howe (tylehowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wendy Schneider (schneider@sctev.org)'; 'Wenonah Haire'; 'Jon Quebbeman'
Subject: RE: Reminder: Comments DUE on the Independent review regarding drawdowns...CORRECTION

Comments due JUNE 26, 2009

-----Original Message-----

From: Alan Stuart
Sent: Tuesday, June 23, 2009 9:23 AM
To: Alison Guth; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester; Linda Schneider; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong; Skeet Mills; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Reminder: Comments DUE on the Independent review regarding drawdowns

Good morning,

Just a reminder, comments on the independent review of drawdowns in Lake Murray were due last Friday. If you have comments or questions you'd like the preparer to address prior to finalizing the technical memo please get them to us no later than Friday May 26, 2009. In the interest of moving forward and getting a package together to file with the FERC we will not be able to accept comments after this date.

Thank you for your cooperation.

Alan

Alison Guth

From: Shane Boring
Sent: Monday, June 22, 2009 2:53 PM
To: 'Amanda Hill'
Cc: 'ARGENTIERI, WILLIAM R'; 'QUATTLEBAUM, MILTON'; Alan Stuart
Subject: Saluda -- Updated Mussel Program Document



LSR Freshwater
Mussel Program ...

[Amanda:](#)

Attached is an updated Freshwater Mussel Program for Saluda Hydro. I believe this incorporates your most recent discussions with Alan and Bill. Thanks

Shane

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)462-5620
Fax: (803)462 - 5619

Alison Guth

From: Suzanne Rhodes [suzrhodes@juno.com]
Sent: Monday, June 22, 2009 12:49 PM
To: Alison Guth
Cc: sarahl@scwf.org; ben@scwf.org
Subject: SCWF target for Settlement Agreement

Ben will sign for SCWF.
Ben Gregg, SCWF Executive Director, South Carolina Wildlife Federation.

The mission of the South Carolina Wildlife Federation is to ADVOCATE for wildlife, habitat and the environment, EDUCATE citizens in the conservation ethic, and SUPPORT outdoor traditions. To that end, SCWF plays many roles which include supporting sound management of all natural resources; reviewing and commenting on agency permit and policy decisions; carefully analyzing resource problems in light of public interest; promoting open discussion and developing constructive resource management solutions; encouraging protection of public lands and natural areas for all South Carolinians to experience; and working with individuals, groups, clubs and others with an interest in hunting and fishing to insure that these activities are available for future generations to enjoy. Our strong track record of providing sound advice and leadership has forged a place for SCWF within the ranks of decision makers.

Alison Guth

From: Don Tyler [tyle6544@bellsouth.net]
Sent: Monday, June 22, 2009 12:34 PM
To: Alan Stuart; RMAHAN@scana.com; BARGENTIERI@scana.com; Alison Guth
Cc: Elymay2@aol.com; dlandis1@sc.rr.com; royparker38@earthlink.net
Subject: Re: Settlement Agreement Edits from 6-16 - addition

Alan,

Thanks for your response and for considering the addition mentioned in my e-mail. Would you consider a couple of additions as indicated in my rainbow version below. Strike the **red** type and add the **green**. A complete rewrite follows the rainbow version.

If too late to modify, your original version is still OK.

Thx
Don

----- Original Message -----

From: [Alan Stuart](#)
To: [Don Tyler](#) ; [RMAHAN@scana.com](#) ; [BARGENTIERI@scana.com](#) ; [Alison Guth](#)
Cc: [Elymay2@aol.com](#) ; [dlandis1@sc.rr.com](#) ; [royparker38@earthlink.net](#)
Sent: Monday, June 22, 2009 8:24 AM
Subject: RE: Settlement Agreement Edits from 6-16 - addition

Good morning Don,

In response to your request we will be including the statement below in the Settlement Agreement. We plan to issue the next version (hopefully near final) tomorrow. If you have questions please let us know.

Thanks, Alan

“Inasmuch as the term of the new license may extend over five decades, **and** it may be appropriate that new interests be represented or accounted for in the future. **and** Because **some signatory organizations may be transitional in ways that may affect their interest in or relevancy to an (current) AMT and since new interest groups may arise**, the current signatories agree that AMT membership may benefit from modification **need to be changed**. Therefore, **any time membership changes will be considered, but only after the new license has been in affect for ten years. after the first ten years of the new license issuance, and With upon consensus among the of the AMT members of the AMT**, but subject to SCE&G’s (licensee) agreement, membership **of in** the AMT may be expanded or otherwise modified.”

Inasmuch as the term of the new license may extend over five decades, it may be appropriate that new interests be represented or accounted for in the future. Because some signatory organizations may be transitional and since new interest groups may arise, the current signatories agree that AMT membership may benefit from modification. Therefore, membership changes will be considered, but only after the new license has been in affect for ten years. With consensus of the AMT members, but subject to SCE&G's (licensee) agreement, membership in the AMT may be expanded or otherwise modified.

-----Original Message-----

From: Don Tyler [mailto:tyle6544@bellsouth.net]

Sent: Thursday, June 18, 2009 5:27 PM

To: RMAHAN@scana.com; BARGENTIERI@scana.com; Alan Stuart; Alison Guth

Cc: Elymay2@aol.com; dlandis1@sc.rr.com; royparker38@earthlink.net

Subject: Re: Settlement Agreement Edits from 6-16 - addition

Bill/Randy/Alan/Alison,

Sorry I couldn't make it on the 16th, but was pre-occupied with having communion with the commode - colonoscopy prep.

There was one issue that we had discussed and I didn't see anything included in the draft and that was with regard to provisions for inclusion of any "new" group or member that would want to participate in future agreement modifications, but were not included among the original signatory participants. As discussed, within a 50 yr. licensing period there are bound to be new stakeholder groups that should have the opportunity to participate in the modification process and such a provisions be added to the initial opening statements (ie somewhere at the end of 4.b.iii Settlement Agreement...).

Perhaps language to the affect that the Licensee could or would recommend the inclusion of such groups to an AMT with reasonable notification and allowance for discussion with the "original stakeholders" utilizing language similar to the provisions/language that would allow a stakeholder to withdraw.

Thanks for considering this inclusion outside the actual review meeting process.

Don Tyler

LMA

----- Original Message -----

From: [Alison Guth](#)

To: DILLMAJW@dhec.sc.gov; [Alan Axson](#); [Alan Stuart](#); [Alison Guth](#); [Amanda Hill](#); [Amy Bennett](#); [Bertina Floyd](#); [Bill Argentieri](#); [Bill Brebner](#); [Bill East](#); [Bill Hulslander](#); [Bill Marshall](#); [Bill Mathias](#); [Bob Perry](#); bseibels@yahoo.com; [Brandon Stutts](#); [Bret Hoffman](#); [Brett Bursey](#); btrump@scana.com; [Bud Badr](#); [Buddy Baker](#); [Chad Altman](#); [Charlene Coleman](#); [Charles Floyd](#); [Charlie Compton](#); [Charlie Rentz](#); [Chris Page](#); ccantley@scdah.state.sc.us; [Chuck Hightower](#); [Daniel Tufford](#); [Dave Anderson](#); [Dave Landis](#); [David Allen](#); [David Hancock](#); [David Jones](#); [David Price](#); [Dee Dee Simmons](#); dchristie@comporium.net; [Don Tyler](#); [Donald Eng](#); [Ed Diebold](#); [Edward Schnepel](#); aregaf@dnr.sc.gov; [George Duke](#); [Gerrit Jobsis \(American Rivers\)](#); [Gina Kirkland](#); [Guy Jones](#); [Hal Beard](#); [Hank McKellar](#); [J. Hamilton Hagood](#); [James Leslie](#); [Jay Schabacher](#); [Jeff Duncan](#); pricej@biol.sc.edu; [Jim Devereaux](#); [Jim Glover](#); [Jim Ruane](#); [JoAnn Butler](#); [Joe Logan](#); [Joel Huggins](#); [John and Rob Altenberg](#); johnd44@bellsouth.net; [John Frick](#); [Jon Leader](#); [Joy Downs](#); [Karen Kustafik](#); [Ken Styer](#); [Ken Uschelbec](#); [Kenneth Fox](#); [Kristina Massey](#); turnerle@dhec.sc.gov; [Lee Barber](#); [Linda Lester](#); [Linda Schneider](#); mwleapir@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; [Matthew Rice](#); [Michael Murrell](#); [Mike Duffy](#); [Mike Sloan](#); msummer@scana.com; [Mike Waddell](#); mquattlebaum@scana.com; [Miriam Atria](#); [Norm Nicholson](#); [Norman Ferris](#); [Parkin Hunter](#); [Patrick Moore](#); LakeMurrayLOA@windstream.net; [Prescott Brownell](#); [Randal Shealy](#); [Randy Mahan](#); [Ray Ammarell](#); [Rebekah Dobrasko](#); rbull@davisfloyd.com; [Rparsons12@windstream.net](#); [Rhett Bickley](#); rkidder1@sc.rr.com; [Richard Mikell](#); SKEENER@sc.rr.com; [Robert Lavisky](#); [Ron Ahle](#); [Ronald Scott](#); [Roy Parker](#); ryanity@scana.com; [S padget](#); [Sandra Reinhardt](#); [Sean Norris](#); [Shane Boring](#); [Sheri Armstrong](#); [Skeet Mills](#); lakewatchman@yahoo.com; [Steve Summer](#); [Suzanne Rhodes](#); [Theresa Powers](#); [Theresa Thom](#); [Tim Vinson](#); tbowles@scana.com; [Tom Ruple](#); [Tommy Boozer](#); [Tony Bebbler](#); tylehowe@nc-chokeee.com; [Van Hoffman](#); [Vivianne Vejdani](#); schneider@sctv.org; [Wenonah Haire](#); [Jon Quebbeman](#)

Sent: Thursday, June 18, 2009 3:40 PM

Subject: Settlement Agreement Edits from 6-16

Good Afternoon All,

Below is a link to the latest version of the settlement agreement (6-16) including the track-changed edits from yesterday's meeting. I will be sending out a clean version of this document next Tuesday. If you have any edits ready, or if you have received comments back from legal review, please send them to me ASAP, as we only have about one month before signing. Email me if you have any questions or any problems accessing the link. Thanks! Alison.

<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Tony Bebber [tbebber@scprt.com]
Sent: Monday, June 22, 2009 9:12 AM
To: Alison Guth
Subject: RE: In support of 1 or 2 ft trigger? MELIP Trigger Wording

Alison, I don't know how you want to handle us as a non-signer and whether you would leave us a blank spot on the signature page or just exclude us. If you want to fill in info for us, Chad Prosser, Director, would be the person that would sign. I sent you a paragraph about our organization recently. We support DNR with the 2 foot trigger.

Thanks,

Tony Bebber, AICP
Planning Manager, Product Services

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, June 18, 2009 1:52 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; Mark Davis; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget;

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Subject: In support of 1 or 2 ft trigger? MELIP Trigger Wording

Hello All,

I have attached to this email the LIP Trigger wording developed through group discussions. You will notice that there are spaces provided for organizations/entities to support a 1 ft trigger, 2 ft trigger or those that are impartial to either. I would like to include the signatory organization names in these spaces in the Settlement Agreement that I issue on Tuesday. Therefore, please respond back to this email in order to let me know if your organization/entity supports the 1 ft trigger, 2 ft trigger, or is impartial to either. I will only need one response per signatory/organization, preferably by the individual who will be signing for that organization/entity or is acting on behalf of that individual. Please send me your response by Monday. Thanks, Alison

Alison Guth

From: Alan Stuart
Sent: Monday, June 22, 2009 8:24 AM
To: 'Don Tyler'; RMAHAN@scana.com; BARGENTIERI@scana.com; Alison Guth
Cc: 'Elymay2@aol.com'; 'dlandis1@sc.rr.com'; 'royparker38@earthlink.net'
Subject: RE: Settlement Agreement Edits from 6-16 - addition

Good morning Don,

In response to your request we will be including the statement below in the Settlement Agreement. We plan to issue the next version (hopefully near final) tomorrow. If you have questions please let us know.

Thanks, Alan

“Inasmuch as the term of the new license may extend over five decades, and it may be appropriate that new interests be represented or accounted for in the future, and because organizations are transitional in ways that may affect their interest in or relevancy to an (current) AMT, the signatories agree that AMT membership may need to be changed. Therefore, any time after the first ten years of the new license issuance, upon consensus among the members of the AMT, but subject to SCE&G’s agreement, membership of the AMT may be expanded or otherwise modified.”

-----Original Message-----

From: Don Tyler [mailto:tyle6544@bellsouth.net]
Sent: Thursday, June 18, 2009 5:27 PM
To: RMAHAN@scana.com; BARGENTIERI@scana.com; Alan Stuart; Alison Guth
Cc: Elymay2@aol.com; dlandis1@sc.rr.com; royparker38@earthlink.net
Subject: Re: Settlement Agreement Edits from 6-16 - addition

Bill/Randy/Alan/Alison,

Sorry I couldn't make it on the 16th, but was pre-occupied with having communion with the commode - colonoscopy prep.

There was one issue that we had discussed and I didn't see anything included in the draft and that was with regard to provisions for inclusion of any "new" group or member that would want to participate in future agreement modifications, but were not included among the original signatory participants. As discussed, within a 50 yr. licensing period there are bound to be new stakeholder groups that should have the opportunity to participate in the modification process and such a provisions be added to the initial opening statements (ie somewhere at the end of 4.b.iii Settlement Agreement...).

Perhaps language to the affect that the Licensee could or would recommend the inclusion of such groups to an AMT with reasonable notification and allowance for discussion with the "original stakeholders" utilizing language similar to the provisions/language that would allow a stakeholder to withdraw.

Thanks for considering this inclusion outside the actual review meeting process.

Don Tyler

LMA

----- Original Message -----

From: [Alison Guth](#)

To: DILLMAJW@dhec.sc.gov ; [Alan Axson](#) ; [Alan Stuart](#) ; [Alison Guth](#) ; [Amanda Hill](#) ; [Amy Bennett](#) ; [Bertina Floyd](#) ; [Bill Argentieri](#) ; [Bill Brebner](#) ; [Bill East](#) ; [Bill Hulslander](#) ; [Bill Marshall](#) ; [Bill Mathias](#) ; [Bob Perry](#) ; bseibels@yahoo.com ; [Brandon Stutts](#) ; [Bret Hoffman](#) ; [Brett Bursey](#) ;

btrump@scana.com ; [Bud Badr](#) ; [Buddy Baker](#) ; [Chad Altman](#) ; [Charlene Coleman](#) ; [Charles Floyd](#) ; [Charlie Compton](#) ; [Charlie Rentz](#) ; [Chris Page](#) ; ccantley@scdah.state.sc.us ; [Chuck Hightower](#) ; [Daniel Tufford](#) ; [Dave Anderson](#) ; [Dave Landis](#) ; [David Allen](#) ; [David Hancock](#) ; [David Jones](#) ; [David Price](#) ; [Dee Dee Simmons](#) ; dchristie@comporium.net ; [Don Tyler](#) ; [Donald Eng](#) ; [Ed Diebold](#) ; [Edward Schnepel](#) ; aregaf@dnr.sc.gov ; [George Duke](#) ; [Gerrit Jobsis \(American Rivers\)](#) ; [Gina Kirkland](#) ; [Guy Jones](#) ; [Hal Beard](#) ; [Hank McKellar](#) ; [J. Hamilton Hagood](#) ; [James Leslie](#) ; [Jay Schabacher](#) ; [Jeff Duncan](#) ; pricej@biol.sc.edu ; [Jim Devereaux](#) ; [Jim Glover](#) ; [Jim Ruane](#) ; [JoAnn Butler](#) ; [Joe Logan](#) ; [Joel Huggins](#) ; [John and Rob Altenberg](#) ; johned44@bellsouth.net ; [John Frick](#) ; [Jon Leader](#) ; [Joy Downs](#) ; [Karen Kustafik](#) ; [Ken Styer](#) ; [Ken Uschelbec](#) ; [Kenneth Fox](#) ; [Kristina Massey](#) ; turnerle@dhec.sc.gov ; [Lee Barber](#) ; [Linda Lester](#) ; [Linda Schneider](#) ; mwleapjr@att.net ; mdavis@scprt.com ; giffinma@dhec.sc.gov ; [Matthew Rice](#) ; [Michael Murrell](#) ; [Mike Duffy](#) ; [Mike Sloan](#) ; msummer@scana.com ; [Mike Waddell](#) ; mquattlebaum@scana.com ; [Miriam Atria](#) ; [Norm Nicholson](#) ; [Norman Ferris](#) ; [Parkin Hunter](#) ; [Patrick Moore](#) ; LakeMurrayLOA@windstream.net ; [Prescott Brownell](#) ; [Randal Shealy](#) ; [Randy Mahan](#) ; [Ray Ammarell](#) ; [Rebekah Dobrasko](#) ; rbull@davisfloyd.com ; Rparsons12@windstream.net ; [Rhett Bickley](#) ; rkidder1@sc.rr.com ; [Richard Mikell](#) ; SKEENER@sc.rr.com ; [Robert Lavisky](#) ; [Ron Ahle](#) ; [Ronald Scott](#) ; [Roy Parker](#) ; ryanity@scana.com ; [S padget](#) ; [Sandra Reinhardt](#) ; [Sean Norris](#) ; [Shane Boring](#) ; [Sheri Armstrong](#) ; [Skeet Mills](#) ; lakewatchman@yahoo.com ; [Steve Summer](#) ; [Suzanne Rhodes](#) ; [Theresa Powers](#) ; [Theresa Thom](#) ; [Tim Vinson](#) ; tbowles@scana.com ; [Tom Ruple](#) ; [Tommy Boozer](#) ; [Tony Bebber](#) ; tylehowe@nc-cherokee.com ; [Van Hoffman](#) ; [Vivianne Vejdani](#) ; schneider@sctv.org ; [Wenonah Haire](#) ; [Jon Quebbeman](#)

Sent: Thursday, June 18, 2009 3:40 PM

Subject: Settlement Agreement Edits from 6-16

Good Afternoon All,

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<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Friday, June 19, 2009 3:52 PM
To: Alison Guth
Cc: Dick Christie
Subject: RE: Settlement Agreement Edits from 6-16

Hi, Alison – here is another edit suggestion.

The following paragraph in the MELIP is confusing. The first sentence does not seem complete as it does away with a reservoir trigger and does not clearly say what trigger is to be used. The intent, I think, is to use 354 as the stop loss trigger. So, I suggest this be spelled out similar to the following...

If 14 day average net inflow should fall below the scheduled minimum flow between December 16 and January 17 (for the 1 ft Trigger), or between December 1 and February 1 (for the 2 ft. trigger), when the target reservoir elevation is within (1 or 2 ft. TBD by FERC) of el. 352.5' (354.0' PD), the reservoir will not be required to drop (1 or 2 ft. TBD by FERC) below the current target elevation before reducing the minimum flow; instead, when reservoir elevation drops below el. 352.5' (354.0' PD) during low inflow periods, the minimum flows from the project will be reduced. Additionally, at any time during a low inflow period (when 14 day average net inflow is less than the scheduled minimum flow), should the reservoir level fall below el. 352.5' (354.0' PD), the minimum flow from the project will be reduced to a target flow of 500 CFS (400 CFS minimum), and will remain at that value regardless of any increase of inflow until the reservoir level has risen above el. 352.5' (354.0' PD).

Thanks,

Bill

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, June 18, 2009 3:41 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ;

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Subject: Settlement Agreement Edits from 6-16

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<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Friday, June 19, 2009 1:33 PM
To: Alison Guth; BARGENTIERI@scana.com; Alan Stuart
Cc: Dick Christie; Bob Perry
Subject: RE: Settlement Agreement Edits from 6-16

Hello, all, you may recall the question that came up at Wednesday's meeting about the following "termination" section. Where does the Settlement Agreement explain the circumstances (such as, transfer of license to another entity) in which the agreement "goes with the new license." Someone said this issue was addressed somewhere in the agreement but I do not recall that we identified where. Thanks. - Bill

i. Termination of Settlement Agreement

Termination of this Settlement Agreement will occur under the following circumstances: (a) the withdrawal of SCE&G from this Settlement Agreement; (b) expiration of the New License term; (c) the termination or surrendering of the New License to FERC by SCE&G pursuant to the requirements of the FPA.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, June 18, 2009 3:41 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Lee (Skeet) Mills; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer;

Tony Bebber; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, June 18, 2009 2:16 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Fish Monitoring Program

Hello All,

As an appendix to the Settlement Agreement, SCE&G has put together a write-up of their LSR Fish Community Monitoring Program. This Program is attached below for your information. Thanks, Alison



Lower Saluda Fish
Community Mo...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Lower Saluda Fish Community Monitoring Guide

Background:

The Saluda Project is an existing licensed hydroelectric project, owned and operated by SCE&G. The Project is located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000-acre reservoir, a gated emergency spillway, a back-up dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005.

The lower Saluda River (LSR) is approximately 10 miles in length and is characterized by bedrock-dominated riffles, with limited gravel and cobble substrates, and a high percentage of pool habitats. The river receives hypolimnetic (i.e., coldwater) flows from Lake Murray via the Saluda Project. This cold water has created the opportunity for the SCDNR to establish a successful Put, Grow and Take trout fishery for brown trout and rainbow trout. The LSR fishery community is unique in that it provides fishing opportunities for both resident warmwater species, as well as stocked coldwater species (trout).

Monitoring Plan:

SCE&G has conducted fish community sampling on the LSR since the mid 1990s to monitor for changes in the fish community. SCE&G will continue to conduct semiannual electrofishing sampling of the LSR to document and monitor for changes in the fish community. This document provides guidelines for the semiannual sampling.

Sampling will be conducted only during daylight hours and with safe, reasonable flows. The majority of sampling will be conducted during the 500-2000 cfs flow range. All efforts will be made to sample at flows that have been constant for a minimum of 8 hours. Sampling will occur in the spring (March – May) and fall (October – November).

Sample locations in the LSR will be located from the tailrace of the Saluda Hydro downstream to the I-26 Bridge. Because changing flow levels in the LSR can limit sampling areas, sample areas will be located within particular sections of the LSR. The first section that will be sampled will be located from the tailrace of Saluda Hydro downstream 2 river miles. The second section will begin 2 miles below Saluda Hydro and extend downstream 3 river miles. The third section will start 5 miles below Saluda Hydro and extend 2.5 river miles downstream. Within each section one to several sample locations will be chosen for sampling, with every effort made to sample the same locations during each sampling event. Sampling locations will be sampled for 15 minutes.

All fish collected will be identified to lowest taxonomic level, measured to nearest millimeter (mm), and weighed to nearest gram (g). All fish collected will be returned to the river except specimens required for identification verification or reference collections. Additional data collected will include the following:

1. Personnel,
2. Sample location,
3. Sampling date, start time, and end time (minutes),
4. Actual shocking time – pedal time (seconds)
5. Notes on fish condition; i.e. sores, lesions, abnormal features, etc.

Basic water quality measurements (pH, temperature, dissolved oxygen) will be collected at each sample location immediately after electrofishing. All recorded data will be retained for a period of 15 years. All fish data will be submitted to the SCDNR annually as required by the Scientific Collecting Permit.

Reports

Reports will not be routinely produced, but will be produced upon SCE&G management or agency request.

Alison Guth

From: Alison Guth
Sent: Thursday, June 18, 2009 1:52 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman
Subject: In support of 1 or 2 ft trigger? MELIP Trigger Wording



MELIP wording.doc
(26 KB)

[Hello All,](#)

I have attached to this email the LIP Trigger wording developed through group discussions. You will notice that there are spaces provided for organizations/entities to support a 1 ft trigger, 2 ft trigger or those that are impartial to either. I would like to include the signatory organization names in these spaces in the Settlement Agreement that I issue on Tuesday. Therefore, please respond back to this email in order to let me know if your organization/entity supports the 1 ft trigger, 2 ft trigger, or is impartial to either. I will only need one response per signatory/organization, preferably by the individual who will be signing for that organization/entity or is acting on behalf of that individual. Please send me your response by Monday. Thanks, Alison

All signatories concur with all implementation procedures, and practices contained within the Maintenance, Emergency and Low Inflow Protocol (MELIP) Program (Appendix X). Signatories recognize consensus was not reached on a reservoir trigger, the agreed upon choices being either 1 foot or 2 feet below target elevation prior to implementation of the MELIP. All signatories understand this will be left unresolved and evaluated by the FERC during its National Environmental Policy Act (NEPA) analysis.

In the interest of moving the FERC relicensing process forward, signatories agree to provide supporting data and/or justifications for either a 1 or 2 foot trigger to the FERC within 60 days of signing the settlement agreement. This information is in addition to any other information that is filed in support of the NEPA process or FERC regulations. However, signatories will demonstrate support for either a 1 or 2 foot trigger in all matters and correspondence with the FERC with regard to implementation of the MELIP.

Those stakeholders endorsing a reservoir trigger level of 1 foot below target elevation include:

- Organization A
- Organization B
- Organization C
- etc

Those stakeholders endorsing a reservoir trigger level of 2 feet below target elevation include:

- Organization 1
- Organization 2
- Organization 3
- etc

Those stakeholders that are impartial to a 1 or 2 foot trigger include:

- Organization 1
- Organization 2
- Organization 3
- etc

Comment: Place holder - All signatories agree that they will rely on their engineering, scientific and economic data and opinions to support the FERC process. This does not prohibit individuals from signatory organizations from filing comments with outside parties to support their positions.

All signatories agree they will rely on the FERC process and will not solicit support from outside parties to influence their agreement position.

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Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Wednesday, June 17, 2009 12:55 PM
To: Alison Guth; Alan Stuart; Amanda Hill; Matthew Rice
Subject: MELIP Trigger Wording



MELIP wording.doc
(26 KB)

William R. Argentieri

South Carolina Electric & Gas Company

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Columbia, SC 29203

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Alison Guth

From: Bill Mathias [bill25@sc.rr.com]
Sent: Wednesday, June 17, 2009 11:00 AM
To: Alison Guth
Subject: Saluda Hydro

Alison,

I have been unable to locate on the website the list of plants/trees recommended for placement between 360 and the 75 foot setback. Could you please send me a copy of this list.

Also, could you update me on the status of the Low Inflow Protocol. I seem to receive only some of the emails, so I am uncertain as to exactly where that stands today.

Thanks.

Bill

Alison Guth

From: Alison Guth
Sent: Tuesday, June 16, 2009 11:53 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: FW: June 11 Meeting Documents



trout program draft RTE Brochure CSB
UPDATED 6-... 06-11-09.doc ...

Good Morning All,

Attached is the updated Trout Program and RT&E brochure that includes the changes made in last week's Fish and Wildlife meeting. These changes will be incorporated into the Settlement Agreement document discussed tomorrow. Thanks, Alison

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT

(FERC NO. 516)

TROUT EVALUATION AND MONITORING PROGRAM FOR THE LOWER SALUDA RIVER

DRAFT

JUNE 2009

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

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COLUMBIA, SOUTH CAROLINA**

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**TROUT EVALUATION AND MONITORING PROGRAM
FOR THE LOWER SALUDA RIVER**

DRAFT

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Appendix A: Lower Saluda River Trout Growth Study

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

**TROUT EVALUATION AND MONITORING PROGRAM
FOR THE LOWER SALUDA RIVER**

DRAFT

1.0 INTRODUCTION

The South Carolina Electric & Gas Company (SCE&G) filed an Application for New License on August 27, 2008, and as part, has developed a Comprehensive Settlement Agreement for Protection, Mitigation and Enhancement of environmental resources at the Saluda Hydroelectric Project (FERC No. 516) (Saluda Hydro or Project). The enhanced relicensing process implemented was a multi-year cooperative effort between SCE&G and interested stakeholders to address operational, recreational and ecological concerns associated with hydroelectric project operations.

As part of that relicensing process, SCE&G consulted with a wide variety of stakeholders including, state and federal resource agencies, non-governmental organizations and concerned citizens seeking their input on important relicensing issues. As a result of that consultation and subsequent stakeholder meetings, relicensing participants identified several issues that they believed needed to be addressed during the relicensing process. One of the identified issues included monitoring and potential enhancement of the Put, Grow and Take trout fishery located in the Saluda Hydro Tailrace.

The current Put-Grow and Take program supports a cold water fishery via annual stockings of brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*). The trout are stocked and managed by the South Carolina Department of Natural Resources Freshwater Fisheries Section. Several efforts are currently underway by SCE&G to improve DO conditions in the lower Saluda River (LSR) that are likely to further improve habitat for trout. Enhancement measures consist of turbine venting, alternate operating scenarios, and implementation of instream flow recommendations.

The *Trout Evaluation And Monitoring Program for the Lower Saluda River* (Program) described herein was developed by the Instream Flow and Aquatic Habitat Technical Working Committee (TWC) and initiated by SCE&G to monitor and assess the success of water quality and flow enhancement measures on the trout fishery. It is a culmination of SCE&G's work with stakeholders to define resource goals and objectives for the lower Saluda trout fishery. Furthermore, the Program will determine a process for evaluating changes and making decisions that contribute to the South Carolina Department of Natural Resources' (SCDNR) management of the fishery based on the best available information. This document explains the goals, objectives, management, and methods of the Program, and was developed to serve as a guidance document for future monitoring and evaluation of the tailrace trout fishery during the new license term of the Saluda Project.

This document is organized to describe the Program in the following manner:

- Section 2 Background of Saluda Project and LSR Fishery
- Section 3 Program Goals and Objectives
- Section 4 Management of the Program
- Section 5 Program Monitoring Methods
- Section 6 Implementation Schedule
- Section 7 Decision Process for Program Modifications

2.0 ***BACKGROUND OF SALUDA PROJECT AND LSR FISHERY***

2.1 Saluda Project

The Saluda Hydro Project is an existing licensed hydroelectric project, owned and operated by SCE&G. The Project is located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000-acre reservoir (at elevation 356.5' NAVD88¹), a gated emergency spillway, a back-up Dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005.

The lower Saluda River (LSR) is approximately 10 miles in length and is characterized by bedrock-dominated riffles, with limited gravel and cobble substrates, and a high percentage of pool habitats. The river receives hypolimnetic (i.e., coldwater) flows from Lake Murray via the Saluda Hydro Project. This cold water has created the opportunity for the SCDNR to establish a successful Put, Grow and Take trout fishery for brown trout and rainbow trout. The following sections summarize features of the fishery and water quality resources of the LSR, including results of applicable studies.

2.2 Fishery Resources

The LSR fishery is unique in that it provides fishing opportunities for both resident warmwater species, as well as stocked coldwater species (trout). As mentioned previously, the LSR currently supports a tailrace trout fishery for rainbow and brown trout that is managed by the SCDNR as a Put, Grow and Take fishery. Trout are not native to the LSR, and the fishery is maintained through stocking of sub-adult rainbow and brown trout. Typically, the SCDNR stocking program runs from early December

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¹ Unless otherwise noted, all elevation references in this document are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD) requires the addition of 1.50 feet.

until mid-April. ~~The total number of trout stocked annually typically averages around 35,000, but varies annually based primarily on availability of fish from the Walhalla State Fish Hatchery.~~ The total number of trout stocked annually typically averages around 30,000 and are produced at the Walhalla State Fish Hatchery. This management approach, which has been employed since the 1960's, is appropriate where trout habitat can provide the acceptable growth and survival of enough sub-adult trout to support a fishery (D. Christie, SCDNR, Pers. Comm.). Similarly, the LSR is classified by the South Carolina Department of Health and Environmental Control (SCDHEC) for regulatory purposes as Put, Grow, and Take Trout Waters, which are defined as freshwaters suitable for supporting the growth of stocked trout populations and a balanced, indigenous aquatic community of fauna and flora (SCDHEC, 2004).

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A trout growth study conducted in 2003 in support of establishment of a site-specific DO standard for the LSR found that growth of trout in the LSR exceeds many other southeastern tailwaters (0.7 percent weight gain per day, 0.67 inches per month) (Kleinschmidt et al., 2003). Further, the study found that 74 of 441 brown and rainbow trout collected during 2003 were greater than 16 inches in length, suggesting a significant number of carryovers from previous stocking years. The study was conducted during a time period when near run of river flow release were being maintained to hold the lake pool elevations constant during dam remediation. The study concluded that the high growth rates and large number of carryovers observed in 2003 could potentially be attributed to higher DO levels since the inception of SCE&G's turbine venting program (Kleinschmidt et al. 2003). Conversely, a recent study begun by SCDNR to evaluate the annual mortality of the stocked trout in the LSR documented significantly less carryover of trout during the spring and summer of 2007 (H. Beard, SCDNR, Pers. Comm.). Disparity between study results suggests significant annual variability in carryover.

2.3 Water Resources

SCE&G began monitoring DO and temperature in the Saluda Project turbine releases in 1989 and continues the effort to the present day. Most recently, SCE&G conducted a study from 2000 to 2006 to characterize water resources by collecting

baseline water quality data in the Saluda Tailrace extending downstream to the confluence with the Broad River. Results of this study and other water quality data are summarized below.

2.3.1 Dissolved Oxygen

The LSR occasionally suffers from short periods of low DO during high flow or when the pool level of Lake Murray is drawn down for special purposes. Characteristics of the project reservoir, namely the relatively high water retention time and considerable depth of Lake Murray, coupled with regional climate conditions, results in seasonal thermal stratification of the lake and an associated decrease in DO in the lower water column. The problem is further exacerbated by watershed factors such as high nutrient loading, particularly from point discharges of phosphorus. High nutrient inputs to Lake Murray leads to an increase in the biological oxygen demand, especially during periods of high runoff (high flow), and consequent depletion of DO from the water column.

Prior to 1999, DO conditions were typically low and extended for long periods of time.....

Comment: Provide per-1999 data

In 1999, to address issues associated with low DO of Project discharges, SCE&G installed an aeration system. This aeration system, which along with modified operational patterns, has since improved water quality of releases from Saluda Hydro. Currently, Project discharges of low DO waters to the LSR are infrequent. USGS water quality monitoring data from 2000 to 2006 found that DO levels were above minimum levels considered protective for trout survival (3.0 mg/L) approximately 97 percent of the time. During the time that DO was less than 3 mg/l those durations were short periods lasting less than XX hours. This water quality monitoring found average monthly DO levels to be above 6.2 mg/L throughout the year with the lowest levels observed in September (average minimum of 4.2 mg/L), and highest levels in February (monthly average 11.0 mg/L).

Comment: Update to the end of 2008 and change percent of time above 3 mg/l.

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Comment: Add sentence how long DO stayed below 3 mg/l.

2.3.2 Temperature

According to the 2000-2008 water quality [data](#), average water temperature throughout the late winter, spring, and early summer months (February – July) in the LSR ranges from 9.5 to 15.4° C. Specifically, during the spring and early summer months (March – June) average water temperature typically remains between 10° C and 14° C. As the summer progresses, water temperatures rise and are at their highest, generally around 17° C, between mid-September and early November. During the 2000-2008 water quality [data](#), water temperatures never exceeded the lethal limit for trout of 25° C at any of the monitored trout habitat sites.

Deleted: 2006

Deleted: study

Comment: Verify for new period of time

Deleted: 2006

Deleted: study

Comment: Verify for new period of time

2.4 Technical Work Committee Consultation History

Note to readers: to be added once the consultation process within the TWC has been completed.

3.0 PROGRAM GOALS AND OBJECTIVES

The goals and objectives of the Trout Evaluation And Monitoring Program for the LSR were developed using a consensus-based approach during stakeholder discussions by the Instream Flow and Aquatic Habitat TWC. Specifically, the goals and objectives are focused in two areas the understanding of which are fundamental to effective management of the LSR trout fishery, namely water quality and fishery resources. For each goal identified in these two areas, there are several qualitative and quantitative objectives for measuring the progress made towards meeting the goals. The Program goals for fishery resources and water quality, and their associated objectives, are described below.

3.1 Fishery Resources

Goal #1 To provide data to SCDNR beneficial to their efforts to enhance the Put, Grow, and Take trout fishery to maximize fishing opportunities for the public.

Objectives

- Assess relative contribution of brown and rainbow trout, as well as native warmwater species, to the LSR fishery community by summarizing data in standard community-level metrics, such as species diversity, richness, relative abundance, trophic levels, presence and distribution of key species, etc.
- Document and assess qualitative changes in trout habitat, including food resources (benthic macroinvertebrates) and water quality factors, resulting from flow modifications and DO enhancements.

Success Criteria

Note to readers : to be developed within the AC

Goal #2 To investigate reproductive successes of trout to augment stocked fishery.

Objectives

- Document recruitment of young-of-year trout within the LSR
- Document trout eggs or larval life-stages in the LSR

Success Criteria

- **Note to readers: to be developed within the AC**

Goal #3 Evaluate the potential for a naturally reproducing trout population as a SCDNR management goal

Deleted: Determine feasibility of a

Deleted: goal for

Deleted: to

Deleted: trout in

Deleted: the LSR

Objectives

- Advisory Committee to conduct annual review and assessment of water quality, IFIM, and biological data. Committee to issue a report of findings and assessment of progress towards goals.

Success Criteria

- **Note to readers: to be developed within the AC**

Goal #4 Determine growth rates of adult trout after implementing new instream flow regimes

Deleted: developed by the TWC

Objectives

- Conduct a trout growth study following completion of sampling as outlined in the Lower Saluda River Benthic Macroinvertebrate Monitoring and Enhancement Program. This will occur no sooner than year 7 after issuance of the new license. The study will document trout growth and be consistent with the study conducted in 2003 during the development of the

LSR site specific DO standard. SCE&G will coordinate the study with the SCDNR and their trout production facilities. Should extended adverse meteorological or hydrologic conditions (i.e. persistent drought, low flows, etc.) or other estenuating circumstances occur during the years prior to implementation of the growth study, the study may be delayed after consultation with the Advisory Committee.

Success Criteria

- **Note to readers: to be developed within the AC**

3.2 Water Quality

Goal #5 To release water from the Saluda Project that meets, to the extent possible, applicable State Water Quality Standards.

Objective

- Collect water quality data in the LSR year-round throughout completion of Benthic Macroinvertebrate Monitoring and Enhancement Program to capture conditions during all seasons and for wet and dry years.

Success Criteria

- **Note to readers: to be developed within the AC**

4.0 MANAGEMENT OF THE PROGRAM

The Instream Flow and Aquatic Habitat TWC has developed this Trout Evaluation and Monitoring Program for the LSR during the relicensing process for inclusion in the FERC license application and eventual incorporation into the new Saluda Project License. SCE&G is ultimately responsible for collection and analysis of Program data; however, an Advisory Committee will be convened, as described below, and it is anticipated and desired that Committee members will actively participate in all facets of the Program.

4.1 Formation of Advisory Committee

To help develop and oversee implementation of the Program, an Advisory Committee (Committee or AC) will be created. Member organizations and their responsibilities, as well as the approved dispute resolution procedures, are described below.

4.1.1 Committee Members and Responsibilities

The Committee will be comprised of representatives from SCE&G, SCDHEC, SCDNR, the United States Fish and Wildlife Service (USFWS), Trout Unlimited (TU), and other interested Stakeholders. With the exception of DHEC, members of the Advisory Committee must be signatories to the settlement agreement. Each entity will have the opportunity to select its own representation to the Committee. SCE&G (or their designee) will serve as chairperson of the Committee and be responsible for organizing meetings and distributing documents to committee members.

The Committee will ultimately be responsible for guiding the decision making processes specified in the Program. It is anticipated that the Committee will be comprised of many members of the TWC responsible for development of

this Program. The Committee's responsibilities may include, but are not limited to the following:

- Collection and evaluation of baseline information and evaluation of study plans;
- Providing overall guidance and decision making for the Program process;
- Evaluating other study (*i.e.*, existing) information or information which becomes available during the time period of evaluations;
- Establishing and documenting the goals and objectives of each modification and determine the appropriate metrics for evaluative purposes;
- Keeping other stakeholders aware of information relative to potential decisions and providing opportunities to comment prior to decisions on modifications and provide a notification system of Advisory Committee meetings;
- Determining and considering long term impacts of operational modifications on downstream projects and project economics when evaluating the feasibility of implementing instream flow modifications; and
- Reviewing the annual report that provides information on the prior year's activities which SCE&G will file with FERC.

The Committee acknowledges the importance of allowing interested stakeholders to review and comment on major documents, such as study results, that may impact the evaluation and potential modification to the Project. The Committee chairman (an SCE&G representative or designee) will distribute these study results and make annual reports available to interested stakeholders. Interested stakeholders can request documents in writing to the Committee chairman. The Committee chairman will ensure that interested stakeholders have adequate notice and review time prior to final decisions of the Committee relative to modifications to test flows, etc. For all other documents on which stakeholders

wish to comment, the Committee will review all timely comments and include these comments in the official record.

All information from the Committee relative to this Program, including notification of meetings, meeting summaries, study results and final study plans will be coordinated by SCE&G and shared with each committee member.

4.1.2 Advisory Committee Meetings

The Advisory Committee will establish a meeting schedule based on the activities and deliverables in any given year. To keep all committee members abreast of the schedule, the Advisory Committee will establish an annual calendar that will be distributed to members, along with any notes from previous meetings. The tentative Program schedule is provided in Section 5.2 of this plan.

4.2 Budget and Program Resources

Responsibility for implementing this Program will rest primarily with SCE&G, as licensee for the Saluda Project. Annual budgets will be developed by SCE&G relative to the monitoring and study costs as well as administrative costs and expenses. SCE&G will also rely on other resources outside of its establishment including, but not limited to, the following:

- federal, state and local grants
- donated services (federal and state agency involvement)
- equipment (purchases and loaners)
- expertise (governmental, non-governmental, private)

5.0 PROGRAM MONITORING METHODS

(Note to readers: Further refinement of Sampling Methodologies will be conducted within the AC)

5.1 Sampling Techniques

5.1.1 Water Quality Monitoring

Water Quality monitoring in the Saluda Tailrace is necessary to establish an accurate baseline and to evaluate changes in water quality resulting from DO enhancements and changes to project operations. Further, it will be the basis from which to determine whether the Project is in compliance with the LSR site-specific water quality standard (Goal #4).

Continuous water temperature and DO data will be sampled annually using installed USGS gages located below the Project dam and near Riverbanks Zoo (#02168504 - Saluda River Below Lake Murray Dam and #02169000 - Saluda River Near Columbia, respectively). Data will be collected at 15 minute intervals or as determined by the USGS equipment capabilities.

5.1.2 Flow Monitoring

Flow monitoring in the LSR is necessary to establish an accurate baseline and to evaluate changes in instream flows as they relate to TWC recommended flows, recreational flow releases and changes in project operations.

Continuous flow data will be collected annually using installed USGS gages located below Saluda Hydro dam and near Riverbanks Zoo (#02168504 - Saluda River Below Lake Murray Dam and #02169000 - Saluda River Near Columbia, respectively). Data will be collected at 15 minute intervals or as determined by the USGS equipment capabilities.

5.1.3 Trout Sampling

In addition to the ~~two~~ fish community surveys ~~per year~~ outlined in the Saluda Hydro Settlement Agreement, SCE&G will conduct additional targeted electrofishing for adult and sub-adult trout. The purpose of this sampling will be to document carryover of trout stocked during previous years and to evaluate other changes in the trout fishery resulting from DO enhancements and changes to project operations. Trout collections may also assist in documenting whether spawning is occurring in the LSR.

Deleted: quarterly

Trout will be sampled in the LSR on two days during the spring months (April/May) and two days during the fall (September-October). Exact locations to be sampled will be determined in consultation with the Advisory Committee (See Section 4.1 above), although the Oh Brother/Ocean Boulevard island complex downstream of Interstate 26 has been identified as a likely location due to the abundance and quality of habitat compared with other reaches of the LSR.

To the extent possible, sampling will be by daytime boat electrofishing, supplemented by backpack electrofishing in habitats not accessible by boat. Effort will be placed on adequate sampling of habitats typically utilized by adult and sub-adult trout, such as mid-channel velocity refuges at the base of shoals and undercut vegetated banks. Additional methodology will be developed in consultation with the Advisory Committee.

All stunned trout will be identified to species, weighed (to nearest gram), measured for total length, marked with a unique alphanumeric Floy-type tag and returned to the LSR. Other pertinent information that will be collected during electrofishing efforts will include date, time, weather conditions, sample location, collection technique, sampling effort, water temperature, DO, and secchi disc, etc.

5.1.4 Benthic Macroinvertebrate Sampling

Benthic Macroinvertebrate sampling will be conducted in accordance with the LSR Benthic Macroinvertebrate Monitoring and Enhancement Program approved by the Freshwater Mussel/Benthic macroinvertebrate TWC.

5.1.5 Ichthyoplankton Sampling

Sampling for trout at the egg and larval stages, or ichthyoplankton sampling, will be performed annually at two locations in the LSR: (1) Corley Island and (2) the Ocean Boulevard/Oh Brother rapids area. Sampling will be performed 1 time per week for a two-month period, likely March and April. Specific sampling periods may be adjusted based on consultation with the Advisory Committee and/or regional trout experts in an effort to ensure that sampling occurs when water temperatures most closely match trout spawning criteria .

Duplicate samples will be collected at each location using D-shaped or rectangular drift net (maximum mesh size 2mm), equipped with a flowmeter. Nets will be anchored facing upstream in sufficient flow to sample effectively and will be deployed for a maximum of 8 hours. Samples from egg nets will be preserved in ethyl alcohol and returned to the laboratory for identification. All eggs collected will be examined to determine stage and all larval specimens will be measured for standard length (0.1 mm). Larval densities (number / cm³) will be calculated, compared by date and location, and presented in the final report.

5.1.6 Trout Growth Study

SCE&G proposes to conduct an in-situ growth study in the LSR to determine growth rates [as inputs to bioenergetics modeling](#) of rainbow trout [consistent with studies](#) in the LSR [done in 2003](#). The trout growth study will be conducted during December – May and employ tag and recapture techniques utilized in the 2003 growth study conducted in LSR (Appendix A).

Annual Report Format and Summary Data Package

At the conclusion of the sampling season for each year of the Program, SCE&G will prepare reports for the various data collection components of the Program and consolidate them into a summary report that will be used by the Committee to track trends in the LSR.

The annual summary report package will include summaries of the following information:

- Water quality sampling data
- LSR flow data for the year
- Trout carryover sampling data
- Benthic macroinvertebrate sampling data
- Ichthyoplankton sampling data
- Trout stocking data
- Trout growth study results (earliest will be 7 years after issuance of new license)

Water quality data will be summarized and displayed graphically by daily average and instantaneous temperature and DO value. Each annual report will include a discussion of any occurrences when water quality did not meet State standards as well as an analysis of the influence of generation on water quality in the Tailrace. Also, as the Program progresses, each report should include a discussion comparing the current years data to previous years data to identify any trends or anomalies.

Electrofishing data will be compared to the Program goals to determine the potential and observed changes (positive or detrimental) to the trout fishery associated with changes in project operations. Analysis of data may include, but not be limited to, a comparison of the following metrics:

- species richness/diversity
- species distribution
- species density
- trophic shifts
- young-of-year recruitment
- distribution of migratory species
- catch rate (average number / 300 FT² or 10 minutes of boat shocking)
- percentage of individuals with disease, tumors, fin damage or other anomalies
- Other sources of available fishery data may also be incorporated into this analysis
- Occurrence of carryover adult trout

Benthic macroinvertebrate sampling data will be summarized to determine the potential and observed changes (positive or detrimental) to trout food sources with changes in project operations. Analysis of data may include, but not be limited to, a comparison of the following metrics:

- species richness/diversity
- species distribution
- species density

Ichthyoplankton sampling data will be summarized to reflect whether reproduction of trout was documented. This data will be used to determine the reproductive potential and success within the LSR.

6.0 IMPLEMENTATION SCHEDULE

The water quality monitoring, flow monitoring and trout sampling aspects of the Program will be implemented concurrently with and according to the schedule outlined in the LSR

Benthic Macroinvertebrate Monitoring and Enhancement Program. The Trout Growth Study will be implemented in the year following completion of the benthic macroinvertebrate, water quality, and flow monitoring and the trout carryover sampling.

Comment: Add time line which is in Macro Study Plan

7.0 DECISION PROCESS FOR PROGRAM MODIFICATIONS

The Advisory Committee will evaluate the annual data and make recommendations to SCE&G for any changes in the Program.

8.0 LITERATURE CITED

Kleinschmidt Associates, Loginetics, Inc., Paladin Water Quality Consulting, and Reservoir Environmental Management, Inc. 2003. Lower Saluda River DO Technical Study Report. Prepared for South Carolina Electric and Gas Company.

South Carolina Department of Health and Environmental Control (SCDHEC). 2004. Water Classification & Standards (R.61-68) and Classified Waters (R.61-69). Bureau of Water, June 25, 2004.

APPENDIX A

LOWER SALUDA RIVER TROUT GROWTH STUDY

**SOUTH CAROLINA ELECTRIC & GAS CO.
COLUMBIA, SOUTH CAROLINA**

**SALUDA DO STANDARD PROJECT
LOWER SALUDA RIVER TROUT GROWTH STUDY**

1.0 DISSOLVED OXYGEN CRITERIA

In 1986 the U.S. Environmental Protection Agency (EPA) produced the Ambient Water Quality Criteria for Dissolved Oxygen (freshwater). This document replaced all previously published EPA aquatic life criteria for dissolved oxygen (DO). State water quality criteria may have the same numerical values as those in the EPA document or States may want to adjust their criteria to reflect local environmental conditions.

Site-specific criteria are allowed by regulation and are subject to EPA review and approval. Although no specific procedures are in place for establishing site-specific criteria for DO in freshwater, existing guidance and practice are that EPA will approve site-specific criteria developed using appropriate procedures. Site-specific criteria must be based upon a sound scientific rationale in order to protect the designated use. A site-specific criterion is intended to come closer than the national criterion to providing the intended level of protection to the aquatic life at the site, usually by taking into account the biological and/or chemical conditions at the site. The LSR trout growth study was the initial step in the use of the bioenergetic model to predict a DO standard that provides a level of protection of trout growth consistent with the EPA DO criteria.

The LSR growth study and the resultant growth model predictions are used to establish a long-term average concentration that will adequately protect trout growth in the LSR. In addition to the long-term average, the DO criteria also contain a short-term DO concentration that will prevent mortality as a result of acute hypoxia. Even short-term exposure to DO levels in the range of 1 to 2 mg/L can kill trout in a short period of time if they are not able to find local refugia where DOs are higher. In one case, mortality of trout has been reported after 3-4 day exposure to 2.4 mg/L at 20 C. In general, low DO is better tolerated at cooler temperatures than at warmer temperatures. In order to avoid direct mortality due to low DO, the EPA criteria

document recommends a minimum DO of 3 mg/L, a DO concentration that is survived by salmonids, including trout, in long-term growth studies.

Although EPA cited, and agreed with, reviews that concluded that invertebrates are generally protected by DO levels that protect fish, there were potential exceptions that induced EPA to recommend a minimum DO of 4 mg/L to protect sensitive species of mayflies, caddisflies, and stoneflies that are present in some areas of the western U.S. There are no data available on the many insect species that inhabit other habitats and regions.

In order to protect trout growth, EPA concluded that the growth attained at a constant, or 30-day running mean, DO concentration of 6.5 mg/L was adequate. The assumed level of protection was estimated to be the threshold of effect of DO on growth. Lower mean concentrations are adequate to protect important fishery resources, but risk slight growth impairment (6 mg/L) or moderate growth impairment (5 mg/L). EPA concluded that reductions in growth rate sometimes seen above 6 mg/L are usually not significant and that DO concentrations below 4 mg/L can have severe effects on growth. Between 4 and 6 mg/L the effect on growth is moderate to slight if the exposure is sufficiently long. It must be noted that these findings are derived from laboratory studies in which food was surplus.

Because DO affects fish growth primarily by reducing appetite and food consumption, growth effects are greatest when food is not limited according to the EPA criteria document. For example, in tests with coho salmon and DOs of 3, 5 and 8 mg/L, growth effects were seen only at food availability greater than 70% of maximum consumption and a DO of 3 mg/L. No effects were seen at 5 mg/L. This 70% food availability is similar to that estimated from the LSR growth study.

The most "natural" DO study included in the EPA criteria document was a test conducted in laboratory streams in which coho salmon fed on insects produced in the streams (9.5-15.5 C). At high growth rates (0.04 to 0.05 g/g/d) dissolved oxygen levels below 5 mg/L reduced growth, but at lower growth rates (0 to 0.02 g/g/d) no effects were seen at concentrations down to 3 mg/L. These lower growth rates are similar to those observed in the LSR. Although these studies were not conducted with rainbow trout, there is a general similarity in growth response to

DO in all tested salmonid species and these results are probably representative of rainbow trout as well.

Perhaps the most critical issue identified in the EPA criteria document was the application of data from tests with constant DO exposure levels to natural situations in which DO may fluctuate significantly. They concluded that existing data allowed for a tentative theoretical dosing model for fluctuating DO as applied to fish growth if daily average DO was calculated using as a maximum value the threshold concentration below which growth effects are observed under constant exposure conditions.

The publication of several fish bioenergetic model papers occurred almost simultaneously with the publication of the EPA criteria document for DO (Cuenco et al., 1985 a, b, c). It was immediately evident that the fish growth analysis performed for the EPA DO criteria document (JRB Associates, 1984) provided the DO-food consumption link that would enable a similar modeling approach to be used for generating growth-effect predictions for natural conditions with cycling DO. Consequently, EPA and TVA entered into a cooperative agreement to develop and test a fish growth model using DO-growth effect data and the other bioenergetic parameters common to established fish growth models. The EPA-TVA model also utilized many physiological parameters from another bioenergetics model developed by the University of Wisconsin Sea Grant Program (Hewett and Johnson, 1991). The resultant model (Shiao et al., 1993) forms the basis for the LSR growth study and the LSR site-specific DO criteria proposal. The 1993 model has been updated with data of better precision for rainbow trout respiration and food consumption relationships with temperature (From and Rasmussen, 1984) and with additional analysis of the rainbow trout growth studies from the EPA criteria document (Sporer, 1981).

This modeling approach provides a tool to address what EPA termed a most critical and poorly documented aspect of the dissolved oxygen criterion which is the acceptable minimum DO under cycles of varying periodicity.

2.0 LOWER SALUDA RIVER TROUT GROWTH STUDY

Prediction of trout growth in the LSR requires adequate knowledge of three key parameters: temperature, DO concentration, and food availability to trout. In-stream monitoring of temperature and DO, coupled with turbine intake DO, a turbine aeration model, and a tailwater water quality model, provided very good data and estimates of the actual temperature and DO to which trout are exposed. Food availability can be estimated by measuring fish growth, determining the temperature and DO during the period that growth was measured, and using the FISH bioenergetics model to estimate food consumption (availability). During the period of this growth study DO was sufficiently high that there was no significant effect of DO. Therefore, food consumption and growth were determined almost exclusively by temperature and food availability.

The growth study was conducted to closely simulate the typical pattern of rainbow trout release into the put, grow, and take trout fishery in the LSR. This pattern is characterized by periodic releases of catchable trout (8-10 inches) at several locations along the LSR.

The growth study began with the tagging of approximately 15,000 rainbow trout obtained from the South Carolina Department of Natural Resources Walhalla Fish Hatchery. The tagging efforts were divided into four nearly equal monthly batches beginning in November and concluding in February. The November batch of rainbow trout contained 3000 individuals while the remaining 3 batches contained approximately 4000 individuals.

Each monthly batch of rainbow trout (201.4 ± 49.7 mm total length, 136 ± 36.7 g; mean \pm SD) was tagged with sequentially numbered, large format, soft Alphanumeric Visible Implant Elastomer (VI-alpha) tags produced by Northwest Marine Technology Inc. To conduct the tagging exercise, fish were crowded in a raceway and 10 - 20 individuals were transferred to 50 - L aerated holding containers containing an anesthetic (~ 90 mg/L MS 222). Once fish were anesthetized, each rainbow trout received one visible implant tag, injected using a syringe-like tag applicator designed and supplied by the manufacturer just below the surface of the clear adipose postorbital eye tissue. The fish were then returned to a separate raceway and held for a minimum of 21 days as required by federal regulation for drug clearance as mandated by the

Food and Drug Administration. During the holding period, fish were maintained in a flow-through raceway system at 4 – 12 C.

After the 21 day waiting period, all fish tagged for that month were individually weighted and measured {Total length (mm) and wet weight (g)} and the tag code recorded for each fish. All fish were left unfed two days prior to weighing and measuring. Each monthly batch of tagged fish were divided up into 1000 fish sub-units, with each sub-group designated for release at one of the four release locations. The December plantings were divided into 4 lots, one 300 batch (Lake Murray Dam), one 700 fish grouping (Saluda Shoals) and 2 1000 fish batches (Allied Signal and Quail Hollow) All other monthly stockings contained relatively equal stockings of 1000 (less tag loss). Monthly tagging numbers and tag retention rates appear in Table B1.

Trout were planted in four discreet releases, one each in December 2002, and in January, February and March of 2003. Release sites were three that are routinely used for the fishery (Saluda Shoals Park, Allied Signal, and Quail Hollow) plus an additional upstream site just below Lake Murray dam (Figure B-1).

The tagged fish arrived in hatchery trucks each outfitted with multiple cells to keep fish separated. To accomplish this, fish were taken from numbered raceways at the hatchery with each raceway containing known tagged fish. Fish were then placed in each of the designated cells for transport and release to the LSR. For the helicopter stocking, the fish were placed in the helicopter bucket and the pilot was given specific directions where to place the fish in the LSR. The remaining stockings were conducted via truck with each driver having a designated stocking location to release fish based on a pre-arranged raceway numbered matrix. During the January stocking, the lock on the access gate to Quail Hollow had been changed which required the driver to stock the fish at Allied Signal. To compensate and provide an even distribution of fish at all stocking locations, two 1000 batches of fish were released in the Quail Hollow area during February stocking event.

To determine trout growth, recovery of tagged trout was carried out by obtaining trout from the LSR by electrofishing as well as by obtaining weight and length data of freshly caught trout in the LSR sports fishery. Fish were collected from the LSR from April thru June using

primarily boat electrofishing means. The sampling area extended from the base of Lake Murray Dam to the I-26 bridge (Figure B-1). While no sampling was conducted below the I-26 Bridge, there were anecdotal reports of tagged fish being caught near Riverbanks Zoo, approximately 1 mile downstream. Boat electrofishing was conducted using a 16 foot aluminum boat outfitted with a generator, Smith-Root model VII-A Electrofisher, and anode and cathode umbrella droppers. Pulsed DC current was placed in the water and output amperage was adjusted to maximize electric current in the water. Voltage was regulated in attempts to maintain approximately 5 amps. During electrofishing sampling, electric current was directed to all microhabitats (shoals, ruffle run complexes and rock outcroppings) throughout the LSR. Electrofishing effort was typically expended over a two and three day period. All trout captured were placed in 100 L aerated containers. Fish were then evaluated to determine if they were tagged. Those fish that were tagged individual length and weight, data was collected, along with the corresponding tag color and number and recorded on field data sheets. Fish were then released back to the LSR in the general location of capture. Additionally untagged trout were collected and those individuals were enumerated and length data obtained.

2.1 Growth Results

A total of 111 tagged trout were collected, weighed and measured during April, May and June. The growth data were analyzed to determine if the data were sufficiently homogeneous to allow use of the entire data set for estimation of food availability in the LSR. There were several factors that might have caused growth (and food availability estimates) to be significantly different for one or more subsets of fish in the growth study. These factors included:

- Release site
- Release date
- Recapture site
- Size at release
- Condition at release
- Condition at recapture
- Direction of movement after release
- Distance of movement after release

- Time between release and recapture

Because growth was primarily influenced by temperature and food availability during the study period (DO was always high), any difference in these factors related to tailwater location or date could have caused differences in growth rate. In addition, size and condition of the fish might be related to fitness to the tailwater environment, including adaptability to feeding, as well as finding and competing for most-suitable habitat. Obviously, any factors that might tend to selectively crop fish through predation, movement out of the study area, or susceptibility to angler harvest could influence the study result. However, as these factors are always present, their exclusion, even if possible, would make the study less representative of the actual conditions for the trout remaining in the system.

2.2 Initial Data Analysis

A summary of the data collected for each recaptured fish from the growth study is provided in Table 2. The weight at release and recapture of the 111 fish used for the growth analysis is shown in Figure B-2. It is immediately evident that there was a large range in fish weight both at release and recapture. The range of trout weight at release is typical, as trout will feed and grow at different rates even in a hatchery environment where feeding is regular. The same phenomenon occurs in nature, as individual fish become more-or-less adapted to the natural habitat and more-or-less dominant in retaining better habitat niches.

2.3 Release Site and Date

The initial analysis of growth rate by release site and release date indicated that differences in median growth rates were relatively small (Table B-3). Because of periodic access problems, only 14 of the 16 potential release combinations (4 sites x 4 dates) were possible. The number of fish recaptures represented in these 14 combinations ranged from 1 to 14, with several releases being represented by less than a half-dozen individuals.

Comparing individual trout growth rates as a function of release site and release date indicated that only two of fourteen release groups had growth rates that appeared to be lower than the norm for the other release groups (Figures B-2a and 2b). The two groups with lower growth rates were the December group released at Quail Hollow and the March group released at Allied Signal. However, these two groups were represented by only four and one fish, respectively. With the large range of growth rates represented within each of the other groups and the fact that most groups in the March release had fish which lost weight following release, there was no reason to remove these two groups (five fish) from the overall data set of 111 trout.

2.4 Recapture Site

It is not possible to determine where an individual fish resided between the time of release and the time of recapture. For those fish that were recaptured near the release site it might be concluded that there was not a significant movement upstream or downstream from the point of release. Other fish that were recaptured farther from the release site may or may not have moved rapidly to the vicinity of the point of recapture. Given the pool-like nature of much of the study area, it is possible that many of the released trout moved freely up and down long stretches of the LSR and established no small-scale area of residency. On the assumption that recapture site might indicate the primary area of residency following release, the growth rate data were analyzed to see if there was a relationship between growth rate and recapture site (Figure B-3).

Growth rates were highly variable regardless of recapture site. Almost twice as many fish were recaptured between Allied Signal and Saluda Shoals than in the upstream or downstream sections. Median growth rates were slightly higher in this intermediate stretch (0.75 percent per day) as compared with upstream (0.68 percent per day) and downstream (0.65 percent per day). Given the highly variable growth rates, these relatively small differences were not seen as significant to the modeling effort. Fish from the Saluda Shoals releases were the most common at all recapture sites below RM 8 (and below the Saluda Shoals release site, ca. RM 8.3), and fish from the release immediately below the dam were most common above RM 8 (Figure B-4). The effect of movement from the site of release was analyzed separately from the site of recapture.

2.5 Growth and Movement

All four release times were characterized by fish moving both up- and downstream from the release sites. In general, more fish moved downstream than upstream, with median movement ranging from 0.3 to 1.2 miles downstream. Although the pattern of movement differed slightly among the four release dates (Figure B-5) only fish from the January releases appeared to differ in any noticeable way from the overall pattern. This exception is perhaps more noteworthy because no fish were released at Quail Hollow during January, and fish that moved downstream from Quail Hollow were outside of the recapture area. In fact, only trout that were released at the two intermediate sites, Saluda Shoals and Allied Signal, could be sampled both above and below the release site. The Quail Hollow released fish were not sampled below the site of release and the fish released just below the dam were obviously limited to the immediate area of the release or movement downstream.

Analysis of fish movement for the two intermediate release sites indicated that both the Saluda Shoals and Allied Signal fish from the December release tended to move downstream (Figure B-6). [Note that in this and other figures some data points are identical and are superimposed in the figures, thus, the number of points visible may not equal the number of data points represented (n).] Later releases at Saluda Shoals followed this pattern, but the indications are that the Allied Signal fish may have moved upstream more frequently following the January and March releases (there was no February release at that site). The release of fish immediately below the dam may have populated the upstream section to the extent that competitive pressure produced the net downstream movement of Saluda Shoals fish. Of course, this movement pattern may also be a direct response to physical habitat characteristics.

Although the movement of trout released at the dam was limited to essentially staying put or moving downstream, and the Quail Hollow releases were only sampled at and above the release site, the analysis of this data is of interest (Figure B-7). The Lake Murray dam releases routinely had a median movement of 0.8 miles downstream. Perhaps the most interesting aspect of all the movement data was the relatively rapid upstream migration of several fish from the March release at Quail Hollow. Although

median movement was still less than one mile upstream, at least four fish moved 3-5 miles upstream in the period between release and sampling.

Given the wide range of dispersal seen among the fish (up to 5 miles up and downstream from the release site) the potential effect of this movement on growth was considered potentially important. As shown in Figure B-8, there was essentially no pattern seen in the growth data when distance and direction of post-release movement was included as a variable. A similar analysis broken down by release site and release date showed no appreciable pattern (Figures B-9-12). Figure B-13 shows the analysis of the relationship between time in the LSR after release and distance traveled between release and recapture. In general, there was no relationship between distance traveled and the time between release and recapture.

2.6 Size at Release and Growth Rate

The maximum growth rate of fish is in part dependent upon fish size, with smaller fish capable of higher food consumption rates and higher growth rates than larger fish. Hatchery feeding practices have routinely used size as a determinant of how much feed to provide trout (e.g., Leitritz, 1972: 2-inch fish 4x and 5-inch fish 2x the food fed 9-inch fish). The growth rate observed for fish in the LSR study indicated a weak relationship to size at release, with most growth rates >1 percent per day occurring in trout that were <150 grams at release (Figure B-14). Given the wide range of growth rates for fish of any particular size and the growth model expression of food availability as a percent of maximum consumption potential rather than absolute amounts of food consumed, there was no compelling need to consider size in determining food availability for the growth model.

2.7 Condition Factor and Growth Rate

Trout of any length may be judged as to their general condition by overall appearance and described as skinny, solid, plump, fat, etc. A quantitative term that describes the length and weight relationship is the "condition factor." The condition factor (c.f.) is expressed as:

$$\text{c.f.} = (W \times 100) / (L)^3$$

where: W = weight in grams and L = length in cm.

A condition factor of 1.0 may be used as a general guide with factors <1 representing less than optimal condition in trout and those >1 representing well-fed trout.

Trout with lower initial condition factors tended to grow at a faster rate than those with higher initial condition factors (Figure B-15). This is an expected finding under circumstances where hatchery conditions can cause a wide spread in condition factor and where field conditions allow dispersal of fish into areas of adequate food. The overall range in initial condition factors (ca. 0.8-1.8 in this study) is not unusual in crowded fish culture units without extensive and frequent grading and separation of fish sizes. Once released into the LSR the fish were able to disperse and feed more uniformly. This tends to allow the skinny fish to bulk up and the fatter fish to become more trim, resulting in the growth rate relationship seen in Figure B-15. This phenomenon is probably typical of the LSR put, grow, and take trout fishery and does not complicate the use of this growth study with the bioenergetic growth model.

The change in condition factor is illustrated in Figure B-16. In general, trout with initial condition factors >1.2 became more trim and those with initial condition factors <1.0 became more robust. The central tendency in the population was to develop a condition factor of about 1.1. This same trend was evident for trout recaptured from each of the release periods (Figures B-17a and b). This trend towards uniformity of condition factor is clearly evident in the decreasing variability in the length-weight relationships between release and recapture (Figure B-18) where r^2 values improved from 0.61 to 0.87 during residency in the LSR. The trend to greater uniformity in condition simplifies the application of the bioenergetic growth model.

Because growth was related to condition factor, the data were analyzed to see if there was any relationship between post-release movement in the LSR and the condition factor of the trout at time of release (Figure B-19). There was no effect of condition factor on the movement of trout following release.

A final analysis of the data was to determine if there was any relationship between growth rate and the time between release and recapture. Except for an apparently reduced growth rate for fish captured shortly after the March release, growth was essentially independent of residence time. The slightly reduced growth seen in the early recapture of the March release is probably attributable to a period of recovery from handling procedures inherent in capture, transport and release of fish in the planting process. Some period of time is also probably needed for the fish to adapt to feeding in nature as opposed to feeding under hatchery conditions. It is likely that all four release periods underwent the same handling stress and adaptation process, but the December-February releases experienced that pattern long before the initial recapture effort in April 2003.

2.8 LSR Trout Fishery Information

Additional information collected during the growth study revealed significant numbers of rainbow and brown trout that appear to be carryovers from previous stockings. A total of 441 tagged and untagged trout were collected from the LSR, with 253 rainbow and 188 brown trout comprising the total catch.

Of the 441 rainbow and brown trout collected, 74 exceeded 16 inches in length, or nearly one in every six fish. The largest rainbow and brown trout collected during these surveys were 22 and 24 inches, respectively, with all fish appearing robust and healthy. Further examination of the data indicates that trout do appear to carryover from annual stockings. Figure B-21 illustrates that at a minimum two distinct age classes of fish were collected in the LSR during the study. However, without otolith examination it is not readily possible to determine what year classes these individuals represent. One likely contributor to this observed carryover is likely is the higher DO levels maintained in the LSR since the inception of SCE&G's turbine venting program than those DO levels historically observed.

3.0 SUMMARY

A detailed analysis of growth patterns and relationships with potentially significant variables relating to the LSR sites, release dates, and fish size indicated that there were no factors requiring either data deletion or subdivision prior to the use of observed growth rates for calculating food availability. Consequently growth rate data from all 111 recaptured trout were used to calibrate the bioenergetics model for the LSR.

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**SOUTH CAROLINA ELECTRIC & GAS CO.
COLUMBIA, SOUTH CAROLINA**

**SALUDA DO STANDARD PROJECT
LOWER SALUDA RIVER TROUT GROWTH STUDY**

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- Figure B-13. Relationship between days in the stream between release and capture and the distance traveled from the point of release.
- Figure B-14. The growth rate of trout in the LSR showed a slight relationship with size at release.
- Figure B-15. Growth rate was greater in fish with lower initial condition factors following release into the LSR.
- Figure B-16. The condition of trout in the LSR became much more uniform than that seen at the time of release.
- Figure B-17a. Condition factor change for December and January releases.
- Figure B-17b. Condition factor change for January and March releases.
- Figure B-18. Illustrating the increased uniformity of trout condition following release into the LSR.
- Figure B-19. There was no significant effect of initial condition factor on the tendency of fish to move up- or down-stream following release.
- Figure B-20. There was no appreciable effect of residency duration on the growth of fish in the LSR.
- Figure B-21 Length Frequency Distribution of all brown and rainbow trout collected from the Lower Saluda River, April – June 2003.

SOUTH CAROLINA ELECTRIC & GAS CO.

SALUDA DO STANDARD PROJECT

LOWER SALUDA RIVER TROUT GROWTH STUDY

AUGUST 2003

Prepared by:

Paladin Water Quality Consulting

**Kleinschmidt Associates
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Table B-1: Number tagged, number of survivors, survival (%), number retaining tags, and proportion (%) retaining tags of rainbow trout tagged with large format, soft VI-alpha tags and held for 25 days

TAG DATE	TAGGED (N)	SURVIVORS (N)	SURVIVAL (%)	NUMBER RELEASED (N)	RETENTION (%)
12/8/02	3000	2975	99.2	2405	80.8
1/6/03	4000	3780	94.5	2979	78.8
1/20/03	4400	4281	97.3	3331	77.8
2/13/03	4000	3251	81.3	3089	95.0
Total	15400	14287	92.8	11804	82.6

Table B-2: Data on rainbow trout recaptured and used in the Bioenergetics Model from the Lower Saluda River Growth Study April- June

	Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date
	Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)				
1	yellow	C27	242	307	179	353	Sandy Beach, way point 106	3	Saluda Shoals Park	2	12/17/2002	4/2/2003
2	yellow	D55	217	230	157	171	Sandy Beach, way point 106	3	Saluda Shoals Park	2	12/17/2002	4/2/2003
3	yellow	22D	233	290	164	299	Corley Island shoal	7	Saluda Shoals Park	2	12/17/2002	4/3/2003
4	yellow	X26	253	298	216	302	downstream of I-20 at house	10	Quail Hollow	4	12/17/2002	4/3/2003
5	yellow	R73	261	324	221	438	tailrace, near spillway inflow	1	Lake Murray Dam	1	12/17/2002	4/28/2003
6	yellow	50E	245	315	197	347	above Sandy Beach (near shoal)	2	Saluda Shoals Park	2	12/17/2002	4/28/2003
7	yellow	D42	233	290	156	273	Sandy Beach	3	Saluda Shoals Park	2	12/17/2002	4/28/2003
8	yellow	L97	243	320	165	379	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	12/17/2002	4/28/2003
9	yellow	R72	245	325	156	350	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
10	yellow	K20	244	315	143	328	downstream of I-20 bridge	11	unknown	n/a	12/17/2002	5/1/2003
11	yellow	J59	265	348	234	501	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
12	yellow	L41	234	278	204	294	downstream of I-20 bridge	11	Saluda Shoals Park	2	12/17/2002	5/1/2003
13	yellow	G73	239	305	210	375	downstream of I-20 bridge	11	Quail Hollow	4	12/17/2002	5/1/2003
14	yellow	I38	208	275	117	211	downstream of I-20 bridge	11	Saluda Shoals Park	2	12/17/2002	5/1/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
15	yellow	09D	239	302	168	309	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
16	yellow	54E	250	335	194	461	Corley Island shoal	7	Allied Signal	3	12/17/2002	5/1/2003
17	yellow	35C	277	345	204	472	Corley Island shoal	7	Saluda Shoals Park	2	12/17/2002	5/1/2003
18	yellow	O7E	239	282	113	255	upstream of Quail Hollow, mile 4+	12	Saluda Shoals	2	12/17/2002	5/20/2003
19	yellow	X04	216	281	197	236.0	upstream of Quail Hollow, mile 4+	12	Quail Hollow	4	12/17/2002	5/20/2003
20	yellow	B97	245	311	209	283	upstream of Quail Hollow, mile 4+	12	Quail Hollow	4	12/17/2002	5/20/2003
21	yellow	56D	254	333	179	377	asphalt plant, mile 4+	11	Allied Signal	3	12/17/2002	5/20/2003
22	yellow	J22	245	336	166	361	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	12/17/2002	6/2/2003
23	yellow	L92	224	334	165	415	Corley Island shoal	7	Saluda Shoals	2	12/17/2002	6/2/2003
24	red	A96	240	295	185	307	Sandy Beach, way point 106	3	Lake Murray Dam	1	1/7/2003	4/2/2003
25	red	S22	220	266	145	222	Sandy Beach, way point 106	3	Lake Murray Dam	1	1/7/2003	4/2/2003
26	red	46B	212	271	102	223	Sandy Beach, way point 106	3	Saluda Shoals Park	2	1/8/2003	4/2/2003
27	red	B84	207	258	133	206	Sandy Beach, way point 106	3	Saluda Shoals Park	2	1/8/2003	4/2/2003
28	red	C59	260	308	238	313	downstream of Hope Ferry Landing	4	Saluda Shoals Park	2	1/8/2003	4/2/2003
29	red	64K	231	275	125	228	Corley Island shoal	7	Saluda Shoals Park	2	1/8/2003	4/3/2003
30	red	50G	226	290	162	227	Corley Island shoal	7	Saluda Shoals Park	2	1/8/2003	4/3/2003
31	red	P13	250	285	183	252	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003
32	red	88L	185	279	70	243	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003
33	red	77D	236	275	168	227	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
34	red	E36	237	280	166	227	above Sandy Beach (near shoal)	2	Allied Signal	3	1/9/2003	4/28/2003
35	red	E17	213	282	130	240	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	1/7/2003	4/28/2003
36	red	85E	220	304	130	319	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	1/8/2003	4/28/2003
37	red	A44	228	305	171	333	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	1/8/2003	4/28/2003
38	red	80M	219	271	124	230	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/28/2003
39	red	92I	264	315	223	339	downstream of I-20 bridge	11	Allied Signal	3	1/9/2003	5/1/2003
40	red	P97	230	283	146	232	downstream of I-20 bridge	11	Allied Signal	3	1/9/2003	5/1/2003
41	red	51D	217	280	125	242	Honeywell Intake	9	Saluda Shoals Park	2	1/8/2003	5/1/2003
42	red	P95	226	298	130	311	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/1/2003
43	red	52M	240	296	157	282	Corley Island shoal	7	Allied Signal	3	1/9/2003	5/1/2003
44	red	V97	217	284	150	272	Corley Island shoal	7	Allied Signal	3	1/9/2003	5/1/2003
45	red	63C	228	301	155	282	Honeywell Intake	9	Saluda Shoals Park	2	1/7/2003	5/20/2003
46	red	K51	223	278	112	206	Honeywell Intake	9	Lake Murray Dam	1	1/8/2003	5/20/2003
47	red	P72	228	289	126	222	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/20/2003
48	red	07I	255	317	235	326	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/20/2003
49	red	F67	224	313	168	339	asphalt plant, mile 4+	11	Allied Signal	3	1/9/2003	5/20/2003
50	red	H29	205	280	91	231	Corley Island shoal, mile 7+	7	Allied Signal	3	1/9/2003	5/20/2003
51	red	82H	221	329	141	434	Corley Island shoal, mile 7+	7	Saluda Shoals	3	1/8/2003	5/20/2003
52	red	23K	245	311	180	298	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	1/7/2003	6/2/2003
53	red	19B	232	320	102	343	downstream of Saluda Shoals	4	Lake Murray Dam	1	1/7/2003	6/2/2003
54	red	50N	243	335	179	397	downstream of Saluda Shoals Park	4	Saluda Shoals	2	1/8/2003	6/2/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
55	red	P41	203	289	149	264	downstream of Saluda Shoals Park, above "Logan's Point"	5	Saluda Shoals	2	1/8/2003	6/2/2003
56	orange	V09	224	258	119	194	Sandy Beach, way point 106	3	Lake Murray Dam	1	2/11/2003	4/2/2003
57	orange	I77	232	277	141	222	Sandy Beach, way point 106	3	Lake Murray Dam	1	2/11/2003	4/2/2003
58	orange	D20	247	273	165	244	downstream of Hope Ferry Landing	4	Lake Murray Dam	1	2/11/2003	4/2/2003
59	orange	Y10	233	244	153	161	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
60	orange	88J	217	247	112	168	Corley Island shoal	7	Quail Hollow	4	2/13/2003	4/3/2003
61	orange	N04	235	252	136	166	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
62	orange	47A	247	265	145	210	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
63	orange	46V	222	227	102	147	downstream of I-20 at house	10	Quail Hollow	4	2/13/2003	4/3/2003
64	orange	73V	218	254	113	185	tailrace, near spillway inflow	1	Lake Murray Dam	1	2/11/2003	4/28/2003
65	orange	G07	212	251	107	171	above Sandy Beach ("flat")	2	Lake Murray Dam	1	2/11/2003	4/28/2003
66	orange	U87	219	260	118	215	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	2/11/2003	4/28/2003
67	orange	26V	220	252	154	179	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	2/11/2003	4/28/2003
68	orange	90P	208	260	108	214	Upstream of Rawls Creek at shoal	5	Lake Murray Dam	1	2/11/2003	4/28/2003
69	orange	09Y	186	288	62	246	downstream of I-20 bridge	5	Lake Murray Dam	1	2/11/2003	5/1/2003
70	orange	Y79	249	295	146	266	downstream of I-20 bridge	10	Quail Hollow	4	2/13/2003	5/1/2003
71	orange	13B	225	265	126	218	downstream of I-20 bridge	10	Saluda Shoals Park	2	2/12/2003	5/1/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
72	orange	74A	232	270	124	186	downstream of I-20 bridge	10	Quail Hollow	4	2/13/2003	5/1/2003
73	orange	M37	249	264	131	208	Honeywell intake area	9	Saluda Shoals Park	2	2/12/2003	5/1/2003
74	orange	18A	236	257	143	165	Honeywell intake area	9	Saluda Shoals Park	2	2/12/2003	5/1/2003
75	orange	73B	224	274	131	211	Corley Island shoal	7	Lake Murray Dam	1	2/11/2003	5/1/2003
76	orange	R44	261	306	183	360	asphalt plant, mile 4+	11	Quail Hollow	4	2/13/2003	5/20/2003
77	orange	62P	203	264	112	193	BC Components intake	8	Saluda Shoals	2	2/12/2003	5/20/2003
78	orange	J45	230	273	148	216	BC Components intake	8	Saluda Shoals	2	2/12/2003	5/20/2003
79	orange	D60	203	241	106	130	Corley Island shoal, mile 7+	7	Quail Hollow	4	2/13/2003	5/20/2003
80	orange	R77	216	280	100	250	Corley Island shoal, mile 7+	7	Saluda Shoals	2	2/12/2003	5/20/2003
81	orange	17C	223	282	142	239	downstream of Saluda Shoals Park	4	Lake Murray Dam	1	2/11/2003	6/2/2003
82	green	R76	267	278	234	243	Sandy Beach, way point 106	3	Lake Murray Dam	1	3/11/2003	4/2/2003
83	green	R79	260	258	173	165	SCE&G boat landing - tailrace, way point 108	1 (red)	Lake Murray Dam	1	3/11/2003	4/2/2003
84	green	Z71	237	279	215	243	downstream of Hope Ferry Landing	4	Quail Hollow	4	3/14/2003	4/2/2003
85	green	22R	215	226	134	126	Corley Island shoal	7	Allied Signal	3	3/13/2003	4/3/2003
86	green	98G	220	230	140	155	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	4/3/2003
87	green	L34	245	245	192	177	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	4/3/2003
88	green	O00	215	270	108	220	above Sandy Beach (near shoal)	2	Saluda Shoals Park	2	3/12/2003	4/28/2003
89	green	N24	242	266	176	225	Sandy Beach	3	Lake Murray Dam	1	3/11/2003	4/28/2003
90	green	47G	238	265	173	203	Sandy Beach	3	Lake Murray Dam	1	3/11/2003	4/28/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
91	green	81L	236	265	148	191	Upstream of Rawls Creek at shoal	5	Lake Murray Dam	1	3/11/2003	4/28/2003
92	green	O57	244	280	154	219	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
95	green	S64	280	300	255	327	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
93	green	91Y	246	278	177	222	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
94	green	37G	235	269	152	238	Honeywell Intake	9	Lake Murray Dam	1	3/11/2003	5/1/2003
95	green	Z21	237	285	215	301	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	5/1/2003
96	green	30T	238	280	138	204	Quail Hollow, mile 3 to mile 4	12	Quail Hollow	4	3/14/2003	5/20/2003
97	green	H42	252	305	178	213.0	Honeywell Intake	9	Quail Hollow	4	3/14/2003	5/20/2003
98	green	11C	230	272	178	204.0	Honeywell Intake	9	Saluda Shoals	2	3/12/2003	5/20/2003
100	green	P34	281	326	252	366	BC Components intake	8	Quail Hollow	4	3/14/2003	5/20/2003
101	green	82R	230	272	186	189	asphalt plant, mile 4+	11	Quail Hollow	4	3/14/2003	5/20/2003
102	green	T65	216	284	167	216	upstream of I-20, ~mile 4.5	13	Quail Hollow	4	3/14/2003	5/20/2003
103	green	G41	300	334	360	372	BC Components intake	8	Lake Murray Dam	1	3/11/2003	5/20/2003
104	green	P89	235	285	145	286	Corley Island shoal, mile 7+	7	Saluda Shoals	2	3/12/2003	5/20/2003
105	green	09Y	225	272	155	186	Corley Island shoal, mile 7+	7	Lake Murray Dam	1	3/11/2003	5/20/2003
106	green	08R	210	262	134	209	Corley Island shoal, mile 7+	7	Lake Murray Dam	1	3/11/2003	5/20/2003
107	green	28B	193	213	88	74	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	3/11/2003	6/2/2003
108	green	G67	230	271	126	211.5	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	3/11/2003	6/2/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
109	green	72Y	259	291	159	259.0	Sandy Beach (upstream of Saluda Shoals Park landing)	3	Lake Murray Dam	1	3/11/2003	6/2/2003
110	green	E35	250	284	157	213.0	Sandy Beach (upstream of Saluda Shoals Park landing)	3	Quail Hollow	4	3/14/2003	6/2/2003
111	green	N25	233	272	146	204.0	downstream of Saluda Shoals Park, above "Logan's Point"	5	Lake Murray Dam	1	3/11/2003	6/2/2003

Table B-3: Median growth rate (n) for each of the fourteen combinations of release site and release date. Overall median (n) growth rates are shown for each site, each date, and for all 111 recaptured trout. Growth rates are g/g/day and the overall rate of 0.0071 g/g/day is 0.71 percent weight gain per day.

	DEC.	JAN.	FEB.	MAR.	ALL MONTHS
Below Dam	0.0072 (2)	0.0070 (6)	0.0095 (11)	0.0048 (13)	0.0075 (32)
Saluda Shoals	0.0077 (11)	0.0083 (12)	0.0075 (9)	0.0063 (6)	0.0076 (38)
Allied Signal	0.0078 (6)	0.0065 (14)	No release	-0.0030 (1)	0.0071 (21)
Quail Hollow	0.0030 (4)	No release	0.0095 (6)	0.0055 (10)	0.0056 (20)
All Sites	0.0071 (23)	0.0072 (32)	0.0083 (26)	0.0056 (30)	<u>0.0071</u> <u>(111)</u>

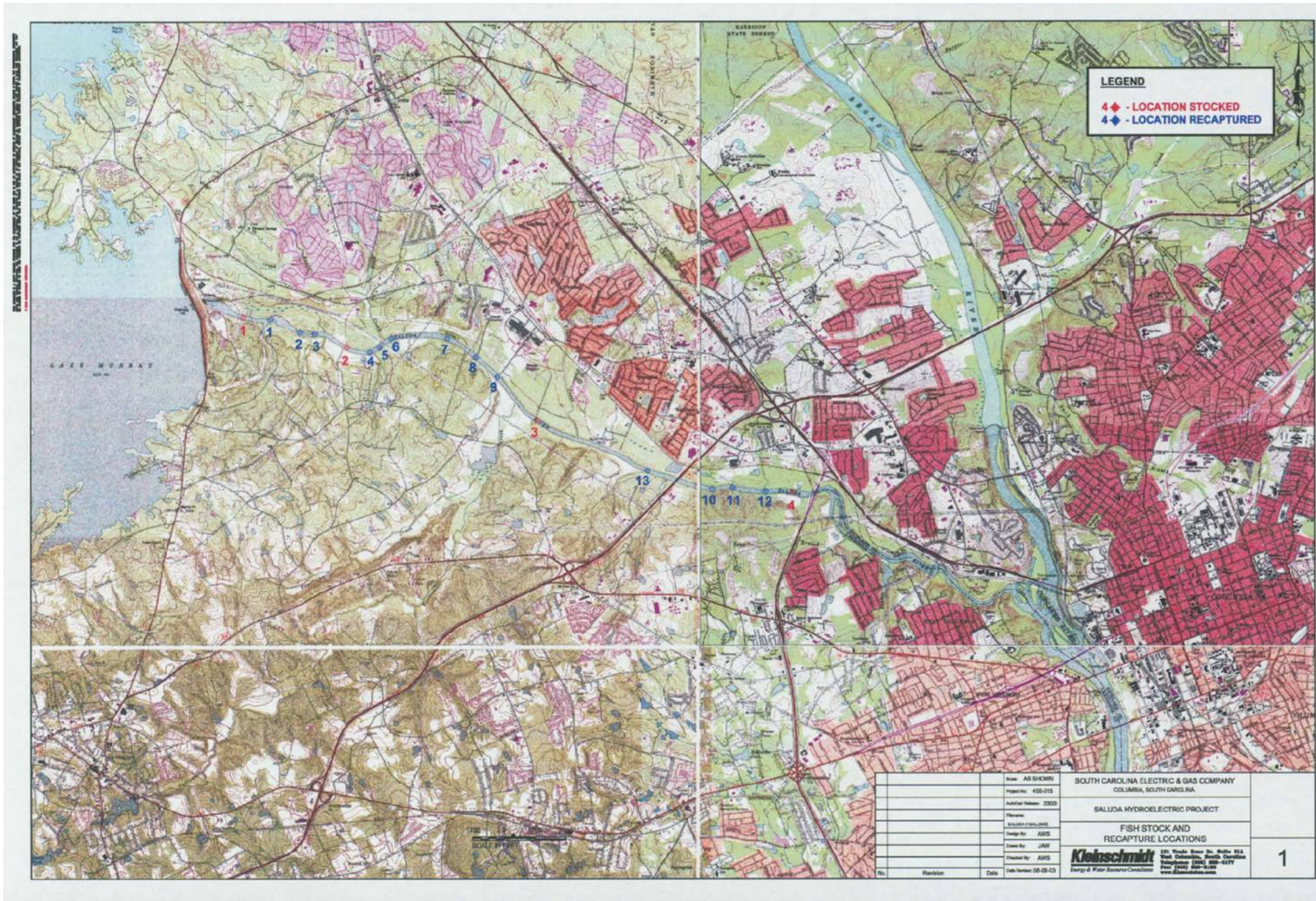


Figure B-1: Fish Stock and Recapture Locations

Weight x Release x Date
Median (n) per Release

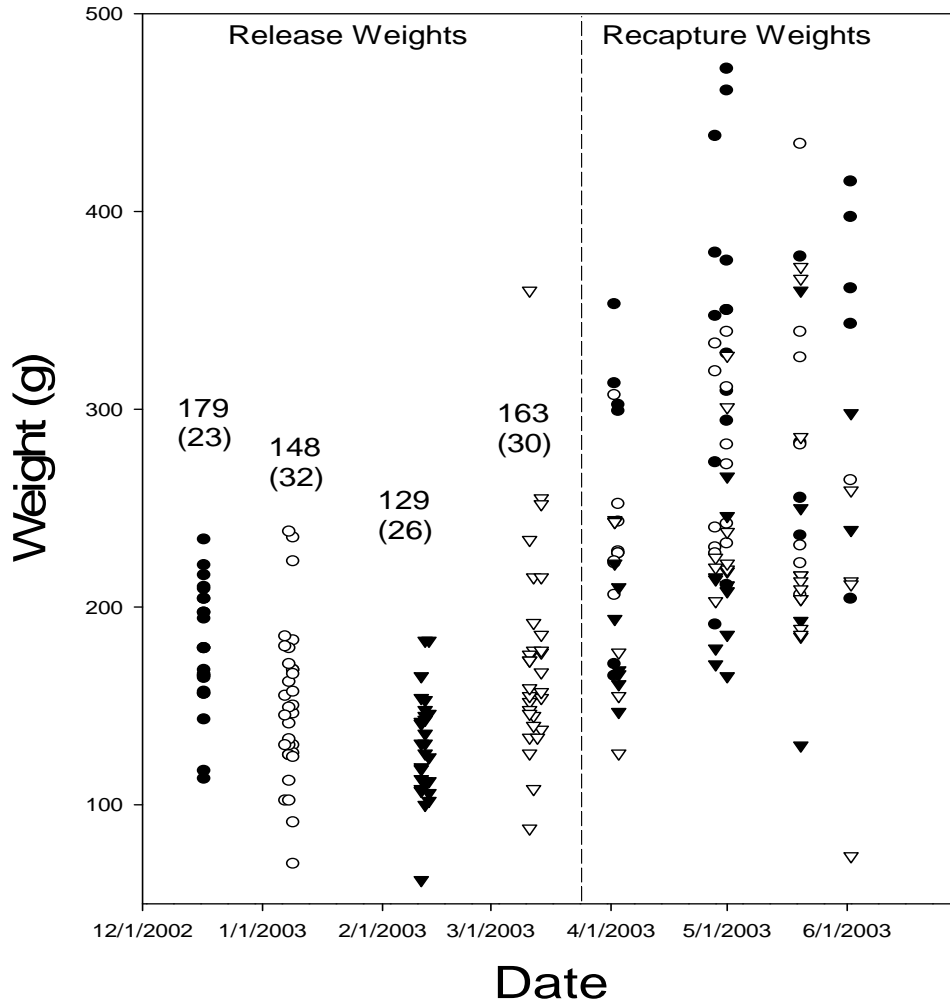
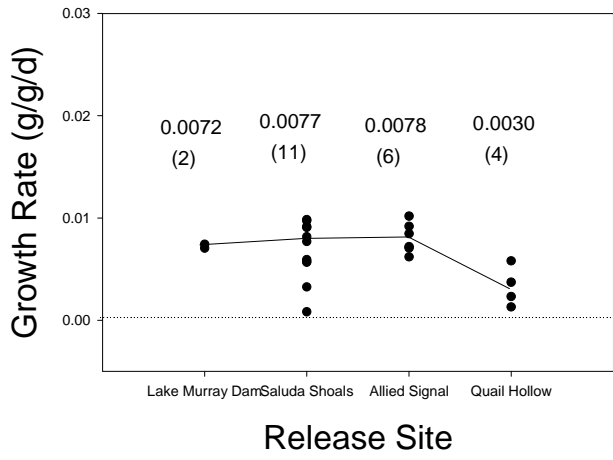


Figure B-2: Weight (g) of Recaptured Trout at Time of Release and Time of Recapture

Growth by Release Site
December Releases
median (n)



Growth by Release Site
January Releases
median (n)

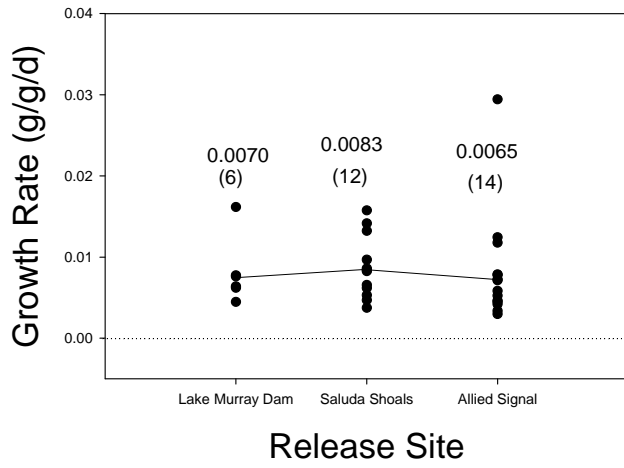
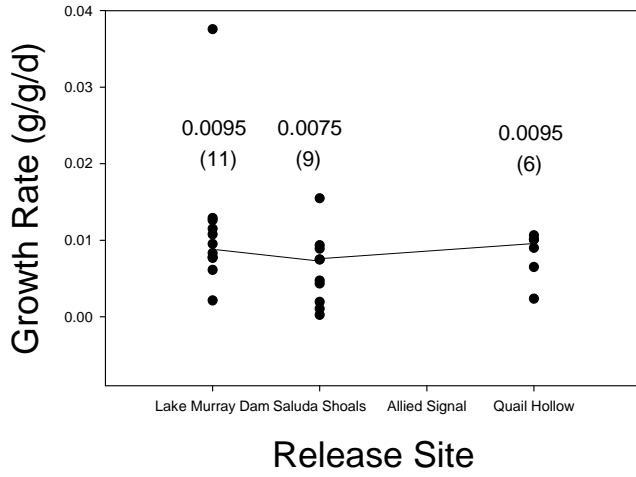


Figure B-2a: Growth Rate by Release Site for December and January Releases

Growth by Release Site
February Releases
median (n)



Growth by Release Site
March Release
median (n)

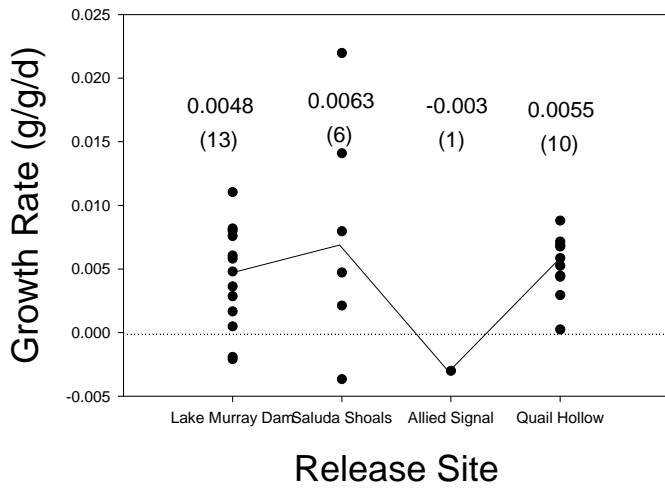


Figure B-2b: Growth Rate of Trout by Release Site for the February and March Releases

Growth vs Capture Site (all releases)
Release Points (dashed lines)

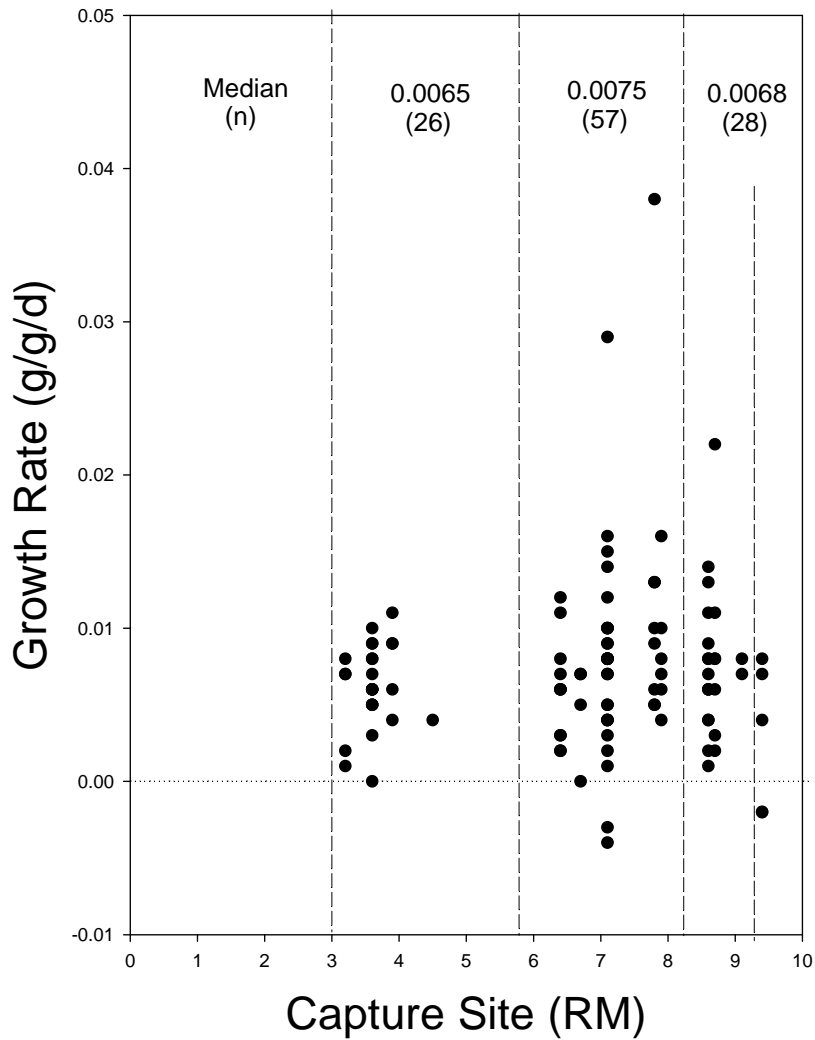


Figure B-3: Growth Rate is Shown as a Function of Recapture Location by River Mile. Release points are indicated by vertical dashed lines. From downstream to upstream these are Quail Hollow, Allied Signal, Saluda Shoals Park, and the immediate vicinity of the Lake Murray dam. No recapture efforts were made below the Quail Hollow release point (RM 3).

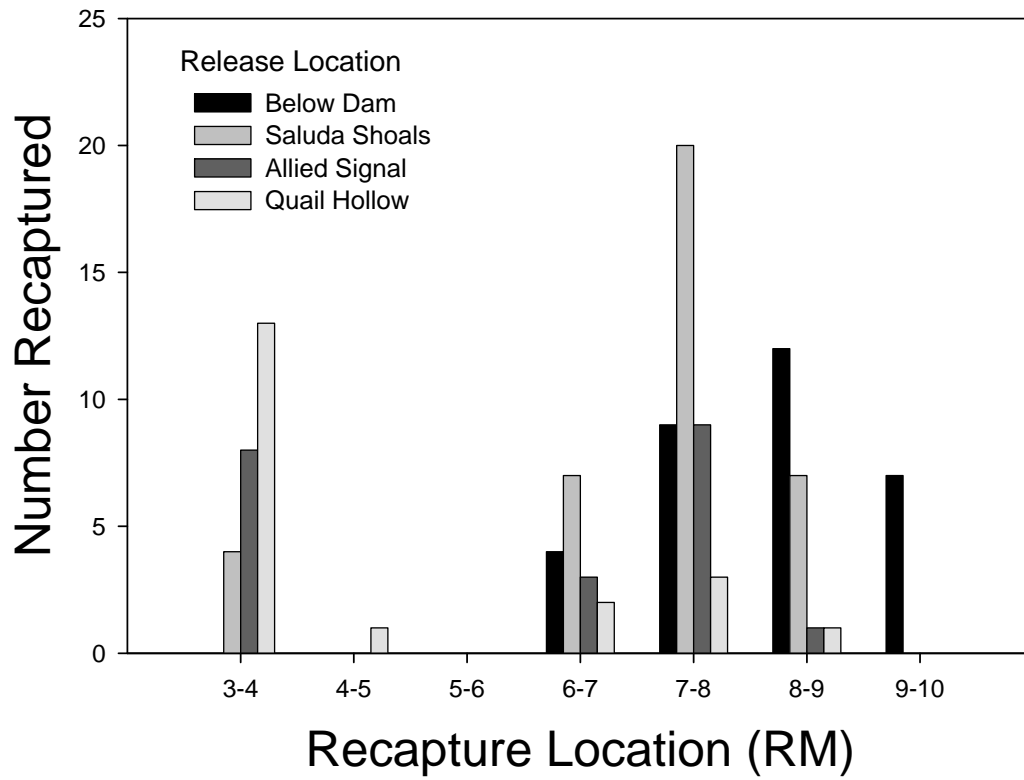


Figure B-4: Recapture Location (RM) and Site of Release. There was Limited Recapture Effort Between RM 4 and 6.

Distance moved from release site
and median (by release date)

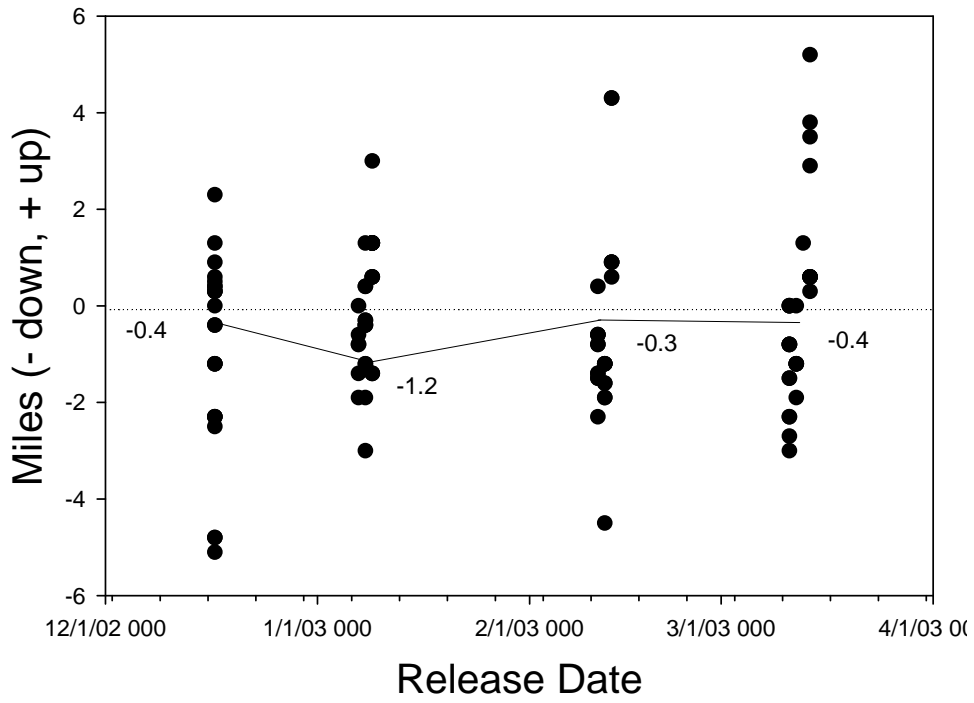


Figure B-5: Distance Moved from Release Site for Each Release Date. Median Distances are Shown on the Graph for each Release Date

Release Date and Movement
median (n)

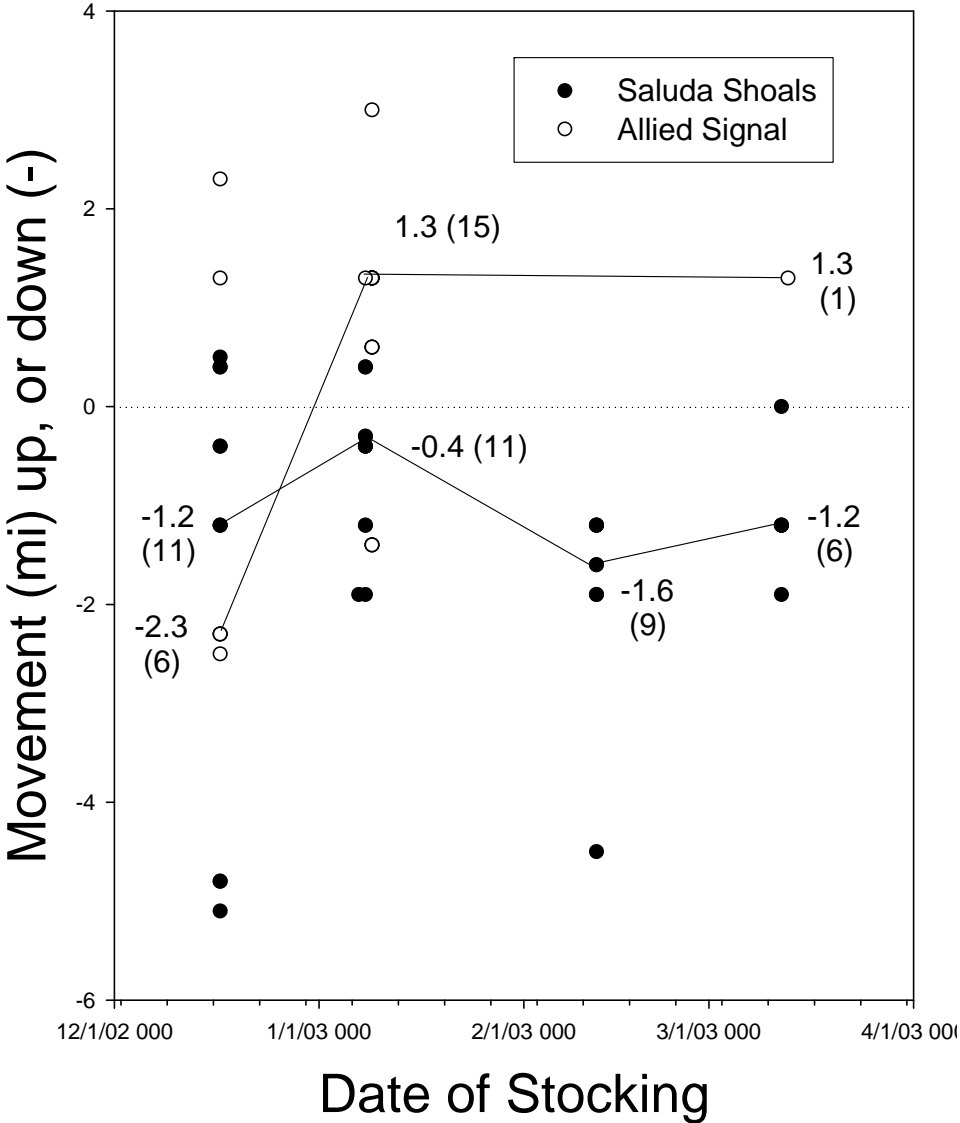


Figure B-6: Movement of Trout by Stocking Date from the Two Intermediate Release Sites where Upstream and Downstream Movement were not Limited by the Dam or by Sampling Site Limitations

Distance Travelled from Release Site
to Recapture Site (upper and lower releases)
median (n)

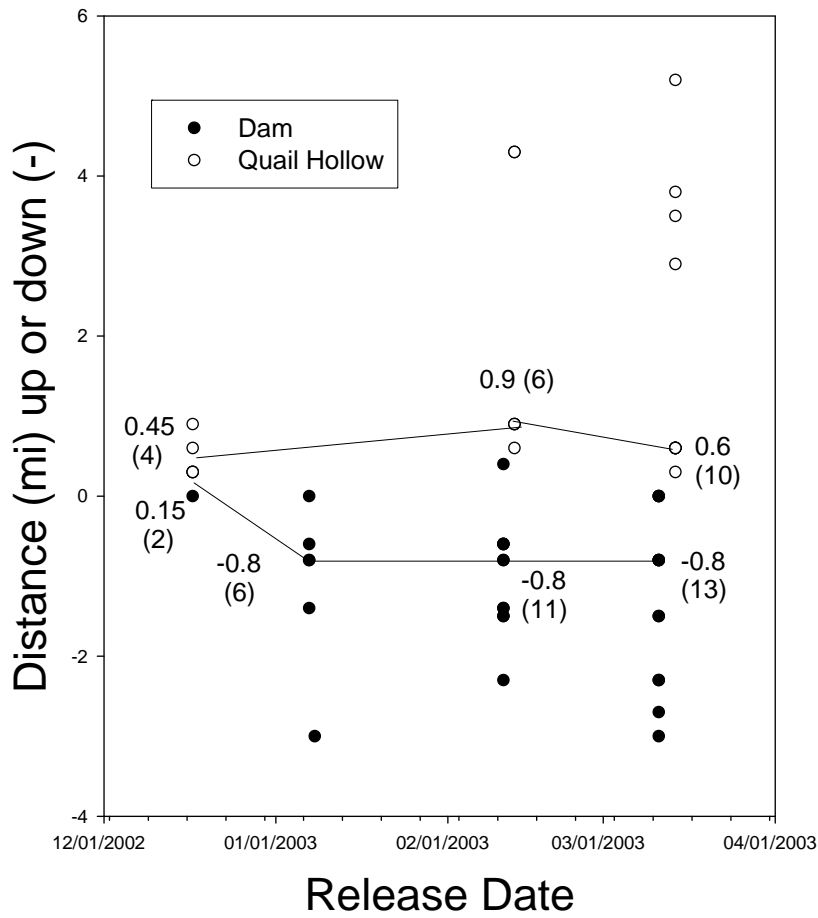


Figure B-7: Movement of Fish Following Release at Various Times at the Upstream Site Near Lake Murray Dam and at Quail Hollow

Growth and Distance Travelled
from Release Point

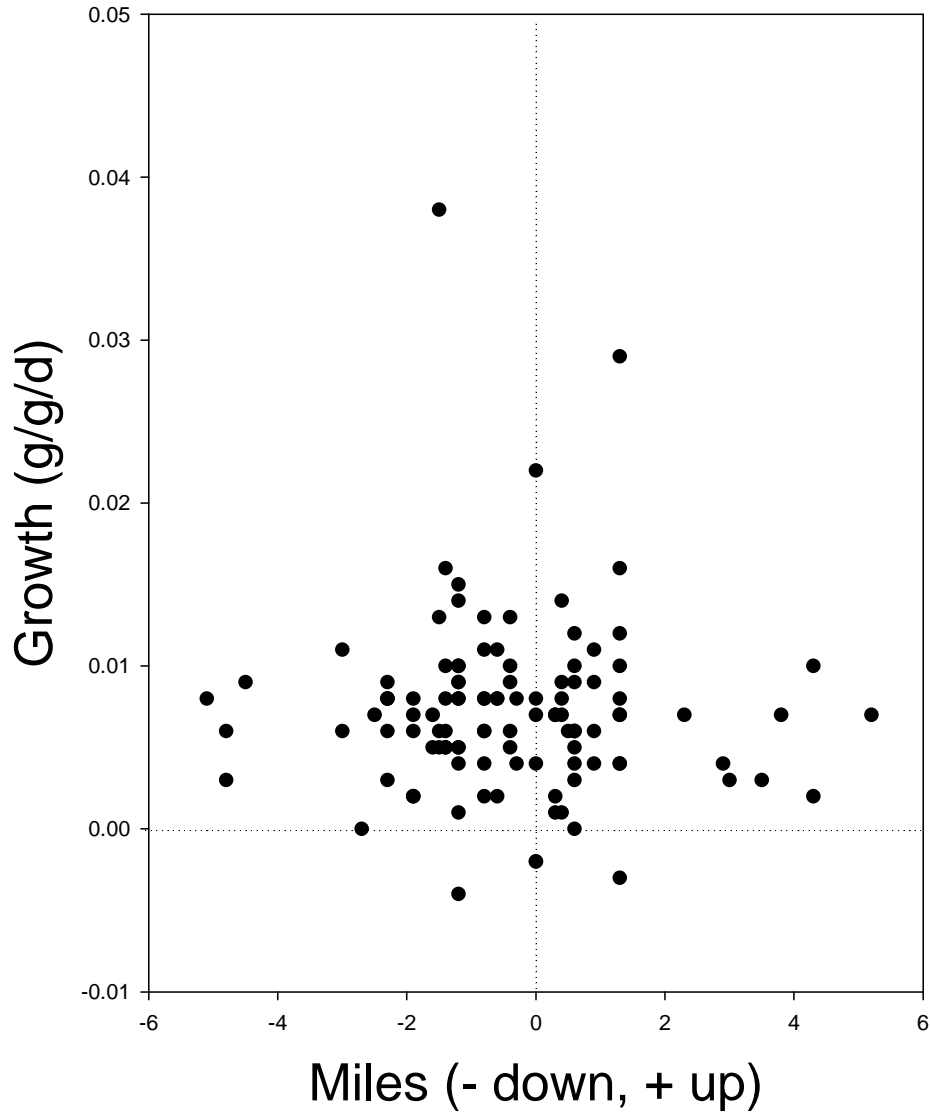


Figure B-8: This Figure Shows the Growth Rates for All 111 Fish as a Function of Their Movement Up or Downstream Following Release

December Release
Distance Travelled between
Release and Recapture Sites

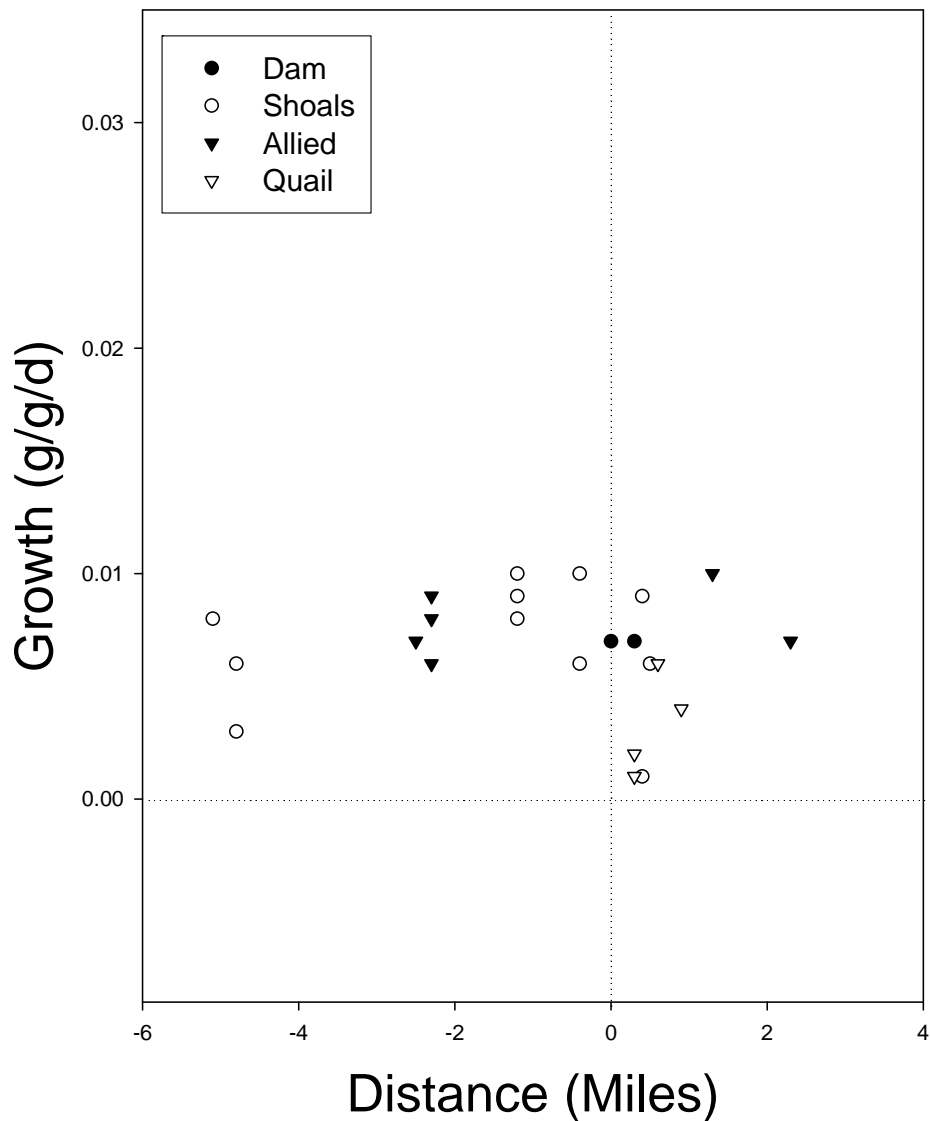


Figure B-9: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in December at the Four Release Sites

January Release
Distance Travelled between
Release and Capture Sites

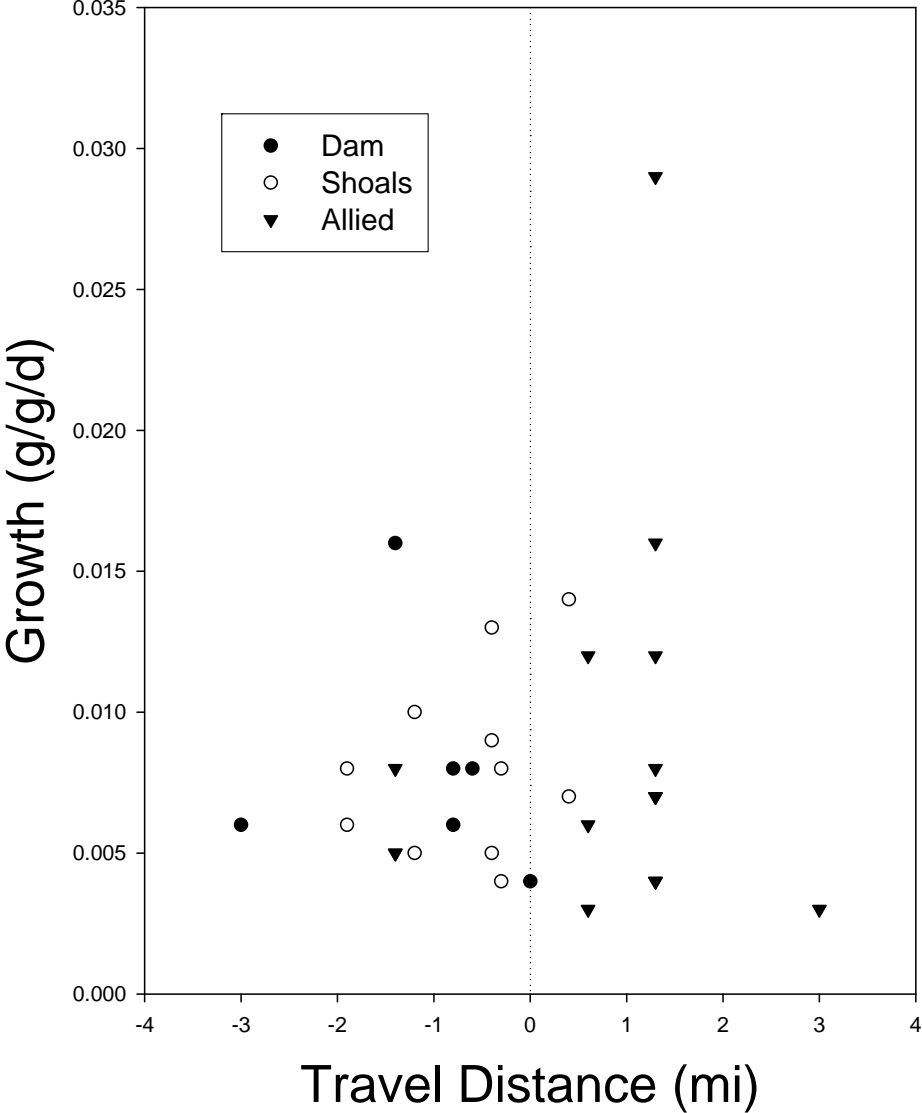


Figure B-10: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in January at the Three Release Sites

February Release Growth
Distance Travelled between
Release and Capture Sites

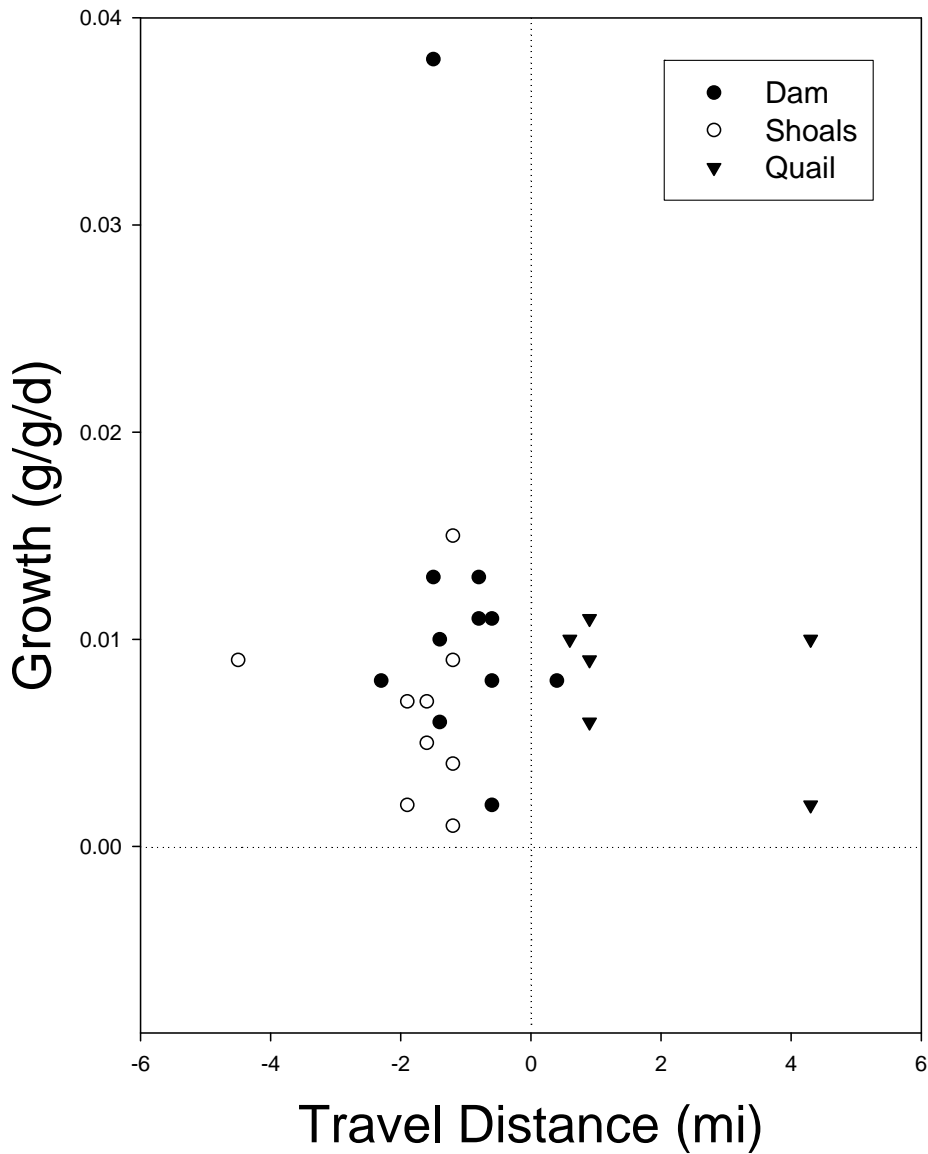


Figure B-11: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in February at the Three Release Sites

March Release Growth
Distance Travelled between
Release and Capture Sites

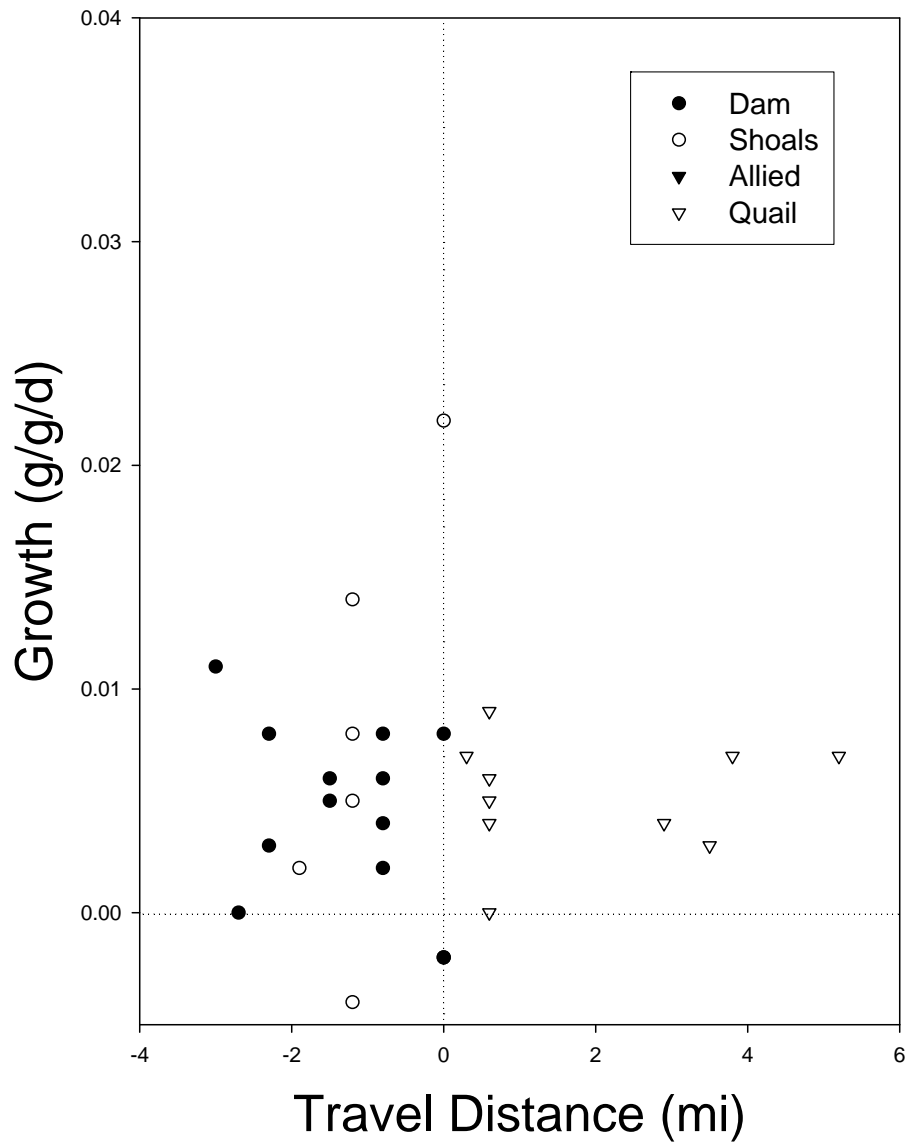


Figure B-12: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in March at the Four Release Sites

Movement vs. Time in Stream

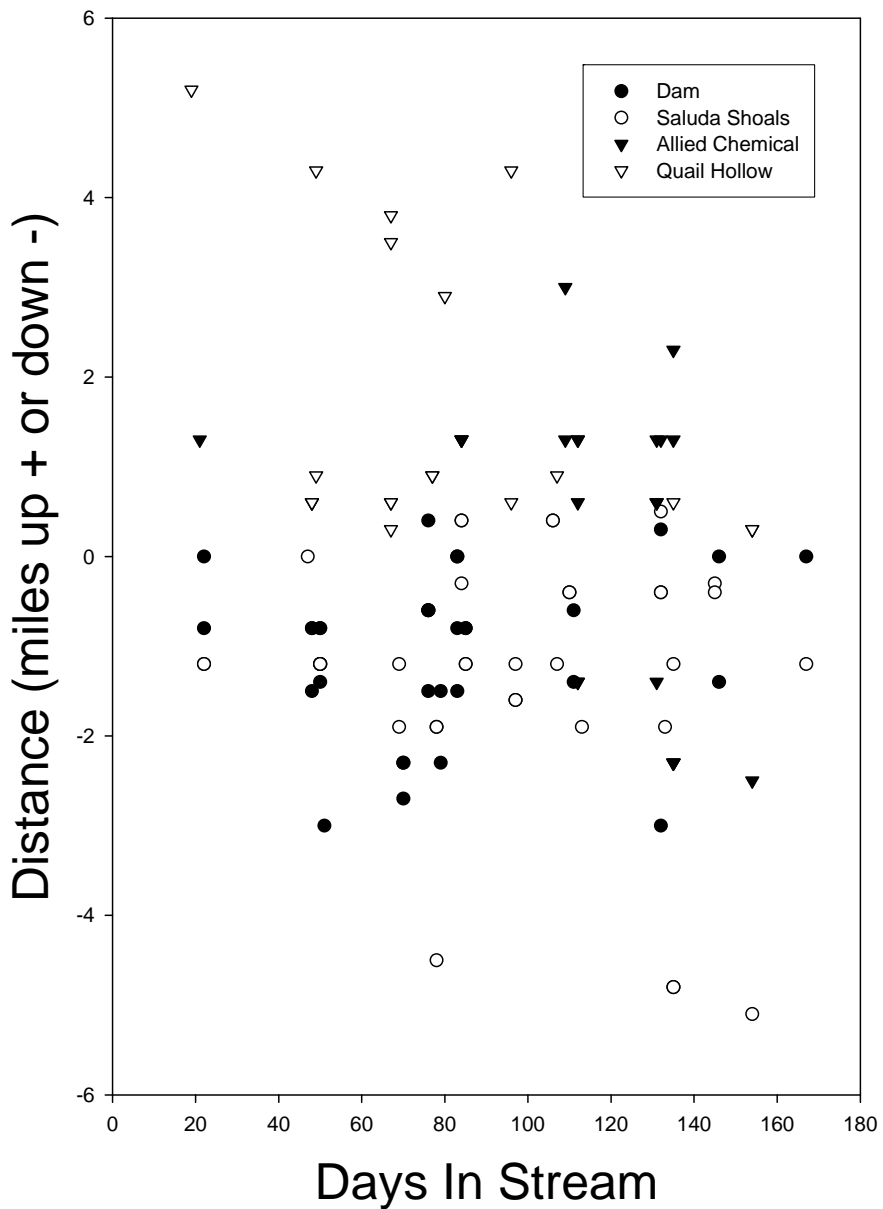


Figure B-13: Relationship Between Days in the Stream Between Release and Capture and the Distance Traveled from the Point of Release

Initial Weight vs. Growth Rate

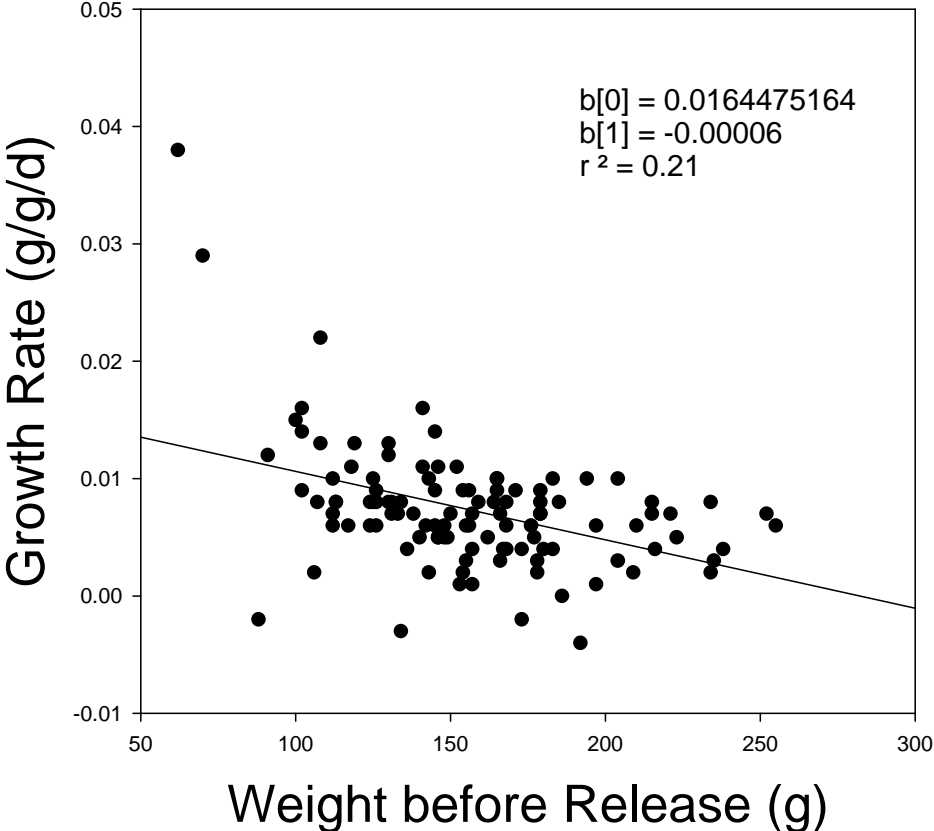


Figure B-14: The growth Rate of Trout in the LSR Showed a Slight Relationship with Size at Release

All Releases

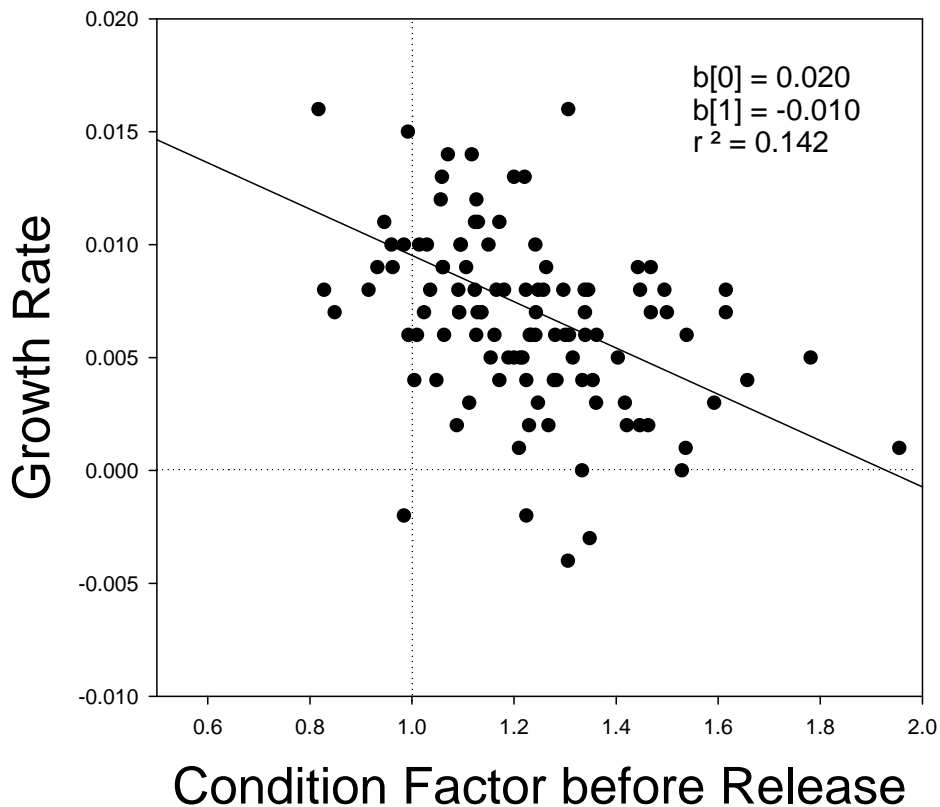


Figure B-15: Growth Rate was Greater in Fish with Lower Initial Condition Factors Following Release into the LSR

Comparison of Condition Factor at Release
and at Recapture (all releases)

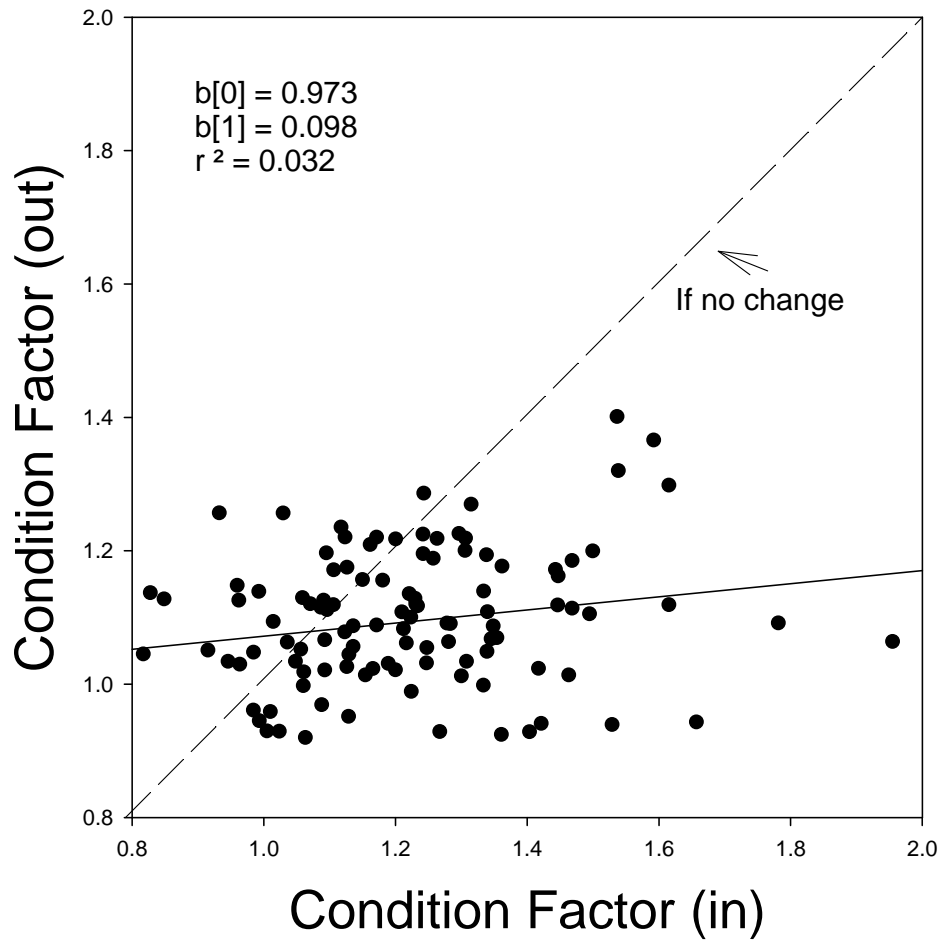


Figure B-16: The Condition of Trout in the LSR Became Much More Uniform Than That Seen at the Time of Release

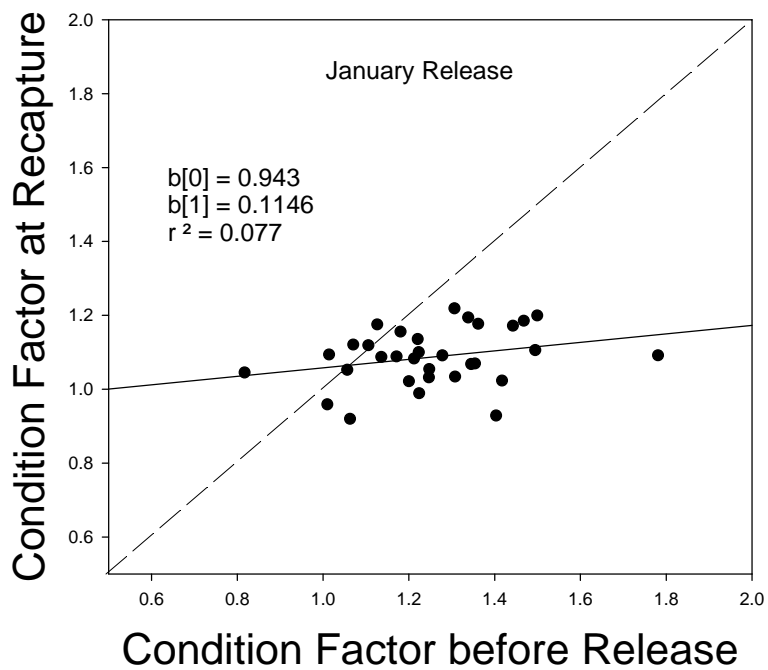
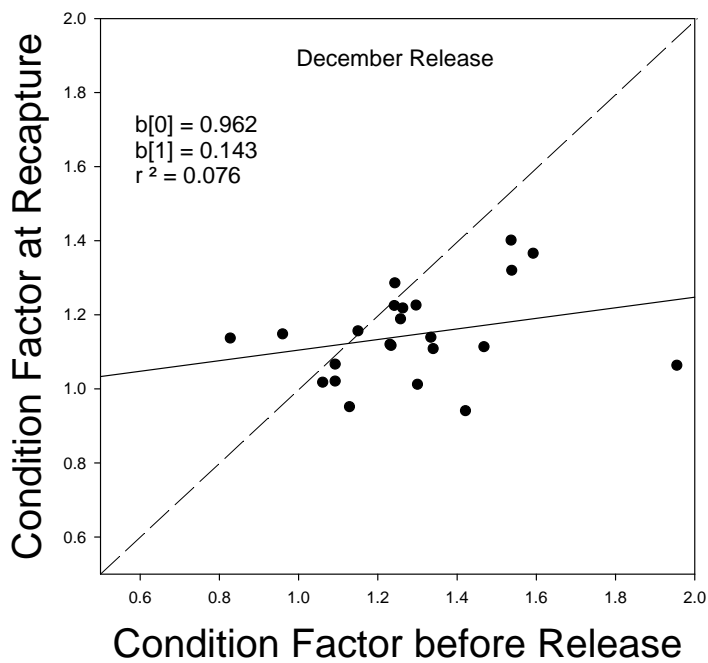


Figure B-17a: Condition Factor Change for December and January Releases

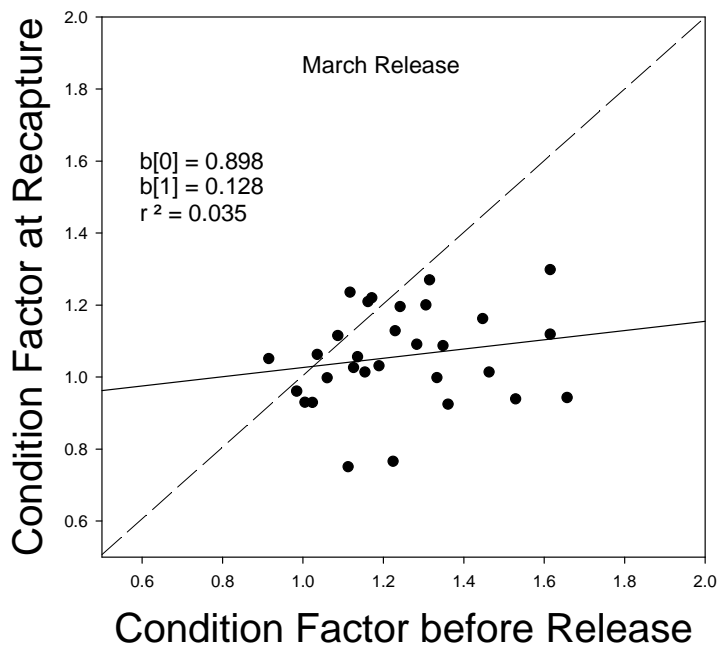
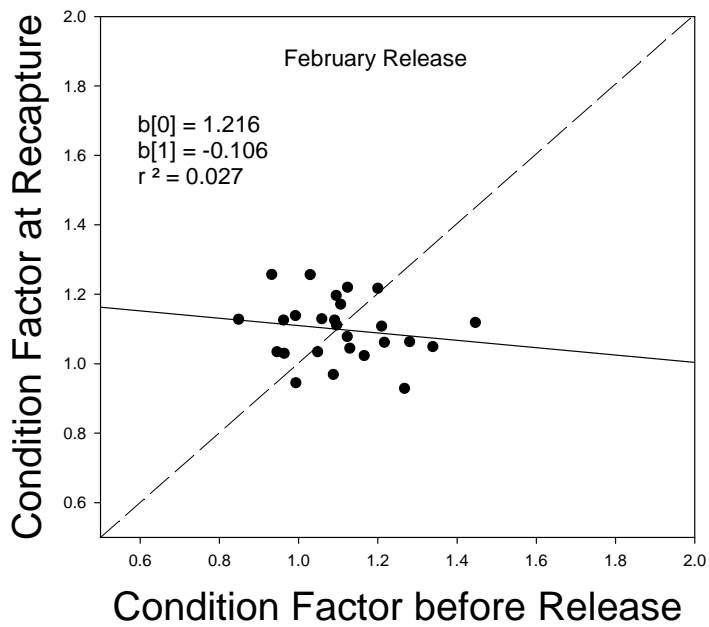


Figure B-17b: Condition Factor Change for January and March Releases

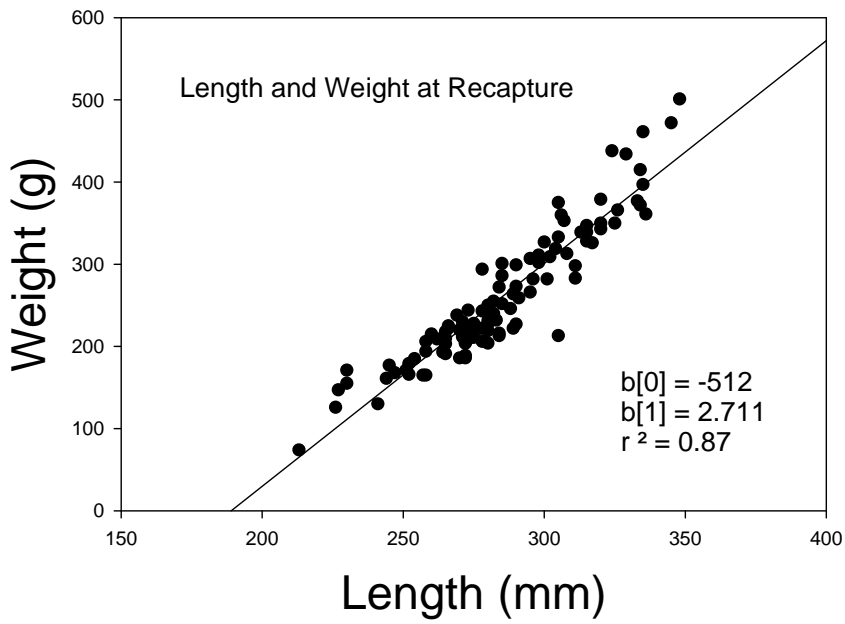
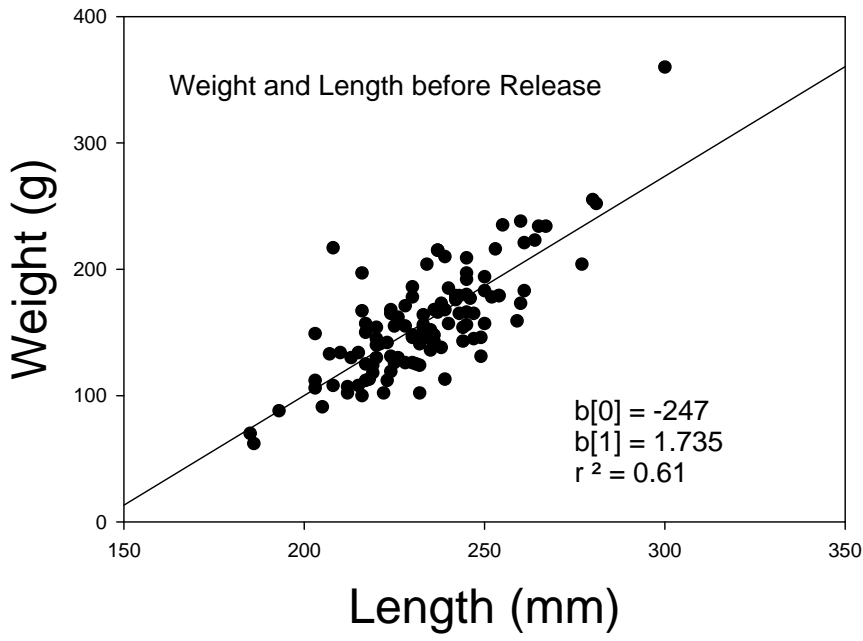


Figure B-18: Illustrating the Increased Uniformity of Trout Condition Following Release into the LSR

Condition Factor (in) vs. Travel in Stream

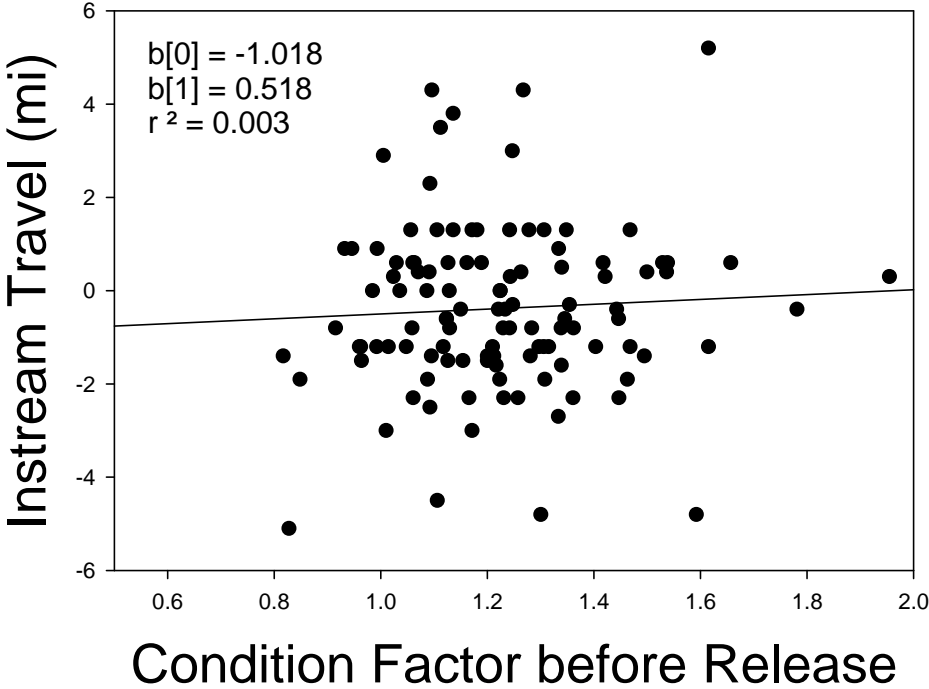


Figure B-19: There was No Significant Effect of Initial Condition Factor on the Tendency of Fish to Move Up or Downstream Following Release

Growth Rate vs. Days in Stream

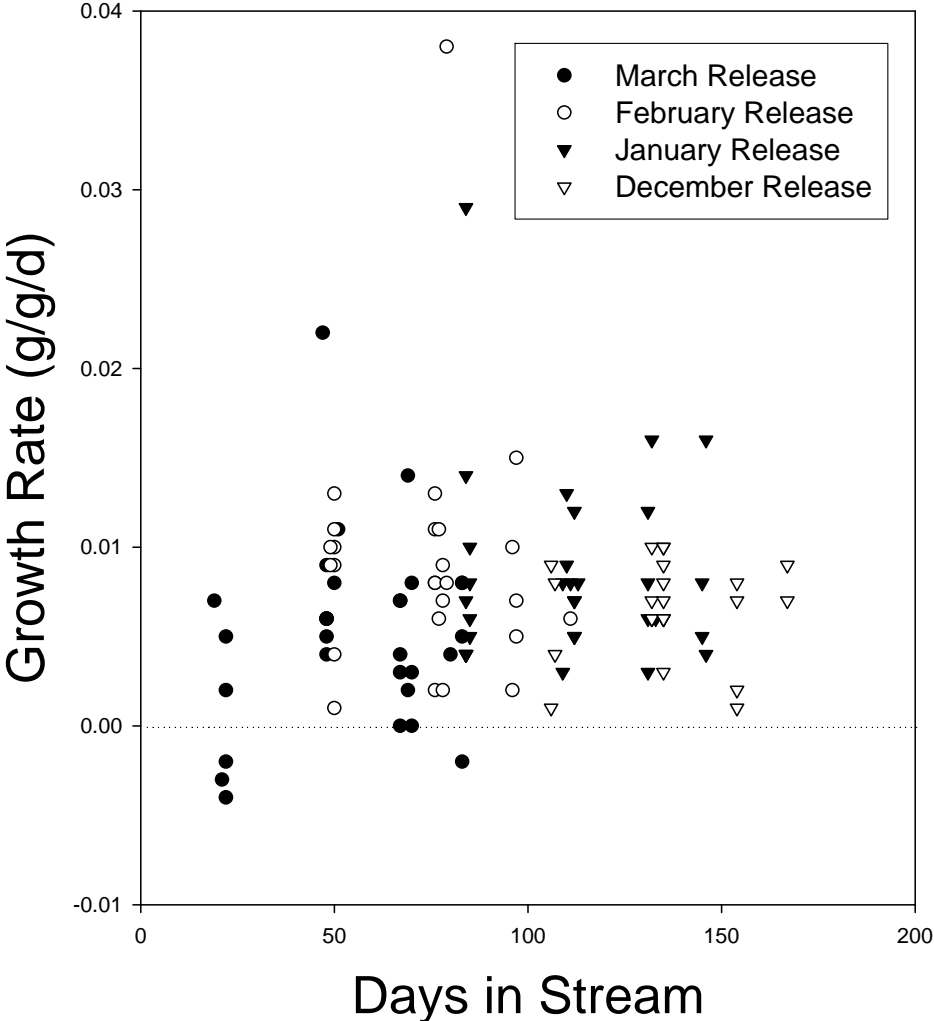


Figure B-20: There was No Appreciable Effect of Residency Duration on the Growth of Fish in the LSR

Length Frequency Distribuion

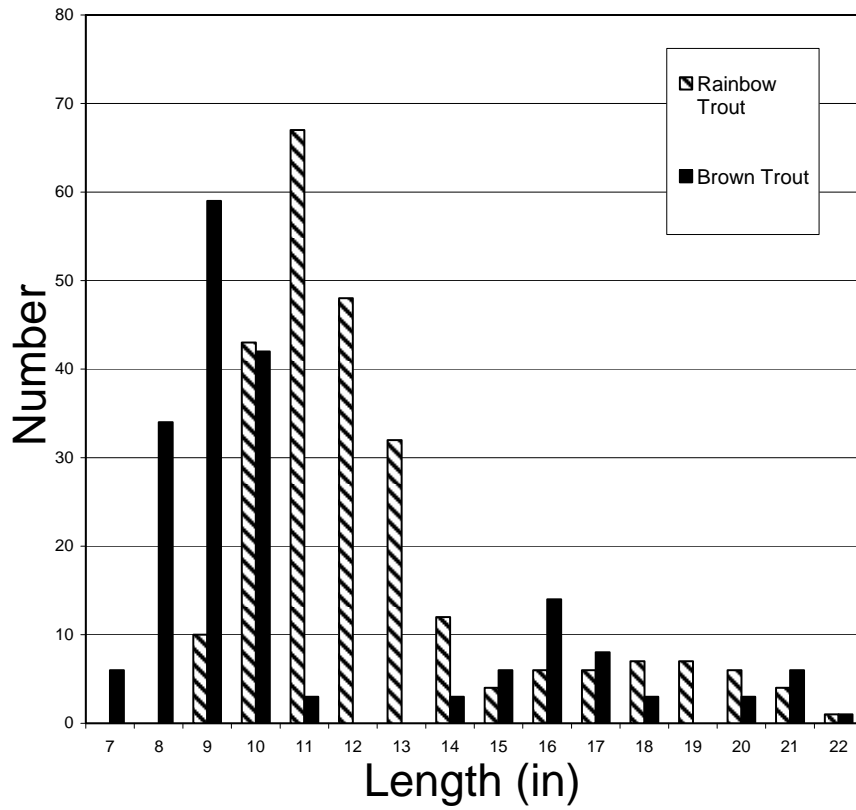


Figure B-21: Length Frequency Distribution of All Brown and Rainbow Trout Collected from the Lower Saluda River, April – June 2003

**RARE PLANT AND ANIMAL SPECIES
OF INTEREST AROUND
LAKE MURRAY AND
THE LOWER SALUDA RIVER**

Wildlife abounds within the ecosystems supported by Lake Murray and the lower Saluda River, and is indeed one of the drawing features to visitors and residents of the area. Among the plants and wildlife that inhabit the lake and river environments are a number of rare, legally protected, or otherwise exemplary species that require special attention. A major focus in managing the lake environment is maintaining the balance between the natural environment that supports these species and human activity and occupation.

SCE&G has developed this brochure to educate the residents and visitors of the Lake about the rare and unique plants and animals occupying the area. By understanding the life requirements and threats to these species, it is our hope that visitors and lake residents will adopt a sense of stewardship for these species and their habitats. Armed with information, such as required habitats and the timing of breeding and nesting behavior, visitors can tailor their activities to minimize disturbance to these species. The public is encouraged to learn and understand the relationships between the rare species and their habitat, and to assume personal responsibility for their conservation. Ultimately, with an informed and conscientious public, these species and their habitats at Lake Murray and lower Saluda River can endure into the future and continue to mark the area as a valued natural resource.

This brochure is also available on the SCE&G website at <http://www.sceg.com/en/my-community/lake-murray/>. Copies can also be picked up at recreational sites, marinas, and parks around Lake Murray.

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is best known as the national bird of the United States of America. The bald eagle was previously listed as a federally endangered species due to population declines attributed to exposure to pesticides, loss of suitable habitat and illegal shooting. Today, the species has recovered to the degree that it was recently removed from the Federal Endangered Species List in July of 2007. The bald eagle continues to receive protection under the South Carolina Nongame and Endangered Species Conservation Act as a state endangered species, as well as federally through the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act.

Bald eagles are birds of prey that may be found throughout North America, typically around water bodies, including Lake Murray and the lower Saluda River, where they feed and nest. Eagles forage on Lake Murray year round, with peak usage likely occurring during the winter months. Nesting of bald eagles on Lake Murray was first documented in 1996, and since that time, the nesting population has increased significantly. The South Carolina Department of Natural Resources (SCDNR) has recently documented seven active bald eagle nests on Lake Murray as well as one active nest on the lower Saluda River. Active bald eagle nests occurring within Lake Murray and the lower Saluda River are monitored by South Carolina Electric & Gas Company (SCE&G) in accordance with the National Bald Eagle Management Guidelines. These guidelines generally prohibit potential “disturbance” within 660 ft of an active nest during the nesting season (September through May) and 330 ft during the non-nesting season.

Photo by Jennifer S. Hand



What You Can Do: Avoid disturbing eagles at nesting and feeding areas and provide habitat for eagles by maintaining mature trees on your property. If you find an injured eagle call the South Carolina Center for Birds of Prey at (843) 971-7474.

Wood Stork

The wood stork (*Mycteria americana*) is a large wading bird native to coastal areas of South Carolina, Georgia, Florida and is the only stork species native to North America. The wood stork was federally listed as endangered in 1984, with population declines attributed primarily to loss of wetlands suitable for nesting and foraging. Like most other wading birds, wood storks feed primarily on small fish in habitats such as narrow tidal creeks, flooded tidal pools, freshwater marshes and freshwater wetlands. Wood storks typically use tall cypresses or other trees near wetlands or marshes for colonial nest sites. Nests are usually located in the upper branches of large trees and there are typically several nests in each tree. Currently, nesting of the species in the U.S. is thought to be limited to the coastal plain of South Carolina, Georgia and Florida.



Wood storks were observed feeding at various locations in the upper portions of Lake Murray between the years of 2001 and 2006. A study conducted by SCE&G during 2005 and 2006, in cooperation with the SCDNR, found that a small number of wood storks periodically forage in the upper reaches of Lake Murray, the Saluda River upstream of the reservoir and nearby wetlands during the late-summer and early-fall of some years. Timing of these observations suggest that these wood storks are likely what biologists term “post-dispersal migrants.” This means that they likely nested or were hatched in coastal areas during the summer months, dispersed from the nest, and migrated through the Lake Murray area to utilize temporary food sources (fish trapped in shallow pools) before returning to coastal areas for the winter.

Photos by Jennifer S. Hand

What You Can Do: If you happen to see a wood stork soaring above Lake Murray or wading along the shorelines call SCE&G’s Environmental



Services at (803) 217-7132. Adult wood storks appear all white with long blackish-grey legs and pink feet. They have an unfeathered head and neck with a long, thick black bill. In flight, the wings underneath are edged in black.

Rocky Shoals Spider Lily

The rocky shoals spider lily (RSSL) (*Hymenocallis coronaria*), also referred to as Cahaba lily, is a flowering aquatic plant that typically inhabits large streams and rivers in South Carolina, Georgia and Alabama. As the name would suggest, these areas usually consist of rocky shoals and bedrock outcrops, which provide anchor points for the RSSL's roots and bulbs. RSSL grows best in constantly flowing, shallow water. The decline of RSSL has historically been attributed to loss of shoal habitat due to construction of impoundments and other channel modifications. Threats to current populations include modification of river flows and fluctuating water levels resulting from dam operations, water pollution and collection for use in gardens. The RSSL is considered a federal species of concern by the United States Fish & Wildlife Service.

A good vantage point from which to observe the RSSL is at the Columbia Riverfront Park. The lily's are in the island complex at the confluence of the Broad and Saluda rivers and just upstream of the confluence in the bypass reach of the Broad River downstream of the Columbia Diversion Dam. Each spring from mid-April to May in this section of the Broad River, one to three stalks will emerge from a RSSL bulb and each will produce a group of six to nine beautiful white flowers. Peak flowering usually occurs from mid-May to mid-June.



Photo by Jennifer S. Hand

What You Can Do: Do not pick the lilies or remove the bulbs for transplant, as they will not grow in a typical garden setting. Rocky shoals spider lilies are most beautiful in their natural habitat.

Shortnose Sturgeon

The shortnose sturgeon (*Acipenser brevirostrum*) is a “living fossil” pre-dating the dinosaurs. Shortnose sturgeons have long life spans, often living up to 60 years. Adults range from three to four feet in length and have primitive characteristics such as an elongated, slightly flattened body covered with bony plates (scutes). They have a toothless mouth that is positioned under the snout, which allows them to feed on bottom dwelling organisms. Shortnose sturgeon inhabit freshwater rivers, estuaries, and coastal marine waters of the Atlantic Coast. Females reach sexual maturity between 8 to 12 years of age and spawn every 3 to 5 years. Adults spawn in freshwater rivers, preferring to deposit their eggs in rocky shoal habitats well inland from the ocean. Young sturgeon gradually move downstream as they mature, and juvenile and adult fish spend most of their lives in lower sections of their natal river near the ocean, with occasional movements upstream or out to coastal waters. Sturgeon will return to their natal rivers to spawn several times throughout their lives. The National Marine Fisheries Service has recognized the Santee-Cooper River in South Carolina as one of the 19 distinct population segments of shortnose sturgeon. Shortnose sturgeon are distributed throughout the Santee River Basin below existing dams in the Wateree and Congaree tributaries, and in Lakes Marion and Moultrie.

USFWS

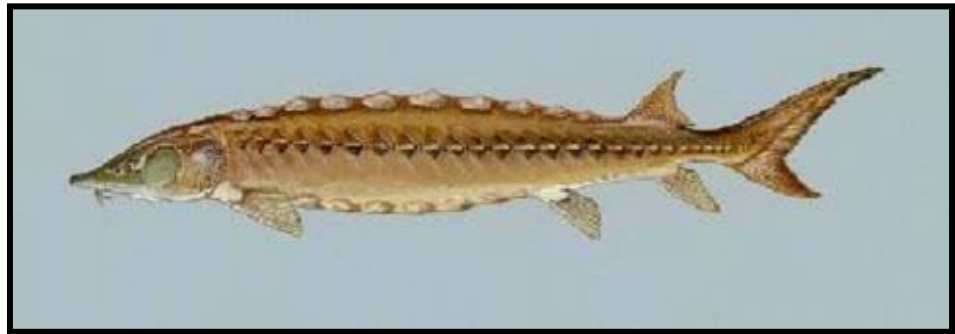


Illustration by Duane Raver,

The shortnose sturgeon was originally listed as endangered on March 11, 1967, with population declines attributed to overharvesting, loss of habitat, limited access to spawning grounds and water pollution. State and federal natural resource agencies, conservation organizations, and industry partners are working together in the Santee River Basin to help improve habitat conditions, and future recovery is promising.

What You Can Do: Become familiar with the fish species native to your area before going fishing. If a live sturgeon is captured, return it safely to the water.

Purple Martin

Purple martins (*Progne subis*) are the largest member of the swallow family in North America, measuring 7 1/2 inches long and weighing 1.9 ounces. An adult purple martin has long angular pointed wings, a large bill and forked tail. The male has a glossy blue-back, with duller black wings and tail. Female and juveniles are dusky black above, light beneath, with a smoke-gray throat and breast. Purple martins typically feed in flight, preying on insects and spiders. Typically, purple martins prefer open countryside, but have also been seen in suburban areas where there are suitable nest sites.

The eastern and southern edge of Lunch Island (also known as Bomb Island) on Lake Murray, approximately 5 miles west of the Lake Murray Dam, is one of the largest pre-migratory roosting sites for purple martins in the United States. The purple martin is a neotropical migrant, meaning that it migrates annually from its normal range in South America, the West Indies and portions of Central America, northward to breeding grounds across North America. This species is unique in that it nests in large colonies and is almost entirely dependant upon man-made structures for nesting. Following the fledging period, purple martins often congregate in large nocturnal roosts of 100,000 or more birds prior to returning southward. Beginning in late June and extending through August or early September these congregations engage in two mass movements daily as they exit the roost in the morning to feed and return in the evening. It has been estimated that at least 700,000 birds utilize the Lunch Island (Bomb Island) roost, prompting SCE&G, South Carolina Department of Natural Resources and the Columbia Chapter of the National Audubon Society to enter into a Memorandum of Agreement to establish a cooperative arrangement for management of the habitat. SCE&G also registered the island with the South Carolina Audubon Society as an Important Bird Area in South Carolina.



Photo James R. Hill III - www.purplemartin.org

What You Can Do: The Purple Martin Conservation Association (PMCA) is a non-profit organization dedicated to the conservation of purple martins. PMCA is attempting to locate every active and inactive martin colony site in North America. If you have a purple martin colony site, or know someone who does, you can register your site at <http://purplemartin.org/>. So far, the organization has registered over 50,000 colony sites.

Looking to the Future

As part of a recent process to renew the Federal Energy Regulatory Commission (FERC) operating license for Lake Murray, SCE&G has committed to implementing a number of measures to enhance and protect habitat for rare wildlife and plants, as well as other species that inhabit the area. For example, under a new license, SCE&G will implement a Rare, Threatened and Endangered Species Management Program. This program includes measures to protect bald eagles nesting along Lake Murray and Saluda River shorelines, as well as monitoring and supplemental plantings of rocky shoals spider lilies at the confluence of the Broad and lower Saluda rivers. SCE&G will also implement minimum flow releases to the lower Saluda River that will enhance fish habitat in the lower Saluda River downstream of Lake Murray dam, as well as habitat for striped bass and the federally endangered shortnose sturgeon in the Congaree River. SCE&G has also proposed to implement a new “guide curve” for Lake Murray, which will result in the lake being at the normal maximum operating water surface elevation for a longer period of time during the year and provide for less dramatic winter drawdowns. The new guide curve will result in increased stability of fish habitat along shoreline areas.

The measures that will be implemented by SCE&G under a new FERC license for Saluda also have potential to enhance or protect habitat for a number of species identified in the South Carolina Department of Natural Resources’ Comprehensive Wildlife Conservation Strategy (CWCS). Although these species are not listed as threatened or endangered at the state or federal level, they are identified in the CWCS as being in need of conservation. Species identified in the CWCS as occurring in Richland, Lexington, Saluda and Newberry Counties, which surround Lake Murray, include:

Highest Conservation Concern

Birds

American Coot
American Kestral
Black Duck
Black-throated Green Warbler
Brown-headed Nuthatch
Common Loon
Eastern Meadowlark
Eastern Wood Peewee
Field Sparrow

High Conservation Concern

Birds

Acadian Flycatcher
Bald Eagle
Black-throated Blue Warbler
Blue-winged Teal
Forster’s Tern
Redhead
Spotted Sandpiper
Fish
Carolina Darter

Moderate Conservation Concern

Birds

Chestnut-sided Warbler
Common Loon
Dark-eyed Junco
Golden-crowned Kinglet
Great Blue Heron
Great Egret
Greater Yellowlegs
Green Heron
Horned Grebe

Kentucky Warbler
Lesser Scaup
Lesser Yellowlegs
Little Blue Heron
Loggerhead Shrike
Mallard
Painted Bunting
Pied-billed Grebe
Prairie Warbler
Solitary Sandpiper
Swainson's Warbler
Western Sandpiper
Wood Stork
Wood Thrush

Fish

American Eel
Blueback Herring

Mussels

Yellow Lampmussel
Savannah Liliput
Creeper

Mussels

Rayed Pink Fatmucket

Louisiana Waterthrush
Pectoral Sandpiper
Red-breasted Nuthatch
Ringneck
Scarlet Tanager
Wood Duck

Fish

Flat Bullhead
Snail Bullhead
Rosyface Chub
V-lip Redhorse
White Catfish

Mussels

Atlantic Spike
Carolina Lance
Carolina Slabshell
Eastern Creekshell
Variable Spike

Additional information regarding the habits and biology of these species can be found in most nature field guides for the region and at the SCDNR website at <http://www.dnr.sc.gov/cwcs/species.html>.

Alison Guth

From: Alison Guth
Sent: Monday, June 15, 2009 5:00 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokekee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: June 12 Settlement Agreement Changes



Settlement
Agreement-Revised 6

Hello All,

Attached are the edits to the Settlement Agreement made as a result of last weeks meeting discussions. These changes will be included in the Settlement Agreement document that we will be discussing Wednesday. Thanks, Alison

Saluda Hydroelectric Project (FERC Project No. 516) Relicensing
Comprehensive Settlement Agreement
Draft – 6-03-2009

1. Introduction

South Carolina Electric & Gas Company (SCE&G), as the holder of the current license for the Saluda Hydroelectric Project (Project)(FERC No. 516), hereby files the following Offer of Settlement Agreement pursuant to Rule 602 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission”) 18 C.F.R. § 385.602 (2008). This Settlement Agreement has been entered into among SCE&G and Saluda Hydro Relicensing Stakeholders. Moreover, the parties to the Settlement Agreement request that the Commission incorporate the obligations and agreements as illustrated in Appendix A without material modification into the terms and conditions of the New License.

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2. Background

The Project is an existing licensed hydroelectric project located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000 acre reservoir (at elevation 356.5¹), a gated emergency spillway, a combination rock-fill and RCC back-up Dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005. The total rated generator capacity for the station is 207.3 MW.² Further, at optimum gate openings, the hydraulic capacity of each of the Units 1 to 4 is 3,000 CFS, and for Unit No. 5 is 6,000 CFS, yielding a total station hydraulic capacity of 18,000 CFS.

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The original fifty (50) year project license was issued by the Federal Power Commission in 1927, effective from August 4, 1927 to August 5, 1977. The currently effective license was issued by the Federal Energy Regulatory Commission (“FERC” or “Commission”) on June 1, 1984 retroactive to 1977, and was set to expire on August 31, 2007. SCE&G requested an extension of the term of the license by letter dated October 3, 2002 and the Commission issued

¹ Unless otherwise noted, all elevation references in this Settlement Agreement and associated appendices are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies and often erroneously referred to as msl) requires the addition of 1.50 feet.

² The currently effective license gives the station capacity as 202.6 MW. This value was based on a power factor of 0.8 for the original four generators. When Unit 3 generator was rewound, its power factor changed to 0.9, and this change was not taken into account in the application for the current license.

an Order on November 18, 2003 extending the term of the license until August 31, 2010.

SCE&G officially began the formal relicensing process on April 29, 2005 by the timely filing of the Notice of Intent to the Commission and with the transmittal of its Initial Consultation Document (ICD) to resource agencies and other interested stakeholders for review and comment. Since that date, SCE&G has worked cooperatively with agencies and stakeholders through numerous resource group meetings to do the following: establish the scope of studies needed to address issues raised at the Project and develop study reports, conduct agreed upon studies, provide draft copies of study reports to agencies and stakeholders for review and comment, revise study reports to reflect agency/stakeholder comments, and complete follow-up studies deemed necessary to accomplish study goals. Resource group meetings have also served to provide a forum for discussion of Project related concerns among stakeholders. Discussions have continued to take place subsequent to the submittal of the License Application for the Project on August 27, 2008. These discussions among resource groups have been necessary to facilitate development of this Settlement Agreement and have culminated in the proposals set forth below. The Commission issued the Notice of Application Tendered for filing and solicited additional study requests on September 10, 2008.

3. Purpose of the Settlement Agreement

The purpose of this Settlement Agreement is to define the consensus based resolutions formulated among the signatories of this Settlement Agreement to those issues that have been raised during the relicensing process for the Project. These resolutions set forth herein are respectfully proposed as terms for the New License and have been structured in accordance with the Federal Power Act Section 10(a)(1) for the balance of both developmental and non-developmental resources.

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4. Terms and Implementation

a. Terms

i. General

This Settlement Agreement is in no way intended to conflict with the legal responsibilities of the Settlement Agreement signatories, nor shall it be in conflict with any lawful statutory or regulatory responsibility of or authority held by said signatories. Furthermore, signatories to this Settlement Agreement are representing their belief that the issue resolutions developed through good faith efforts do not conflict with these responsibilities.

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ii. For the New License

The signatories to this Settlement Agreement recognize that the Commission will incorporate into the New License those articles

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pursuant to 18 C.F.R. 2.9 (“L-Forms”), as well as such articles as the Commission needs to carry out its responsibilities for administering and enforcing the New License. With these considerations, the signatories respectfully request that the Commission incorporate the terms set forth in this Settlement Agreement Appendix A into the terms of the New License without material modification. Based on the significant efforts made in the development of this comprehensive Settlement Agreement the signatories respectfully request that the Commission consider issuing a new license for a term of 50 years.

iii. Fish Passage

A prescription for a fish passage facility pursuant to Section 18 of the Federal Power Act (FPA), 16 U.S.C. § 811, is not included in this Settlement Agreement. The reservation of authority of the Secretary of the Interior for the New License has been established by mutual agreement under the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (Accord) (attached as Appendix A-5). The Accord was entered into among SCE&G, Duke Energy Carolinas, LLC, South Carolina Department of Natural Resources (SCDNR), North Carolina Wildlife Resources Commission (NCWRC), and United States Fish & Wildlife Service (USFWS). According to this agreement, the USFWS will file with the FERC its reservation of authority for any fishway prescriptions for the Project for the term of the new license. Although not a signatory to the Accord because of its position that it may not bind itself in any way that might infringe upon its statutory authority and obligations, the National Marine Fisheries Service (NMFS) and South Carolina Department of Health and Environmental Control (SCDHEC) were integral members of the team that developed the Accord, and will participate in its natural resource protection role as it determines appropriate.

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iv. Endangered Species Act:

Through cooperation, the signatories to this Settlement Agreement have developed a Rare, Threatened and Endangered Species (RT&E) Species Plan for the Project, which includes measures for the management of RT&E species in the Project Area. By the signing of this agreement, the USFWS and NMFS each represents that it believes the measures required by the Settlement Agreement will protect RT&E species and that it intends to issue a Biological Opinion (BO) consistent with such measures. This Settlement Agreement is in no way intended to compromise the authority of the USFWS and their determination of conditions for compliance with the Endangered Species Act (ESA), 7 U.S.C. §136; 16 U.S.C. §1531 et seq., or preclude any standard conditions pursuant to applicable law. In the event that a

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BO is issued that is inconsistent with this Settlement Agreement, with the exception of the above stated conditions, any signatory to this Settlement Agreement may withdraw after discussion as described in Section 4.b.

b. Implementation

i. Commitments of Parties

By the signing of this Settlement Agreement, signatories are expressing their support for the components herein (in some cases, as resolutions that may be less than they desire, but nevertheless representing compromise positions that they “can live with”), and the incorporation of these components into the new license issued by the Commission. Once the Settlement Agreement is signed, all signatories will support this Settlement Agreement in all public communications regarding the relicensing of the Saluda Hydroelectric Project.

Within 30 days after the draft National Environmental Policy Act (NEPA) document is issued, SCE&G will convene a meeting with the signatories to determine if the document is consistent with the terms of the Settlement Agreement. Should the NEPA document be inconsistent with the Settlement Agreement, the parties will work cooperatively to develop appropriate responses to address the inconsistencies.

SCE&G will convene a meeting within 14 days after the issuance of a new license to review the license conditions for consistency with the terms of the Settlement Agreement. Should the license be inconsistent with the Settlement Agreement, the parties will work cooperatively to develop appropriate responses to address the inconsistencies.

All signatories believe that this Settlement Agreement is consistent with all applicable laws and regulations. However, nothing in this Settlement Agreement is intended to abrogate the regulatory or statutory responsibilities of the parties under applicable law.

ii. Commission Review of the Settlement Agreement

If the Commission has any questions or concerns with regards to the Settlement Agreement in the process of drafting the New License, it is requested that the Commission arrange for the convening of a technical conference to discuss these questions or concerns prior to the new license issuance.

iii. Modification of the Settlement Agreement

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After the signature period has ended, and prior to submission to the Commission, the signatories may by unanimous consent, modify the agreement.

In the event environmental analysis or other pre-license investigation yields material new information which may warrant changes to the Settlement Agreement, SCE&G will convene a meeting with the signatories to discuss whether and/or how to modify the Settlement Agreement to address the material new information.

After submission to the Commission, modification of Settlement Agreement can only occur by the unanimous consent of all signatories through negotiation meetings and written consent.

iv. Legal Authorization of Signatories

By the signing of this Settlement Agreement each signatory is representing that they have the authorization by the party or parties they represent legally to bind that party or those parties to this Settlement Agreement. Moreover, upon signature, parties represented by the signing person(s) are legally bound to the terms expressed herein.

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v. Withdrawal of Parties

A signatory may withdraw from this Settlement Agreement if their interests are materially affected by an Inconsistent Act by a Jurisdictional Body. An example of an Inconsistent Act could be if the new license requires flows and/or lake levels substantially different from those in the Settlement Agreement.

Any signatory intending to withdraw from this Settlement Agreement will notify all other signatories in writing of the basis for their withdrawal no less than 60 days prior to the withdrawal. With notice to all signatories, any other signatory may require a meeting of the withdrawing signatory to have the matter heard prior to withdrawal from the Settlement Agreement.

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vi. Termination of Settlement Agreement

Termination of this Settlement Agreement may occur under the following circumstances: (a) the withdrawal of SCE&G from this Settlement; Agreement (b) expiration of the New License term; (c) the termination or surrendering of the New License by SCE&G pursuant to the requirements of the FPA.

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vii. Signing Period

Once the Settlement Agreement is final, SCE&G will distribute the final document with a signature page to all relicensing Parties.

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Each Party will have a 30 day period in which to return a signed copy of the signature page to SCE&G.

viii. Effective Date of Settlement Agreement:

This Settlement Agreement becomes binding on the signatories at the end of the 30 days signing period. With regards to the proposed terms for the license articles, as set forth in Appendix A, these terms only become effective upon their inclusion into the New License as issued by the Commission for the Project and are enforceable to the extent permissible by law.

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ix. Submittal of Settlement Agreement to the Commission:

This Settlement Agreement shall be submitted to the Commission as soon as reasonably possible, but no later than 60 days of the end of the signing period.

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x. Structure of Settlement Agreement:

The preceding sections serve to establish the responsibilities of the signatories to this Settlement Agreement, the terms of which are defined in Appendix A. The signatories respectfully request that the terms of Appendix A be incorporated into the terms of the new license without material modification.

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xi. License Amendments

SCE&G will consult with signatories prior to requesting a license amendment that may be inconsistent with the Settlement Agreement.

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DEFINITIONS:

The definitions set forth in the following sections are applicable to this Settlement Agreement and associated appendices and are fundamental to the understanding and interpretation of the material herein. When appropriate, these definitions may be adopted by the Commission into the articles of the New License.

- Acre-foot – A volume of water equal to one foot depth over an area of one acre, or 43,560 cubic feet. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Benthic macroinvertebrates - Animals without backbones, which are visible to the eye and which live on, under, and around rocks and sediment on the bottoms of lakes, rivers, and streams. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Cubic feet per second (CFS) - A measurement of water flow representing one cubic foot of water moving past a given point in one second. One CFS is equal to 0.0283 cubic meters per second and 0.646 million gallons per day.. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Cultural resources - Includes items, structures, etc. of historical, archaeological, or architectural significance. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Dissolved oxygen (DO) - One of the most commonly employed measures of water quality, DO is the amount of gaseous oxygen in a liquid. Low DO levels can adversely affect fish and other aquatic life. The total absence of DO leads to the development of an anaerobic condition with the eventual development of odor and aesthetic issues. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Drawdown - The intentional lowering of a reservoir for a defined purpose. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Elevation - references in this Settlement Agreement are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies for the license application and frequently referred to as mean sea level (MSL)) requires the addition of 1.50 feet. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Eutrophic - Water quality term that refers to undesirable conditions caused by the presence of high concentrations of nutrients, such as phosphorous and nitrogen. Eutrophication is the process of nutrient addition and/or concentration that drives water quality towards a higher eutrophic condition. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Flow - The volume of water passing a given point per unit of time. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Flow Forecasting Model – A computer based model developed by SCE&G to predict inflow to and operation of the Saluda Hydroelectric Project. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"
- Guide Curve – A series of target daily elevations for Lake Murray over the course of a year. Formatted: Indent: Left: 0.5", Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1", Tabs: Not at 1"

- Hydrologic Condition - The amount and distribution of precipitation, runoff, and streamflow in the Saluda River basin which affect the amount of inflow to Lake Murray at a given time

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- Hypolimnetic – Related to the deeper cooler portions of a reservoir or lake that result from thermal stratification.

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- Inconsistent Act – any action by a Jurisdictional Body that increases the burden upon or cost or risk to a Party substantially beyond the burden, cost, or risk assumed by the Party in this Settlement Agreement, or deprives a Party of a substantial benefit promised by another Party in this Settlement Agreement, such as by relieving another party of a substantial bargained-for obligation.

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- Initial Consultation Document (ICD) - A document containing detailed information on a hydroelectric project; the document is used to describe the project and its resources and to start the applicant's consultation process with resource agencies and the public. It is in fact a collection of documents, taken together.

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- Invasive Species - Species not native to the Project area and whose introduction is likely to cause detrimental effects to economic, environmental and/or human health.

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- Jurisdictional Body – any governmental body which has the authority to prevent the implementation of, or to require specific steps be followed prior to implementing any part of this Settlement Agreement or to require activities that result in an Inconsistent Act.

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- Lacustrine - Related to standing water, (e.g., a lake).

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- Lake Elevation – The elevation of Lake Murray as measured by USGS gage number 02168500 located at the intake towers.

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- Low Inflow Period - A hydrologic condition in the Saluda River basin draining to Lake Murray during which the 14 day average gauged inflow less estimated municipal usage ("net inflow") falls below the scheduled Minimum Flow.

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- Littoral - Associated with shallow (shoreline area) water (e.g., the littoral zone of an impoundment).

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- Lotic - Flowing or actively moving water including rivers and streams.

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- Minimum Flow – a continuous flow, measured in CFS, that is required to be released from the Project dam during a specified period of time

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- Non-Governmental Organization (NGO) – An organization that has been created by an individual or group of individuals containing no membership or participation by any governmental entity.

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- Non-Project Property – SCE&G lands not contained within the Project boundary.

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- Non-Reserve Generation – Any generation other than reserve generation such as lake level management, recreation releases, swift water rescue training releases, minimum flow releases and striped bass flow release or any other releases not associated with reserve generation capability.

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- Normal Inflow Periods - Any time when the Low Inflow Protocol is not in effect.

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- Project - One or more hydroelectric plants collectively included in a single license issued by the FERC. Projects typically consist of a dam or dams, reservoir, powerhouse and appurtenant facilities. As used in this document, the capitalized term "Project" refers specifically to the Saluda Hydroelectric Project (P-516).

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- Project area – All lands and water within and outside of the Project boundary that may influence or be influenced by Project operations.

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- Project boundary or Project boundary line (PBL) - A demarcation line established by the FERC within which some level of interest in or control over all lands, waters and structures are deemed needed to operate a licensed hydroelectric project.

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- Recreation area – A land and associated water surface area which people use for leisure activities, whether formally designated or used informally.

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- Reserve Generation - That capability above firm system demand required to provide for regulation, load forecasting error, equipment forced and scheduled outages to SCE&G generating units, local area protection, to correct for or stabilize the system in the event of contingencies or to meet SCE&G's VACAR reserve obligations as defined as Operating Reserve by the North American Electric Reliability Commission.

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- Regulatory agency – A governmental agency that has statutory authority to regulate.

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- Resource agency - Federal, state, or interstate agency with responsibilities for flood control, navigation, irrigation, recreation, fish or wildlife, water resource management, or cultural or other relevant resources of the state(s) in which a project is located.

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- Stakeholder - Any individual or organization (government or non-governmental) with an interest in the management and/or operation of a hydroelectric project.

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- Stratification - A physical and chemical process that results in the formation of distinct layers of water within a lake or reservoir (i.e., epilimnion, metalimnion, and hypolimnion).

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- Streamflow - The rate at which water passes a given point in a stream, usually expressed in cubic feet per second (CFS).
- Tailrace - The tailrace is an area of stream downstream of a dam where the impounded water re-enters the river after passing through the turbines
- Wildlife Management Area (WMA) - An area established through the cooperative efforts of private landowners and the SCDNR to provide for the enjoyment of all wildlife enthusiasts. Seasonal hunting is allowed on these areas with the purchase of a WMA permit and hunting license.

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Appendix A

Proposed Content of License Conditions

The following conditions outlined in this appendix serve to set forth the terms and conditions developed for the protection, mitigation, and enhancement of natural resources affected by the Project.

1. SAFETY

Subsequent to the issuance of the new license, SCE&G shall:

- 1.1 Continue to adjust the existing warning system along the lower Saluda River in accordance with the Lower Saluda River Warning System Enhancement Plan (Appendix A-1).
- 1.2 Continue to maintain, modify as necessary, and operate an electronic ring-down call system (ERDS) for the life of the new license to provide notification to subscribers of flow releases from Saluda Hydroelectric Project even if the Safety and Outreach Program is modified, so long as the Safety RCG agrees that continued operation of the ERDS is appropriate and effective. The ERDS may be modified, terminated, or replaced with a newer or more effective technology or system upon agreement by the Safety RCG.
- 1.3 Continue to maintain, modify as necessary, and operate the SCE&G Lower Saluda River website for the life of the new license to provide notification of current operations and a schedule of planned operations for the Saluda Hydroelectric Project even if the Safety and Outreach Program is modified, so long as the Safety RCG agrees that continued operation of the Lower Saluda River website is appropriate and effective. The Lower Saluda River website may be modified, terminated, or replaced with a newer or more effective technology or system upon agreement by the Safety RCG.

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2. RECREATION

2.1. Recreation Plan:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Recreation Plan (Appendix A-2).

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3. FISH AND WILDLIFE

3.1. Lower Saluda River Aquatic Protection and Enhancement:

SCE&G shall implement the following enhancement programs for aquatic species in the LSR, developed in consultation with resource agencies, as part of this Settlement Agreement.

(a) **Macroinvertebrate Surveys:**

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Lower Saluda River Benthic Macroinvertebrate Monitoring and Enhancement Program (Appendix A-3).

(b) **Freshwater Mussel Research and Restoration:**

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Lower Saluda River Freshwater Mussel Restoration Program (Appendix A-4).

(c) **Involvement in the Santee Basin Accord for Diadromous Fish Protection:**

SCE&G shall continue to participate in and fund the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (Appendix A-5).

(d) **Sturgeon Management Programs:**

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Sturgeon Protection and Adaptive Management Program (Appendix A-6).

(e) **Trout Adaptive Monitoring Program:**

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Trout Adaptive Monitoring Program (Appendix A-7).

SCE&G, resource and regulatory agencies and non-governmental organizations will evaluate and implement, where reasonable, opportunities to partner in enhancing efficiencies and effectiveness of activities tied to objectives set forth in the Trout Adaptive Monitoring Program.

Subject to the completion of the Trout Monitoring Program, SCE&G will consider potential partnerships with resource and regulatory agencies

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and non-governmental organizations for habitat enhancement projects in the lower Saluda River.

(f) **Lower Saluda River Fish Community**

SCE&G will continue to implement the annual fish community survey as described in Appendix A-8.

3.2. Rare, Threatened and Endangered Species Management Program:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project RT&E Species Management Program (Appendix A-9).

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3.3. Rare Plant and Animal Species of Interest Around Lake Murray and the Lower Saluda River Brochure:

Within 2 years after the issuance of the new license, SCE&G shall issue the Rare Plant and Animal Species of Interest Around Lake Murray and the Lower Saluda River Brochure. (Appendix A-10).

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3.4. Fish Entrainment Mitigation Program:

Upon the issuance of the new license, SCE&G shall make official the fish mitigation program outlined below:

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- In the event a turbine induced fish kill occurs that SCDNR determines necessitates a fish kill investigation, SCE&G will compensate the SCDNR for the lost fish and SCDNR staff time accrued during investigations, if SCE&G is found responsible for the fish kill.

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Furthermore, SCE&G will employ the hydroacoustic equipment located near the intake tower number 5 in order to monitor fish movements and reduce the potential for fish entrainment and mortality during non-reserve call events. This equipment will be operational during the low DO months of July through October or such other period as determined by SCE&G in consultation with SCDNR when it is more likely that large numbers of fish will be congregated in front of Unit 5.

3.5. Purple Martin Roosting Area

SCE&G shall manage Lunch Island (Bomb Island) as a protected area for purple martin roosting.

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3.6. Flow Releases to the Lower Saluda River:

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Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Flow Release Program (Appendix A-11).

4. WATER QUALITY

The lower Saluda River is classified as Trout Put, Grow and Take (TPGT) from the Lake Murray Dam to its confluence with the Broad River. As conditioned in its new license, SCE&G will do all it reasonably can to maintain and support the existing uses. Dissolved oxygen and temperature levels will be measured at the existing USGS gage (02168504).

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4.1. The Upgrade of Unit Runners:

During the period of the new license issued by the Commission, SCE&G plans to install new runners of modern design that offer higher efficiencies, output, and dissolved oxygen (DO) uptake, and to rewind the generators according to the schedule discussed below.

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While providing for enhanced unit efficiency and maintaining the reliability necessary to meet generation obligations, upgrading the existing unit runners will provide positive benefits for downstream DO levels such that 100% support of the South Carolina lower Saluda River site specific DO standard may be assured.

The complete schedule for runner upgrades will be determined based on an adaptive program. The adaptive program is intended to allow for a full evaluation of the levels to which downstream water quality goals are achieved as a result of improvements resulting from each unit upgrade. At the point at which the DO standard is consistently maintained through all operating scenarios, whether it occurs after the first unit upgrade, the second one, or the third one, the remaining unit upgrades (if any remain to be done) will be implemented in a purely economics-driven manner. This could extend the upgrade period to as long as 25 years after the issuance of the license. However, so long as environmental objectives are being achieved, an economics driven schedule for the remaining units is entirely justified.

The upgrade of Unit 5 will be completed within three years from issuance of the license. The upgrade of that unit is expected to take as long as three years to account for the need to accommodate the extensive design and testing necessary to assure the new runner meets the performance objectives. Subsequent to the Unit 5 upgrade, downstream water quality will be assessed, employing the adaptive management process. Subsequent unit upgrades may proceed thereafter as follows:

- Should it be necessary to upgrade another unit to assure support of the South Carolina lower Saluda River site specific DO standard, SCE&G will perform the upgrades on the following schedule:

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○ Upgrade one of the smaller units (preferably Unit 3) within two years after the completion of the upgrade to Unit 5.

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○ This process will be repeated with the sequential upgrades of Units 4, 1, and 2, each being achieved within two years after the completion of the previous unit upgrade should the effects of that prior upgrade not support the water quality goals. The sequence of unit upgrades as noted may change. SCE&G will determine the next unit for upgrades at the completion of the previous upgrade.

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● Should the South Carolina lower Saluda River site specific DO standard be fully supported with installation of Unit 5 the SCE&G will perform the upgrades on the following schedule. Should reliability or other issues require the upgrade of one or more of the units sooner than proposed, the schedule will be accelerated to meet the identified need.

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- Unit 3 will be upgraded within five years after license issuance;
- Two units (preferably Units 4 and 1) will be upgraded within 15 years of license issuance; and
- The last unit (preferably Unit 2) will be upgraded within 25 years after license issuance.

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Deleted: Upon

Deleted: approximated to be 3 years after the issuance of the new license, SCE&G shall

Deleted: operate Unit 5 in a "first on, last off" scenario during generation events in order

Deleted: Minimum flows will be accomplished mainly with the bottom oriented units (Units 1 through 4). The operation scenario shall be as follows:

Deleted: For generation flows (flows in excess of minimum flows): ¶

¶ <#>Unit 5 shall be operated preferentially as "first on, last off" from November 1 through July 31 of each year. ¶

¶ <#>The bottom-oriented units (Units 1 through 4) shall be operated preferentially as "first on, last off" during the months of August through October.¶

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Until these upgrades are complete, SCE&G agrees to continue with turbine aeration measures (i.e. turbine venting and hub baffles) and operational modifications implemented since 1999 and as conditioned by FERC Order 108 FERC ¶ 61,064.

4.2. Reservoir Drawdowns

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Reservoir Drawdown Program (Appendix A-12).

4.3. Unit 5 Operation Subsequent to Unit Upgrades:

Within one year after completion of Unit 5 upgrades, the Licensee will consult with the South Carolina Department of Natural Resources (SCDNR), the South Carolina Department of Health and Environmental Control (SCDHEC), US Fish and Wildlife Service (USFWS), other applicable resource agencies and other relicensing stakeholders with relevant experience and interests that are signatories to the settlement agreement to evaluate Unit 5 operational scenarios to aid in preservation of a coolwater refuge habitat for the benefit of the reservoir and riverine fisheries.

5. OPERATIONS

5.1. Low Inflow Protocol and Operations during Maintenance Activities and Emergency Situations:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Maintenance, Emergency, and Low Inflow Protocol (Appendix A-13)

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5.2. Lake Level Management:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Normal Reservoir Operating Guidelines (Appendix A-14)

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6. LAKE AND LAND MANAGEMENT

6.1. Implementation of Shoreline Management Plan and Lake Murray Shoreline Management Handbook and Permitting Guidelines:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Shoreline Management Plan (SMP) (Appendix A-15) as developed in consultation with the Lake and Land Management Technical Working Committee.

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6.2. Lands Designated for the Enhancement of Waterfowl Habitats:

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 1,100 acres of Forest Management land, as identified in Appendix A-16, to SCDNR to be placed/maintained in their WMA Program as DNR elects. The purpose of placing these lands in the WMA Program will be to enhance waterfowl habitat and provide public waterfowl hunting opportunities. The lease will be co-terminus with the new license issued by the Commission.

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6.3. Aquatic Plant Management:

Subsequent to the issuance of the new license by the Commission, SCE&G shall work cooperatively with the SCDNR Aquatic Nuisance Species Program and the S.C. Aquatic Plant Management Council (Council) to manage invasive aquatic plants in Project waters for the term of the new license. SCE&G shall assist in the development of, abide by, and share with the funding of annual aquatic plant management plans approved by the Council.

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7. CULTURAL RESOURCES

7.1. Historic Properties Management Plan

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Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Historic Properties Management Plan (Appendix A-17).

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Appendix A-1
Lower Saluda River Warning System Enhancement Plan

APPENDIX A-1

Lower Saluda River Warning System Enhancement Plan

Lower Saluda River Warning System Installation:

Subsequent to the issuance of the new license, SCE&G shall continue with the installation of planned enhancements to the warning system along the lower Saluda River in accordance with the following schedule:



Phase 1 - new sirens #1 and #2, new strobe lights A and B, and upgrade of existing sign at Saluda Shoals Park – Complete – Installed and Operational as of 2008.

Phase 2 - new strobe lights C, D, E and F – To be installed within one year after issuance of the new license.

Phase 3 - new sirens #3, #4, #5, #6, #7, #8, and #9 – To be installed within two years after installation of Phase 2 is complete. If it is determined that a siren in Phase 3 is not needed or needs to be modified to a strobe, or if other issues arise that make the installation not feasible, then that siren will not be installed.

Appendix A-2
Saluda Hydroelectric Project Recreation Plan

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Appendix A-2 is included as a separate PDF file on the webpage

Appendix A-3
Saluda Hydroelectric Project Lower Saluda River Benthic
Macroinvertebrate Monitoring and Enhancement Program

Appendix A-3 is included as a separate PDF file on the webpage

Appendix A-4
Saluda Hydroelectric Project Lower Saluda River Freshwater Mussel
Restoration Program

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Appendix A-4 is still under discussion among the working committee

Appendix A-5
**Santee River Basin Accord for Diadromous Fish Protection, Restoration,
and Enhancement**

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Appendix A-5 is included as a separate PDF file on the webpage

Appendix A-6
Saluda Hydroelectric Project Sturgeon Protection and Adaptive Management Program

Appendix A-6 is included as a separate PDF file on the webpage

Appendix A-7
Saluda Hydroelectric Project Trout Adaptive Monitoring Program

Draft

Appendix A-7 is still under discussion among the working committee

Appendix A-8
Lower Saluda River Fish Community Surveys

Appendix A-8 is currently being developed by SCE&G

Appendix A-9
Saluda Hydroelectric Project RT&E Species Management Program

Appendix A-9 is included as a separate PDF file on the webpage

Draft

**Appendix A-10
Rare Plant and Animal Species of Interest Around Lake Murray and the
Lower Saluda River Brochure**

**RARE PLANT AND
ANIMAL SPECIES OF
INTEREST AROUND
LAKE MURRAY AND
THE LOWER SALUDA
RIVER**

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Wildlife abounds within the ecosystems supported by Lake Murray and the lower Saluda River, and is indeed one of the drawing features to visitors and residents of the area. Among the plants and animals that inhabit the lake and river environments are a number of rare, legally protected, or otherwise exemplary species that require special attention. A major focus in managing the lake environment is maintaining the balance between the natural environment that supports these species and human activity and occupation.

SCE&G has developed this brochure to educate the residents and visitors of the Lake about the rare and unique plants and animals occupying the area. By understanding the life requirements and threats to these species, it is our hope that visitors and lake residents will adopt a sense of stewardship for these species and their habitats. Armed with information, such as required habitats and the timing of breeding and nesting behavior, visitors can tailor their activities to minimize disturbance to these species. The public is encouraged to learn and understand the relationships between the rare species and their habitat, and to assume personal responsibility for their conservation. Ultimately, with an informed and conscientious public, these species and their habitats at Lake Murray and lower Saluda River can endure into the future and continue to mark the area as a valued natural resource.

This brochure is also available on the SCE&G website at <http://www.sceg.com/en/my-community/lake-murray/>. Copies can also be picked up at recreational sites, marinas, and parks around Lake Murray.

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is best known as the national bird of the United States of America. The bald eagle was previously listed as a federally endangered species due to population declines attributed to exposure to pesticides, loss of suitable habitat and illegal shooting. Today, the species has recovered to the degree that it was recently removed from the Federal Endangered Species List in July of 2007. The bald eagle continues to receive protection under the South Carolina Nongame and Endangered Species Conservation Act as a state endangered species, as well as federally through the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act.

The bald eagle is a bird of prey that may be found throughout North America, typically around water bodies, including Lake Murray and the lower Saluda River, where they feed and nest. Eagles forage on Lake Murray year round, with peak usage likely occurring during the winter months. Nesting of bald eagles on Lake Murray was first documented in 1996, and since that time, the nesting population has increased significantly. The South Carolina Department of Natural Resources (SCDNR) has recently documented seven active bald eagle nests on Lake Murray as well as one active nest on the lower Saluda River. Active bald eagle nests occurring within Lake Murray and lower Saluda River are managed by South Carolina Electric & Gas (SCE&G) in accordance with the National Bald Eagle Management Guidelines. These guidelines generally prohibit potential “disturbance” within 660 ft of an active nest during the nesting season (September through May) and 330 ft during the non-nesting season.



Photo by Jennifer S. Hand

What You Can Do: Avoid disturbing eagles at nesting and feeding areas and provide habitat for eagles by maintaining mature trees on your property. If you find an injured eagle call the South Carolina Center for Birds of Prey at (843) 971-7474.

Wood Stork

The wood stork (*Mycteria americana*) is a large wading bird native to coastal areas of South Carolina, Georgia, Florida and is the only stork species native to North America. The wood stork was federally listed as endangered in 1984, with population declines attributed primarily to loss of wetlands suitable for nesting and foraging. Like most other wading birds, wood storks feed primarily on small fish in habitats such as narrow tidal creeks, flooded tidal pools, freshwater marshes and freshwater wetlands. Wood storks typically use tall cypresses or other trees near wetlands or marshes for colonial nest sites. Nests are usually located in the upper branches of large trees and there are typically several nests in each tree. Currently, nesting of the species in the U.S. is thought to be limited to the coastal plain of South Carolina, Georgia and Florida.



Wood storks were observed feeding at various locations in the upper portions of Lake Murray between the years of 2001 and 2006. A study conducted by SCE&G during 2005 and 2006, in cooperation with the SCDNR, found that a small number of wood storks periodically forage in the upper reaches of Lake Murray, the Saluda River upstream of the reservoir and nearby wetlands during the late-summer and early-fall of some years. Timing of these observations suggest that these wood storks are likely what is known by biologists as “post-dispersal migrations,” meaning that they likely nested or were hatched in coastal areas during the summer months, dispersed from the nest, and then migrating through the Lake Murray area to exploit temporary food sources (fish trapped in shallow pools) before returning to coastal areas for the winter.



Photos by Jennifer S. Hand

What You Can Do: If you happen to see a wood stork soaring above Lake Murray or wading along the shorelines call SCE&G’s Environmental

Services at (803) 217-7132. Adult wood storks appear all white with long blackish-grey legs and pink feet. They have an unfeathered head and neck with a long, thick black bill. In flight, the wings underneath are edged in black.

Rocky Shoals Spider Lily

The rocky shoals spider lily (RSSL) (*Hymenocallis coronaria*), also referred to as Cahaba lily, is a flowering aquatic plant that typically inhabits large streams and rivers in South Carolina, Georgia and Alabama. As the name would suggest, these areas usually consist of rocky shoals hence and bedrock outcrops, which provide anchor points for the RSSL's roots and bulbs. RSSL grows best in constantly flowing, shallow water. The decline of RSSL has historically been attributed to loss of shoal habitat due to construction of impoundments and other channel modifications. Threats to current populations include modification of river flows and fluctuating water levels resulting from dam operations, water pollution and collection for use in gardens. The RSSL is considered a species of concern by the State of South Carolina.

A good vantage point from which to observe the RSSL is at the Columbia Riverfront Park. The lily's are in the island complex at the confluence of the Broad and Saluda rivers and just upstream of the confluence in the bypass reach of the Broad River downstream of the Columbia Diversion Dam. Each spring from mid-April to May in this section of the Broad River, one to three stalks will emerge from a RSSL bulb and each will produce a group of six to nine beautiful white flows.

Photo by Jennifer S. Hand



What You Can Do: Do not pick the lilies or remove the bulbs for transplant, as they will not grow in a typical garden setting. Rocky shoals spider lilies are most beautiful in their natural habitat.

Shortnose Sturgeon

The Shortnose sturgeon (*Acipenser brevirostrum*) is one of the oldest living fish species, predating dinosaurs. They range from three to four feet in length and have primitive characteristics such as an elongated, slightly flattened body covered with bony plates (scutes). They have a toothless mouth that is positioned under the snout, which allows them to feed on bottom dwelling organisms. Shortnose sturgeon are spawned in freshwater rivers and migrate out to the ocean where they spend most of their life. Sturgeon will return to their natal rivers to spawn several times throughout their life. Shortnose sturgeon are restricted to the east coast of North America. The National Marine Fisheries Service has recognized South Carolina as one of the 19 distinct population segments of shortnose sturgeon. Shortnose sturgeon have been documented downstream of the dams associated with the Santee-Cooper Lakes (Marion and Moultrie) and as far up as the Congaree River in the vicinity of the Gervais Street Bridge.



Photo by Duane Raver, USFWS

The shortnose sturgeon was federally listed as endangered on March 11, 1967, with population declines attributed to extensive overharvesting, loss of habitat, limited access to spawning grounds and polluted waters. Specific environmental conditions must be present for sturgeon to spawn such as specific water temperatures and available spawning habitat. Females will spawn every 3 to 5 years after reaching sexual maturity at age 8 to 12 years. With the combination of human threats along with the number of years it takes a female sturgeon to reach sexual maturity, it will take many years for the shortnose sturgeon populations to recover from its decline.

What You Can Do: Become familiar with the fish species native to your area before going fishing. If a live sturgeon is captured, return it safely to the water.

Purple Martin

Purple martins (*Progne subis*) are the largest member of the swallow family in North America, measuring 7 1/2 inches long and weighing 1.9 ounces. An adult purple martin has long angular pointed wings, a large bill and forked tail. The male has a glossy blue-back, with duller black wings and tail. Female and juveniles are dusky black above, light beneath, with a smoke-gray throat and breast. Purple martins eat insects and airborne spiders, that are caught on their wings. Typically, purple martins prefer open countryside, but have also been seen in suburban areas where there are suitable nest sites.

The eastern and southern edge of Lunch Island (also known as Bomb Island) on Lake Murray, approximately 5 miles west of the Project dam, is one of the largest pre-migratory roosting sites for purple martins in the United States. The purple martin is a neotropical migrant, meaning that it migrates annually from its normal range in South America, the West Indies and portions of Central America, northward to breeding grounds across North America. This species is unique in that it nests in large colonies and is almost entirely dependant upon man-made structures for nesting. Following the fledging period, purple martins often congregate in large nocturnal roosts of 100,000 or more birds prior to returning southward. Beginning in late June and extending through August or early September these congregations engage in two mass movements daily as they exit the roost in the morning to feed and return in the evening. It has been estimated that at least 700,000 birds utilize the Lunch Island (Bomb Island) roost, prompting SCE&G, South Carolina Department of natural Resources and the Columbia Chapter of the National Audubon Society to enter into a Memorandum of Agreement to establish a cooperative arrangement for management of the habitat. SCE&G also registered the island with the South Carolina Audubon Society as an Important Bird Area in South Carolina.



Photo James R. Hill III - www.purplemartin.org

What You Can Do: The Purple Martin Conservation Association (PMCA) is a non-profit organization dedicated to the conservation of purple martins. PMCA is attempting to locate every active and inactive martin colony site in North America. If you

have a purple martin colony site, or know someone who does, you can register your site at <http://purplemartin.org/>. So far, the organization has registered over 50,000 colony sites.

As part of a recent process to renew the Federal Energy Regulatory Commission (FERC) operating license for Lake Murray, SCE&G has committed to implementing a number of measures to enhance and protect habitat for rare wildlife and plants, as well as other species that inhabit the area. For example, under a new license, SCE&G will implement a Rare, Threatened and Endangered Species Management Program. This program includes measures to protect bald eagles nesting along Lake Murray and Saluda River shorelines, as well as monitoring and supplemental plantings of rocky shoals spider lilies at the confluence of the Broad and lower Saluda rivers. SCE&G will also implement minimum flow releases to the lower Saluda River that will enhance fish habitat in the lower Saluda River downstream of Lake Murray dam, as well as habitat for striped bass and the federally-endangered shortnose sturgeon in the Congaree River. SCE&G has also proposed to implement a new “guide curve” for Lake Murray, which will result in the lake being at the normal maximum operating water surface elevation for a longer period of time during the year and provide for less dramatic winter drawdowns. The new guide curve will result in increased stability of fish habitat along shoreline areas.

The measures that will be implemented by SCE&G under a new FERC license for Saluda also have potential to enhance or protect habitat for a number of species identified in the South Carolina Department of Natural Resources’ Comprehensive Wildlife Conservation Strategy (CWCS). Although these species are not listed as threatened or endangered at the state or federal level, they are identified in the CWCS as being in need of conservation. Species identified in the CWCS as occurring in Richland, Lexington, Saluda and Newberry Counties, which surround Lake Murray, include:

Highest Conservation Concern

Birds

American Coot
American Kestrel
Black Duck
Black-throated Green Warbler
Brown-headed Nuthatch
Common Loon
Eastern Meadowlark

High Conservation Concern

Birds

Acadian Flycatcher
Bald Eagle
Black-throated Blue Warbler
Blue-winged Teal
Forster's Tern
Redhead
Spotted Sandpiper

Moderate Conservation Concern

Birds

Chestnut-sided Warbler
Common Loon
Dark-eyed Junco
Golden-crowned Kinglet
Great Blue Heron
Great Egret
Greater Yellowlegs

Eastern Wood Peewee
Field Sparrow
Kentucky Warbler
Lesser Scaup
Lesser Yellowlegs
Little Blue Heron
Loggerhead Shrike
Mallard
Painted Bunting
Pied-billed Grebe
Prairie Warbler
Solitary Sandpiper
Swainson's Warbler
Western Sandpiper
Wood Stork
Wood Thrush
Fish
American Eel
Blueback Herring
Mussels
Yellow Lampmussel
Savannah Liliput
Creeper

Fish
Carolina Darter
Mussels
Rayed Pink Fatmucket

Green Heron
Horned Grebe
Louisiana Waterthrush
Pectoral Sandpiper
Red-breasted Nuthatch
Ringneck
Scarlet Tanager
Wood Duck
Fish
Flat Bullhead
Snail Bullhead
Rosyface Chub
V-lip Redhorse
White Catfish
Mussels
Atlantic Spike
Carolina Lance
Carolina Slabshell
Eastern Creekshell
Variable Spike

Additional information regarding the habits and biology of these species can be found in most nature field guides for the region and at the SCDNR website at <http://www.dnr.sc.gov/cwcs/species.html>.

Appendix A-11
Saluda Hydroelectric Project Flow Release Program

Appendix A-11
Flow Release Program

Flow Releases to the Lower Saluda River:

As a result of Instream Flow Incremental Methodology Study performed during relicensing at the direction of the Instream Flow Technical Working Committee (TWC) on the lower Saluda River (LSR), a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios to maintain and enhance aquatic habitat. . After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves habitat goals as outlined by the Instream Flow TWC based on a target minimum of 80% of the total available WUA
April 1 – May 10	Striped Bass Enhancement Flow Regime (See below for details.)	Enhances striped bass spawning in the Congaree River and adult trout habitat in the lower Saluda River
May 11 – May 31	1,000	Enhances adult trout and striped bass habitat
June 1 – Dec. 31	700	Achieves habitat goals as outlined by the Instream Flow TWC based on a target minimum of 80% of the total available WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1 through May 10 period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,500 and 8,000 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,500 CFS and 8,000 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda Hydro when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,500 CFS or greater than 8,000 CFS.

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The STB target flow for a given day will be released to the extent possible as a continuous flow. It is recognized that STB habitat enhancement flows will vary on a day to day basis. For compliance purposes SCE&G will be granted a plus or minus 100 CFS variance of the STB target habitat enhancement flows. Determination of compliance shall be subject to matters beyond the reasonable control of SCE&G. The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage as shown in Table 1 and Chart 1. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. During the period from April 1 – May 10 when the previous day's average flow in the Broad River at the Alston gage is less than 2,500 CFS or greater than 8,000 CFS, STB target flows will not be in effect and a continuous flow of 1,000 CFS will be released.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Maintenance, Emergency and Low Inflow Protocol (MELIP) outlined in Section 5.4.

Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for striped bass enhancement flow regime in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. Members of the AMT must be signatories to the settlement agreement. The AMT will meet annually, in February, to evaluate the results of the previous year's striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC will meet within one year after the settlement agreement is filed with the Commission.

Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, develop study plans and reporting requirements prior to implementation of the striped bass flow regime.

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- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. The Licensee will not be responsible for any monitoring of this enhancement. All monitoring will be performed by State or federal agencies or other partners identified by the AMT. Funding may be provided by sources other than State and federal agencies.

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- **Decision Thresholds:** During the 6th and 11th years, or such other years as determined appropriate by the AMT, following the issuance of the Saluda Hydroelectric Project new license, monitoring results will be assessed to determine if changes to the striped bass flows released from the Saluda Dam are needed. If the striped bass enhancement flow regime fails to meet goals identified by the AMT, an alternative operations or monitoring approach may be recommended and/or the flow will revert to the original recommendation of 1,000 CFS from April 1 to April 15, 1,300 CFS from April 16 to May 14 and 1,000 CFS from May 15 to May 31 or associated low inflow protocol flows. Any increase in flows from those specified above as the STB flows, must be agreed to by SCE&G before being implemented. SCE&G will consult with and consider other stakeholders interests who are signatories to the settlement agreement prior to agreeing to increased flows. Any continuation or reduction in flows from those specified above as the STB flows, must be agreed to by the AMT before being implemented.

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- **Reporting:** The Licensee will file an annual progress report with the Commission on the efforts of the AMT by June 30.

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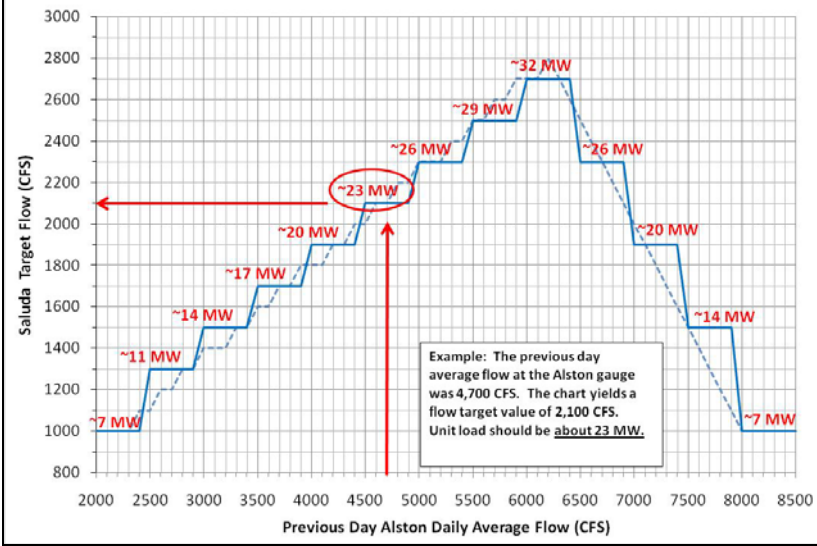
**Table 1 Striped Bass (STB) Enhancement Target Flow Schedule
To be implemented annually April 1 – May 10
when Broad River daily average flow is between 2,500 and 8,000
CFS**

Previous Day's Average Flow in Broad River at USGS Alston Gauge (CFS)	STB Enhancement Target Discharge from Saluda Hydro (CFS)	STB Enhancement Allowable Discharge Range from Saluda Hydro (CFS)
<2,500	1,000 minimum	1,000 minimum
2,500 – 2,999	1,300	1,200 – 1,400
3,000 – 3,499	1,500	1,400 – 1,600
3,500 – 3,999	1,700	1,600 – 1,800
4,000 – 4,499	1,900	1,800 – 2,000
4,500 – 4,999	2,100	2,000 – 2,200
5,000 – 5,499	2,300	2,200 – 2,400
5,500 – 5,999	2,500	2,400 – 2,600
6,000 – 6,499	2,700	2,600 – 2,800
6,500 – 6,999	2,300	2,200 – 2,400
7,000 – 7,499	1,900	1,800 – 2,000
7,500 – 7,999	1,500	1,400 – 1,600
≥8,000	1,000 minimum	1,000 minimum

Footnote: This table was developed based on existing equipment and therefore is subject to change pending unit upgrades.

Chart 1

SCDNR Striped Bass Enhancement Target Flow Chart
(Modified 03/25/09)



Appendix A-12
Saluda Hydroelectric Project Reservoir Drawdown Program

Appendix A-12
Reservoir Drawdown Program

SCE&G reserves the right to conduct periodic drawdowns for maintenance, inspections and safety issues as necessary. Additional drawdowns may be necessary for water quality, aquatic plant control and fisheries management.

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It is the desire of all parties to maintain lake levels in Lake Murray as close to the guide curve as possible. However, SCE&G acknowledges that reservoir drawdowns can be an effective management tool to address problems with undesirable aquatic plants, fisheries management, and water quality; and periodic reservoir draw downs of Lake Murray may be utilized during the new license period as a management tool.

Periodic Drawdowns for Lake Management:

Periodic lake drawdowns will be conducted for water quality maintenance, sediment transport and aquatic vegetation management. This also allows opportunities for dock maintenance, shoreline stabilization, excavations and other lake user maintenance activities.

The frequency of drawdowns and inflow trigger are as follows: Implement a winter drawdown to el. 350 ft. PD every third year if the average November flow at the USGS Gage 02167000, Saluda River at Chappells, SC is equal to or greater than 1,500 CFS. The drawdown will be conducted during December. Once the 350 ft. PD (348.5' NAVD88) reservoir elevation has been attained the reservoir will be held at this elevation for a period of 28 days. Following this period, the reservoir will be allowed to return to or above the guide curve as quickly as inflow will allow while maintaining downstream minimum flow requirements.

If a drawdown is not conducted in the third year, SCE&G will convene a meeting with the Drawdown Advisory Group (DAG).

Special Drawdown:

If water quality, aquatic plant or fish population management problems are identified in Lake Murray, a meeting will be convened between SCE&G, appropriate resource agencies (DNR, FWS, DHEC) and interested stakeholders to develop a strategy to address the problem. Attempts should be made to reach a consensus based management decision. If it is agreed that any management activity is needed, SCE&G, in cooperation with the appropriate natural resource agency, will make a reasonable effort to publicly communicate the nature of the problem and the recommended management approach.

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Deleted: If water quality issues arise, a meeting will be convened between SCE&G, appropriate agencies and interested stakeholders to evaluate the need for a draw down, and make recommendations based on available information and data including potential impacts to other resources. Attempts should be made to reach a consensus based management decision. Recommendations for the frequency of drawdowns and a trigger are provided in the CE-QUAL-W2 water quality modeling report (see Attachment XX); however, using an average flow at the Chappell's gage of 1,450 CFS or greater during the month of November. The lake may be drawn down for water quality to an elevation of approximately 350.0' Plant Datum (348.5' NAVD88). These recommendations will be (... [1])

Adaptive Management Teams, consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. With the exception of DHEC, members of the AMT's must be signatories to the Settlement Agreement. A Drawdown Advisory Group (DAG) will meet following the second drawdown after the issuance of a new license. The DAG, structured as a focus group, will consist of SCE&G (chair) and their representatives, lake homeowner groups, lake and river user groups and resource agency technical staff. The DAG shall be responsible to make recommendations relative to timing, frequency, duration and limits of drawdowns. The DAG will prepare summary reports relative to water quality, fisheries, aquatic plant management and other pertinent data relative to Lake Murray and the effects of the drawdowns. Summary reports shall include among other things supporting technical data and any recommendations. The DAG will submit each summary report to the Drawdown Regulatory Committee (DRC). If a three year periodic drawdown does not occur, the DAG will be responsible for defining the parameters on implementing the next drawdown.

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The DRC will consist of SCE&G (chair), SCDNR, SCDHEC and USFWS. The role of the DRC will be to review and consider DAG recommendations for changes in drawdowns. The DRC will convene a meeting no later than year 13, to evaluate the drawdown program and determine if modifications are necessary with respect to drawdowns in Lake Murray. Modifications that require actions that are beyond the scope of the new license will require a variance granted by FERC. An adhoc meeting of both the DAG and/or DRC may be convened at any time as conditions warrant.

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During release of flows for a drawdown, consideration will be given to the effects on downstream resources.

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**Appendix A-13
Saluda Hydroelectric Project Maintenance, Emergency, and Low Inflow
Protocol**

PURPOSE

The Maintenance, Emergency, and Low Inflow Protocol (MELIP) for the Saluda Hydroelectric Project (FERC Project No. 516) is intended to provide operational guidance for abnormal operating situations caused by maintenance activities, emergency situations (including high inflow or flood events), and periods of sustained low inflow or drought conditions.

There are several types of maintenance activities which may require temporary modifications to normal reservoir levels and/or seasonal minimum flow and scheduled recreation flow releases. Certain emergency situations involving the interconnected electric system ("grid"), project structures, equipment, or waterways may also require temporary modifications to normal reservoir levels and/or seasonal minimum flow and scheduled recreation flow releases.

During periods of high inflow or flood events, the project must be operated to safely pass and/or store the high inflow without compromising the safety of the dam and other project structures. This may require temporary modifications to normal reservoir levels and/or seasonal minimum flow and scheduled recreation flow releases, either to pass higher than normal inflow, or to draw down the reservoir in advance of forecast high inflow.

During periods of low inflow, the Licensee's goal is to conserve the remaining water stored in Lake Murray, in order to delay or prevent depletion of water stored in the reservoir. This will allow the project to continue to fulfill critical functions for as long as possible during drought periods: Reserve electric generation, municipal water supply, and preserve the recreational, environmental, and economic values of the Project waters.

TARGET RESERVOIR ELEVATIONS

Normal target reservoir elevations are defined by the Normal Reservoir Operating Guidelines. These are reservoir elevations which the Licensee will endeavor in good faith to achieve, unless operating under one of the conditions listed in this Maintenance, Emergency, and Low Inflow Protocol.

MINIMUM FLOW SCHEDULE

The seasonal minimum flow schedule is as follows (excluding low inflow conditions):

January 1 – March 31: 700 CFS
April 1 – May 10: Striped Bass Enhancement Flow Regime (See Appendix A-13-3 for details.)
May 11 – May 31: 1,000 CFS
June 1 – December 31: 700 CFS

It is agreed that a target flow of 500 CFS with a minimum flow of 400 CFS will be implemented during the MELIP.

OPERATION DURING MAINTENANCE ACTIVITIES

Under some maintenance conditions, it may be necessary to operate the project such that reservoir elevations and/or seasonal minimum or scheduled recreation flows cannot be maintained in the normal ranges, even during periods of normal inflow and hydrologic conditions. Examples of such conditions are:

- Scheduled or unscheduled project structure or hydro unit maintenance;
- Scheduled reservoir drawdown below normal minimum elevation due to required inspection or maintenance of project structures, ecological management of the lake (see Reservoir Drawdown Program), or improvements to lakeside facilities.

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To the extent practical, the Licensee will avoid scheduling project structure or hydro unit maintenance that would impact the ability of the Licensee to release the required seasonal minimum flow or scheduled recreation flows, unless it is likely that further damage or unscheduled maintenance would ensue if the work is delayed. If it is determined that the seasonal minimum flows cannot be maintained due to the scheduled maintenance activities, the Licensee will consult with the resource and regulatory agencies (SCDNR, SCDHEC, USFWS, NMFS and any other appropriate resource agencies) to monitor and minimize impacts to water quality and aquatic habitat. To the extent practical, the licensee will also endeavor to replace any scheduled recreation flows which are impacted by the scheduled maintenance activities within the same calendar year as originally scheduled.

The reservoir may periodically be drawn down to its minimum level of el. 343.5' (el. 345.0' PD)³ for repairs to the upstream riprap armor on the original earth dam, inspection or repairs to the intake towers or spillway structure, or to accomplish other Project improvements. Scheduled drawdowns such as this would normally occur during October through February; however the time period may vary depending on the required scope of maintenance work. The Licensee will make public notification of scheduled drawdowns via media releases and announcements on the corporate web site as far in advance as practical and engage in appropriate public outreach such as education or seeking public input from interested stakeholders.

An unscheduled reservoir drawdown due to unforeseen equipment damage or other reason is very unlikely; however it is possible that this would occur at some time. To the extent practical, the Licensee will take steps to limit the magnitude and duration of any unscheduled reservoir drawdown.

³ All elevation references in this MELIP are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies for this license application and often erroneously referred to as MSL) requires the addition of 1.5 ft.

OPERATION DURING EMERGENCIES

During emergency conditions, it may be necessary to operate the project such that reservoir elevations and/or seasonal minimum or scheduled recreation flows cannot be maintained in the normal ranges, even during periods of normal inflow and hydrologic conditions. Examples of such emergencies are:

- Grid voltage or capacity emergency declared by the Licensee's System Operations Center or Transmission Operations Center;
- Dam safety emergency;
- Emergency plant shutdown due to equipment failure, fire, or other situations which endanger human health and safety or the environment;
- River access special circumstances (e.g., emergency rescue or recovery operations).

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During a declared grid voltage or capacity emergency, the Licensee will operate the project as required to maintain or restore the reliability of the electrical system, with due regard to the safety of both the public and the project structures. This may result in deviation from scheduled recreation flows and/or normal reservoir operation levels.

During a dam safety emergency, the safety of the downstream population is paramount, and the Licensee will take actions as required to maintain or restore the integrity of all project water retaining structures. This may result in deviation from seasonal minimum flow, scheduled recreation flows and/or normal reservoir operation levels.

In the event of serious equipment failure, fire, releases or spills, or other conditions which endanger plant personnel, the public, or the environment, it may be necessary to completely shut down the Saluda Hydro plant and limit discharge from the facility to the minimum possible. This may result in deviation from seasonal minimum flow and/or scheduled recreation flows.

Upon request from local emergency response agencies, it may be necessary to decrease or increase the discharge from the Saluda Hydro plant in order to facilitate access to the lower Saluda River for rescue or recovery operations. This may result in deviation from seasonal minimum flow and/or scheduled recreation flows.

If it is determined that the seasonal minimum flows cannot be maintained due to an emergency condition, the Licensee will consult with the resource and regulatory agencies (SCDNR, SCDHEC, USFWS, NMFS and any other appropriate resource agencies) as soon as is practical to monitor and minimize impacts to water quality and aquatic habitat. To the extent practical, the licensee will also endeavor to replace any scheduled recreation flows which are impacted by the emergency situation within the same calendar year as originally scheduled.

OPERATION DURING HIGH INFLOW PERIODS OR FLOODS

The Licensee has developed a Flow Forecast Model (FFM) for the purpose of anticipating high inflow events due to large amounts of rainfall in the Saluda River basin draining to Lake Murray. The FFM uses precipitation forecasts from the National Weather Service (NWS) and near real time data from the U.S. Geological Survey (USGS) to estimate inflow to Lake Murray up to 5 days in advance. The Licensee's System Operators also monitor the National Weather Service on a routine basis. In the event a weather system capable of producing heavy precipitation is forecast to impact the Saluda Project, the Licensee's engineering staff runs the FFM using the latest precipitation forecast and current streamflow data from the USGS gauge network. Based on the magnitude and duration of the inflow hydrograph computed by the FFM, the System Operators are advised as to what action to take in order to safely pass and/or store the projected inflow. Such actions may include:

- Reduction of reservoir level below the existing target elevation in advance of or during the weather system to provide storage volume for the forecast inflow;
- Operation of one or more spillway gates to pass inflow in excess of that which can be passed by generation and prevent the reservoir from rising above el. 358.5' (360.0' PD);
- Allowing the reservoir to rise above the existing target elevation in order to store all or a portion of the inflow and limit excessive downstream releases.

Any of these actions may result in deviation from scheduled recreation flows and/or normal reservoir operation levels. To the extent practical, the licensee will endeavor to replace any scheduled recreation flows which are impacted by the high inflow conditions within the same calendar year as originally scheduled.

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OPERATION DURING LOW INFLOW PERIODS

For operation during periods of sustained low inflow or drought, the MELIP defines trigger points and procedures for incremental reductions in seasonal minimum flow and downstream recreation flows based on gauged inflow to the project. During periods of normal inflow, the Licensee will operate the Saluda Project to maintain the reservoir level at or near the current target elevation within the proposed normal operating range of el. 352.5' (354.0' PD) to el. 356.5.0' (358.0' PD), while providing the normal seasonal minimum downstream flow and normal scheduled recreation and safety training flows. The project will be available for reserve generation as required by the Licensee's system and obligations under the Virginia-Carolinas Electric Reliability Council (VACAR, or its successor) Reserve Sharing Agreement (VRSA). During times when inflow to the project exceeds the seasonal minimum flow and scheduled recreation flows, the project will generate on an as-needed basis to maintain the reservoir at or near the current target elevation.

If hydrologic conditions in the Saluda River basin draining to Lake Murray worsen and the 14 day average gauged inflow less estimated municipal usage ("net inflow")⁴ falls below the scheduled minimum flow, water stored in Lake Murray will be used to augment project inflow to provide the normal seasonal minimum flow until the reservoir level falls to more than 1.0 ft. below the current target elevation. At that time, the Licensee will discharge target minimum flow as follows:

14 Day Average Net Inflow	Target Flow (except April 1st – May 10th)
< 1,000 CFS	700 CFS minimum flow
< 700 CFS	500 CFS target flow with 400 CFS minimum flow

If 14 day average net inflow falls below the scheduled minimum flow during the April 1st through May 10th period when the striped bass enhancement flow regime is in effect (as described in Appendix A-13: 3), reduced striped bass flows or continuous minimum flow will be implemented as follows, once the reservoir falls to more than 1.0 ft. below the current target elevation:

14 Day Average Net Inflow	Target Flow Provided April 1st – May 10th
< Striped Bass Flow Request (See Appendix A-13: 3 for Details)	1,000 CFS minimum flow
< 1,000 CFS	700 CFS minimum flow
< 700 CFS	500 CFS target flow with 400 CFS minimum flow

⁴ Gauged inflow will be computed each day as the sum of three scaled USGS gauge values for the Saluda River, Little River, and Bush River, less estimated municipal usage from the reservoir. The 14 day average of these daily values will be computed each day. See Appendix 2 for details of inflow scaling and computing net inflow.

If 14 day average net inflow should fall below the scheduled minimum flow between December 16th and January 17th, when the target reservoir elevation is within 1.0 ft. of el. 352.5' (354.0' PD), the reservoir will not be required to drop 1.0 ft. below the current target elevation before reducing the minimum flow. Additionally, at any time during a low inflow period (when 14 day average net inflow is less than the scheduled minimum flow), should the reservoir level fall below el. 352.5' (354.0' PD), the minimum flow from the project will be reduced to a target flow of 500 CFS (400 CFS minimum), and will remain at that value regardless of any increase of inflow until the reservoir level has risen above el. 352.5' (354.0' PD).

During periods where the inflow falls below the scheduled minimum flow and the reservoir level is below the target elevation range, SCE&G will make reasonable efforts to conserve the remaining water stored in Lake Murray to achieve its goal of allowing the lake level to reach the guide curve and re-establish normal minimum flows.

During an MELIP implementation, scheduled recreation flows will be reduced in two stages. First stage is when the reservoir falls more than 2 feet below target elevation or reaches 352.5' (354.0' PD) and the 14 day average net inflow is less than scheduled minimum flow; the recreation flow volume in acre-feet will be reduced by 30 percent. This can be accomplished either by reducing the flow or duration of a given event. Second stage begins once the reservoir level falls below el. 352.5' (354.0' PD); all scheduled recreation flows will be reduced to target minimum flow until the reservoir level has risen above el. 352.5' (354.0' PD). The 51 recreation days will remain protected from reserve operations during MELIP implementation.

During extended periods of low inflow, when depletion of the reservoir below el. 348.5' (350.0' PD) is imminent, the Licensee will consult with the South Carolina Department of Natural Resources (SCDNR), the South Carolina Department of Health and Environmental Control (SCDHEC), US Fish and Wildlife Service (USFWS) and other applicable resource agencies to determine if further reductions in minimum flow below 400 CFS should be considered. At that time, the Licensee will also coordinate a joint meeting with consulting agencies and the managers of the municipal water systems which withdraw water from Lake Murray, to determine a drought management plan that could include voluntary or mandatory water conservation measures, as determined by the agencies.

Comment: This is a place holder for the CFD safety training flow reduction wording. This language still needs to be approved by SCE&G management and CFD.

COORDINATION OF LOW INFLOW PROTOCOL WITH MAINTENANCE ACTIVITIES OR EMERGENCY CONDITIONS

If maintenance or emergency conditions require modifications to the normal reservoir target elevations and/or the normal minimum flow schedule during low inflow periods, the requirements of the maintenance activity or emergency condition may supersede the Low Inflow Protocol operation if necessary.

Drawdown of the reservoir due to maintenance or emergency conditions will not automatically trigger reductions in minimum flow, unless 14 day average inflow falls below the scheduled minimum flow. During refilling of the reservoir after a drawdown, if 14 day average inflow falls below the scheduled minimum flow while the reservoir is below el. 352.5' (el. 354.0' PD), the target flow will be reduced to 500 CFS (400 CFS minimum) until the reservoir exceeds el. 352.5' (el. 354.0' PD).

During periods of maintenance or emergency conditions if the reservoir elevation is below 352.5' (el. 354.0' PD), a meeting will be convened with the Recreational Advisory Flow Team (RAFT) to determine if recreation flow reductions are necessary in order to allow the reservoir to reach target levels.

It should also be noted that the South Carolina Department of Natural Resources (SCDNR) has certain statutory authority under the South Carolina Drought Response Act and Regulations, and nothing in this LIP is intended to abrogate that authority.

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PERIODIC REVIEW OF PROTOCOL

The Licensee will consult with the South Carolina Department of Natural Resources (SCDNR), the South Carolina Department of Health and Environmental Control (SCDHEC), US Fish and Wildlife Service (USFWS), other applicable resource agencies and other relicensing stakeholders with relevant experience and interests that are signatories to the settlement agreement every 5 years during the license term to evaluate the effectiveness of the MELIP during the previous 5 years, and to determine if any modifications to the MELIP are required.

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A-13: APPENDIX 2 – NET INFLOW COMPUTATION

INFLOW SCALING

The three USGS gauge stations used to compute inflow to Lake Murray are:

02167000 Saluda River at Chappells (gauged drainage area = 1,360 mi²)
 02167450 Little River near Silverstreet (gauged drainage area = 230 mi²)
 02167582 Bush River near Prosperity (gauged drainage area = 115 mi²)

Since the total drainage area of the Saluda River basin at the Saluda Dam is 2,420 mi², the discharge values recorded at the gauge sites must be scaled to provide an estimate of the total inflow to Lake Murray. The project drainage basin has been divided into seven sub-basins, five of which are downstream of Lake Greenwood and represent inflow to Lake Murray. Two sub-basins (nos. 6 & 7) are un-gauged, and inflow from these areas is estimated based on the Bush River gauge using the scale factors in the table below. [Note: a streamflow gauge was installed in 2008 on the Little Saluda River near Saluda (No. 02167705), however there has been insufficient flow for the USGS to calibrate (rate) the gauge since it was installed. When this gauge has been rated, it will replace the Bush River gauge for estimating flow from sub-basins 6 & 7.]

Basin No.	Name	Area (SM)	Cum. Area (SM)	Gage No.	DA at Gage	Scale Factor	
1	Upper Saluda R.	1,034.0	1,034.0				
2	Lake Greenwood	126.0	1,160.0				
3	Chappells	227.3	1,387.3	02167000	1,360.0	1.020	
4	Little River	283.5	1,670.8	02167450	230.0	1.233	
5	Bush River	140.1	1,810.9	02167582	115.0	1.218	
6	Little Saluda River	331.0	2,141.9	Scaled from 7582	115.0	2.878	} 6.515
7	Lake Murray Direct	278.1	2,420.0	Scaled from 7582	115.0	2.418	

Using these scale factors, the total inflow (Q_{total}) to Lake Murray is computed as:

$$Q_{\text{total}} = (1.02)(Q_{\text{Chappells}}) + (1.233)(Q_{\text{Little R.}}) + (6.515)(Q_{\text{Bush R.}})$$

ESTIMATED MUNICIPAL WITHDRAWALS

Five municipal water intakes are permitted to withdraw water from Lake Murray. The total maximum withdrawal rate for these intakes is estimated to be approximately 120 CFS as of 2008⁵. The actual withdrawal rate varies throughout the year, as estimated in the following table.

Month	Estimated Withdrawal Rate (CFS)	Month	Estimated Withdrawal Rate (CFS)
January	60	July	120
February	60	August	120

⁵ The existing municipal water intakes are approved for higher withdrawal rates than those shown in the table, which represent estimates of actual withdrawals as of 2008. If water withdrawal rates change or new intakes are approved, the Licensee may modify the estimated withdrawal rates used to compute net inflow.

March	60	September	120
April	90	October	100
May	100	November	60
June	120	December	60

The above withdrawal rates are subtracted from the total inflow to Lake Murray to compute the net inflow to the project. The 14 day running average of net inflow is used to determine minimum flow during low inflow periods.

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A-13: APPENDIX 3 – STRIPED BASS ENHANCEMENT FLOW REGIME

STRIPED BASS ENHANCEMENT FLOW REGIME

The Striped Bass Enhancement Flow Regime (STB Flows) was originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1 through May 10 period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,500 and 8,000 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

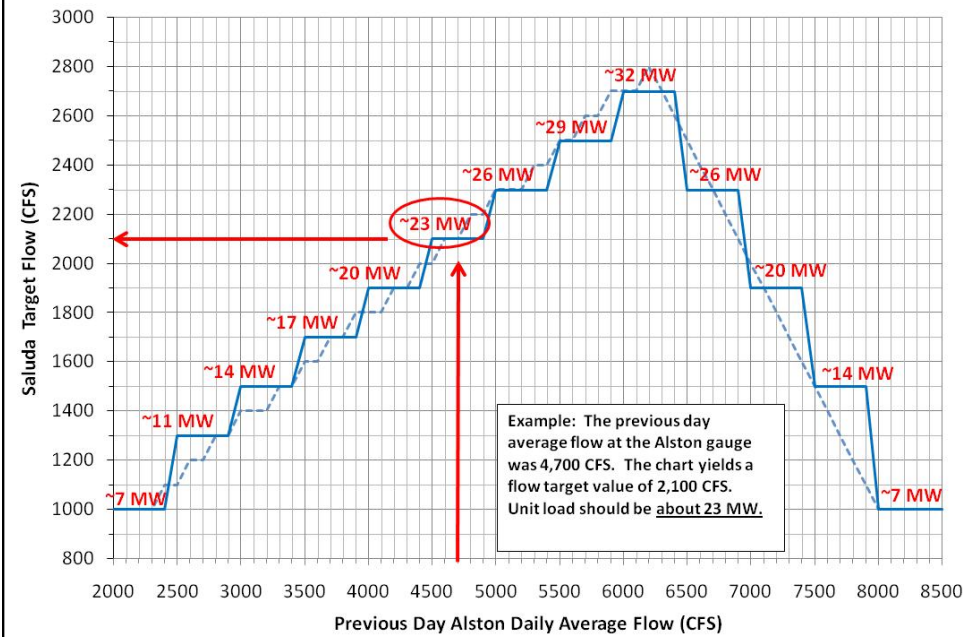
- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,500 CFS and 8,000 CFS, Saluda will release as a continuous target flow equal to the lesser of:
- 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
- The balance of what is required to create a 9,000 CFS flow in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda Hydro when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,500 CFS or greater than 8,000 CFS.

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The STB target flow for a given day will be released to the extent possible as a continuous flow. It is recognized that STB habitat enhancement flows will vary on a day to day basis. For compliance purposes SCE&G will be granted a plus or minus 100 CFS variance of the STB target habitat enhancement flows. Determination of compliance shall be subject to matters beyond the reasonable control of SCE&G. The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage as shown in Table 1 and Chart 1. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. During the period from April 1 – May 10 when the previous day's average flow in the Broad River at the Alston gage is less than 2,500 CFS or greater than 8,000 CFS, STB target flows will not be in effect and a continuous flow of 1,000 CFS will be released.

The chart on the following page was prepared to correlate the Broad River flow with the STB target flow request.

**SCDNR Striped Bass Enhancement Target Flow Chart
(Modified 03/25/09)**



**Striped Bass (STB) Enhancement Target Flow Schedule
To be implemented annually April 1 – May 10
when Broad River daily average flow is between 2,500 and 8,000
CFS**

Previous Day's Average Flow in Broad River at USGS Alston Gauge (CFS)	STB Enhancement Target Discharge from Saluda Hydro (CFS)	STB Enhancement Allowable Discharge Range from Saluda Hydro (CFS)
<2,500	1,000 minimum	1,000 minimum
2,500 – 2,999	1,300	1,200 – 1,400
3,000 – 3,499	1,500	1,400 – 1,600
3,500 – 3,999	1,700	1,600 – 1,800
4,000 – 4,499	1,900	1,800 – 2,000
4,500 – 4,999	2,100	2,000 – 2,200
5,000 – 5,499	2,300	2,200 – 2,400
5,500 – 5,999	2,500	2,400 – 2,600
6,000 – 6,499	2,700	2,600 – 2,800
6,500 – 6,999	2,300	2,200 – 2,400
7,000 – 7,499	1,900	1,800 – 2,000
7,500 – 7,999	1,500	1,400 – 1,600
≥8,000	1,000 minimum	1,000 minimum

Draft

Appendix A-14
Saluda Hydroelectric Project Normal Reservoir Operating Guidelines

Appendix A-14

Normal Reservoir Operating Guidelines

Lake Level Management:

Subsequent to the issuance of the new license by the Commission, SCE&G will employ the lake level management protocol discussed below and in the Maintenance Emergency and Low Inflow Protocol (MELIP) (Appendix A-13). This includes the implementation of the guide curve, developed in part with the objective of protecting the environmental, cultural, recreational and economic resources associated with and dependent upon the reservoir.

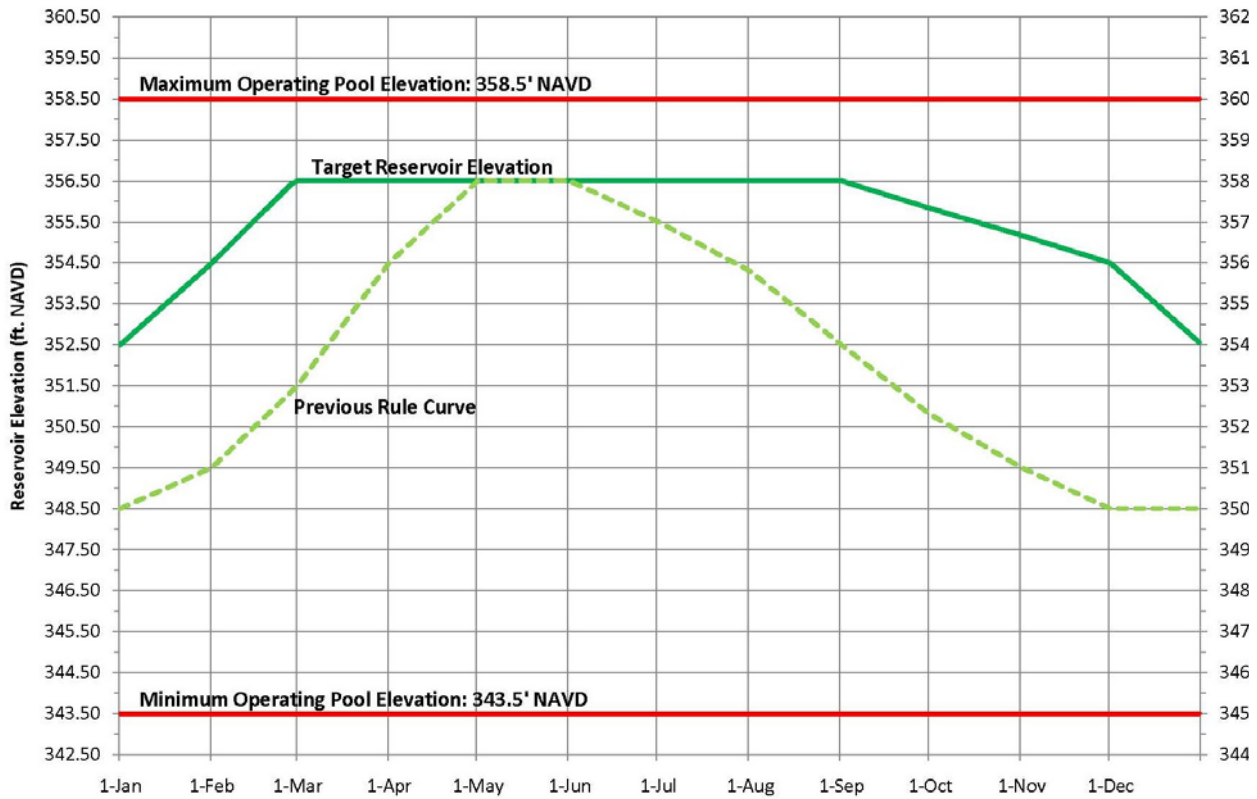
SCE&G agrees to operate Saluda Hydro to moderate lake level fluctuations, to address safety issues, improve recreation opportunities, and to support downstream flow targets, including striped bass flows. SCE&G agrees to make all reasonable efforts to operate during Normal Inflow Periods within a range of four feet, from a normal target operating lake level of 358' Plant Datum (PD) between March 1 and August 31, and a lower operating limit of 354' PD as illustrated in the lake level guide curve below. In order to maintain lake levels and minimize fluctuations,

SCE&G will operate in a manner that allows it to take advantage of surplus water for Non-Reserve Generation while making reasonable efforts to minimize downstream fluctuations in flow that may adversely affect habitat. This will ensure the Project is operated economically and aids in the protection of life and property, responds to changed hydrologic or other circumstances, meets lake management objectives, and does not interfere with required maintenance.

SCE&G shall, to the best of its ability and subject to the operational constraints, operate the Saluda Hydroelectric Project in a manner that follows the guide curve outlined below:

Saluda Hydroelectric Project No. 516

Reservoir Guide Curve



Reservoir Guide Curve Table – Elevations in Feet NAVD

	January	February	March	April	May	June	July	August	September	October	November	December
1	352.50	354.50	356.50	356.50	356.50	356.50	356.50	356.50	356.50	355.83	355.17	354.50
2	352.56	354.57	356.50	356.50	356.50	356.50	356.50	356.50	356.48	355.81	355.15	354.44
3	352.63	354.64	356.50	356.50	356.50	356.50	356.50	356.50	356.46	355.79	355.13	354.37
4	352.69	354.71	356.50	356.50	356.50	356.50	356.50	356.50	356.43	355.77	355.10	354.31
5	352.76	354.79	356.50	356.50	356.50	356.50	356.50	356.50	356.41	355.74	355.08	354.24
6	352.82	354.86	356.50	356.50	356.50	356.50	356.50	356.50	356.39	355.72	355.06	354.18
7	352.89	354.93	356.50	356.50	356.50	356.50	356.50	356.50	356.37	355.70	355.04	354.11
8	352.95	355.00	356.50	356.50	356.50	356.50	356.50	356.50	356.34	355.68	355.01	354.05
9	353.02	355.07	356.50	356.50	356.50	356.50	356.50	356.50	356.32	355.66	354.99	353.98
10	353.08	355.14	356.50	356.50	356.50	356.50	356.50	356.50	356.30	355.64	354.97	353.92
11	353.15	355.21	356.50	356.50	356.50	356.50	356.50	356.50	356.28	355.62	354.95	353.85
12	353.21	355.29	356.50	356.50	356.50	356.50	356.50	356.50	356.25	355.60	354.92	353.79
13	353.27	355.36	356.50	356.50	356.50	356.50	356.50	356.50	356.23	355.57	354.90	353.73
14	353.34	355.43	356.50	356.50	356.50	356.50	356.50	356.50	356.21	355.55	354.88	353.66
15	353.40	355.50	356.50	356.50	356.50	356.50	356.50	356.50	356.19	355.53	354.86	353.60
16	353.47	355.57	356.50	356.50	356.50	356.50	356.50	356.50	356.17	355.51	354.84	353.53
17	353.53	355.64	356.50	356.50	356.50	356.50	356.50	356.50	356.14	355.49	354.81	353.47
18	353.60	355.71	356.50	356.50	356.50	356.50	356.50	356.50	356.12	355.47	354.79	353.40
19	353.66	355.79	356.50	356.50	356.50	356.50	356.50	356.50	356.10	355.45	354.77	353.34
20	353.73	355.86	356.50	356.50	356.50	356.50	356.50	356.50	356.08	355.43	354.75	353.27
21	353.79	355.93	356.50	356.50	356.50	356.50	356.50	356.50	356.05	355.40	354.72	353.21
22	353.85	356.00	356.50	356.50	356.50	356.50	356.50	356.50	356.03	355.38	354.70	353.15
23	353.92	356.07	356.50	356.50	356.50	356.50	356.50	356.50	356.01	355.36	354.68	353.08
24	353.98	356.14	356.50	356.50	356.50	356.50	356.50	356.50	355.99	355.34	354.66	353.02
25	354.05	356.21	356.50	356.50	356.50	356.50	356.50	356.50	355.96	355.32	354.63	352.95
26	354.11	356.29	356.50	356.50	356.50	356.50	356.50	356.50	355.94	355.30	354.61	352.89
27	354.18	356.36	356.50	356.50	356.50	356.50	356.50	356.50	355.92	355.28	354.59	352.82
28	354.24	356.43	356.50	356.50	356.50	356.50	356.50	356.50	355.90	355.26	354.57	352.76
29	354.31	356.43	356.50	356.50	356.50	356.50	356.50	356.50	355.87	355.23	354.54	352.69
30	354.37		356.50	356.50	356.50	356.50	356.50	356.50	355.85	355.21	354.52	352.63
31	354.44		356.50		356.50		356.50	356.50		355.19		352.56

Reservoir Guide Curve Table – Elevations in Feet Plant Datum (PD)

	January	February	March	April	May	June	July	August	September	October	November	December
1	354.00	356.00	358.00	358.00	358.00	358.00	358.00	358.00	358.00	357.33	356.67	356.00
2	354.06	356.07	358.00	358.00	358.00	358.00	358.00	358.00	357.98	357.31	356.65	355.94
3	354.13	356.14	358.00	358.00	358.00	358.00	358.00	358.00	357.96	357.29	356.63	355.87
4	354.19	356.21	358.00	358.00	358.00	358.00	358.00	358.00	357.93	357.27	356.60	355.81
5	354.26	356.29	358.00	358.00	358.00	358.00	358.00	358.00	357.91	357.24	356.58	355.74
6	354.32	356.36	358.00	358.00	358.00	358.00	358.00	358.00	357.89	357.22	356.56	355.68
7	354.39	356.43	358.00	358.00	358.00	358.00	358.00	358.00	357.87	357.20	356.54	355.61
8	354.45	356.50	358.00	358.00	358.00	358.00	358.00	358.00	357.84	357.18	356.51	355.55
9	354.52	356.57	358.00	358.00	358.00	358.00	358.00	358.00	357.82	357.16	356.49	355.48
10	354.58	356.64	358.00	358.00	358.00	358.00	358.00	358.00	357.80	357.14	356.47	355.42
11	354.65	356.71	358.00	358.00	358.00	358.00	358.00	358.00	357.78	357.12	356.45	355.35
12	354.71	356.79	358.00	358.00	358.00	358.00	358.00	358.00	357.75	357.10	356.42	355.29
13	354.77	356.86	358.00	358.00	358.00	358.00	358.00	358.00	357.73	357.07	356.40	355.23
14	354.84	356.93	358.00	358.00	358.00	358.00	358.00	358.00	357.71	357.05	356.38	355.16
15	354.90	357.00	358.00	358.00	358.00	358.00	358.00	358.00	357.69	357.03	356.36	355.10
16	354.97	357.07	358.00	358.00	358.00	358.00	358.00	358.00	357.67	357.01	356.34	355.03
17	355.03	357.14	358.00	358.00	358.00	358.00	358.00	358.00	357.64	356.99	356.31	354.97
18	355.10	357.21	358.00	358.00	358.00	358.00	358.00	358.00	357.62	356.97	356.29	354.90
19	355.16	357.29	358.00	358.00	358.00	358.00	358.00	358.00	357.60	356.95	356.27	354.84
20	355.23	357.36	358.00	358.00	358.00	358.00	358.00	358.00	357.58	356.93	356.25	354.77
21	355.29	357.43	358.00	358.00	358.00	358.00	358.00	358.00	357.55	356.90	356.22	354.71
22	355.35	357.50	358.00	358.00	358.00	358.00	358.00	358.00	357.53	356.88	356.20	354.65
23	355.42	357.57	358.00	358.00	358.00	358.00	358.00	358.00	357.51	356.86	356.18	354.58
24	355.48	357.64	358.00	358.00	358.00	358.00	358.00	358.00	357.49	356.84	356.16	354.52
25	355.55	357.71	358.00	358.00	358.00	358.00	358.00	358.00	357.46	356.82	356.13	354.45
26	355.61	357.79	358.00	358.00	358.00	358.00	358.00	358.00	357.44	356.80	356.11	354.39
27	355.68	357.86	358.00	358.00	358.00	358.00	358.00	358.00	357.42	356.78	356.09	354.32
28	355.74	357.93	358.00	358.00	358.00	358.00	358.00	358.00	357.40	356.76	356.07	354.26
29	355.81	357.93	358.00	358.00	358.00	358.00	358.00	358.00	357.37	356.73	356.04	354.19
30	355.87		358.00	358.00	358.00	358.00	358.00	358.00	357.35	356.71	356.02	354.13
31	355.94		358.00		358.00		358.00	358.00		356.69		354.06

When SCE&G is not able to follow the guide curve due to low inflow to the reservoir, the MELIP shall be implemented.

Appendix A-15
Saluda Hydroelectric Project Shoreline Management Plan

Appendix A-15 is included as a separate PDF file on the webpage

Appendix A-16
Lands included in the SCDNR Wildlife Management Area Program to
Enhance Waterfowl Habitat

Appendix A-16 is included as a separate PDF file on the webpage

Draft

Appendix A-17
Saluda Hydroelectric Project Historic Properties Management Plan

Draft

**Due to the sensitive nature of the material contained within this report,
the HPMP is not attached to the public version of this document.**

Appendix B

Proposed Content of Off-License Agreements

1.0 Safety and Outreach Program

Administer as an off license agreement, the Safety and Outreach Program as developed in the context of relicensing. This will allow for the program to be modified by the Safety Resource Conservation Group (RCG) without requiring Commission approval. The Safety and Outreach program includes periodic meetings to review issues related to Project-related public safety. SCE&G shall maintain membership in the Safety RCG and provide a meeting location and administrative support a minimum of once per year so long as public interest remains high. Should meeting attendance at the annual meeting fall below three members (not including SCE&G and from at least three different, unrelated organizations), SCE&G's obligation to provide an annual meeting location and administrative support shall cease, but SCE&G may nevertheless continue to participate in safety-related meetings with the public. A copy of the Safety and Outreach Program is attached as Appendix B-1.

2.0 Implementation of the Lake Murray Shoreline Management Handbook and Permitting Guidelines:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project Lake Murray Shoreline Management Handbook and Permitting Guidelines (Appendix B-2) as developed in consultation with the Lake and Land Management Technical Working Committee.

3.0 Agreement to Lease Property to SCDNR for Inclusion in the WMA Program

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 3,900 acres of property, as identified in Appendix B-3, to SCDNR to be placed/maintained in their WMA Program as DNR elects. The purpose of placing these lands in the WMA Program will be to conserve wildlife habitat, public hunting opportunities, and other compatible WMA uses. The leases will either be co-terminus with the new license issued by the Commission or on an annual basis as identified on Appendix B-3.

Waiver of WMA lease fees will be considered.

Appendix B-1
Saluda Hydroelectric Project Safety and Outreach Program

Appendix B-1 is included as a separate PDF file on the webpage

Draft

Draft

**Appendix B-2
Lake Murray Shoreline Management Handbook and Permitting Guidelines**

Appendix B-2 is included as a separate PDF file on the webpage

Appendix B-3
Lands included in the SCDNR Wildlife Management Area Program

Appendix B-3 is included as a separate PDF file on the webpage

Appendix C

Supporting Justification for the Settlement Agreement

Draft

Appendix D

Signatories to the Settlement Agreement

American Rivers:

Signature: _____ Date: _____

Rebecca R. Wodder,
President

American Whitewater:

Signature: _____ Date: _____

N. Charlene Coleman

Adventure Carolina:

Signature: _____ Date: _____

Richard B. Mikell

Capitol City/Lake Murray Country Tourism:

Signature: _____ Date: _____

Yet to be determined

City of Columbia Parks and Recreation:

Signature: _____ Date: _____

Yet to be determined

Coastal Conservation League:

Signature: _____ Date: _____
Dana Beach,
Executive Director

Eastern Band of Cherokee Indians:

Signature: _____ Date: _____
The Honorable Principal Chief Michell Hicks

Lake Murray Association:

Signature: _____ Date: _____
Yet to be determined

Lake Murray Docks, Inc.:

Signature: _____ Date: _____
James L. Leslie, Jr.
President

Lake Murray Homeowners Coalition:

Signature: _____ Date: _____
Yet to be determined

Lake Murray Power Squadron:

Signature: _____ Date: _____
Jeff Langlois
Commander

Lake Watch:

Signature: _____ Date: _____
Yet to be determined

Lexington County:

Signature: _____ Date: _____
Yet to be determined

Midlands Striper Club:

Signature: _____ Date: _____
B. Reed Bull, Jr.

National Park Service:

Signature: _____ Date: _____
Yet to be determined

NOAA, National Marine Fisheries Service, Southeast Region:

Signature: _____ Date: _____
Dr. Roy E. Crabtree
Regional Administrator

Newberry County:

Signature: _____ Date: _____
Yet to be determined

Saluda County:

Signature: _____ Date: _____
Yet to be determined

Saluda River Chapter of Trout Unlimited:

Signature: _____ Date: _____
Michael G. Waddell

South Carolina Council Trout Unlimited:

Signature: _____ Date: _____
Malcolm W. Leaphart Jr.
Relicensing Coordinator

South Carolina Department of Archives and History:

Signature: _____ Date: _____
Elizabeth M. Johnson
Deputy State Historic Preservation Officer

South Carolina Department of Natural Resources:

Signature: _____ Date: _____
John E. Frampton,
Director

South Carolina Department of Parks, Recreation and Tourism:

Signature: _____ Date: _____
Yet to be determined

South Carolina Electric & Gas Company:

Signature: _____ Date: _____

James M. Landreth
Vice President – Fossil & Hydro Operations

South Carolina Wildlife Federation:

Signature: _____ Date: _____

Yet to be determined

U.S. Fish and Wildlife Service:

Signature: _____ Date: _____

Yet to be determined

Draft

If water quality issues arise, a meeting will be convened between SCE&G, appropriate agencies and interested stakeholders to evaluate the need for a draw down, and make recommendations based on available information and data including potential impacts to other resources. Attempts should be made to reach a consensus based management decision. Recommendations for the frequency of drawdowns and a trigger are provided in the CE-QUAL-W2 water quality modeling report (see Attachment XX); however, using an average flow at the Chappell's gage of 1,450 CFS or greater during the month of November. The lake may be drawn down for water quality to an elevation of approximately 350.0' Plant Datum (348.5' NAVD88). These recommendations will be in effect for a period of 12 years following the issuance of a new license. If conditions arise to cause concerns of potential water quality impacts, this plan will be re-evaluated. According to that report, failure to maintain the recommended drawdown schedule will increase the risk of poorer water quality (sediment accumulation, weeds, increased nutrient cycling from the sediments especially in embayments, and greater potential TMDL designation by DHEC that could lead to very expensive sediment treatments) compared to current conditions. Periodic winter drawdowns should be conducted to maintain dissolved oxygen required to meet State standards.

An

drawdownThe AMT will meet in year seven of the new license to evaluate the effects of the drawdowns on water quality and aquatic resources within Lake Murray.

The DAG's mission will be to exchange available scientific data relative to water quality, fisheries, aquatic plant managements and other pertinent data relative to Lake Murray and the effects of the drawdowns.

with respect to changes in drawdowns including, timing, frequency, duration and limits

after each 3 year drawdown

summary reports in making any future

Alison Guth

From: Alison Guth
Sent: Monday, June 15, 2009 4:57 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman
Subject: Changes to Settlement Agreement Document

Hello All,

In preparation for Wednesday's meeting, I will be incorporating the changes made in the last Water Quality meeting, as well as the few changes that SCE&G discussed Friday. If you have proposed changes to the Settlement Agreement ready, you are more than welcome to email them to me today or tomorrow and I will incorporate them into the document in track changes for discussion on Wednesday. This will also be helpful if you are unable to attend Wednesday's meeting, but have changes to the document. Email me if you have any questions. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Friday, June 12, 2009 10:08 AM
To: Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry ; Brandon Stutts ; Buddy Baker ; Chad Altman; Dick Christie (dchristie@comporium.net); Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mqattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Relicensing: Final 2008-2009 Lake Murray Waterfowl report

All:

Attached for your records is the final report for the waterfowl surveys performed by Savannah River Ecology Lab on Lake Murray during 2008-2009. This was the final survey season under our Saluda relicensing study plan. Many thanks to those who provided comments and have a great weekend.

Shane

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)462-5620
Fax: (803)462 - 5619



SREL Waterfowl
Report 2008-09 ...

**Waterfowl Aerial Surveys of Lake Murray, South Carolina:
2008–2009 Report**

A Final Report of Activities under Contract Agreement between
The University of Georgia Research Foundation, Inc.
Savannah River Ecology Laboratory and
Kleinschmidt Associates

Prepared and edited by:

R. A. Kennamer

The Savannah River Ecology Laboratory

P.O. Drawer E, Aiken, SC 29802

June 2009

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Executive Summary

As a part of the Federal Energy Regulatory Commission (FERC) relicensing process for the Saluda Hydroelectric Project (FERC No. P-516) by the South Carolina Electric & Gas Company (SCE&G), the South Carolina Department of Natural Resources (SCDNR) submitted a study request asking for an evaluation of wintering waterfowl usage at Lake Murray, South Carolina. Kleinschmidt Associates, a consulting firm specializing in engineering, regulatory management and environmental services, is coordinating the relicensing process for SCE&G. In early November 2006, the University of Georgia's Savannah River Ecology Laboratory (SREL) of Aiken, South Carolina, entered into a sub-consultant agreement with Kleinschmidt Associates to provide aerial survey data from three consecutive years describing wintering waterfowl use of Lake Murray, which is located in Lexington, Richland, Saluda, and Newberry Counties.

In year one, six fixed-wing aerial surveys of the entire Lake Murray basin were conducted between 14 December, 2006 and 27 February, 2007, during which over 4,000 waterfowl were documented using the reservoir. Seven waterfowl species (includes American Coots [*Fulica americana*]) were identified using Lake Murray during the first-year surveys. The Mallard (*Anas platyrhynchos*) was the only dabbling duck species seen at Lake Murray and was the only species observed on every aerial survey, but their numbers never exceeded more than 211 individuals on any single survey. Canada Geese (*Branta canadensis*) were observed on five of six 2006–2007 aerial surveys, with a maximum of 144 observed. Three diving duck species were observed at Lake Murray in 2006–2007, including the Bufflehead (*Bucephala albeola*), Ring-necked Duck (*Aythya collaris*), and Lesser Scaup (*Aythya affinis*). Lesser Scaup were the most numerous waterfowl seen on Lake Murray during the aerial surveys of 2006–2007, with more than 500 observed on three occasions, and a maximum of 1,535 observed on 19 February, 2007. Lesser Scaup were noted in the vicinity of Goat Island and Pine Island near the Saluda Dam on three surveys where they were observed to have churned-up the shallow waters, presumably as they were bottom feeding.

During year two of the study, six fixed-wing aerial surveys of the Lake Murray basin were conducted between 16 November, 2007 and 21 February, 2008. In this second year, aerial surveys documented only about 850 waterfowl using the reservoir, a decline of almost 80% from the previous year. In 2007–2008, only four waterfowl species (includes American Coots) were identified using Lake Murray during the surveys. As in the previous year, the Mallard was the only dabbling duck species seen at Lake Murray, but their numbers never exceeded more than 104 individuals on any single survey. Mallards were observed on every aerial survey in 2007–2008. Canada Geese were also observed on all six 2007–2008 aerial surveys, with a maximum of 161 observed. The only diving duck species observed at Lake Murray in 2007–2008 was the Lesser Scaup, but only 10 individuals were seen on a single occasion.

During the third and final year of the study, six additional fixed-wing aerial surveys for waterfowl on Lake Murray were conducted between 25 November, 2008 and 10 February, 2009. In the third year, 1,179 waterfowl were documented using Lake Murray, an increase of almost 40% from the previous year. In 2008–2009, four waterfowl species were identified during the aerial surveys. As in the previous two years, the Mallard was the only dabbling duck species seen at Lake Murray, with a maximum of 30 individuals recorded on any single survey. Both Mallards and Canada Geese were observed on each of the six surveys in 2008–2009. Diving ducks observed during 2008–2009 included only Lesser Scaup, and Buffleheads, with a single survey maximum of 175 divers.

A declining trend in waterfowl use of the reservoir in recent years noted from SCDNR mid-winter waterfowl surveys is likely attributed to several factors, including a multi-year partial drawdown

and nuisance aquatic plant control activities that have undoubtedly affected invasive and native vegetation communities that wintering waterfowl depend on as food resources. Additionally, as is common to multi-purpose reservoirs like Lake Murray, recreational boating by the general public that was noted during both winters may well be high enough to create disturbance to waterfowl and thereby also contribute to the limited use of the reservoir by these species. With what may be lower quantity and quality waterfowl food resources and observed levels of disturbance on the reservoir in winter, Lake Murray will likely function primarily as a temporary stopover location for migrating waterfowl.

Introduction

On 29 April, 2005 South Carolina Electric & Gas Company (SCE&G) filed a notice of intent with the Federal Energy Regulatory Commission (FERC) to seek a new license for the Saluda Hydroelectric Project (FERC No. P-516), which includes Lake Murray. The current license for the 206 MW Saluda Hydroelectric plant, which is located near Columbia, SC, expires in 2010. Kleinschmidt Associates, a consulting firm specializing in engineering, regulatory management and environmental services, began coordinating the relicensing process for SCE&G. In addition to its notice of intent, SCE&G also submitted its initial consultation document to begin the official relicensing process. As a result of the review of documents associated with the filing by numerous state and federal resource agencies, the United States Fish and Wildlife Service (USFWS), South Carolina Department of Natural Resources (SCDNR), National Marine Fisheries Service (NMFS), and several Non-governmental Organizations (NGOs) requested studies to determine the potential impact of Project operation on fish and wildlife resources, including the status of overwintering waterfowl on Lake Murray. In early November 2006, the University of Georgia's Savannah River Ecology Laboratory (SREL) of Aiken, South Carolina, entered into a sub-consultant agreement with Kleinschmidt Associates to provide aerial survey data (6 flights/yr) describing waterfowl use of Lake Murray over a consecutive three-year period.

Study Area

Lake Murray (Figure 1) is a 50,000-acre hydroelectric reservoir created in 1930 with the construction of an earthen dam in the Dreher Shoals area of the Saluda River. The lake basin drains some 2,420 square miles in portions of Lexington, Richland, Saluda, and Newberry Counties of South Carolina.

The Saluda Hydro Project is typically used to meet SCE&G's reserve capacity obligations. Seasonally, as the project is operated, Lake Murray undergoes drawdowns and refills. The minimum drawdown is usually to 350 feet MSL (November–December) and the maximum elevation is held to 358 feet MSL (May–June; Figure 2). Spillway gates prevent the reservoir from rising above the 360-foot capacity level. Although originally developed for hydroelectric power production, damming of the natural watercourse of the Saluda River to create the reservoir also provided for recreational and real estate development, which have flourished because of the proximity to the state capital in Columbia.

Aerial Surveys Methods

Kleinschmidt Associates provided for air services through Eagle Aviation Inc. (Columbia, SC), which supplied aircraft (Cessna 172) and a pilot for the six planned Lake Murray aerial bird surveys each year. Because of potential bias associated with multiple observers, all aerial surveys were conducted by a

single observer. The SREL observer, W. L. Stephens, Jr., accompanied the pilot in the aircraft; the pilot was instructed to fly at an altitude of approximately 200–300 ft and an airspeed of about 80–105 mph. Surveys consisted of complete coverages of the lake basin, thus providing what were considered true count data as opposed to randomized line-transect surveys which would yield only estimates of bird abundance (this latter technique is often used when study areas are much larger geographic regions). The pilot was instructed to circle above larger flocks of birds while species were identified and counts were made. Bird species and numbers of individuals were recorded directly onto field maps of the lake; after survey completion, observed birds were tallied by species and recorded on a summary data sheet. Additional data provided on each summary data sheet included: date, start/end times of survey, and general weather conditions at the time of the aerial survey (i.e., visibility, wind, temperature, rainfall). Meteorological information from Dutch Oaks station, Irmo, SC was also gathered for each flight period. Aerial surveys were conducted during the early-afternoon hours, with all surveys being started by 1500hrs. Surveys generally lasted 1.5–2 hours.

Data were stored on a networked PC-workstation operating in a Microsoft-Windows environment. The Statistical Analysis System (Statistical Analysis System, SAS Institute, Inc., Cary, NC) was used to summarize the aerial survey data.

Aerial Survey Results and Discussion

Year one (2006–2007)

During year one, six fixed-wing aerial surveys of the entire Lake Murray basin were conducted between 14 December, 2006 and 27 February, 2007. A flight scheduled for 29 November, 2006 was cancelled due to limited visibility (fog) conditions in and around the survey area, and could not be rescheduled until mid-December, 2006. A flight scheduled for 5 January, 2007 was rescheduled for 9 January, 2007 because of inclement weather on the original date. Also, a flight scheduled for 6 February, 2007 was cancelled by Eagle Aviation due to plane/pilot availability; this flight was rescheduled to 19 February, 2007. Prevailing weather conditions during the 2006–2007 flights are provided in Table 1.

Seven waterfowl species (includes American Coots [*Fulica americana*]) were identified using Lake Murray during the 2006–2007 aerial surveys (Table 2). During these surveys, over 4,000 waterfowl were documented using the reservoir (Table 3). Mallards (*Anas platyrhynchos*) were the only dabbling duck species seen at Lake Murray and were the only species observed on every aerial survey, but their numbers never exceeded more than 211 individuals on any single survey (Table 3). Canada Geese (*Branta canadensis*) were observed on five of six 2006–2007 aerial surveys, with a maximum of 144 observed. Three diving duck species were observed at Lake Murray in 2006–2007, including the Bufflehead (*Bucephala albeola*), Ring-necked Duck (*Aythya collaris*), and Lesser Scaup (*Aythya affinis*; Table 3).

Figure 3 shows the Lake Murray locations of waterfowl concentrations of 100+ individuals observed during aerial surveys in the winter of 2006–2007. These locations included an area just west of the SC Hwy 391 bridge over the Saluda River fork, the Hollow Creek region of the lake, the Lowman Creek area near the Lighthouse Marina, and around islands in the vicinity of the Saluda Dam. Lesser Scaup were the most numerous waterfowl seen on Lake Murray during the 2006–2007 aerial surveys, with more than 500 observed on three occasions, and a maximum of 1,535 observed on 19 February, 2007 (Table 3). Lesser Scaup were noted in the vicinity of Goat Island and Pine Island near the Saluda Dam (Figure 1) on three surveys where they were observed to have churned-up the shallow waters, presumably as they were bottom feeding. Lesser Scaup often prefer feeding on small mussels such as the

Asiatic clam (*Corbicula fluminea*) which occur in southeastern reservoirs. One adult Bald Eagle (*Haliaeetus leucocephalus*) was also observed at Lake Murray on 19 January, 2007.

Year two (2007–2008)

During year two of the study, six additional fixed-wing aerial surveys of the Lake Murray basin were conducted between 16 November, 2007 and 21 February, 2008. A flight scheduled for 3 December, 2007 was rescheduled to 12 December, 2007 due to pilot illness. A flight scheduled for 22 January, 2008 was rescheduled for 28 January, 2008 because of inclement weather on the original date. Also, a flight scheduled for 13 February, 2008 was rescheduled to 21 February, 2008 because of windy conditions on the original date. Prevailing weather conditions during the 2007–2008 flights are provided in Table 4. Of note, heavy rain falling during the later portion of the 21 February, 2008 flight lead to very poor visibility while surveying most of the southern shore of Lake Murray.

In year two, only four waterfowl species (includes American Coots) were identified by aerial surveys using Lake Murray (Table 2). During the 2007–2008 surveys, only 845 total waterfowl were documented using the reservoir (Table 5), a decline of almost 80% from the previous year. As in the first year, the Mallard was the only dabbling duck species seen at Lake Murray in 2007–2008, but their numbers never exceeded more than 104 individuals on any single survey (Table 5). Mallards were observed on every aerial survey in 2007–2008. Canada Geese were also observed on all six 2007–2008 aerial surveys, with a maximum of 161 observed (Table 5). The only diving duck species observed at Lake Murray in 2007–2008 was the Lesser Scaup, but only 10 individuals were seen on a single occasion (Table 5). American Coots were observed on only one aerial survey in 2007–2008, totaling 200 individuals. One adult Bald Eagle was also observed at Lake Murray on 28 January, 2008.

Figure 4 shows the Lake Murray locations of waterfowl concentrations of 50+ individuals observed during aerial surveys in the winter of 2007–2008. Two west lake locations included an area near the SC Hwy 391 bridge over the Saluda River fork and an area within the Little Saluda River fork. Waterfowl concentrations of 50+ were also seen north of the Putnam's Landing area (Figure 4).

Year three (2008–2009)

During year three of the study, six additional fixed-wing aerial surveys of the Lake Murray basin were conducted between 25 November, 2008 and 10 February, 2009. The initial flight of 2008–2009 planned for 13 November, 2008 was rescheduled for 14 November, 2008 due to necessary plane maintenance, but rain on that reschedule date forced the flight to be further postponed until 25 November, 2008. All flights planned for December 2008 and January 2009 were executed either on the date originally scheduled or a day later, on the first alternate date. Also, the final flight originally scheduled for 13 February, 2009 was rescheduled to 10 February, 2009. Prevailing weather conditions during the 2008–2009 flights are provided in Table 6.

In year three, only four waterfowl species were identified by aerial surveys using Lake Murray (Table 2). During the 2008–2009 surveys, 1,179 total waterfowl were documented using the reservoir (Table 7), an increase of almost 40% from the previous year. As in both previous years, the Mallard was the only dabbling duck species seen at Lake Murray in 2008–2009, but their numbers never exceeded more than 30 individuals on any single survey (Table 7). Mallards were observed on every aerial survey in 2008–2009. Canada Geese were also observed on all six 2008–2009 aerial surveys, with a maximum of 212 observed on 3 December, 2008 (Table 7). Only two diving duck species were observed at Lake Murray in 2008–2009, including the Lesser Scaup and Bufflehead, with a maximum of 175 divers seen on 21 January, 2009 (Table 7). No Bald Eagles were observed at Lake Murray during the aerial waterfowl surveys in 2008–2009.

Figure 5 shows the Lake Murray locations of waterfowl concentrations of 50+ individuals observed during aerial surveys in the winter of 2008–2009. Three south-shore locations near Rocky Creek, Hollow Creek, and Shull Island had 50–75 Lesser Scaup each and two north-shore locations had 50–100 Canada Geese each (Figure 5). One of the north-shore locations was actually a small pond adjacent to Lake Murray, but separated by only a short distance (Figure 5).

A declining trend in waterfowl use of the reservoir in recent years noted from SCDNR mid-winter waterfowl surveys (see Appendix 1) is likely attributed to several factors, including a multi-year partial drawdown (drawdown began in the fall of 2002; refill began in the spring of 2004) and nuisance aquatic plant control activities that have affected vegetation and associated macro-invertebrates that wintering waterfowl depend on as food resources. Another factor that commonly has a negative affect on waterbird use of waterbodies is human disturbance. Recreational boat use by the general public that was noted during all winters of the current study, even during the coldest months of the year, may well be high enough to create disturbance to waterfowl and thereby also contribute to the limited use of the reservoir by these species. With what may be lower quantity and quality waterfowl food resources and observed levels of disturbance on the reservoir in winter, Lake Murray will likely function primarily as a temporary stopover location for migrating waterfowl.

Acknowledgments

We extend our sincere thanks to Paul Watkins, pilot with Eagle Aviation, who, together with SREL's Warren L. "Cub" Stephens Jr., spent hours above Lake Murray surveying waterfowl. C. Shane Boring, an Environmental Scientist with Kleinschmidt Associates, provided guidance throughout the study period. Cherie Summer and Bob Nestor of SREL assisted with contract arrangements. Many thanks to all those involved in one way or another.

Table 1. Weather conditions during waterfowl aerial surveys of Lake Murray in 2006–2007.

Survey Date:	12/14/2006	12/27/2006	1/9/2007	1/19/2007	2/19/2007	2/27/2007
Observer	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens
Start Time	14:45	13:00	12:00	12:30	15:00	14:00
Stop Time	16:15	14:45	13:30	14:30	16:30	15:30
Noted General Conditions	PC/Hazy/Calm	Clear/Calm	Clear/Windy	Clear/Windy	Clear/Cool	Clear/Cool
Irmo Temp Range (C)*	17-19°C	11°C	13-14°C	13-14°C	14-15°C	20°C
Irmo Wind (mph)*	Calm-SW@2	Calm-W@5	Calm-SW@17; Gusts@22	Calm-SW@14; Gusts@23	Calm-SSW@2	Calm-SSW@6
Irmo Rainfall Rate (mm/hr)*	None	None	None	None	None	None
Irmo Sky Conditions*	OVC	FEW	CLR	BKN	FEW	BKN

*Dutch Oaks, Irmo, SC; Latitude: N 34 ° 8 ' 49 " (34.147 °); Longitude: W 81 ° 12 ' 54 " (-81.215 °); Elevation: 366 ft; Station Hardware: Oregon Scientific WMR968; Abbreviations: PC=Partly Cloudy, OVC=Overcast, FEW=Few Clouds, SCT=Scattered Clouds, CLR=Clear Skies, BKN=Broken Skies, RN = Rain

Table 2. Species list compiled from waterfowl aerial surveys of Lake Murray in 2006–2007, 2007–2008, and 2008–2009.

Guild	Common Name	Scientific Name	2006-2007	2007-2008	2008-2009
Swans	Mute Swan	<i>Cygnus olor</i>	X		
Geese	Canada Goose	<i>Branta canadensis</i>	X	X	X
Dabbling Ducks	Mallard	<i>Anas platyrhynchos</i>	X	X	X
Diving Ducks	Ring-necked Duck	<i>Aythya collaris</i>	X		
	Lesser Scaup	<i>Aythya affinis</i>	X	X	X
	Bufflehead	<i>Bucephala albeola</i>	X		X
Rails	American Coot	<i>Fulica americana</i>	X	X	

Table 3. Counts of waterfowl identified during aerial surveys of Lake Murray in 2006–2007.

Survey Date:	12/14/06	12/27/06	1/9/07	1/19/07	2/19/07	2/27/07	All Surveys
Mallard	211	46	16	23	25	7	328
American Black Duck							0
Mottled Duck							0
Gadwall							0
American Wigeon							0
Green-Wing Teal							0
Blue-Wing Teal							0
Northern Shoveler							0
Northern Pintail							0
Wood Duck							0
Total Dabblers:	211	46	16	23	25	7	328
Redhead							0
Canvasback							0
Scaup spp.		920	100	600	1535		3155
Ring-necked Duck		106					106
Common Goldeneye							0
Bufflehead		14	8	11	8		41
Ruddy Duck							0
Total Divers:	0	1040	108	611	1543	0	3302
Scoter spp.							0
Long-tailed Duck							0
Harlequin Duck							0
Total Seaducks:	0	0	0	0	0	0	0
Merganser spp.							0
Unidentified Ducks							0
Total Ducks:	211	1086	124	634	1568	7	3630
Brant							0
Snow Goose							0
White-Fronted Goose							0
Canada Goose		66	144	140	9	19	378
Total Geese:	0	66	144	140	9	19	378
Tundra Swan							0
Trumpeter Swan							0
Mute Swan					2		2
Total Swans:	0	0	0	0	2	0	2
American Coot	50						50
Grand Total:	261	1152	268	774	1579	26	4060

Table 4. Weather conditions during waterfowl aerial surveys of Lake Murray in 2007–2008.

Survey Date:	11/16/2007	12/12/2007	12/19/2007	1/7/2008	1/28/2008	2/21/2008
Observer	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens
Start Time	13:00	13:00	13:00	13:00	13:00	13:00
Stop Time	16:00	15:00	15:00	15:30	16:00	14:30
Noted General Conditions	Clear/Light wind	Clear/Windy	PC/Light wind	Clear/Light wind	Clear/Light wind	Cloudy/Rain
Irmo Temp Range (C)*	12-13°C	26-27°C	13-15°C	21-22°C	14-15°C	9-10°C
Irmo Wind (mph)*	Calm-SW@10 Gusts@21	Calm-SW@9 Gusts@25	Calm-SW@8; Gusts@17	Calm-SSW@7; Gusts@12	Calm-WSW@8 Gusts@13	Calm-NE@8 Gusts@20
Irmo Rainfall Rate (mm/hr)*	None	None	None	None	None	None
Irmo Sky Conditions*	BKN	BKN	BKN	BKN	BKN	BKN

*Dutch Oaks, Irmo, SC; Latitude: N 34 ° 8 ' 49 " (34.147 °); Longitude: W 81 ° 12 ' 54 " (-81.215 °); Elevation: 366 ft; Station Hardware: Oregon Scientific WMR968; Abbreviations: PC=Partly Cloudy, OVC=Overcast, FEW=Few Clouds, SCT=Scattered Clouds, CLR=Clear Skies, BKN=Broken Skies, RN = Rain

Table 5. Counts of waterfowl identified during aerial surveys of Lake Murray in 2007–2008.

Survey Date:	11/16/07	12/12/07	12/19/07	1/7/08	1/28/08	2/21/08	All Surveys
Mallard	4	2	38	104	2	8	158
American Black Duck							0
Mottled Duck							0
Gadwall							0
American Wigeon							0
Green-Wing Teal							0
Blue-Wing Teal							0
Northern Shoveler							0
Northern Pintail							0
Wood Duck							0
Total Dabblers:	4	2	38	104	2	8	158
Redhead							0
Canvasback							0
Scaup spp.					10		10
Ring-necked Duck							0
Common Goldeneye							0
Bufflehead							0
Ruddy Duck							0
Total Divers:	0	0	0	0	10	0	10
Scoter spp.							0
Long-tailed Duck							0
Harlequin Duck							0
Total Seaducks:	0	0	0	0	0	0	0
Merganser spp.							0
Unidentified Ducks							0
Total Ducks:	4	2	38	104	12	8	168
Brant							0
Snow Goose							0
White-Fronted Goose							0
Canada Goose	20	90	161	101	69	36	477
Total Geese:	20	90	161	101	69	36	477
Tundra Swan							0
Trumpeter Swan							0
Mute Swan							0
Total Swans:	0	0	0	0	0	0	0
American Coot					200		200
Grand Total:	24	92	199	205	281	44	845

Table 6. Weather conditions during waterfowl aerial surveys of Lake Murray in 2008–2009.

Survey Date:	11/25/2008	12/3/2008	12/19/2008	1/6/2009	1/21/2009	2/10/2009
Observer	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens	W.L. Stephens
Start Time	13:00	13:00	13:00	13:00	13:00	11:00
Stop Time	14:30	15:00	15:00	15:00	15:00	12:30
Noted General Conditions	Windy	Clear/Calm	Windy	Cloudy	Clear	Clear
Irmo Temp Range (C)*	13-14°C	12°C	22-23°C	19-20°C	4-5°C	20-22°C
Irmo Wind (mph)*	SW@7-14; Gust@32	Calm-WSW@8; Gust@15	SW@7-18; Gust@26	Calm-ENE@6; Gust@10	Calm-SW@6; Gust@15	Calm-SSW@5; Gust@15
Irmo Rainfall (mm)*	None	None	None	None	None	None
Irmo Sky Conditions*	BKN	BKN	BKN	BKN	BKN	BKN

*Dutch Oaks, Irmo, SC; Latitude: N 34 ° 8 ' 49 " (34.147 °); Longitude: W 81 ° 12 ' 54 " (-81.215 °); Elevation: 366 ft; Station Hardware: Oregon Scientific WMR968; Abbreviations: PC=Partly Cloudy, OVC=Overcast, FEW=Few Clouds, SCT=Scattered Clouds, CLR=Clear Skies, BKN=Broken Skies, RN = Rain

Table 7. Counts of waterfowl identified during aerial surveys of Lake Murray in 2008–2009.

Survey Date:	11/25/08	12/3/08	12/19/08	1/6/09	1/21/09	2/10/09	All Surveys
Mallard	18	6	18	14	30	20	106
American Black Duck							0
Mottled Duck							0
Gadwall							0
American Wigeon							0
G-W Teal							0
B-W Teal							0
Northern Shoveler							0
Northern Pintail							0
Wood Duck							0
Total Dabblers:	18	6	18	14	30	20	106
Redhead							0
Canvasback							0
Scaup spp.	2	4			175	60	241
Ring-necked Duck							0
Common Goldeneye							0
Bufflehead				2		5	7
Ruddy Duck							0
Total Divers:	2	4	0	2	175	65	248
Scoter spp.							0
Long-tailed Duck							0
Harlequin Duck							0
Total Seaducks:	0	0	0	0	0	0	0
Merganser spp.							0
Unidentified Ducks		6		3	2		11
Total Ducks:	20	16	18	19	207	85	365
Brant							0
Snow Goose							0
White-Fronted Goose							0
Canada Goose	147	212	174	39	180	62	814
Total Geese:	147	212	174	39	180	62	814
Tundra Swan							0
Trumpeter Swan							0
Mute Swan							0
Total Swans:	0	0	0	0	0	0	0
American Coot							0
Grand Total:	167	228	192	58	387	147	1179

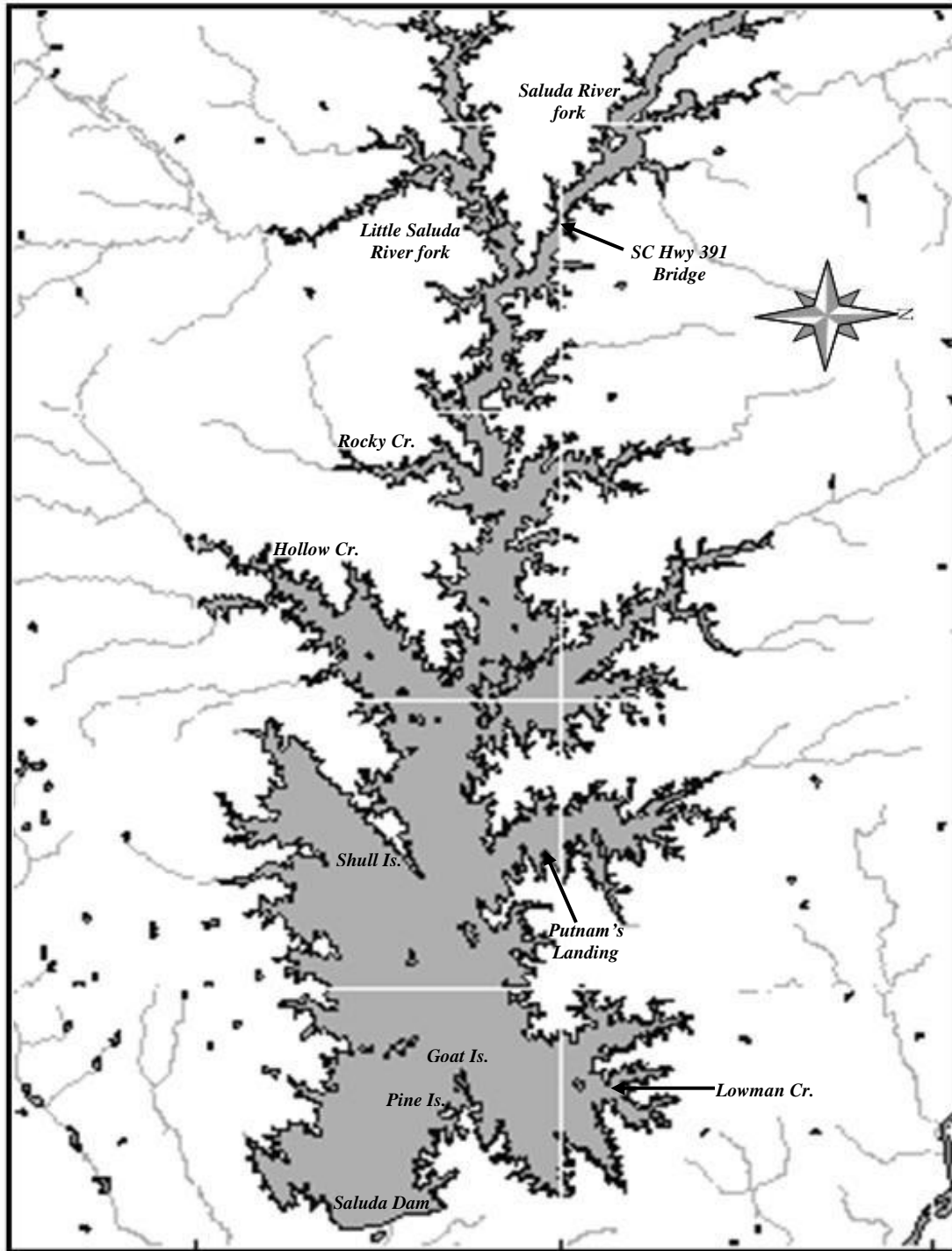


Figure 1. Map of Lake Murray showing locations referred to in the report.

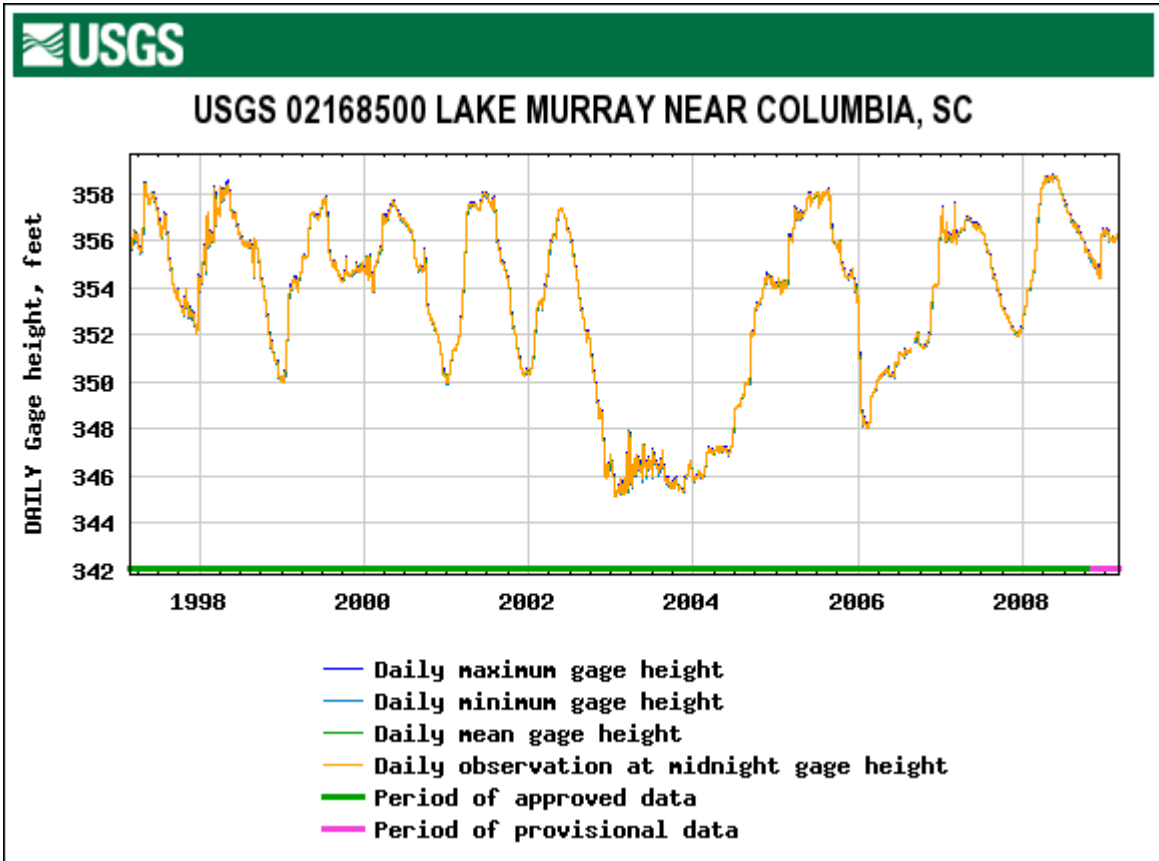


Figure 2. Lake Murray daily gage height (feet; full pool = 360feet) during March 1997–March 2009
 Location: Latitude 34°03'07", Longitude 81°13'15" (NAD27), Lexington Co., SC, Hydrologic Unit
 03050109; Description: Drainage area: 2,420.00 square miles; Datum of gage: -0.64 feet above sea level
 NGVD29. Source: U.S. Geological Survey National Water Information System.

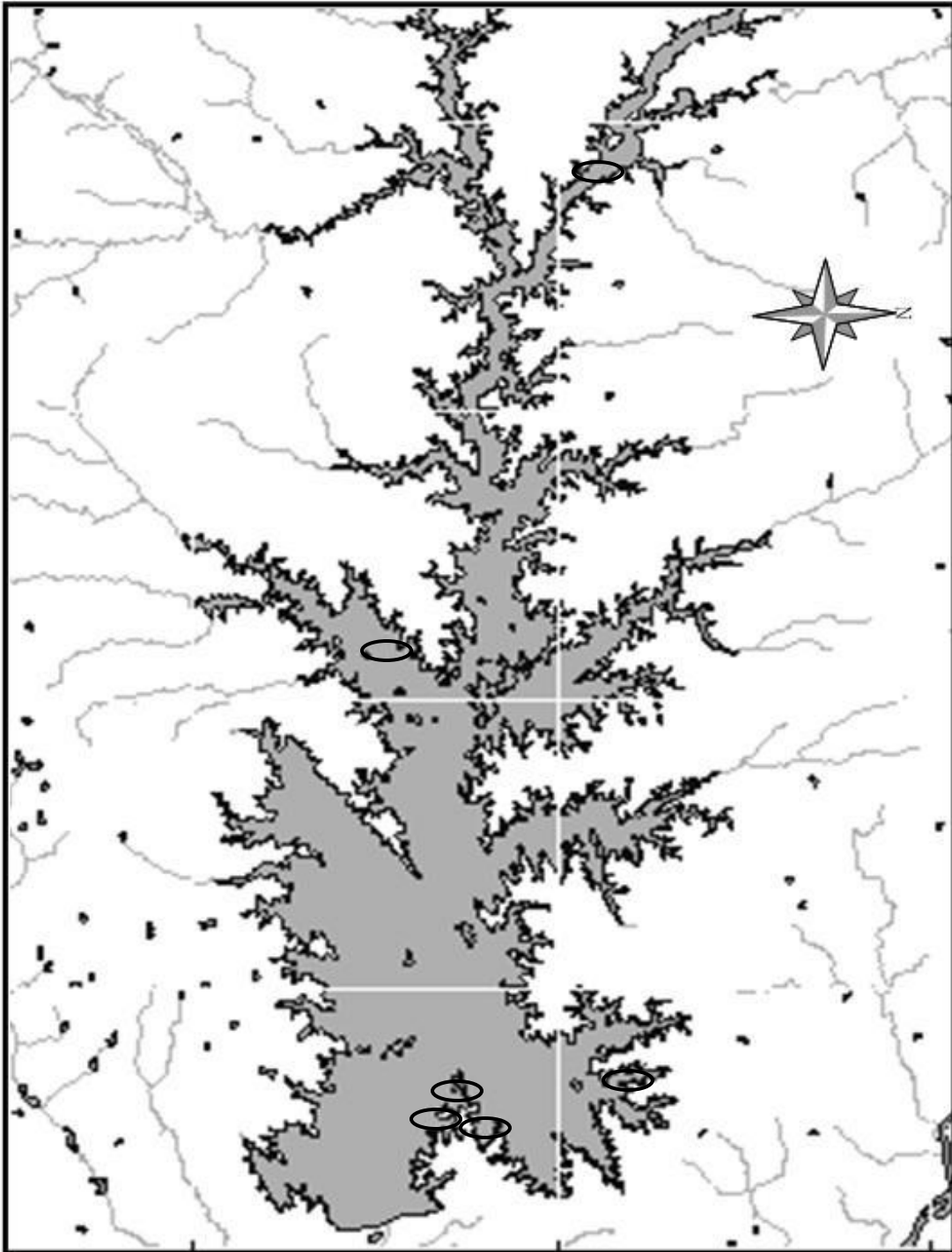


Figure 3. Map of Lake Murray showing locations of waterfowl concentrations of 100+ individuals observed during aerial surveys in 2006–2007.

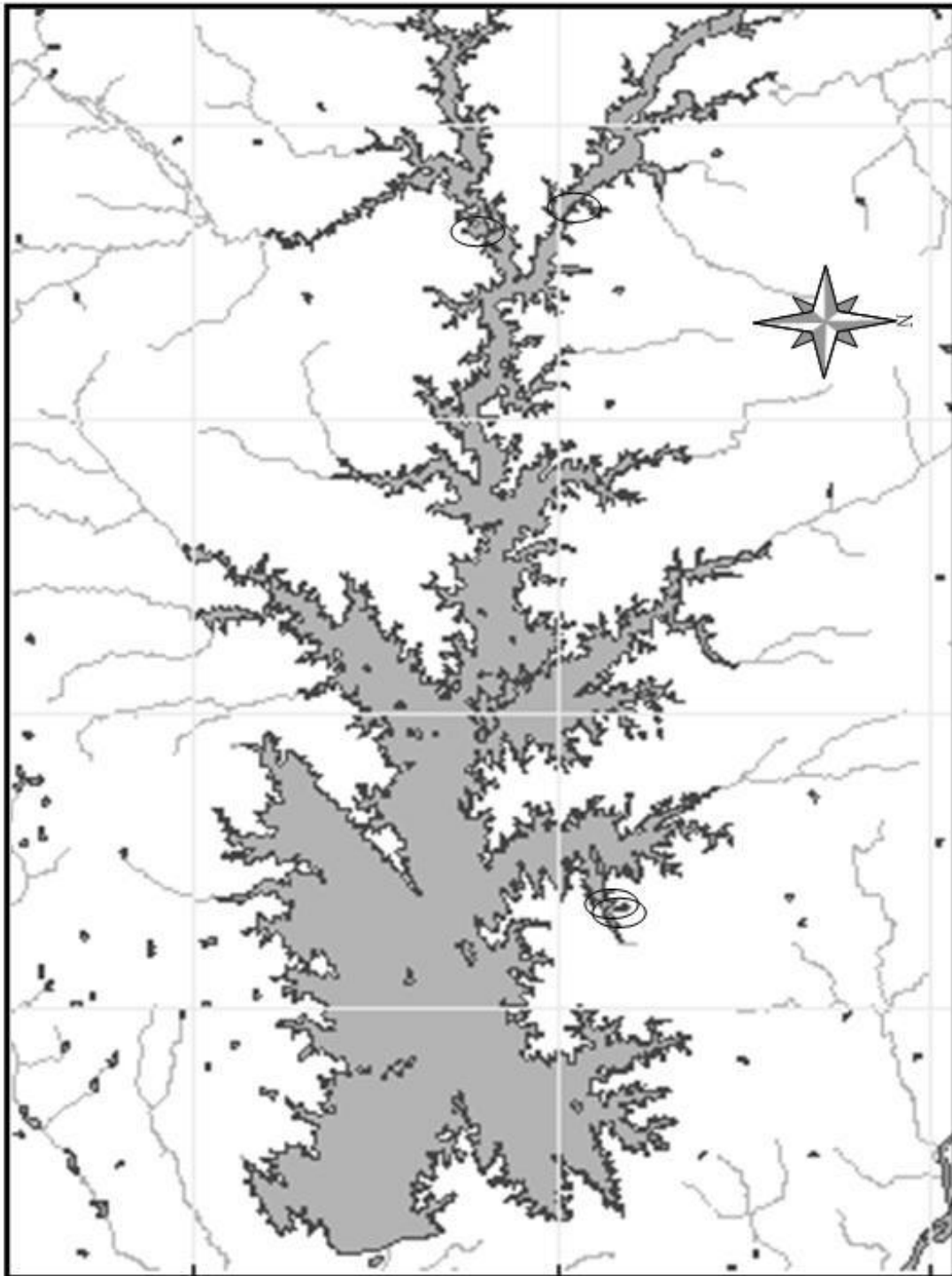


Figure 4. Map of Lake Murray showing locations of waterfowl concentrations of 50+ individuals observed during aerial surveys in 2007–2008.

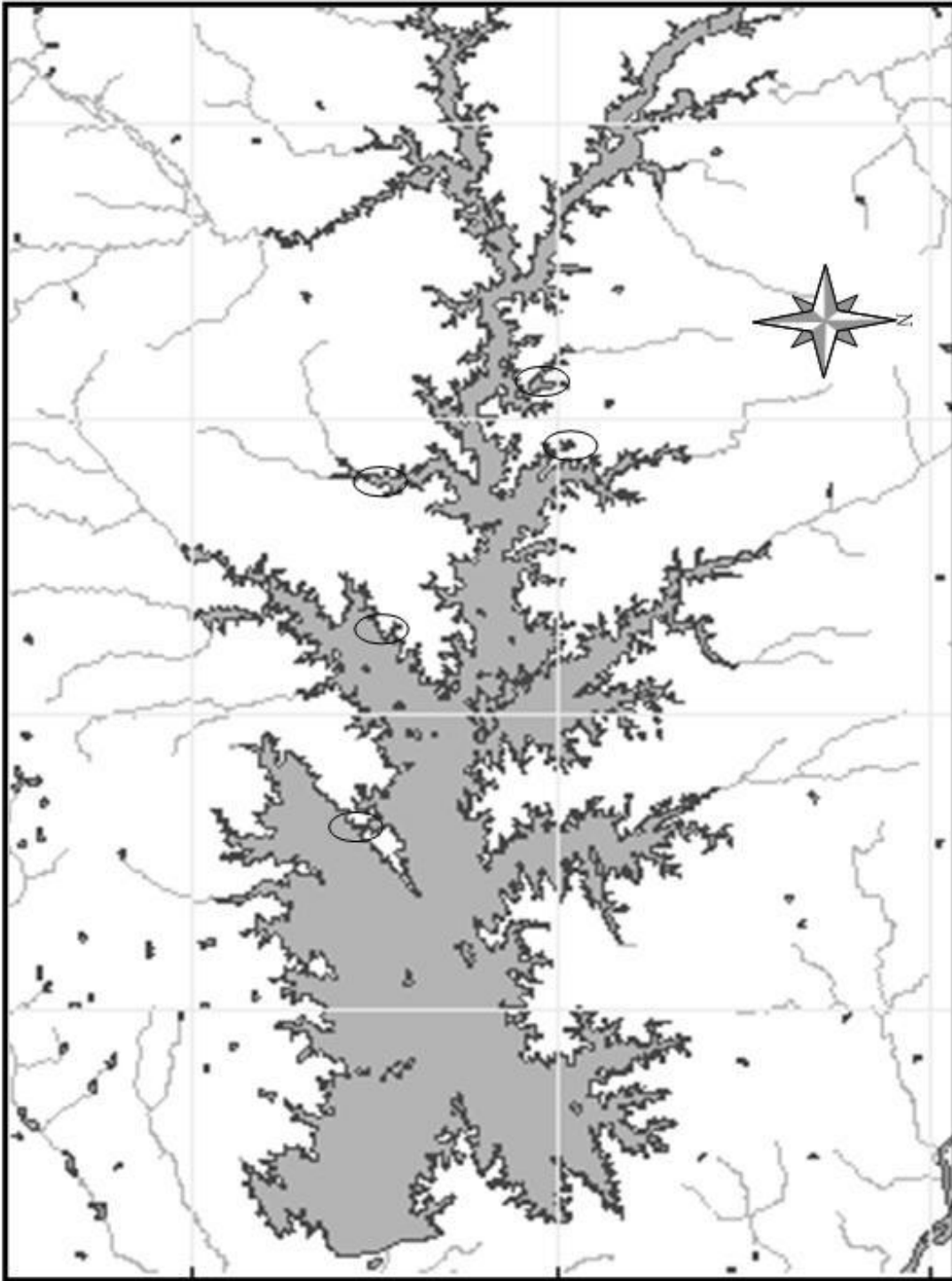


Figure 5. Map of Lake Murray showing locations of waterfowl concentrations of 50+ individuals observed during aerial surveys in 2008–2009.

Appendix 1. South Carolina Department of Natural Resources mid-winter waterfowl counts from Lake Murray.

Survey Winter:	2003	2004	2005	2006	2007	2008	All Surveys
Mallard	26	19	2	44		23	114
American Black Duck	4						4
Mottled Duck							0
Gadwall							0
American Wigeon							0
Green-Wing Teal							0
Blue-Wing Teal							0
Northern Shoveler	3						3
Northern Pintail							0
Wood Duck							0
Total Dabblers:	33	19	2	44	0	23	121
Redhead			1				1
Canvasback							0
Scaup spp.	2610	1718	2	4	536	60	930
Ring-necked Duck	200	1353	34				1587
Common Goldeneye	3						3
Bufflehead	80	40		139	49	50	358
Ruddy Duck	7						7
Total Divers:	2900	3111	37	143	585	110	6886
Scoter spp.							0
Long-tailed Duck							0
Harlequin Duck							0
Total Seaducks:	0	0	0	0	0	0	0
Merganser spp.			5	4			9
Unidentified Ducks		4		4			8
Total Ducks:	2933	3134	44	195	585	133	7024
Brant							0
Snow Goose							0
White-Fronted Goose							0
Canada Goose	394	86	12	56	44	109	701
Total Geese:	394	86	12	56	44	109	701
Tundra Swan							0
Trumpeter Swan							0
Mute Swan							0
Total Swans:	0	0	0	0	0	0	0
American Coot	19500	9000	753	125	9		29387
Grand Total:	22827	12220	809	376	638	242	37112

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Friday, June 12, 2009 9:14 AM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Amy Bennett; BARGENTIERI@scana.com; Bill Hulslander; Bill Marshall; Bud Badr; Charlene Coleman; Dave Landis; dchristie@comporium.net; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hank McKellar; Jeff Duncan; Jennifer O'Rourke; Joy Downs; Kristina Massey; turnerle@dhec.sc.gov; Mark Leao; msummer@scana.com; Mike Waddell; Parkin Hunter; Patrick Moore ; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Russell Jernigan; lakewatchman@yahoo.com; Suzanne Rhodes; Theresa Thom; Tom Ruple; Tom Stonecypher; Jon Quebbeman; Bret Hoffman; Alan Axson; Bill Brebner ; Charlie Rentz; Dave Anderson; David Hancock; Guy Jones; Irvin Pitts; Jennifer Hand; Jim Devereaux; JoAnn Butler; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Lee Barber; mwleapjr@att.net; Mark Davis; Marty Phillips; Matthew Rice ; Miriam Atria; Norman Ferris; Rparsons12@windstream.net; Richard Mikell; sjones@imichotels.net; Tim Vinson; Tommy Boozer; Van Hoffman
Subject: RE: CFD Swift Water Rescue Safety Training Flow Request

In section 3.b. of the Rec Plan language, you may want to clearly state whether or not the "off reserve" days will be in addition to the 51 "off reserve" days discussed in the rest of the Recreation Plan.

Tony Bebber, AICP
Planning Manager, Product Services

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Tuesday, June 09, 2009 1:12 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bill Argentieri; Bill Hulslander; Bill Marshall; Bud Badr; Charlene Coleman; Dave Landis; dchristie@comporium.net; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hank McKellar; Jeff Duncan; Jennifer O'Rourke; Joy Downs; Kristina Massey; turnerle@dhec.sc.gov; Mark Leao; msummer@scana.com; Mike Waddell; Parkin Hunter; Patrick Moore ; Randal Shealy; Randy Mahan; Ray Ammarell; Russell Jernigan; lakewatchman@yahoo.com; Suzanne Rhodes; Theresa Thom; Tom Ruple; Tom Stonecypher; Tony Bebber; Jon Quebbeman; Bret Hoffman; Alan Axson; Bill Brebner ; Charlie Rentz; Dave Anderson; David Hancock; Guy Jones; Irvin Pitts; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Lee Barber; mwleapjr@att.net; Mark Davis; Marty Phillips; Matthew Rice ; Miriam Atria; Norman Ferris; Rparsons12@windstream.net; Richard Mikell; sjones@imichotels.net; Tim Vinson; Tommy Boozer; Van

Hoffman

Subject: CFD Swift Water Rescue Safety Training Flow Request

Good Afternoon,

As discussed at the May 19th meeting, SCE&G and the Columbia Fire Department met to discuss the requested swift water rescue and safety training flows. Attached is the language for the Settlement Agreement, MELIP and Recreation Plan that was developed as a result of these discussions. I subsequently will be adding this language to the appropriate places within these documents and replacing the identified placeholders. Please email me if you have any questions. Thanks! Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Settlement Agreement Meeting
Location: Lake Murray Training Center

Start: Wed 7/15/2009 9:30 AM
End: Wed 7/15/2009 3:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: All RCG & TWC Members

Optional Attendees: Alan Stuart; 'QUATTLEBAUM, MILTON'; 'BICKLEY, RHETT'; Dave Anderson; Shane Boring; 'Gina Kirkland'; 'Gerrit Jobsis'; 'tpowers@newberrycounty.net'; 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; 'Tim Vinson'; 'Larry Turner'; 'SUMMER, STEPHEN E'; 'Dobrasco, Rebekah'; 'Kustafik, Karen'; 'Bob Perry'; 'SUMMER, MICHAEL C'; 'James %22Will%22 Dillman'; 'Vivianne Vejdani'; 'James Glover'; 'Matt Rice'; 'BOOZER, THOMAS C'; 'Mark Giffin'; 'Bill Marshall'; 'HOFFMAN, VAN B'; 'AMMARELL, RAYMOND R'; 'David Price'; 'Tony Bebber'; Amy Bennett

Hello All,

Just a reminder of the Settlement Agreement meeting scheduled for July 15th at 9:30. If you have not already RSVP'ed for this meeting, please do so. We will be reviewing a few editorial changes to the Settlement Agreement documents that I will be sending out for your review this afternoon. We will also be reviewing any other edits that organizations may have to the documents at the meeting. Thanks, Alison

Previous Message:

Hello All,

We will be holding a meeting to discuss any last minute revisions to the Settlement Agreement on Wednesday, July 15th. This meeting will begin at 9:30 and will be held at the Lake Murray training center. If you recall, this meeting was originally scheduled for July 14th but was changed due to a lack of meeting space. Please RSVP for this meeting a week prior to the event date. Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Thursday, June 11, 2009 4:34 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Meeting Dates Moved!

Importance: High

Hello All,

The meeting originally scheduled for next Tuesday, June 16, to discuss comments on the Settlement Agreement has been canceled and moved due to the lack of meeting space. Alternatively, we will be holding this meeting on **Wednesday, June 17**, at the Lake Murray Training Center. Please RSVP by Monday if you plan on attending Wednesday's meeting.

Furthermore, due to a lack of meeting space, the meeting planed for July 14th has now been moved to July 15th. I will be sending out outlook calendar reminders for the new dates. Email me if you have any questions. Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, June 10, 2009 5:56 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: April 16 Public Meeting Notes

Hello All,

Attached to this email is a copy of the meeting notes for the morning and evening sessions of the April 16th public meeting to review the SMP and Permitting Handbook. Thanks, Alison



2009-4-16 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, June 09, 2009 1:12 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bill Argentieri; Bill Hulslander; Bill Marshall; Bud Badr; Charlene Coleman; Dave Landis; Dick Christie (dchristie@comporium.net); Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hank McKellar; Jeff Duncan; Jennifer O'Rourke; Joy Downs; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Mark Leao; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patrick Moore ; Randal Shealy; Randy Mahan; Ray Ammarell; Russell Jernigan; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Theresa Thom; Tom Ruple; Tom Stonecypher; Tony Bebber; Jon Quebbeman; Bret Hoffman; Alan Axson; Bill Brebner ; Charlie Rentz; Dave Anderson; David Hancock; Guy Jones; Irvin Pitts (ipitts@scprt.com); Jennifer Hand; Jim Devereaux; JoAnn Butler; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Lee Barber; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Marty Phillips; Matthew Rice ; Miriam Atria; Norman Ferris; Regis Parsons (Rparsons12@windstream.net); Richard Mikell; Stan Jones (sjones@imichotels.net); Tim Vinson; Tommy Boozer; Van Hoffman
Subject: CFD Swift Water Rescue Safety Training Flow Request



CFD Flow Request
Resolution.do...

Good Afternoon,

As discussed at the May 19th meeting, SCE&G and the Columbia Fire Department met to discuss the requested swift water rescue and safety training flows. Attached is the language for the Settlement Agreement, MELIP and Recreation Plan that was developed as a result of these discussions. I subsequently will be adding this language to the appropriate places within these documents and replacing the identified placeholders. Please email me if you have any questions. Thanks! Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Columbia Fire Department (CFD) Flow Request Resolution

The following are sections from the Recreation Plan and Maintenance, Emergency, and Low Inflow Protocol (MELIP) and what we plan to include in the Settlement Agreement document that address the CFD safety training flow request. Please review and concur that it is acceptable to you.

Recreation Plan wording:

SCE&G will provide flow releases to allow the City of Columbia Fire Department (CFD) or any successor or co-jurisdictional swift water rescue organization(s) to facilitate safety training of staff for swift water rescue on the lower Saluda River (LSR).¹ These flows will be provided in such a manner as to ensure attainment of the dissolved oxygen (DO) targets in the LSR. The flow release plan will be as described below.

1. Each year, SCE&G will release approximately 45,000 acre-feet of water to be used at the discretion of CFD for safety training during December.
 - a. The flows cumulatively equaling the 45,000 acre-feet of water may be spread over a period of up to eleven 8 hour days. The December time period, rather than any earlier in the fall/winter is necessary to avoid negatively impacting DO in the LSR that can accompany high generation flows during the timeframe from mid-summer through November.
 - b. If after installation and performance testing of proposed new turbines, it is determined that the requested flows can be provided without negatively impacting DO in the LSR, the training flows may thereafter be scheduled at times during the last quarter of each year.
 - c. SCE&G will meet with the CFD approximately 30 days prior to implementation of the releases to coordinate the dates and flow regimes that will be made available during the swift water rescue safety training. Approximately 14 days prior to implementation of the safety training flows SCE&G will provide the CFD confirmation of the flow releases.
 - d. The Saluda Hydroelectric Project will be removed from reserve operations status during these times.
2. During March of each year, SCE&G will coordinate with the CFD in an effort to help CFD take advantage of lake level management flow releases for swift water rescue safety training.
 - a. SCE&G will notify CFD as far in advance as it reasonably can of its plans to make significant releases of water for lake level management.
 - b. In particular, SCE&G will notify the CFD if it believes that it can accommodate a flow of at least 10,000 CFS for a sufficient period of time to provide the CFD with an opportunity to schedule some level of safety training during this time of the year.

¹ Inasmuch as governmental reorganizations and regional cooperation between governments, etc. may occur during the new license period for the Saluda Hydroelectric Project, although it is assumed that the CFD will be the lead entity for conducting and/or managing swift water rescue training, the language herein is being made broad enough to account for these possibilities without requiring wholesale renegotiations and re-drafting should circumstances change. Reference to CFD shall encompass CFD or any successor(s) as appropriate.

- c. While these flow releases cannot be guaranteed each year, SCE&G will make reasonable efforts to release lake level management flows in such a manner that the CFD may have some opportunities for swift water rescue safety training.
3. Flow releases for CFD safety training will be reduced or eliminated in conformance with the dictates of the Maintenance, Emergency, and Low Inflow Protocol (MELIP).
 - a. SCE&G will coordinate with the CFD approximately 30 days prior to implementation of reduced flows as to the exact dates and flow regimes that will be available for the CFD safety training.
 - b. The Saluda Hydro Project will be removed from reserve operations status during these times.
 - c. SCE&G will coordinate with the CFD approximately 30 days prior to the elimination of safety training flow releases if conditions as described in the MELIP exist.

SCE&G will make reasonable efforts to provide the requested flow release. However, due to Project equipment it is recognized that these are “target” flows and they may vary to some extent. As with the recreation flow releases, flows will be measured at the USGS gage below the Saluda Dam (02168504).

MELIP wording:

Scheduled fall releases for the Columbia Fire Department (CFD) swift water rescue safety training will be provided in full if the reservoir level is at least 353.5' (355.0' PD) on December 1 for December safety training flows. If after installation and performance testing of proposed new turbines, it is determined that the requested flows can be provided at other times during the last quarter of each year without negatively impacting Dissolved Oxygen (DO) in the lower Saluda River (LSR), SCE&G will provide swift water rescue safety training flows in full so long as the reservoir elevation is within one foot of the guide curve target elevation at the time safety training flows are requested.

When the MELIP is in effect and the lake elevation is below 353.5' (355.0' PD) on December 1 the acre-feet provided for safety training will be reduced by one third. Therefore, only approximately 30,000 acre-feet will be available for safety training. If it is determined that the requested safety training flows can be provided at other times during the last quarter of each year without negatively impacting DO in the LSR, then reduced flows of approximately 30,000 acre-feet will be implemented so long as the lake elevation is more than one foot below the guide curve target elevation for that time of the year but above 352.5' (354.0' PD).

Safety training flows will be eliminated for that year if the lake elevation is at or below 352.5' (354.0' PD) on the date these flows are scheduled.

Settlement Agreement wording:

Columbia Fire Department (CFD) Safety Training Flows:

Subsequent to the issuance of the new license by the Commission, SCE&G will provide safety training flows to the CFD for swift water rescue training as described in the Recreation Plan (Appendix X) and MELIP (Appendix X).

DRAFT

Alison Guth

From: Alison Guth
Sent: Tuesday, June 09, 2009 11:08 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman
Subject: Upcoming Settlement Agreement Meetings

Hello all,

We are getting closer to the signing of the Settlement Agreement. However, there are several more meetings that are needed, in addition to a signing meeting. I have listed below the proposed meeting dates and I will send out Outlook Calendar reminders as well for those of you who utilize Microsoft Outlook. I have also listed the meeting purposes. I will be sending out the final version of the Settlement Agreement on or around June 24th, subsequent to the proposed June 16th meeting. Please email me if you have any questions regarding the meeting dates. Alison

Upcoming Meeting Dates:

June 16th - To discuss stakeholder revisions to the Draft Settlement Agreement
July 14th - Follow up meeting to discuss any last minute details of the Settlement Agreement
July 24th - Signing Day

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, June 09, 2009 10:05 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; Bill Argentieri; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Hand; Jim Glover; Jim Ruane ; Larry Turner (turnerle@dhec.sc.gov); Malcolm Leaphart (mwleapjr@att.net); Mark Giffin (giffinma@dhec.sc.gov); Milton Quattlebaum (mquattlebaum@scana.com); Patrick Moore ; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Richard Kidder (rkidder1@sc.rr.com); Roger Hall; Ron Ahle; Roy Parker; Shane Boring; Tom Bowles (tbowles@scana.com); Vivianne Vejdani
Subject: Draft Technical Memorandum: Review of Lake Murray Winter Pool Level Recommendation



Draft TM Lake Murray_06-05-09...
Figure1_ReservoirGuideCurve.pdf...
Figure2_TVAReservoirCharts.pdf...

Hello All,

In preparation for Friday's Water Quality TWC meeting, attached is the draft Technical Memo developed by CH2M Hill on the Lake Murray winter pool level recommendation. Please review this document in preparation for discussions on Friday. Thanks and have a great day. Alison

Review of Lake Murray Winter Pool Level Recommendations

PREPARED FOR: South Carolina Electric and Gas Company
PREPARED BY: CH2M HILL
DATE: June 5, 2009

Introduction

This Technical Memorandum (TM) presents a review of the conclusions and recommendations provided in the document entitled "Whitepaper Regarding Increasing the Winter Minimum Pool Level for Normal Operations of Lake Murray" (Whitepaper) prepared by Jim Ruane of Reservoir Environmental Management, Inc. (REMI) and dated June 20, 2008. Ruane prepared the Whitepaper for South Carolina Electric and Gas Company (SCE&G) as part of water resources studies to support Federal Energy Regulatory Commission (FERC) relicensing of SCE&G's Saluda Hydroelectric Project (FERC No. 516). Lake Murray is a 48,000-acre reservoir located on the Saluda River in Lexington, Richland, Newberry, and Saluda Counties, South Carolina. SCE&G filed its final license application for the Saluda Hydro Project in August 2008. The new FERC license will determine operations and guide the management of multiple resources associated with Lake Murray for next 30 to 50 years.

During the relicensing, SCE&G has proposed modifying its winter drawdown practices for Lake Murray. The Whitepaper by Ruane (2008) provides a qualitative risk analysis of SCE&G's proposed new guide curve for Lake Murray involving potential effects of increasing the target winter minimum pool level. This TM provides technical review of the Whitepaper pertaining to changing the winter pool levels at Lake Murray and the potential effects on reservoir water quality, aquatic vegetation, and fisheries habitat.

Objectives

The objectives of this TM are to:

- Review the Whitepaper on its overall scientific and technical merits and relevance to reservoir operation goals, mainly the implications of changing the winter minimum pool elevation for maintenance of water quality and scouring of sediment deposits in the shallow areas of the reservoir
- Review supporting background information and relevant scientific and technical literature regarding sediment transport and water quality during reservoir operations
- Provide technical review comments and observations on the conclusions and recommendations reached in the Whitepaper regarding the frequency, timing, and

magnitude of winter drawdowns and their effects on overall water quality of Lake Murray

Scope of Review

In addition to the Whitepaper, the following documents provided by SCE&G were reviewed and considered as relevant background information:

- Lake Murray Water Quality Report
- Calibration of the CE-QUAL-W2 Model for Lake Murray (Sawyer and Ruane, 2006)
- “Considerations about Raising the Winter Minimum Pool Elevation,” a slide presentation by Ruane and Sawyer (November 6, 2007)
- Applications of the CE-QUAL-W2 Model for Lake Murray Relicensing Issues (Sawyer and Ruane, 2007)

Background on Reservoir Guide Curve

Under the current FERC license, Lake Murray normally has been maintained between elevation 350 feet plant datum (PD)¹ in the winter and elevation 358 feet in the summer, with occasional drawdowns to elevation 345 feet for project maintenance or aquatic vegetation control (Kleinschmidt, 2008) (Figure 1; “previous rule curve;” PD elevation shown on right-hand X axis). The reservoir typically is drawn down beginning in August from elevation 358 feet to between elevation 354 feet and elevation 350 feet in December. Over the past 28 years, the normal winter minimum pool elevation of Lake Murray has varied between 348 and 355 feet, and in general, was near 350 feet about half the years and near 354 feet the other half the years (Kleinschmidt, 2008). Filling begins in January or February to bring the reservoir back up to 358 feet by May. During the peak recreation season of May through August, elevations generally are maintained between 354 and 358 feet.

SCE&G proposes a new reservoir guide curve that would increase the minimum winter pool elevation from 350 feet to 354 feet every year and maintain a more consistent target elevation throughout the recreation season (Figure 1). The reservoir would be managed to a target elevation of 358 feet from March through August, a period of 6 months covering a substantial portion of the recreation season. Beginning in September, the reservoir would be drawn down to 354 feet by the end of December. Filling would begin in January to bring the reservoir back up to 358 feet by March.

TM Organization

The following section summarizes the main conclusions and recommendations presented in the Whitepaper regarding SCE&G’s proposed reservoir guide curve. The summary is followed by technical review comments and observations on the three main impact areas addressed in the Whitepaper: sediment, water quality, and aquatic plants. The TM concludes with a summary of the review findings.

¹ All elevations in the text of this TM refer to plant datum (PD). PD = North American Vertical Datum (NAVD) + 1.5 feet.

Summary of Whitepaper Conclusions and Recommendations

The Whitepaper prepared by Ruane (2008) addresses the potential effects of increasing the winter minimum pool elevation of Lake Murray to 354 feet or higher each year on sediment deposition, water quality, and nuisance aquatic vegetation in Lake Murray. According to the Whitepaper, there would be considerable risk in changing the previous rule curve (Figure 1) to raise the winter minimum pool elevation, as summarized below.

Deposition and Scour of Sediments at Inflow Region to Lake

Based on a review of key principles of sedimentation at the inflows to reservoirs and documentation of bottom elevation changes in the Saluda River embayment of Lake Murray, Ruane (2008) concludes that raising the minimum pool elevation substantially above 350 feet would likely result in significantly increased sediment deposition in the first 1 to 2 miles of the upper end of the lake and for some distance upstream of the lake; however, the precise magnitude and rate of accumulation are uncertain. Ruane further concludes that there would be a strong likelihood for sediment-related problems, including impaired water quality in the upper reaches of the lake, increased backwater flooding, increased growth of nuisance aquatic vegetation, and more difficult boating access in the inflow region of the lake.

Effects of Reduced Sediment Scouring on Water Quality in Lake

Based on his experience at other southeastern reservoirs, including Douglas Reservoir in Tennessee, and application of the CE-QUAL-W2 model for Lake Murray, Ruane (2008) concludes that raising the minimum pool level would adversely affect water quality in the shallow, upper regions of Lake Murray, where eutrophic conditions are already present. The increased sedimentation would result in the following types of water quality impairment in the upper regions of the lake: greater levels of nutrient and organic matter; greater levels of sediment oxygen demand (SOD); greater levels of releases of nutrients (i.e., internal nutrient cycling) and anoxic products; lower dissolved oxygen (DO) concentrations and higher frequency of low DO levels; and higher levels of algae and possibly aquatic weeds. These near-field effects could result in far-field effects on striped bass habitat in Lake Murray and water quality issues for downstream releases at the Saluda powerhouse.

Effects of Increasing Minimum Winter Pool Elevation on Aquatic Plants

Based on the anticipated shallower water at the inflow areas during the growing season and more stable sediment deposits, compared to current "shifting sand" conditions with drawdowns to 350 feet that scour sediments, Ruane (2008) concludes that the growth of nuisance aquatic vegetation would increase in the upper regions of Lake Murray. Increased growth could then lead to additional pollutant loads of organic and nutrient levels.

Whitepaper Recommendation for Winter Minimum Pool Levels

The Whitepaper recommends maintaining the same frequency of drawing down Lake Murray to a winter pool level of 350 feet as the rule curve used under the existing license (i.e., about half the time) to avoid increased sedimentation in the upper regions of the lake that would risk poorer water quality compared to existing conditions.

Technical Review Comments

This section provides technical review comments and observations on the conclusions and recommendations of the qualitative risk analysis provided by the Whitepaper. The key comments and conclusions are provided as headings, supported by explanatory observations, under the three main areas: sediments, water quality, and aquatic plants.

Sediments

Raising the Minimum Pool Elevation to 354 feet Each Year would likely Shift Sediment Deposition Upstream toward the Inflow Areas of the Lake

- The increase in winter minimum pool elevation from 350 to 354 feet would not affect the amount of sediment transported into the lake from the upstream watershed, but the change in elevation combined with the earlier full-pool target in March (Figure 1) would likely affect the distribution of that sediment in the reservoir, as explained in the Whitepaper.
 - As the velocity in the river begins to decrease approaching the reservoir backwater, there is a corresponding decrease in the sediment-carrying capacity. The flow energy necessary to suspend and move sediment particles in the backwater area is a function of the pool surface elevation either raised or lowered by the downstream flow impediment. Thus, an increase in the minimum pool would shift the point at which settling should occur in the upstream direction.
 - When sediment-laden rivers flow into lakes or reservoirs, fan-shaped deltas typically form that spread out laterally as they propagate in the downstream direction (Harrison, 1983). If the river is confined to a narrow valley, however, impoundment can lead to a nearly longitudinal delta that extends downstream through the reservoir embayment (Thankur and Mackay, 1973; Sundborg, 1967).
- The Whitepaper clearly explains and supports with evidence the key processes of sediment deposition and scour in lakes and reservoirs and the backwater effects on sediment distribution. The literature supports the Whitepaper's conclusions regarding the probable upstream shift in the accumulation of sediments in the embayments and the reduced scouring and transport of the sediment resulting from a consistently higher winter minimum pool elevation and a shorter winter drawdown period.

The Upstream Shift in Sediment Deposition would be Most Pronounced in Tributary Embayments Carrying the Highest Sediment Loads into the Lake; however, the Rates of Sediment Accumulation and Scouring cannot be Accurately Predicted without Additional Study

- The prediction in the Whitepaper that more sediment would deposit in the first 1 to 2 miles at the upper end of the Saluda River embayment is consistent with the data presented, including the elevation profiles measured in 1975 and 2007.
 - Figure 1 in the Whitepaper shows that an existing sediment delta up to 15 feet deep has formed in the Saluda River embayment over a 4-mile reach beginning about 4 miles downstream of the river inflow point. Based on the lower water velocities expected with a higher minimum pool elevation and the highest expected seasonal

inflow of sediment during the period January through April, it is reasonable to infer that sediment deposition would shift about 1 to 2 miles upstream in the embayment.

- Sediment deposition also would be expected to shift farther upstream in other tributary embayments with substantial drainage area (and therefore, sediment sources) upstream of the lake. These embayments would include Little Saluda River, Bush River, and Clouds Creek, as identified in the Whitepaper.
- As noted in the Whitepaper, accurate predictions of the magnitude and rate of sediment accumulation in the upper inflow areas of the lake are not possible without additional information on upstream sediment sources, rates of production, and transport into Lake Murray. Also, without further characterization of the sediment entering the inflow areas, it would be difficult to predict how problematic scouring could become, and whether it could become irreversible without dredging, should a minimum winter pool elevation of 354 feet be implemented for several consecutive years on a trial basis.
- The Whitepaper advises against testing a guide curve with an increased minimum pool level because of the uncertainty and considerable risk that adverse impacts could become irreversible, in part because of the establishment of rooted vegetation, which would trap and hold more sediment in place. No data appear to be available for the past 28 years directly indicating how much sediment accumulated during those years when the minimum pool elevation was near 354 feet (about half) compared to those years when the minimum pool elevation was near 350 feet (about half), or to what extent scouring may have been affected by consecutive years of drawdowns to 354 feet. For example, the winter minimum pool elevation was near 354 feet for 5 of 6 years from 1982 through 1987; the mean was 353.3 feet (Kleinschmidt, 2008). However, it is interesting to note that no major aquatic plant problems were known to occur in Lake Murray until the mid-1980s, near the end of this sustained period of higher winter pool elevations. According to the baseline survey of aquatic plants (Aulbach, 2007), aquatic plant complaints around the lake increased dramatically in 1987, and Brazilian elodea (*Egeria densa*) and slender naiad (*Najas flexilis*) began to reach the surface of the water in many areas.

Increased and Persistent Sediment Deposition in Shallow Inflow Areas would Affect Boating Access, Aquatic Plant Growth, Fish Habitat, and Visual Aesthetics

- The evidence presented for the expected increase in sediment deposition, reduced scouring, and increased growth of aquatic vegetation supports the Whitepaper's conclusion that boating access could be adversely affected in the shallower inflow areas of the lake by sediment and/or rooted aquatic vegetation. As channels would become more constricted with sediment and open-water areas would be reduced, these areas would likely support or attract fewer types of boating recreation uses.
- These changes in physical habitat characteristics also would likely affect the species composition and distribution of fish populations in shallow areas, their accessibility for anglers, and the use of shoreline and littoral communities by migrant and resident waterfowl and other wildlife species. In addition, substantial increases in the area of shallow-water sediments and nuisance aquatic vegetation would likely adversely affect

the visual aesthetic experience of recreationists and homeowners in the affected inflow areas.

Periodic Winter Drawdowns to 350 Feet would Increase the Opportunity for Sediment to Move Deeper into the Lake but No Data are Available for Lake Murray Characterizing Sediment Transport under Differing Frequency and Magnitude of Drawdown

- The Whitepaper recommends continuing the same frequency of winter drawdown to 350 feet as under the existing license (half the years), presumably following the previous guide curve, which also provides for a more extended drawdown period than under the proposed new guide curve (Figure 1). No discussion or analysis was provided in the Whitepaper on alternative frequencies or magnitudes of drawdowns that might also be effective in periodically scouring accumulated sediments and maintaining water quality in the upper areas of the reservoir while also balancing lakeowners' desire for more stable water levels for boating access. However, without additional information and data on sediment transport characteristics in the inflow area, identifying and evaluating potential alternative operating scenarios is difficult.
- A potentially effective approach for identifying alternative drawdown scenarios that might be effective in balancing the multi-purpose uses of Lake Murray may be to research and closely evaluate the relationship between drawdown, sedimentation characteristics, and water quality and aquatic vegetation issues at other similar reservoirs in the southeastern U.S. The Whitepaper provides general observations relative to drawdown characteristics at Tennessee Valley Authority (TVA) reservoirs and several other large reservoirs in the southeast and elsewhere, but few data are provided for meaningful comparison. Figure 2 summarizes the average residence time and average annual drawdown for 32 TVA reservoirs (Baker and Dycus, 2006). Some of these reservoirs with longer residence times and annual drawdowns less than 10 feet, and others identified in the Whitepaper (e.g., Smith Mountain, Rhodhiss) and characterized by Morris and Fan (1997) (e.g., DeGray Reservoir), may be good candidates for further screening and comparison.

Water Quality

The Water Quality Modeling Approach was Appropriate for the Objectives at Hand and is Consistent with Generally Accepted Practice Concerning Reservoir Limnology

- The scientific basis of the CE-QUAL-W2 Model for Lake Murray is adequate and appropriate to support lake and reservoir water quality assessments. The model should be adequate to show the effects of different winter pool levels on water quality. The model demonstrated that non-point and point sources of organic matter and nutrients (especially total phosphorus [TP]) would need to be reduced or maintained at current levels to prevent changes in TP and chlorophyll *a*. Future model simulations may be used to show the effects of reducing TP in the watershed on water quality in the lake.
- The water quality model assumptions regarding the increase in organic matter represented by SOD need to be substantiated, and it was noted in the 2007 report "Applications of the CE-QUAL-W2 Model for Lake Murray Relicensing Issues" (Sawyer and Ruane, 2007) that additional data would be needed to properly calibrate the model

simulations for the Little Saluda River embayment, so the model results are useful only for sensitivity analyses.

Sources of Organic Matter and Nutrients Entering the Lake are a Function of the Upstream Watershed Characteristics and Not the Guide Curve

- The Whitepaper presents the premise that water quality in the lake would be adversely affected due to the accumulation of organic matter in the sediments in the upper 1 to 2 miles of the inflow region on the Saluda River. As explained in the Whitepaper, this is primarily due to recycling and resuspending nutrients from sediments, which promotes the growth of algae and aquatic plants. When the plants decompose, nutrients settle to the bottom and the recycling process starts over again. The nutrient recycling process moves upstream with sediment deposition and is exacerbated by shallow water. The nutrients are eventually transported downstream and affect the trophic status of the lake.
- The Whitepaper notes that inflow sediment deposition and water quality in the lake, especially originating in the upper areas of the lake, would likely be significantly impacted by increasing the minimum pool elevation to 354 feet.
 - Organic carbon is supplied to lakes by input from the catchment (allochthonous carbon) or by primary production in the lake (autochthonous carbon). The primary sources of organic matter contributing to the embayments originate in the watershed. These sources should be characterized and quantified for use in developing and calibrating the model and making a determination of the effects on the embayments and lake water quality.
 - The watershed is the primary source of organic matter, TP, and other nutrients entering the embayments and eventually Lake Murray, and the tributaries are the primary conduit for this source. Increasing the pool elevation would affect the distribution of organic matter being transported by the tributaries but not the amount of organic matter being transported.

With the Upstream Shift in Sediment Accumulation, Current Eutrophic Conditions would also Shift Upstream in Some Embayments

- The Whitepaper documents that eutrophic conditions are already present in the inflow region and embayments of Lake Murray.
- Locations at Rocky Creek and in the Bush River arm of Lake Murray were reported to be among the most eutrophic sites on large lakes in South Carolina. All the locations between Rocky Creek and the dam, including the embayment locations, were reported to be among the least eutrophic in South Carolina (Sawyer and Ruane, 2006).
- Blue-green algae, the dominant algal population in summer at upper lake stations, is a measure of eutrophication. Headwater embayments consistently showed high densities of blue-green algae, including the main channel of the lake down to Rocky Creek, the Little Saluda River embayment (including the Cloud Creek arm), and the Bush River. However, the phytoplankton populations in the Saluda River did not increase to densities as high as in the smaller tributaries.

- TP loads, which contribute to the eutrophication of Lake Murray, are high due to nutrient loads from Ninety-Six Creek, Bush River, Little Saluda River, and Clouds Creek. These tributaries in the upper end of Lake Murray contribute an estimated 71 percent of the TP load to Lake Murray, while their streamflow contributions only total about 18 percent.
- The distribution of coarse particulate organic matter (CPOM) in the embayments would shift as predicted in the Whitepaper (e.g., 1 to 2 miles upstream in the Saluda River) with the distribution of sediments. As CPOM would degrade by natural processes, nutrients and fine particulate organic matter (FPOM) would provide sustenance for the production of algae in these areas, but because the CPOM is limited, growth would be equal to the current growth of algae already occurring in the upstream portions of the embayments. No change in trophic status would be expected.
- The water quality model showed that the total primary production (algal growth as chlorophyll *a*) and TP levels in the Little Saluda River embayment (i.e., eutrophication of the embayment and lake) are not expected to change with an increase in winter water level without an additional source of nutrients and/or CPOM from the watershed.

Modeling of Little Saluda Embayment Identified Internal Nutrient Cycling as a Potential Concern but no Differences were Demonstrated in Model Results between 350 and 354 Feet Minimum Pool Elevations Under Existing Conditions

- Raising the winter minimum pool level would reduce the displacement of water from the Little Saluda River embayment (effectively increasing the residence time in the embayment). This could contribute to an increase in internal nutrient cycling, but the modeling results showed that winter minimum pool levels of 350 and 354 feet had little effect on TP and chlorophyll *a* concentrations (i.e., trophic status indicators) under baseline SOD conditions.
- The modeling results showed that an assumed doubling of SOD at elevation 354 feet increased TP and chlorophyll *a* levels. This provided evidence of the potential for internal nutrient cycling, but elevation 350 feet was not modeled under similar conditions.
- The modeling assumed a doubling of SOD, but no data were provided in support of this assumption based on changing water levels. The model was run only for 2001, which was a dry year. In addition, the model did not achieve acceptable calibration for the Little Saluda River.
- Model results show that when SOD (i.e., organic matter) sources from the Little Saluda River watershed are increased by a factor of 2 and the current TP loading from the watershed is reduced to zero, there is no change in the TP concentrations in the embayment in late summer and fall. The phosphorus concentrations during late summer and fall are controlled by internal nutrient cycling from the sediments (autochthonous sources) and are sufficient to maintain high concentrations of algae as measured by chlorophyll *a* (Sawyer and Ruane, 2007)

- SOD was used as a surrogate for organic matter loading in the Little Saluda River embayment in the CE-QUAL-W2 Model. The SOD was doubled to account for an anticipated increase in organic matter if the minimum pool level were set to 354 feet. Seasonal SOD dynamics measured at Douglas Reservoir was cited to support the use of SOD as a surrogate for the organic matter to model conditions in the Little Saluda River embayment.
- Model simulations included current conditions with minimum pool at 350 feet and 354 feet (without SOD load); minimum pool at 354 feet with SOD load; and minimum pool at 354 feet with SOD load and no TP load.
 - ✓ Model simulation for minimum pool at 350 feet with SOD load was not provided for comparison to the minimum pool at 354 feet run.
 - ✓ Seasonal SOD dynamics occurring at Douglas Reservoir was not provided in the Whitepaper, Water Quality Report, or either of the CE-QUAL-W2 Model reports.

Modeling of the Winter Pool Elevations in the Little Saluda River Embayment Demonstrates that Changes in Water Quality Indicators (TP and chlorophyll *a*) would not be Substantial

- CE-QUAL-W2 Model results show little, if any, change in TP and chlorophyll *a* in the Little Saluda River embayment when simulating the 350 feet and 354 feet winter pool depths under background conditions (Sawyer and Ruane, 2007).
- Model results show a small increase in TP concentration and chlorophyll *a* in the Little Saluda River embayment for the 354 feet winter pool elevation when SOD (i.e., organic matter) contribution is increased by a factor of 2 (Sawyer and Ruane, 2007). The rationale for doubling the concentration of SOD or organic matter was not well explained or supported with the data in the context of the increase in winter pool elevation.
 - The difference in TP concentration between winter pool depths of 350 feet and 354 feet was not discernible under background conditions, as shown in the resulting graphics provided in Figures 5-2 through 5-5 of the CE QUAL-W2 Report (Sawyer and Ruane, 2007). The concentrations of TP for two winter pool depths simulated range between approximately 0.015 milligram per liter (mg/L) (summer/fall) and 0.12 mg/L (winter/spring). Carlson (1977) and Wetzel (1975) report that, based on work by Vollenweider (1968) and others, these ranges are typical of eutrophic conditions. The model shows that the TP decreased during the winter, but increased slightly during summer and fall when SOD was increased by a factor of 2. However, the slight increase (approximately 0.01 mg/L to 0.02 mg/L) in TP would not change the trophic status of the embayment, which is eutrophic. Similarly, the change in chlorophyll *a* modeled for the two winter pools was negligible under background conditions. The change in chlorophyll *a* simulated when SOD was increased by a factor of 2 did not change during winter and increased by about 0.004 mg/L during summer and fall. Generally, the Little Saluda River embayment, based on the modeled chlorophyll *a* concentrations, is eutrophic during the spring, summer, and fall with or without the SOD loading and regardless of the winter pool levels (Sawyer and Ruane, 2007).

- Data from the South Carolina Department of Health and Environmental Control sampling show that TP in the Little Saluda River and its major tributaries, with the exception of Clouds Creek (8.5 miles upstream of Little Saluda River), steadily decreased between 1974 and 1998. The highest concentration of chlorophyll *a* recorded was 64.8 mg/L in the Clouds Creek embayment.

Water Quality Modeling Showed Minimum Pool Elevation would have no Effect on Striped Bass Habitat or DO in the Downstream Releases

- Modeling showed that fish kills occurred when cumulative flows were high, especially for the months of March through June. Temperature and DO were correlated with flow through the reservoir, i.e., in years with higher flows the temperature increases more rapidly and DO decreases more rapidly at the depths where striped bass habitat occurs.
- Modeling showed that nutrient cycling and eutrophication with an increase in pool elevation did not have an effect on striped bass habitat requirements.
- The CE-QUAL-W2 model was used to evaluate decreasing the winter minimum pool elevation to 350 and 354 feet to determine the effects on release water quality and fish habitat. The evaluation assessed striped bass habitat and temperature and DO in the releases.
 - The model simulations showed that neither minimum pool level had an apparent impact on issues related to the main body of the lake. However, if TP could be reduced in inflows from the watershed, then the problem with low DO in the inflow region of the lake and the issue regarding low pH in the releases from Saluda Hydro would be significantly improved or eliminated

Aquatic Plants

Raising the Minimum Pool Level Would Provide More Stable Littoral Zone Conditions for the Establishment of Rooted Aquatic Plants

- Aquatic plants can thrive in shallow southeastern reservoirs.
- After the mid 1980s, aquatic plants became problematic in Lake Murray and periodic drawdowns did not appear to provide effective control of Brazilian elodea, slender pondweed (*Potamogeton berchtoldii*), and southern naiad (*Najas guadalupensis*). Prior to the 1990-1991 drawdown to elevation 345 feet, the lake was dominated by Brazilian elodea between elevation 332 and 355 feet (i.e., in summer lake depths of over 20 feet). The post-drawdown survey showed that Brazilian elodea survived in the area below the drawdown zone and it began to recolonize the drawdown zone during the following season (Aulbach, 2007).
 - Lowering the water level in the winter exposes the sediment to both freezing and loss of water. Freezing can have a dramatic impact on aquatic plants that have no overwintering structures such as viable seeds, tubers, or winter buds. Prolonged exposure to freezing temperatures is often fatal to many plant species. Freezing of the sediments can also impact native plant and animal species (Washington State Department of Ecology web site).

- Cook (1980) recommended lake level drawdown for macrophyte control in situations where prolonged (1 month or more) dewatering of lake sediments is possible under rigorous conditions of cold or heat, and where susceptible species are the major nuisances. The proposed rule curve may not be of sufficient duration to manage susceptible species.
- The literature indicates that drawdown is a reasonable technique for managing aquatic vegetation. However, not all aquatic plants respond (desiccate and decay) the same way to drawdown. Some types of vegetation, such as alligator weed, some naiads, and pond weeds, increase with winter drawdown, although winter drawdown is effective for managing most aquatic plants (Holcomb and Wegner 1971; Fox et al., 1977; Nichols, 1975).
- The duration of the drawdown depends on the management scheme and is usually 1 to 2 months during the winter. The New Hampshire Department of Environmental Services suggests that a drawdown be alternated every 2 years with no drawdown, to prevent resistant species from becoming firmly established. (Environmental Fact Sheet, New Hampshire Department of Environmental Services. 2001. www.des.nh.gov.)

The Presence of Aquatic Vegetation Would Stabilize the Sediments and Reduce the Effectiveness of Drawdown on Flushing Sediments

- Sediment accumulated further upstream in the embayments would become vegetated with rooted aquatic vegetation. Established vegetation would stabilize the sediments in this area.
 - The rate at which vegetation would become established in the upstream embayments and along the shoreline was not discussed in the Whitepaper. However, if sediments were to deposit and accumulate upstream of their current position in the embayments (e.g., 1 to 2 miles in the Saluda River) and consolidate, then aquatic vegetation could establish and further stabilize and trap more sediments, as suggested in the Whitepaper. However, it is unclear how this would contribute additional loads of nutrients and organic matter to the reservoir as suggested. Sources of additional nutrients and organic matter would have to originate from either the watershed in stormwater runoff or from a release of nutrients already bound in the sediments.
 - If vegetation were to increase in the upstream embayments, it could restrict boat traffic and some other recreational activities. Additional management measures may be necessary to manage aquatic vegetation in the upstream reaches if this were to occur.

Maintaining a Substantial Drawdown is One Method of Managing Aquatic Vegetation but Other Methods Exist, Including Chemical and Biological Control

- Integrated vegetation management methods (i.e., chemical, biological, and physical) are commonly used as lake management devices to minimize negative side effects, to improve the speed, overall effectiveness, or duration of control, and to reduce costs.

- Aulbach (2007) reported that the grass carp, introduced in 2003, have kept all of the submerged plants under control with the exception of stonewort (*Nitella*) and that full control of hydrilla was achieved by 2005. These data suggest that the grass carp and periodic drawdowns, and some foliar application, would be effective at managing most of the aquatic vegetation. However, the report concludes that invasive exotic species such as rattlebush (*Sesbania punicea*), along with the native water willow (*Justicia americana*), are becoming established. It was not reported if these species could be controlled by the grass carp, but these species may contribute to stabilizing shoreline sediments which they are able to colonize.
- The aquatic flora of Lake Murray has undergone dramatic changes in the past 30 years. Twenty years of quantitative data provide valuable information on the impact of exotic species as well as the impacts of herbicide control, grass carp control, and water level changes and manipulations (Aulbach, 2007).

Summary of Findings

The Whitepaper addressed the probable effects of increasing the minimum pool elevation from 350 to 354 feet each year on sediment deposition and water quality in the embayments and the lake, as well as the pH and DO levels in the tailwaters. A qualitative assessment of the winter pool operations and conditions at other reservoirs was performed to show how Lake Murray could change if the winter pool level was to increase. In addition, CE-QUAL-W2 model simulations were evaluated to assess water quality and effects on striped bass.

Three main impacts were addressed:

1. Effects of increased future sediment deposition and reduced sediment scouring near the inflow areas of the lake on greater and more frequent inundation of property upstream of the lake
2. Effects of reduced sediment scouring on water quality in the lake and anoxic products in the releases from Saluda Hydro
3. Effects of raised minimum pool elevation on increased growth of aquatic plants around the shoreline

Sediment Transport, Deposition, and Scouring

- The qualitative evidence provided in the Whitepaper (i.e., from other reservoir operation studies) and the literature review conducted for this TM support the conclusion that sediment deposition would shift upstream in the embayments.
- The changes in sediment distribution would be most apparent in the embayments that have substantial sediment transport from the watershed, generally flat stream channels, and have a small watershed which does not generate flow energy sufficient to scour the sediments from upstream locations. Most of these embayments occur in the headwaters of the lake above the Little Saluda River, but Buffalo Creek, Camping Creek, Bear Creek, and Hollow Creek, with sizable drainage basins, could be affected.

- Although the data support the conclusion that the sediments would deposit further upstream, it was less clear if the sediments would become entrenched, effectively reducing the recreational use in the embayments. The frequency, degree (change in depth), and duration of drawdowns should be explored in other reservoirs to determine if it is possible to support or refute the inference that sediments would become entrenched and not scour if the winter pool elevation were raised to 350 feet every winter. Figure 2 (Baker and Dycus, 2006) was presented to show average residence time and average annual drawdown for 32 TVA reservoirs; some of these reservoirs may be good candidates for further screening and detailed comparison.

Lake Water and Discharge Water Quality

- The Whitepaper, based on the CE-QUAL-W2 model and comparisons to other reservoir operations, supports a position that the water quality at the upper end of the reservoir, at the lower part of the reservoir, and in the release from the Saluda Hydro would be adversely affected due to the accumulation of organic matter in the sediments in the upper 1 to 2 miles of the inflow region. However, this interpretation is based on model simulations that assume an increase in SOD and does not appear to be related to increasing winter pool elevation.
- Organic matter is expected to precipitate with sediment as they deposit further upstream in the embayments. However, the amount of organic matter accumulated is not necessarily a function of the winter pool elevation alone. Other factors that must be considered when addressing a change in water quality include changes in the nutrient and organic load from the watershed.
- The CE-QUAL-W2 model demonstrated that a change in TP and chlorophyll *a* would occur in the Little Saluda River embayment if organic matter were to increase as represented by a two-fold increase in SOD. However, this change does not appear to substantially change the trophic state of the embayment. There was little change in TP and chlorophyll *a*. In addition, the modeling results showed that winter minimum pool levels of 350 and 354 feet had little effect on TP and chlorophyll *a* concentration (i.e., trophic status indicators) under baseline SOD conditions.
- It can be concluded from the modeling results that water quality in the reservoir would not change with the change in winter pool elevation, unless there is a change in the watershed and land use that increases nutrient and organic loads to this system.
- The model results demonstrated that the nutrient loads to Lake Murray are a dominant factor, the relative quantities and/or control of which can and do have the greatest impact on striped bass habitat. However, high inflow and outflows, especially during March-June, which would not be affected by the change in winter pool elevation, are a primary cause for fish kills and are not attributed to winter pool elevations. In addition, while flow is a dominant factor, it cannot be controlled in a manner to avoid fish kills
- Higher outflows cause the bottom of the lake to warm, and low DO levels are associated with this warmer water rather than the winter pool elevation.

Vegetation Increase with Winter Pool Level

- Around 1987, aquatic plants became problematic in Lake Murray and periodic drawdowns did not appear to provide effective control of several aquatic species. Data showed that between 1982 and 1987, the winter minimum pool elevation was near 354 feet for 5 of 6 years. These data support the hypothesis that the increased winter pool elevation would result in an increase in aquatic vegetation. However, the changes may be due to other factors such as when problematic species were first introduced. Aulbach (2007) reported that before 1970, muskgrass (*Chara* sp.) was the only known submerged plant in the lake. The reported nuisance species, Brazilian elodea, slender naiad, slender pondweed, and southern naiad, were introduced after 1980 and then became abundant and a concern.
- Periodic drawdowns alone may not be sufficient to manage some aquatic vegetation. Prior to the 1990/1991 drawdown to elevation 354 feet, the lake was dominated by Brazilian elodea between elevations 332 and 355 feet. The post-drawdown survey showed that Brazilian elodea survived in the area below the drawdown zone and it began to recolonize the drawdown zone during the following season (Aulbach, 2007).
- Literature data suggest that sediments translocated upstream in embayments as a result of the increased winter pool levels would become vegetated with rooted aquatic plants and that the established vegetation would further stabilize sediments. Evidence suggests that this may have occurred during high winter pool elevations documented between 1982 and 1987, when vegetation was reported to be problematic. The aquatic vegetation apparently became established in the embayments as a result of higher winter pool elevations.
- If vegetation were to increase in the upstream embayments, it could restrict boat traffic and some other recreational activities. Additional management measures may be necessary to control aquatic vegetation in the upstream reaches if this were to occur.
- An integrated vegetation management program using chemical, biological, and/or physical methods is crucial for successful management of aquatic vegetation. Of primary concern are the potential impacts of new invasive exotic species such as the rattlebush, which may be difficult to manage without an aggressive foliar application program.

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To: Shane Boring; Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill East; Bill Hulslander; Bill Marshall; Bob Perry; bseibels@yahoo.com; Charlene Coleman; Daniel Tufford; dchristie@comporium.net; Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Glover; Jim Goller; Joe Logan; Joy Downs; turnerle@dhec.sc.gov; laura.mccary@gmail.com; mwleapjr@att.net; Mike Sloan; Mike Waddell; mquattlebaum@scana.com; Norman Ferris; Patrick Moore ; Prescott Brownell; RMAHAN@scana.com; rbull@davisfloyd.com; Robert Lavisky; Ron Ahle; Scott Harder; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; tbowles@scana.com
Subject: RE: Saluda Relicense: Update Trout Program



trout program draft
UPDATED 6-...

Shane,

I made one revision of a statement in this document to more accurately reflect the current trout stocking program in the LSR.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Friday, June 05, 2009 11:57 AM
To: Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry; bseibels@yahoo.com; Charlene Coleman; Daniel Tufford; dchristie@comporium.net; Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Glover; Jim Goller; Joe Logan; Joy Downs; turnerle@dhec.sc.gov; laura.mccary@gmail.com; mwleapjr@att.net; Mike Sloan; Mike Waddell; mquattlebaum@scana.com; Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; rbull@davisfloyd.com; Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; tbowles@scana.com
Subject: Saluda Relicense: Update Trout Program

Dear RCG Members:

In preparation for next week's Fish and Wildlife meeting, here the updated version of the Lower Saluda Trout Program for your review. Have a great weekend and do not hesitate to call with questions.

Shane

<<trout program draft UPDATED 6-5-2009.doc>>

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

C. Shane Boring
Environmental Scientist
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Alison Guth

From: Hal Beard [BeardH@dnr.sc.gov]
Sent: Tuesday, June 09, 2009 8:55 AM
To: Shane Boring; Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill East; Bill Hulslander; Bill Marshall; Bob Perry; bseibels@yahoo.com; Charlene Coleman; Daniel Tufford; dchristie@comporium.net; Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Glover; Jim Goller; Joe Logan; Joy Downs; turnerle@dhec.sc.gov; laura.mccary@gmail.com; mwleapjr@att.net; Mike Sloan; Mike Waddell; mquattlebaum@scana.com; Norman Ferris; Patrick Moore ; Prescott Brownell; RMAHAN@scana.com; rbull@davisfloyd.com; Robert Lavisky; Ron Ahle; Scott Harder; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; tbowles@scana.com
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SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT

(FERC NO. 516)

TROUT EVALUATION AND MONITORING PROGRAM FOR THE LOWER SALUDA RIVER

DRAFT

JUNE 2009

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

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FOR THE LOWER SALUDA RIVER**

DRAFT

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Appendix A: Lower Saluda River Trout Growth Study

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

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DRAFT

1.0 INTRODUCTION

The South Carolina Electric & Gas Company (SCE&G) filed an Application for New License on August 27, 2008, and as part, has developed a Comprehensive Settlement Agreement for Protection, Mitigation and Enhancement of environmental resources at the Saluda Hydroelectric Project (FERC No. 516) (Saluda Hydro or Project). The enhanced relicensing process implemented was a multi-year cooperative effort between SCE&G and interested stakeholders to address operational, recreational and ecological concerns associated with hydroelectric project operations.

As part of that relicensing process, SCE&G consulted with a wide variety of stakeholders including, state and federal resource agencies, non-governmental organizations and concerned citizens seeking their input on important relicensing issues. As a result of that consultation and subsequent stakeholder meetings, relicensing participants identified several issues that they believed needed to be addressed during the relicensing process. One of the identified issues included monitoring and potential enhancement of the Put, Grow and Take trout fishery located in the Saluda Hydro Tailrace.

The current Put-Grow and Take program supports a cold water fishery via annual stockings of brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*). The trout are stocked and managed by the South Carolina Department of Natural Resources Freshwater Fisheries Section. Several efforts are currently underway by SCE&G to improve DO conditions in the lower Saluda River (LSR) that are likely to further improve habitat for trout. Enhancement measures consist of turbine venting, alternate operating scenarios, and implementation of instream flow recommendations.

The *Trout Evaluation And Monitoring Program for the Lower Saluda River* (Program) described herein was developed by the Instream Flow and Aquatic Habitat Technical Working Committee (TWC) and initiated by SCE&G to monitor and assess the success of water quality and flow enhancement measures on the trout fishery. It is a culmination of SCE&G's work with stakeholders to define resource goals and objectives for the lower Saluda trout fishery. Furthermore, the Program will determine a process for evaluating changes and making decisions that contribute to the South Carolina Department of Natural Resources' (SCDNR) management of the fishery based on the best available information. This document explains the goals, objectives, management, and methods of the Program, and was developed to serve as a guidance document for future monitoring and evaluation of the tailrace trout fishery during the new license term of the Saluda Project.

This document is organized to describe the Program in the following manner:

- Section 2 Background of Saluda Project and LSR Fishery
- Section 3 Program Goals and Objectives
- Section 4 Management of the Program
- Section 5 Program Monitoring Methods
- Section 6 Implementation Schedule
- Section 7 Decision Process for Program Modifications

2.0 BACKGROUND OF SALUDA PROJECT AND LSR FISHERY

2.1 Saluda Project

The Saluda Hydro Project is an existing licensed hydroelectric project, owned and operated by SCE&G. The Project is located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000-acre reservoir (at elevation 356.5' NAVD88¹), a gated emergency spillway, a back-up Dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005.

The lower Saluda River (LSR) is approximately 10 miles in length and is characterized by bedrock-dominated riffles, with limited gravel and cobble substrates, and a high percentage of pool habitats. The river receives hypolimnetic (i.e., coldwater) flows from Lake Murray via the Saluda Hydro Project. This cold water has created the opportunity for the SCDNR to establish a successful Put, Grow and Take trout fishery for brown trout and rainbow trout. The following sections summarize features of the fishery and water quality resources of the LSR, including results of applicable studies.

2.2 Fishery Resources

The LSR fishery community is unique in that it provides fishing opportunities for both resident warmwater species, as well as stocked coldwater species (trout). As mentioned previously, the LSR currently supports a tailrace trout fishery for rainbow and brown trout that is managed by the SCDNR as a Put, Grow and Take fishery. Trout are not native to the LSR, and the fishery is maintained through stocking of sub-adult rainbow and brown trout. Typically, the SCDNR stocking program runs from early

¹ Unless otherwise noted, all elevation references in this document are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD) requires the addition of 1.50 feet.

December until mid-April. ~~The total number of trout stocked annually typically averages around 35,000, but varies annually based primarily on availability of fish from the Walhalla State Fish Hatchery.~~ The total number of trout stocked annually typically averages around 30,000 and are produced at the Walhalla State Fish Hatchery. This management approach, which has been employed since the 1960's, is appropriate where trout habitat is marginal but can provide the acceptable growth and survival of enough sub-adult trout to support a fishery (D. Christie, SCDNR, Pers. Comm.). Similarly, the LSR is classified by the South Carolina Department of Health and Environmental Control (SCDHEC) for regulatory purposes as Put, Grow, and Take Trout Waters, which are defined as freshwaters suitable for supporting the growth of stocked trout populations and a balanced, indigenous aquatic community of fauna and flora (SCDHEC, 2004).

A trout growth study conducted in 2003 in support of establishment of a site-specific DO standard for the LSR found that growth of trout in the LSR exceeds many other southeastern tailwaters (0.7 percent weight gain per day, 0.67 inches per month) (Kleinschmidt et al., 2003). Further, the study found that 74 of 441 brown and rainbow trout collected during 2003 were greater than 16 inches in length, suggesting a significant number of carryovers from previous stocking years. The study concluded that the high growth rates and large number of carryovers observed in 2003 could potentially be attributed to higher DO levels since the inception of SCE&G's turbine venting program (Kleinschmidt et al. 2003). Conversely, a recent study begun by SCDNR to evaluate the annual mortality of the stocked trout in the LSR documented significantly less carryover of trout during the spring and summer of 2007 (H. Beard, SCDNR, Pers. Comm.). Disparity between study results suggests significant annual variability in carryover.

2.3 Water Resources

SCE&G began monitoring DO and temperature in the Saluda Project turbine releases in 1989 and continues the effort to the present day. Most recently, SCE&G conducted a study from 2000 to 2006 to characterize water resources by collecting baseline water quality data in the Saluda Tailrace extending downstream to the

confluence with the Broad River. Results of this study and other water quality data are summarized below.

2.3.1 Dissolved Oxygen

The LSR occasionally suffers from short periods of low DO during high flow or when the pool level of Lake Murray is drawn down for special purposes. Characteristics of the project reservoir, namely the relatively high water retention time and considerable depth of Lake Murray, coupled with regional climate conditions, results in seasonal thermal stratification of the lake and an associated decrease in DO in the lower water column. The problem is further exacerbated by watershed factors such as high nutrient loading, particularly from point discharges of phosphorus. High nutrient inputs to Lake Murray leads to an increase in the biological oxygen demand, especially during periods of high runoff (high flow), and consequent depletion of DO from the water column.

In 1999, to address issues associated with low DO of Project discharges, SCE&G installed an aeration system. This aeration system, which along with modified operational patterns, has since improved water quality of releases from Saluda Hydro. Currently, Project discharges of low DO waters to the LSR are infrequent. Water quality monitoring conducted from 2000 to 2006 found that DO levels were above minimum levels considered protective for trout survival (3.0 mg/L) approximately 97 percent of the time. This water quality monitoring found average monthly DO levels to be above 6.2 mg/L throughout the year with the lowest levels observed in September (average minimum of 4.2 mg/L), and highest levels in February (monthly average 11.0 mg/L).

2.3.2 Temperature

According to the 2000-2006 water quality study, average water temperature throughout the late winter, spring, and early summer months

(February – July) in the LSR ranges from 9.5 to 15.4° C. Specifically, during the spring and early summer months (March – June) average water temperature typically remains between 10° C and 14° C. As the summer progresses, water temperatures rise and are at their highest, generally around 17° C, between mid-September and early November. During the 2000-2006 water quality study, water temperatures never exceeded the lethal limit for trout of 25°C at any of the monitored trout habitat sites.

2.4 Technical Work Committee Consultation History

Note to readers: to be added once the consultation process within the TWC has been completed.

3.0 PROGRAM GOALS AND OBJECTIVES

The goals and objectives of the Trout Evaluation And Monitoring Program for the LSR were developed using a consensus-based approach during stakeholder discussions by the Instream Flow and Aquatic Habitat TWC. Specifically, the goals and objectives are focused in two areas the understanding of which are fundamental to effective management of the LSR trout fishery, namely water quality and fishery resources. For each goal identified in these two areas, there are several qualitative and quantitative objectives for measuring the progress made towards meeting the goals. The Program goals for fishery resources and water quality, and their associated objectives, are described below.

3.1 Fishery Resources

Goal #1 To provide data to SCDNR beneficial to their efforts to enhance the Put, Grow, and Take trout fishery to maximize fishing opportunities for the public.

Objectives

- Assess relative contribution of brown and rainbow trout, as well as native warmwater species, to the LSR fishery community by summarizing data in standard community-level metrics, such as species diversity, richness, relative abundance, trophic levels, presence and distribution of key species, etc.
- Document and assess qualitative changes in trout habitat, including food resources (benthic macroinvertebrates) and water quality factors, resulting from flow modifications and DO enhancements.

Success Criteria

Note to readers : to be developed within the AC

Goal #2 To investigate reproductive successes of trout to augment stocked fishery.

Objectives

- Document recruitment of young-of-year trout within the LSR
- Document trout eggs or larval life-stages in the LSR

Success Criteria

- **Note to readers: to be developed within the AC**

Goal #3 Determine feasibility of a naturally reproducing trout population as a goal for SCDNR to manage trout in the LSR.

Objectives

- Advisory Committee to conduct annual review and assessment of water quality, IFIM, and biological data. Committee to issue a report of findings and assessment of progress towards goals.

Success Criteria

- **Note to readers: to be developed within the AC**

Goal #4 Determine growth rates of adult trout after implementing new instream flow regimes developed by the TWC.

Objectives

- Conduct a trout growth study following completion of sampling as outlined in the Lower Saluda River Benthic Macroinvertebrate Monitoring and Enhancement Program. This will occur no sooner than year 7 after issuance of the new license. The study will document trout growth and be consistent with the study conducted in 2003 during the development of the

LSR site specific DO standard. SCE&G will coordinate the study with the SCDNR and their trout production facilities. Should extended adverse meteorological or hydrologic conditions (i.e. persistent drought, low flows, etc.) or other estenuating circumstances occur during the years prior to implementation of the growth study, the study may be delayed after consultation with the Advisory Committee.

Success Criteria

- **Note to readers: to be developed within the AC**

3.2 Water Quality

Goal #5 To release water from the Saluda Project that meets, to the extent possible, applicable State Water Quality Standards.

Objective

- Collect water quality data in the LSR year-round throughout completion of Benthic Macroinvertebrate Monitoring and Enhancement Program to capture conditions during all seasons and for wet and dry years.

Success Criteria

- **Note to readers: to be developed within the AC**

4.0 MANAGEMENT OF THE PROGRAM

The Instream Flow and Aquatic Habitat TWC has developed this Trout Evaluation and Monitoring Program for the LSR during the relicensing process for inclusion in the FERC license application and eventual incorporation into the new Saluda Project License. SCE&G is ultimately responsible for collection and analysis of Program data; however, an Advisory Committee will be convened, as described below, and it is anticipated and desired that Committee members will actively participate in all facets of the Program.

4.1 Formation of Advisory Committee

To help develop and oversee implementation of the Program, an Advisory Committee (Committee or AC) will be created. Member organizations and their responsibilities, as well as the approved dispute resolution procedures, are described below.

4.1.1 Committee Members and Responsibilities

The Committee will be comprised of representatives from SCE&G, SCDHEC, SCDNR, the United States Fish and Wildlife Service (USFWS), Trout Unlimited (TU), and other interested Stakeholders. With the exception of DHEC, members of the Advisory Committee must be signatories to the settlement agreement. Each entity will have the opportunity to select its own representation to the Committee. SCE&G (or their designee) will serve as chairperson of the Committee and be responsible for organizing meetings and distributing documents to committee members.

The Committee will ultimately be responsible for guiding the decision making processes specified in the Program. It is anticipated that the Committee will be comprised of many members of the TWC responsible for development of

this Program. The Committee's responsibilities may include, but are not limited to the following:

- Collection and evaluation of baseline information and evaluation of study plans;
- Providing overall guidance and decision making for the Program process;
- Evaluating other study (*i.e.*, existing) information or information which becomes available during the time period of evaluations;
- Establishing and documenting the goals and objectives of each modification and determine the appropriate metrics for evaluative purposes;
- Keeping other stakeholders aware of information relative to potential decisions and providing opportunities to comment prior to decisions on modifications and provide a notification system of Advisory Committee meetings;
- Determining and considering long term impacts of operational modifications on downstream projects and project economics when evaluating the feasibility of implementing instream flow modifications; and
- Reviewing the annual report that provides information on the prior year's activities which SCE&G will file with FERC.

The Committee acknowledges the importance of allowing interested stakeholders to review and comment on major documents, such as study results, that may impact the evaluation and potential modification to the Project. The Committee chairman (an SCE&G representative or designee) will distribute these study results and make annual reports available to interested stakeholders. Interested stakeholders can request documents in writing to the Committee chairman. The Committee chairman will ensure that interested stakeholders have adequate notice and review time prior to final decisions of the Committee relative to modifications to test flows, etc. For all other documents on which stakeholders

wish to comment, the Committee will review all timely comments and include these comments in the official record.

All information from the Committee relative to this Program, including notification of meetings, meeting summaries, study results and final study plans will be coordinated by SCE&G and shared with each committee member.

4.1.2 Advisory Committee Meetings

The Advisory Committee will establish a meeting schedule based on the activities and deliverables in any given year. To keep all committee members abreast of the schedule, the Advisory Committee will establish an annual calendar that will be distributed to members, along with any notes from previous meetings. The tentative Program schedule is provided in Section 5.2 of this plan.

4.2 Budget and Program Resources

Responsibility for implementing this Program will rest primarily with SCE&G, as licensee for the Saluda Project. Annual budgets will be developed by SCE&G relative to the monitoring and study costs as well as administrative costs and expenses. SCE&G will also rely on other resources outside of its establishment including, but not limited to, the following:

- federal, state and local grants
- donated services (federal and state agency involvement)
- equipment (purchases and loaners)
- expertise (governmental, non-governmental, private)

5.0 PROGRAM MONITORING METHODS

(Note to readers: Further refinement of Sampling Methodologies will be conducted within the AC)

5.1 Sampling Techniques

5.1.1 Water Quality Monitoring

Water Quality monitoring in the Saluda Tailrace is necessary to establish an accurate baseline and to evaluate changes in water quality resulting from DO enhancements and changes to project operations. Further, it will be the basis from which to determine whether the Project is in compliance with the LSR site-specific water quality standard (Goal #4).

Continuous water temperature and DO data will be sampled annually using installed USGS gages located below the Project dam and near Riverbanks Zoo (#02168504 - Saluda River Below Lake Murray Dam and #02169000 - Saluda River Near Columbia, respectively). Data will be collected at 15 minute intervals or as determined by the USGS equipment capabilities.

5.1.2 Flow Monitoring

Flow monitoring in the LSR is necessary to establish an accurate baseline and to evaluate changes in instream flows as they relate to TWC recommended flows, recreational flow releases and changes in project operations.

Continuous flow data will be collected annually using installed USGS gages located below Saluda Hydro dam and near Riverbanks Zoo (#02168504 - Saluda River Below Lake Murray Dam and #02169000 - Saluda River Near Columbia, respectively). Data will be collected at 15 minute intervals or as determined by the USGS equipment capabilities.

5.1.3 Trout Sampling

In addition to the quarterly fish community surveys outlined in the Saluda Hydro Settlement Agreement, SCE&G will conduct additional targeted electrofishing for adult and sub-adult trout. The purpose of this sampling will be to document carryover of trout stocked during previous years and to evaluate other changes in the trout fishery resulting from DO enhancements and changes to project operations. Trout collections may also assist in documenting whether spawning is occurring in the LSR.

Trout will be sampled in the LSR on two days during the spring months (April/May) and two days during the fall (September-October). Exact locations to be sampled will be determined in consultation with the Advisory Committee (See Section 4.1 above), although the Oh Brother/Ocean Boulevard island complex downstream of Interstate 26 has been identified as a likely location due to the abundance and quality of habitat compared with other reaches of the LSR.

To the extent possible, sampling will be by daytime boat electrofishing, supplemented by backpack electrofishing in habitats not accessible by boat. Effort will be placed on adequate sampling of habitats typically utilized by adult and sub-adult trout, such as mid-channel velocity refuges at the base of shoals and undercut vegetated banks. Additional methodology will be developed in consultation with the Advisory Committee.

All stunned trout will be identified to species, weighed (to nearest gram), measured for total length, marked with a unique alphanumeric Floy-type tag and returned to the LSR. Other pertinent information that will be collected during electrofishing efforts will include date, time, weather conditions, sample location, collection technique, sampling effort, water temperature, DO, and secchi disc, etc.

5.1.4 Benthic Macroinvertebrate Sampling

Benthic Macroinvertebrate sampling will be conducted in accordance with the LSR Benthic Macroinvertebrate Monitoring and Enhancement Program approved by the Freshwater Mussel/Benthic macroinvertebrate TWC.

5.1.5 Ichthyoplankton Sampling

Sampling for trout at the egg and larval stages, or ichthyoplankton sampling, will be performed annually at two locations in the LSR: (1) Corley Island and (2) the Ocean Boulevard/Oh Brother rapids area. Sampling will be performed 1 time per week for a two-month period, likely March and April. Specific sampling periods may be adjusted based on consultation with the Advisory Committee and/or regional trout experts in an effort to ensure that sampling occurs when water temperatures most closely match trout spawning criteria .

Duplicate samples will be collected at each location using D-shaped or rectangular drift net (maximum mesh size 2mm), equipped with a flowmeter. Nets will be anchored facing upstream in sufficient flow to sample effectively and will be deployed for a maximum of 8 hours. Samples from egg nets will be preserved in ethyl alcohol and returned to the laboratory for identification. All eggs collected will be examined to determine stage and all larval specimens will be measured for standard length (0.1 mm). Larval densities (number / cm³) will be calculated, compared by date and location, and presented in the final report.

5.1.6 Trout Growth Study

SCE&G proposes to conduct an in-situ growth study in the LSR to determine growth rates of rainbow trout in the LSR. The trout growth study will be conducted during December – May and employ tag and recapture techniques utilized in the 2003 growth study conducted in LSR (Appendix A).

Annual Report Format and Summary Data Package

At the conclusion of the sampling season for each year of the Program, SCE&G will prepare reports for the various data collection components of the Program and consolidate them into a summary report that will be used by the Committee to track trends in the LSR.

The annual summary report package will include summaries of the following information:

- Water quality sampling data
- LSR flow data for the year
- Trout carryover sampling data
- Benthic macroinvertebrate sampling data
- Ichthyoplankton sampling data
- Trout stocking data
- Trout growth study results (earliest will be 7 years after issuance of new license)

Water quality data will be summarized and displayed graphically by daily average and instantaneous temperature and DO value. Each annual report will include a discussion of any occurrences when water quality did not meet State standards as well as an analysis of the influence of generation on water quality in the Tailrace. Also, as the Program progresses, each report should include a discussion comparing the current years data to previous years data to identify any trends or anomalies.

Electrofishing data will be compared to the Program goals to determine the potential and observed changes (positive or detrimental) to the trout fishery associated with changes in project operations. Analysis of data may include, but not be limited to, a comparison of the following metrics:

- species richness/diversity
- species distribution
- species density
- trophic shifts
- young-of-year recruitment
- distribution of migratory species
- catch rate (average number / 300 FT² or 10 minutes of boat shocking)
- percentage of individuals with disease, tumors, fin damage or other anomalies
- Other sources of available fishery data may also be incorporated into this analysis
- Occurrence of carryover adult trout

Benthic macroinvertebrate sampling data will be summarized to determine the potential and observed changes (positive or detrimental) to trout food sources with changes in project operations. Analysis of data may include, but not be limited to, a comparison of the following metrics:

- species richness/diversity
- species distribution
- species density

Ichthyoplankton sampling data will be summarized to reflect whether reproduction of trout was documented. This data will be used to determine the reproductive potential and success within the LSR.

6.0 IMPLEMENTATION SCHEDULE

The water quality monitoring, flow monitoring and trout sampling aspects of the Program will be implemented concurrently with and according to the schedule outlined in the LSR Benthic Macroinvertebrate Monitoring and Enhancement Program. The Trout Growth Study

will be implemented in the year following completion of the benthic macroinvertebrate, water quality, and flow monitoring and the trout carryover sampling.

7.0 DECISION PROCESS FOR PROGRAM MODIFICATIONS

The Advisory Committee will evaluate the annual data and make recommendations to SCE&G for any changes in the Program.

8.0 LITERATURE CITED

Kleinschmidt Associates, Loginetics, Inc., Paladin Water Quality Consulting, and Reservoir Environmental Management, Inc. 2003. Lower Saluda River DO Technical Study Report. Prepared for South Carolina Electric and Gas Company.

South Carolina Department of Health and Environmental Control (SCDHEC). 2004. Water Classification & Standards (R.61-68) and Classified Waters (R.61-69). Bureau of Water, June 25, 2004.

APPENDIX A

LOWER SALUDA RIVER TROUT GROWTH STUDY

**SOUTH CAROLINA ELECTRIC & GAS CO.
COLUMBIA, SOUTH CAROLINA**

**SALUDA DO STANDARD PROJECT
LOWER SALUDA RIVER TROUT GROWTH STUDY**

1.0 DISSOLVED OXYGEN CRITERIA

In 1986 the U.S. Environmental Protection Agency (EPA) produced the Ambient Water Quality Criteria for Dissolved Oxygen (freshwater). This document replaced all previously published EPA aquatic life criteria for dissolved oxygen (DO). State water quality criteria may have the same numerical values as those in the EPA document or States may want to adjust their criteria to reflect local environmental conditions.

Site-specific criteria are allowed by regulation and are subject to EPA review and approval. Although no specific procedures are in place for establishing site-specific criteria for DO in freshwater, existing guidance and practice are that EPA will approve site-specific criteria developed using appropriate procedures. Site-specific criteria must be based upon a sound scientific rationale in order to protect the designated use. A site-specific criterion is intended to come closer than the national criterion to providing the intended level of protection to the aquatic life at the site, usually by taking into account the biological and/or chemical conditions at the site. The LSR trout growth study was the initial step in the use of the bioenergetic model to predict a DO standard that provides a level of protection of trout growth consistent with the EPA DO criteria.

The LSR growth study and the resultant growth model predictions are used to establish a long-term average concentration that will adequately protect trout growth in the LSR. In addition to the long-term average, the DO criteria also contain a short-term DO concentration that will prevent mortality as a result of acute hypoxia. Even short-term exposure to DO levels in the range of 1 to 2 mg/L can kill trout in a short period of time if they are not able to find local refugia where DOs are higher. In one case, mortality of trout has been reported after 3-4 day exposure to 2.4 mg/L at 20 C. In general, low DO is better tolerated at cooler temperatures than at warmer temperatures. In order to avoid direct mortality due to low DO, the EPA criteria

document recommends a minimum DO of 3 mg/L, a DO concentration that is survived by salmonids, including trout, in long-term growth studies.

Although EPA cited, and agreed with, reviews that concluded that invertebrates are generally protected by DO levels that protect fish, there were potential exceptions that induced EPA to recommend a minimum DO of 4 mg/L to protect sensitive species of mayflies, caddisflies, and stoneflies that are present in some areas of the western U.S. There are no data available on the many insect species that inhabit other habitats and regions.

In order to protect trout growth, EPA concluded that the growth attained at a constant, or 30-day running mean, DO concentration of 6.5 mg/L was adequate. The assumed level of protection was estimated to be the threshold of effect of DO on growth. Lower mean concentrations are adequate to protect important fishery resources, but risk slight growth impairment (6 mg/L) or moderate growth impairment (5 mg/L). EPA concluded that reductions in growth rate sometimes seen above 6 mg/L are usually not significant and that DO concentrations below 4 mg/L can have severe effects on growth. Between 4 and 6 mg/L the effect on growth is moderate to slight if the exposure is sufficiently long. It must be noted that these findings are derived from laboratory studies in which food was surplus.

Because DO affects fish growth primarily by reducing appetite and food consumption, growth effects are greatest when food is not limited according to the EPA criteria document. For example, in tests with coho salmon and DOs of 3, 5 and 8 mg/L, growth effects were seen only at food availability greater than 70% of maximum consumption and a DO of 3 mg/L. No effects were seen at 5 mg/L. This 70% food availability is similar to that estimated from the LSR growth study.

The most "natural" DO study included in the EPA criteria document was a test conducted in laboratory streams in which coho salmon fed on insects produced in the streams (9.5-15.5 C). At high growth rates (0.04 to 0.05 g/g/d) dissolved oxygen levels below 5 mg/L reduced growth, but at lower growth rates (0 to 0.02 g/g/d) no effects were seen at concentrations down to 3 mg/L. These lower growth rates are similar to those observed in the LSR. Although these studies were not conducted with rainbow trout, there is a general similarity in growth response to

DO in all tested salmonid species and these results are probably representative of rainbow trout as well.

Perhaps the most critical issue identified in the EPA criteria document was the application of data from tests with constant DO exposure levels to natural situations in which DO may fluctuate significantly. They concluded that existing data allowed for a tentative theoretical dosing model for fluctuating DO as applied to fish growth if daily average DO was calculated using as a maximum value the threshold concentration below which growth effects are observed under constant exposure conditions.

The publication of several fish bioenergetic model papers occurred almost simultaneously with the publication of the EPA criteria document for DO (Cuenco et al., 1985 a, b, c). It was immediately evident that the fish growth analysis performed for the EPA DO criteria document (JRB Associates, 1984) provided the DO-food consumption link that would enable a similar modeling approach to be used for generating growth-effect predictions for natural conditions with cycling DO. Consequently, EPA and TVA entered into a cooperative agreement to develop and test a fish growth model using DO-growth effect data and the other bioenergetic parameters common to established fish growth models. The EPA-TVA model also utilized many physiological parameters from another bioenergetics model developed by the University of Wisconsin Sea Grant Program (Hewett and Johnson, 1991). The resultant model (Shiao et al., 1993) forms the basis for the LSR growth study and the LSR site-specific DO criteria proposal. The 1993 model has been updated with data of better precision for rainbow trout respiration and food consumption relationships with temperature (From and Rasmussen, 1984) and with additional analysis of the rainbow trout growth studies from the EPA criteria document (Spor, 1981).

This modeling approach provides a tool to address what EPA termed a most critical and poorly documented aspect of the dissolved oxygen criterion which is the acceptable minimum DO under cycles of varying periodicity.

2.0 LOWER SALUDA RIVER TROUT GROWTH STUDY

Prediction of trout growth in the LSR requires adequate knowledge of three key parameters: temperature, DO concentration, and food availability to trout. In-stream monitoring of temperature and DO, coupled with turbine intake DO, a turbine aeration model, and a tailwater water quality model, provided very good data and estimates of the actual temperature and DO to which trout are exposed. Food availability can be estimated by measuring fish growth, determining the temperature and DO during the period that growth was measured, and using the FISH bioenergetics model to estimate food consumption (availability). During the period of this growth study DO was sufficiently high that there was no significant effect of DO. Therefore, food consumption and growth were determined almost exclusively by temperature and food availability.

The growth study was conducted to closely simulate the typical pattern of rainbow trout release into the put, grow, and take trout fishery in the LSR. This pattern is characterized by periodic releases of catchable trout (8-10 inches) at several locations along the LSR.

The growth study began with the tagging of approximately 15,000 rainbow trout obtained from the South Carolina Department of Natural Resources Walhalla Fish Hatchery. The tagging efforts were divided into four nearly equal monthly batches beginning in November and concluding in February. The November batch of rainbow trout contained 3000 individuals while the remaining 3 batches contained approximately 4000 individuals.

Each monthly batch of rainbow trout (201.4 ± 49.7 mm total length, 136 ± 36.7 g; mean \pm SD) was tagged with sequentially numbered, large format, soft Alphanumeric Visible Implant Elastomer (VI-alpha) tags produced by Northwest Marine Technology Inc. To conduct the tagging exercise, fish were crowded in a raceway and 10 - 20 individuals were transferred to 50 - L aerated holding containers containing an anesthetic (~ 90 mg/L MS 222). Once fish were anesthetized, each rainbow trout received one visible implant tag, injected using a syringe-like tag applicator designed and supplied by the manufacturer just below the surface of the clear adipose postorbital eye tissue. The fish were then returned to a separate raceway and held for a minimum of 21 days as required by federal regulation for drug clearance as mandated by the

Food and Drug Administration. During the holding period, fish were maintained in a flow-through raceway system at 4 – 12 C.

After the 21 day waiting period, all fish tagged for that month were individually weighted and measured {Total length (mm) and wet weight (g)} and the tag code recorded for each fish. All fish were left unfed two days prior to weighing and measuring. Each monthly batch of tagged fish were divided up into 1000 fish sub-units, with each sub-group designated for release at one of the four release locations. The December plantings were divided into 4 lots, one 300 batch (Lake Murray Dam), one 700 fish grouping (Saluda Shoals) and 2 1000 fish batches (Allied Signal and Quail Hollow) All other monthly stockings contained relatively equal stockings of 1000 (less tag loss). Monthly tagging numbers and tag retention rates appear in Table B1.

Trout were planted in four discreet releases, one each in December 2002, and in January, February and March of 2003. Release sites were three that are routinely used for the fishery (Saluda Shoals Park, Allied Signal, and Quail Hollow) plus an additional upstream site just below Lake Murray dam (Figure B-1).

The tagged fish arrived in hatchery trucks each outfitted with multiple cells to keep fish separated. To accomplish this, fish were taken from numbered raceways at the hatchery with each raceway containing known tagged fish. Fish were then placed in each of the designated cells for transport and release to the LSR. For the helicopter stocking, the fish were placed in the helicopter bucket and the pilot was given specific directions where to place the fish in the LSR. The remaining stockings were conducted via truck with each driver having a designated stocking location to release fish based on a pre-arranged raceway numbered matrix. During the January stocking, the lock on the access gate to Quail Hollow had been changed which required the driver to stock the fish at Allied Signal. To compensate and provide an even distribution of fish at all stocking locations, two 1000 batches of fish were released in the Quail Hollow area during February stocking event.

To determine trout growth, recovery of tagged trout was carried out by obtaining trout from the LSR by electrofishing as well as by obtaining weight and length data of freshly caught trout in the LSR sports fishery. Fish were collected from the LSR from April thru June using

primarily boat electrofishing means. The sampling area extended from the base of Lake Murray Dam to the I-26 bridge (Figure B-1). While no sampling was conducted below the I-26 Bridge, there were anecdotal reports of tagged fish being caught near Riverbanks Zoo, approximately 1 mile downstream. Boat electrofishing was conducted using a 16 foot aluminum boat outfitted with a generator, Smith-Root model VII-A Electrofisher, and anode and cathode umbrella droppers. Pulsed DC current was placed in the water and output amperage was adjusted to maximize electric current in the water. Voltage was regulated in attempts to maintain approximately 5 amps. During electrofishing sampling, electric current was directed to all microhabitats (shoals, ruffle run complexes and rock outcroppings) throughout the LSR. Electrofishing effort was typically expended over a two and three day period. All trout captured were placed in 100 L aerated containers. Fish were then evaluated to determine if they were tagged. Those fish that were tagged individual length and weight, data was collected, along with the corresponding tag color and number and recorded on field data sheets. Fish were then released back to the LSR in the general location of capture. Additionally untagged trout were collected and those individuals were enumerated and length data obtained.

2.1 Growth Results

A total of 111 tagged trout were collected, weighed and measured during April, May and June. The growth data were analyzed to determine if the data were sufficiently homogeneous to allow use of the entire data set for estimation of food availability in the LSR. There were several factors that might have caused growth (and food availability estimates) to be significantly different for one or more subsets of fish in the growth study. These factors included:

- Release site
- Release date
- Recapture site
- Size at release
- Condition at release
- Condition at recapture
- Direction of movement after release
- Distance of movement after release

- Time between release and recapture

Because growth was primarily influenced by temperature and food availability during the study period (DO was always high), any difference in these factors related to tailwater location or date could have caused differences in growth rate. In addition, size and condition of the fish might be related to fitness to the tailwater environment, including adaptability to feeding, as well as finding and competing for most-suitable habitat. Obviously, any factors that might tend to selectively crop fish through predation, movement out of the study area, or susceptibility to angler harvest could influence the study result. However, as these factors are always present, their exclusion, even if possible, would make the study less representative of the actual conditions for the trout remaining in the system.

2.2 Initial Data Analysis

A summary of the data collected for each recaptured fish from the growth study is provided in Table 2. The weight at release and recapture of the 111 fish used for the growth analysis is shown in Figure B-2. It is immediately evident that there was a large range in fish weight both at release and recapture. The range of trout weight at release is typical, as trout will feed and grow at different rates even in a hatchery environment where feeding is regular. The same phenomenon occurs in nature, as individual fish become more-or-less adapted to the natural habitat and more-or-less dominant in retaining better habitat niches.

2.3 Release Site and Date

The initial analysis of growth rate by release site and release date indicated that differences in median growth rates were relatively small (Table B-3). Because of periodic access problems, only 14 of the 16 potential release combinations (4 sites x 4 dates) were possible. The number of fish recaptures represented in these 14 combinations ranged from 1 to 14, with several releases being represented by less than a half-dozen individuals.

Comparing individual trout growth rates as a function of release site and release date indicated that only two of fourteen release groups had growth rates that appeared to be lower than the norm for the other release groups (Figures B-2a and 2b). The two groups with lower growth rates were the December group released at Quail Hollow and the March group released at Allied Signal. However, these two groups were represented by only four and one fish, respectively. With the large range of growth rates represented within each of the other groups and the fact that most groups in the March release had fish which lost weight following release, there was no reason to remove these two groups (five fish) from the overall data set of 111 trout.

2.4 Recapture Site

It is not possible to determine where an individual fish resided between the time of release and the time of recapture. For those fish that were recaptured near the release site it might be concluded that there was not a significant movement upstream or downstream from the point of release. Other fish that were recaptured farther from the release site may or may not have moved rapidly to the vicinity of the point of recapture. Given the pool-like nature of much of the study area, it is possible that many of the released trout moved freely up and down long stretches of the LSR and established no small-scale area of residency. On the assumption that recapture site might indicate the primary area of residency following release, the growth rate data were analyzed to see if there was a relationship between growth rate and recapture site (Figure B-3).

Growth rates were highly variable regardless of recapture site. Almost twice as many fish were recaptured between Allied Signal and Saluda Shoals than in the upstream or downstream sections. Median growth rates were slightly higher in this intermediate stretch (0.75 percent per day) as compared with upstream (0.68 percent per day) and downstream (0.65 percent per day). Given the highly variable growth rates, these relatively small differences were not seen as significant to the modeling effort. Fish from the Saluda Shoals releases were the most common at all recapture sites below RM 8 (and below the Saluda Shoals release site, ca. RM 8.3), and fish from the release immediately below the dam were most common above RM 8 (Figure B-4). The effect of movement from the site of release was analyzed separately from the site of recapture.

2.5 Growth and Movement

All four release times were characterized by fish moving both up- and downstream from the release sites. In general, more fish moved downstream than upstream, with median movement ranging from 0.3 to 1.2 miles downstream. Although the pattern of movement differed slightly among the four release dates (Figure B-5) only fish from the January releases appeared to differ in any noticeable way from the overall pattern. This exception is perhaps more noteworthy because no fish were released at Quail Hollow during January, and fish that moved downstream from Quail Hollow were outside of the recapture area. In fact, only trout that were released at the two intermediate sites, Saluda Shoals and Allied Signal, could be sampled both above and below the release site. The Quail Hollow released fish were not sampled below the site of release and the fish released just below the dam were obviously limited to the immediate area of the release or movement downstream.

Analysis of fish movement for the two intermediate release sites indicated that both the Saluda Shoals and Allied Signal fish from the December release tended to move downstream (Figure B-6). [Note that in this and other figures some data points are identical and are superimposed in the figures, thus, the number of points visible may not equal the number of data points represented (n).] Later releases at Saluda Shoals followed this pattern, but the indications are that the Allied Signal fish may have moved upstream more frequently following the January and March releases (there was no February release at that site). The release of fish immediately below the dam may have populated the upstream section to the extent that competitive pressure produced the net downstream movement of Saluda Shoals fish. Of course, this movement pattern may also be a direct response to physical habitat characteristics.

Although the movement of trout released at the dam was limited to essentially staying put or moving downstream, and the Quail Hollow releases were only sampled at and above the release site, the analysis of this data is of interest (Figure B-7). The Lake Murray dam releases routinely had a median movement of 0.8 miles downstream. Perhaps the most interesting aspect of all the movement data was the relatively rapid upstream migration of several fish from the March release at Quail Hollow. Although

median movement was still less than one mile upstream, at least four fish moved 3-5 miles upstream in the period between release and sampling.

Given the wide range of dispersal seen among the fish (up to 5 miles up and downstream from the release site) the potential effect of this movement on growth was considered potentially important. As shown in Figure B-8, there was essentially no pattern seen in the growth data when distance and direction of post-release movement was included as a variable. A similar analysis broken down by release site and release date showed no appreciable pattern (Figures B-9-12). Figure B-13 shows the analysis of the relationship between time in the LSR after release and distance traveled between release and recapture. In general, there was no relationship between distance traveled and the time between release and recapture.

2.6 Size at Release and Growth Rate

The maximum growth rate of fish is in part dependent upon fish size, with smaller fish capable of higher food consumption rates and higher growth rates than larger fish. Hatchery feeding practices have routinely used size as a determinant of how much feed to provide trout (e.g., Leitritz, 1972: 2-inch fish 4x and 5-inch fish 2x the food fed 9-inch fish). The growth rate observed for fish in the LSR study indicated a weak relationship to size at release, with most growth rates >1 percent per day occurring in trout that were <150 grams at release (Figure B-14). Given the wide range of growth rates for fish of any particular size and the growth model expression of food availability as a percent of maximum consumption potential rather than absolute amounts of food consumed, there was no compelling need to consider size in determining food availability for the growth model.

2.7 Condition Factor and Growth Rate

Trout of any length may be judged as to their general condition by overall appearance and described as skinny, solid, plump, fat, etc. A quantitative term that describes the length and weight relationship is the "condition factor." The condition factor (c.f.) is expressed as:

$$\text{c.f.} = (W \times 100) / (L)^3$$

where: W = weight in grams and L = length in cm.

A condition factor of 1.0 may be used as a general guide with factors <1 representing less than optimal condition in trout and those >1 representing well-fed trout.

Trout with lower initial condition factors tended to grow at a faster rate than those with higher initial condition factors (Figure B-15). This is an expected finding under circumstances where hatchery conditions can cause a wide spread in condition factor and where field conditions allow dispersal of fish into areas of adequate food. The overall range in initial condition factors (ca. 0.8-1.8 in this study) is not unusual in crowded fish culture units without extensive and frequent grading and separation of fish sizes. Once released into the LSR the fish were able to disperse and feed more uniformly. This tends to allow the skinny fish to bulk up and the fatter fish to become more trim, resulting in the growth rate relationship seen in Figure B-15. This phenomenon is probably typical of the LSR put, grow, and take trout fishery and does not complicate the use of this growth study with the bioenergetic growth model.

The change in condition factor is illustrated in Figure B-16. In general, trout with initial condition factors >1.2 became more trim and those with initial condition factors <1.0 became more robust. The central tendency in the population was to develop a condition factor of about 1.1. This same trend was evident for trout recaptured from each of the release periods (Figures B-17a and b). This trend towards uniformity of condition factor is clearly evident in the decreasing variability in the length-weight relationships between release and recapture (Figure B-18) where r^2 values improved from 0.61 to 0.87 during residency in the LSR. The trend to greater uniformity in condition simplifies the application of the bioenergetic growth model.

Because growth was related to condition factor, the data were analyzed to see if there was any relationship between post-release movement in the LSR and the condition factor of the trout at time of release (Figure B-19). There was no effect of condition factor on the movement of trout following release.

A final analysis of the data was to determine if there was any relationship between growth rate and the time between release and recapture. Except for an apparently reduced growth rate for fish captured shortly after the March release, growth was essentially independent of residence time. The slightly reduced growth seen in the early recapture of the March release is probably attributable to a period of recovery from handling procedures inherent in capture, transport and release of fish in the planting process. Some period of time is also probably needed for the fish to adapt to feeding in nature as opposed to feeding under hatchery conditions. It is likely that all four release periods underwent the same handling stress and adaptation process, but the December-February releases experienced that pattern long before the initial recapture effort in April 2003.

2.8 LSR Trout Fishery Information

Additional information collected during the growth study revealed significant numbers of rainbow and brown trout that appear to be carryovers from previous stockings. A total of 441 tagged and untagged trout were collected from the LSR, with 253 rainbow and 188 brown trout comprising the total catch.

Of the 441 rainbow and brown trout collected, 74 exceeded 16 inches in length, or nearly one in every six fish. The largest rainbow and brown trout collected during these surveys were 22 and 24 inches, respectively, with all fish appearing robust and healthy. Further examination of the data indicates that trout do appear to carryover from annual stockings. Figure B-21 illustrates that at a minimum two distinct age classes of fish were collected in the LSR during the study. However, without otolith examination it is not readily possible to determine what year classes these individuals represent. One likely contributor to this observed carryover is likely is the higher DO levels maintained in the LSR since the inception of SCE&G's turbine venting program than those DO levels historically observed.

3.0 SUMMARY

A detailed analysis of growth patterns and relationships with potentially significant variables relating to the LSR sites, release dates, and fish size indicated that there were no factors requiring either data deletion or subdivision prior to the use of observed growth rates for calculating food availability. Consequently growth rate data from all 111 recaptured trout were used to calibrate the bioenergetics model for the LSR.

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**SALUDA DO STANDARD PROJECT
LOWER SALUDA RIVER TROUT GROWTH STUDY**

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SOUTH CAROLINA ELECTRIC & GAS CO.

SALUDA DO STANDARD PROJECT

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Table B-1: Number tagged, number of survivors, survival (%), number retaining tags, and proportion (%) retaining tags of rainbow trout tagged with large format, soft VI-alpha tags and held for 25 days

TAG DATE	TAGGED (N)	SURVIVORS (N)	SURVIVAL (%)	NUMBER RELEASED (N)	RETENTION (%)
12/8/02	3000	2975	99.2	2405	80.8
1/6/03	4000	3780	94.5	2979	78.8
1/20/03	4400	4281	97.3	3331	77.8
2/13/03	4000	3251	81.3	3089	95.0
Total	15400	14287	92.8	11804	82.6

Table B-2: Data on rainbow trout recaptured and used in the Bioenergetics Model from the Lower Saluda River Growth Study April- June

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
1	yellow	C27	242	307	179	353	Sandy Beach, way point 106	3	Saluda Shoals Park	2	12/17/2002	4/2/2003
2	yellow	D55	217	230	157	171	Sandy Beach, way point 106	3	Saluda Shoals Park	2	12/17/2002	4/2/2003
3	yellow	22D	233	290	164	299	Corley Island shoal	7	Saluda Shoals Park	2	12/17/2002	4/3/2003
4	yellow	X26	253	298	216	302	downstream of I-20 at house	10	Quail Hollow	4	12/17/2002	4/3/2003
5	yellow	R73	261	324	221	438	tailrace, near spillway inflow	1	Lake Murray Dam	1	12/17/2002	4/28/2003
6	yellow	50E	245	315	197	347	above Sandy Beach (near shoal)	2	Saluda Shoals Park	2	12/17/2002	4/28/2003
7	yellow	D42	233	290	156	273	Sandy Beach	3	Saluda Shoals Park	2	12/17/2002	4/28/2003
8	yellow	L97	243	320	165	379	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	12/17/2002	4/28/2003
9	yellow	R72	245	325	156	350	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
10	yellow	K20	244	315	143	328	downstream of I-20 bridge	11	unknown	n/a	12/17/2002	5/1/2003
11	yellow	J59	265	348	234	501	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
12	yellow	L41	234	278	204	294	downstream of I-20 bridge	11	Saluda Shoals Park	2	12/17/2002	5/1/2003
13	yellow	G73	239	305	210	375	downstream of I-20 bridge	11	Quail Hollow	4	12/17/2002	5/1/2003
14	yellow	I38	208	275	117	211	downstream of I-20 bridge	11	Saluda Shoals Park	2	12/17/2002	5/1/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
15	yellow	09D	239	302	168	309	downstream of I-20 bridge	11	Allied Signal	3	12/17/2002	5/1/2003
16	yellow	54E	250	335	194	461	Corley Island shoal	7	Allied Signal	3	12/17/2002	5/1/2003
17	yellow	35C	277	345	204	472	Corley Island shoal	7	Saluda Shoals Park	2	12/17/2002	5/1/2003
18	yellow	O7E	239	282	113	255	upstream of Quail Hollow, mile 4+	12	Saluda Shoals	2	12/17/2002	5/20/2003
19	yellow	X04	216	281	197	236.0	upstream of Quail Hollow, mile 4+	12	Quail Hollow	4	12/17/2002	5/20/2003
20	yellow	B97	245	311	209	283	upstream of Quail Hollow, mile 4+	12	Quail Hollow	4	12/17/2002	5/20/2003
21	yellow	56D	254	333	179	377	asphalt plant, mile 4+	11	Allied Signal	3	12/17/2002	5/20/2003
22	yellow	J22	245	336	166	361	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	12/17/2002	6/2/2003
23	yellow	L92	224	334	165	415	Corley Island shoal	7	Saluda Shoals	2	12/17/2002	6/2/2003
24	red	A96	240	295	185	307	Sandy Beach, way point 106	3	Lake Murray Dam	1	1/7/2003	4/2/2003
25	red	S22	220	266	145	222	Sandy Beach, way point 106	3	Lake Murray Dam	1	1/7/2003	4/2/2003
26	red	46B	212	271	102	223	Sandy Beach, way point 106	3	Saluda Shoals Park	2	1/8/2003	4/2/2003
27	red	B84	207	258	133	206	Sandy Beach, way point 106	3	Saluda Shoals Park	2	1/8/2003	4/2/2003
28	red	C59	260	308	238	313	downstream of Hope Ferry Landing	4	Saluda Shoals Park	2	1/8/2003	4/2/2003
29	red	64K	231	275	125	228	Corley Island shoal	7	Saluda Shoals Park	2	1/8/2003	4/3/2003
30	red	50G	226	290	162	227	Corley Island shoal	7	Saluda Shoals Park	2	1/8/2003	4/3/2003
31	red	P13	250	285	183	252	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003
32	red	88L	185	279	70	243	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003
33	red	77D	236	275	168	227	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/3/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
34	red	E36	237	280	166	227	above Sandy Beach (near shoal)	2	Allied Signal	3	1/9/2003	4/28/2003
35	red	E17	213	282	130	240	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	1/7/2003	4/28/2003
36	red	85E	220	304	130	319	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	1/8/2003	4/28/2003
37	red	A44	228	305	171	333	Upstream of Rawls Creek at shoal	5	Saluda Shoals Park	2	1/8/2003	4/28/2003
38	red	80M	219	271	124	230	Corley Island shoal	7	Allied Signal	3	1/9/2003	4/28/2003
39	red	92I	264	315	223	339	downstream of I-20 bridge	11	Allied Signal	3	1/9/2003	5/1/2003
40	red	P97	230	283	146	232	downstream of I-20 bridge	11	Allied Signal	3	1/9/2003	5/1/2003
41	red	51D	217	280	125	242	Honeywell Intake	9	Saluda Shoals Park	2	1/8/2003	5/1/2003
42	red	P95	226	298	130	311	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/1/2003
43	red	52M	240	296	157	282	Corley Island shoal	7	Allied Signal	3	1/9/2003	5/1/2003
44	red	V97	217	284	150	272	Corley Island shoal	7	Allied Signal	3	1/9/2003	5/1/2003
45	red	63C	228	301	155	282	Honeywell Intake	9	Saluda Shoals Park	2	1/7/2003	5/20/2003
46	red	K51	223	278	112	206	Honeywell Intake	9	Lake Murray Dam	1	1/8/2003	5/20/2003
47	red	P72	228	289	126	222	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/20/2003
48	red	07I	255	317	235	326	Honeywell Intake	9	Allied Signal	3	1/9/2003	5/20/2003
49	red	F67	224	313	168	339	asphalt plant, mile 4+	11	Allied Signal	3	1/9/2003	5/20/2003
50	red	H29	205	280	91	231	Corley Island shoal, mile 7+	7	Allied Signal	3	1/9/2003	5/20/2003
51	red	82H	221	329	141	434	Corley Island shoal, mile 7+	7	Saluda Shoals	3	1/8/2003	5/20/2003
52	red	23K	245	311	180	298	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	1/7/2003	6/2/2003
53	red	19B	232	320	102	343	downstream of Saluda Shoals	4	Lake Murray Dam	1	1/7/2003	6/2/2003
54	red	50N	243	335	179	397	downstream of Saluda Shoals Park	4	Saluda Shoals	2	1/8/2003	6/2/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
55	red	P41	203	289	149	264	downstream of Saluda Shoals Park, above "Logan's Point"	5	Saluda Shoals	2	1/8/2003	6/2/2003
56	orange	V09	224	258	119	194	Sandy Beach, way point 106	3	Lake Murray Dam	1	2/11/2003	4/2/2003
57	orange	I77	232	277	141	222	Sandy Beach, way point 106	3	Lake Murray Dam	1	2/11/2003	4/2/2003
58	orange	D20	247	273	165	244	downstream of Hope Ferry Landing	4	Lake Murray Dam	1	2/11/2003	4/2/2003
59	orange	Y10	233	244	153	161	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
60	orange	88J	217	247	112	168	Corley Island shoal	7	Quail Hollow	4	2/13/2003	4/3/2003
61	orange	N04	235	252	136	166	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
62	orange	47A	247	265	145	210	Corley Island shoal	7	Saluda Shoals Park	2	2/12/2003	4/3/2003
63	orange	46V	222	227	102	147	downstream of I-20 at house	10	Quail Hollow	4	2/13/2003	4/3/2003
64	orange	73V	218	254	113	185	tailrace, near spillway inflow	1	Lake Murray Dam	1	2/11/2003	4/28/2003
65	orange	G07	212	251	107	171	above Sandy Beach ("flat")	2	Lake Murray Dam	1	2/11/2003	4/28/2003
66	orange	U87	219	260	118	215	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	2/11/2003	4/28/2003
67	orange	26V	220	252	154	179	above Sandy Beach (near shoal)	2	Lake Murray Dam	1	2/11/2003	4/28/2003
68	orange	90P	208	260	108	214	Upstream of Rawls Creek at shoal	5	Lake Murray Dam	1	2/11/2003	4/28/2003
69	orange	09Y	186	288	62	246	downstream of I-20 bridge	5	Lake Murray Dam	1	2/11/2003	5/1/2003
70	orange	Y79	249	295	146	266	downstream of I-20 bridge	10	Quail Hollow	4	2/13/2003	5/1/2003
71	orange	13B	225	265	126	218	downstream of I-20 bridge	10	Saluda Shoals Park	2	2/12/2003	5/1/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
72	orange	74A	232	270	124	186	downstream of I-20 bridge	10	Quail Hollow	4	2/13/2003	5/1/2003
73	orange	M37	249	264	131	208	Honeywell intake area	9	Saluda Shoals Park	2	2/12/2003	5/1/2003
74	orange	18A	236	257	143	165	Honeywell intake area	9	Saluda Shoals Park	2	2/12/2003	5/1/2003
75	orange	73B	224	274	131	211	Corley Island shoal	7	Lake Murray Dam	1	2/11/2003	5/1/2003
76	orange	R44	261	306	183	360	asphalt plant, mile 4+	11	Quail Hollow	4	2/13/2003	5/20/2003
77	orange	62P	203	264	112	193	BC Components intake	8	Saluda Shoals	2	2/12/2003	5/20/2003
78	orange	J45	230	273	148	216	BC Components intake	8	Saluda Shoals	2	2/12/2003	5/20/2003
79	orange	D60	203	241	106	130	Corley Island shoal, mile 7+	7	Quail Hollow	4	2/13/2003	5/20/2003
80	orange	R77	216	280	100	250	Corley Island shoal, mile 7+	7	Saluda Shoals	2	2/12/2003	5/20/2003
81	orange	17C	223	282	142	239	downstream of Saluda Shoals Park	4	Lake Murray Dam	1	2/11/2003	6/2/2003
82	green	R76	267	278	234	243	Sandy Beach, way point 106	3	Lake Murray Dam	1	3/11/2003	4/2/2003
83	green	R79	260	258	173	165	SCE&G boat landing - tailrace, way point 108	1 (red)	Lake Murray Dam	1	3/11/2003	4/2/2003
84	green	Z71	237	279	215	243	downstream of Hope Ferry Landing	4	Quail Hollow	4	3/14/2003	4/2/2003
85	green	22R	215	226	134	126	Corley Island shoal	7	Allied Signal	3	3/13/2003	4/3/2003
86	green	98G	220	230	140	155	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	4/3/2003
87	green	L34	245	245	192	177	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	4/3/2003
88	green	O00	215	270	108	220	above Sandy Beach (near shoal)	2	Saluda Shoals Park	2	3/12/2003	4/28/2003
89	green	N24	242	266	176	225	Sandy Beach	3	Lake Murray Dam	1	3/11/2003	4/28/2003
90	green	47G	238	265	173	203	Sandy Beach	3	Lake Murray Dam	1	3/11/2003	4/28/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location	Location on Figure B-1	Stock	Recaptured	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)	Stocked	(Red unless noted)	Date	Date	
91	green	81L	236	265	148	191	Upstream of Rawls Creek at shoal	5	Lake Murray Dam	1	3/11/2003	4/28/2003
92	green	O57	244	280	154	219	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
95	green	S64	280	300	255	327	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
93	green	91Y	246	278	177	222	downstream of I-20 bridge	11	Quail Hollow	4	3/14/2003	5/1/2003
94	green	37G	235	269	152	238	Honeywell Intake	9	Lake Murray Dam	1	3/11/2003	5/1/2003
95	green	Z21	237	285	215	301	Corley Island shoal	7	Saluda Shoals Park	2	3/12/2003	5/1/2003
96	green	30T	238	280	138	204	Quail Hollow, mile 3 to mile 4	12	Quail Hollow	4	3/14/2003	5/20/2003
97	green	H42	252	305	178	213.0	Honeywell Intake	9	Quail Hollow	4	3/14/2003	5/20/2003
98	green	11C	230	272	178	204.0	Honeywell Intake	9	Saluda Shoals	2	3/12/2003	5/20/2003
100	green	P34	281	326	252	366	BC Components intake	8	Quail Hollow	4	3/14/2003	5/20/2003
101	green	82R	230	272	186	189	asphalt plant, mile 4+	11	Quail Hollow	4	3/14/2003	5/20/2003
102	green	T65	216	284	167	216	upstream of I-20, ~mile 4.5	13	Quail Hollow	4	3/14/2003	5/20/2003
103	green	G41	300	334	360	372	BC Components intake	8	Lake Murray Dam	1	3/11/2003	5/20/2003
104	green	P89	235	285	145	286	Corley Island shoal, mile 7+	7	Saluda Shoals	2	3/12/2003	5/20/2003
105	green	09Y	225	272	155	186	Corley Island shoal, mile 7+	7	Lake Murray Dam	1	3/11/2003	5/20/2003
106	green	08R	210	262	134	209	Corley Island shoal, mile 7+	7	Lake Murray Dam	1	3/11/2003	5/20/2003
107	green	28B	193	213	88	74	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	3/11/2003	6/2/2003
108	green	G67	230	271	126	211.5	tailrace boat ramp & upstream	1 (red)	Lake Murray Dam	1	3/11/2003	6/2/2003

Tag	Tag	Stocked Total	Recaptured Total	Stock Weight	Recaptured Weight	Location Recaptured	Location on Figure B-1	Location Stocked	Location on Figure B-1 (Red unless noted)	Stock Date	Recaptured Date	
Color	Number	Length (mm)	Length (mm)	(g)	(g)		(blue except where noted)					
109	green	72Y	259	291	159	259.0	Sandy Beach (upstream of Saluda Shoals Park landing)	3	Lake Murray Dam	1	3/11/2003	6/2/2003
110	green	E35	250	284	157	213.0	Sandy Beach (upstream of Saluda Shoals Park landing)	3	Quail Hollow	4	3/14/2003	6/2/2003
111	green	N25	233	272	146	204.0	downstream of Saluda Shoals Park, above "Logan's Point"	5	Lake Murray Dam	1	3/11/2003	6/2/2003

Table B-3: Median growth rate (n) for each of the fourteen combinations of release site and release date. Overall median (n) growth rates are shown for each site, each date, and for all 111 recaptured trout. Growth rates are g/g/day and the overall rate of 0.0071 g/g/day is 0.71 percent weight gain per day.

	DEC.	JAN.	FEB.	MAR.	ALL MONTHS
Below Dam	0.0072 (2)	0.0070 (6)	0.0095 (11)	0.0048 (13)	0.0075 (32)
Saluda Shoals	0.0077 (11)	0.0083 (12)	0.0075 (9)	0.0063 (6)	0.0076 (38)
Allied Signal	0.0078 (6)	0.0065 (14)	No release	-0.0030 (1)	0.0071 (21)
Quail Hollow	0.0030 (4)	No release	0.0095 (6)	0.0055 (10)	0.0056 (20)
All Sites	0.0071 (23)	0.0072 (32)	0.0083 (26)	0.0056 (30)	<u>0.0071</u> <u>(111)</u>

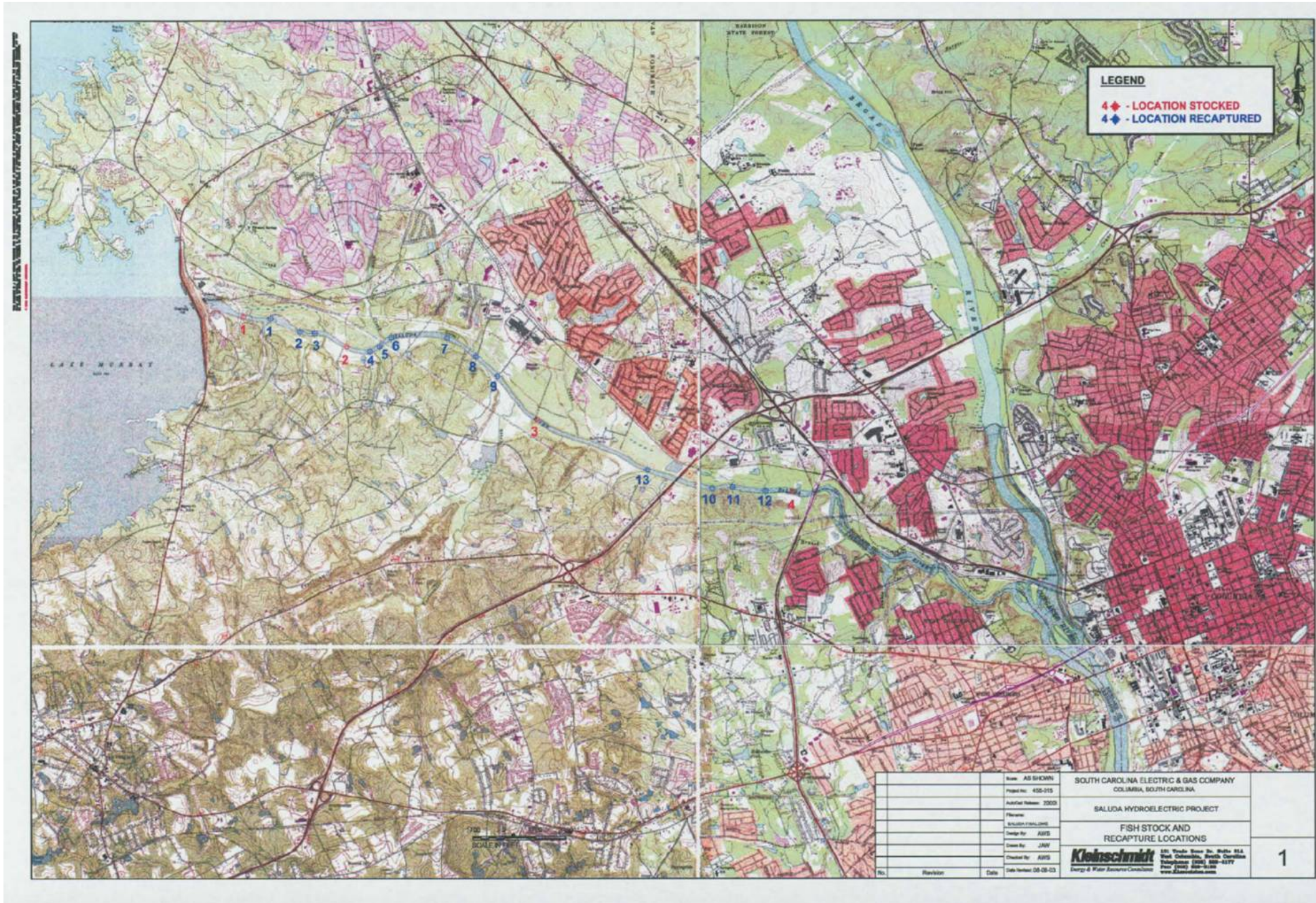


Figure B-1: Fish Stock and Recapture Locations

Weight x Release x Date
Median (n) per Release

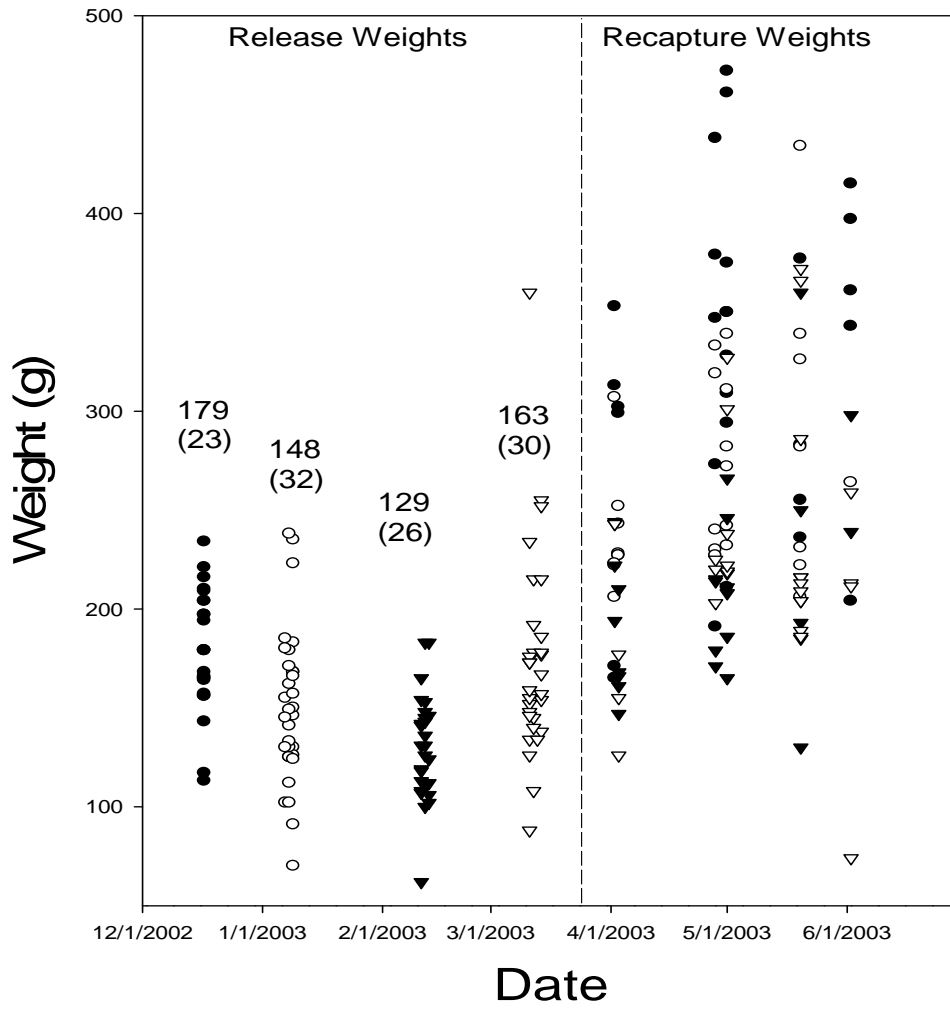
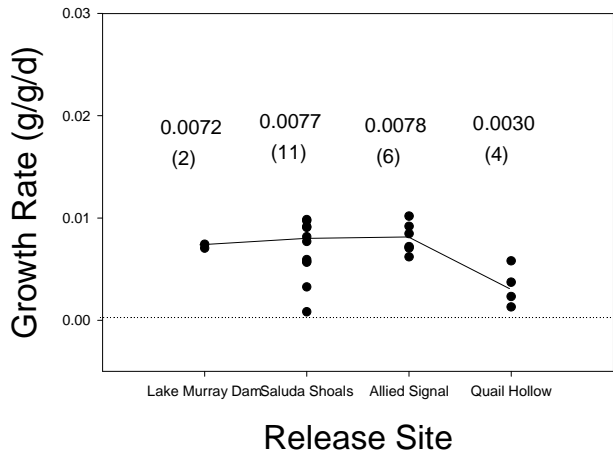


Figure B-2: Weight (g) of Recaptured Trout at Time of Release and Time of Recapture

Growth by Release Site
 December Releases
 median (n)



Growth by Release Site
 January Releases
 median (n)

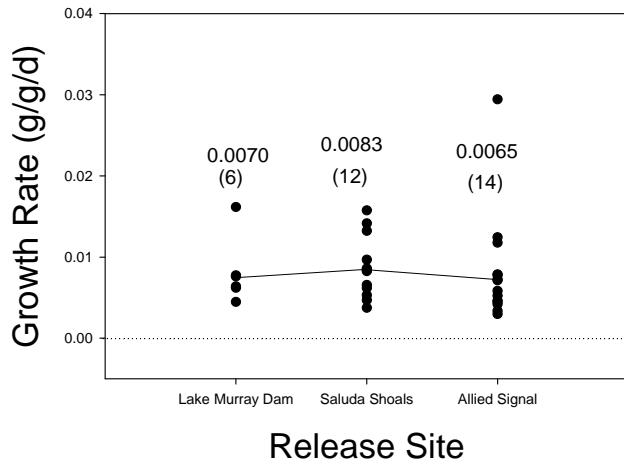
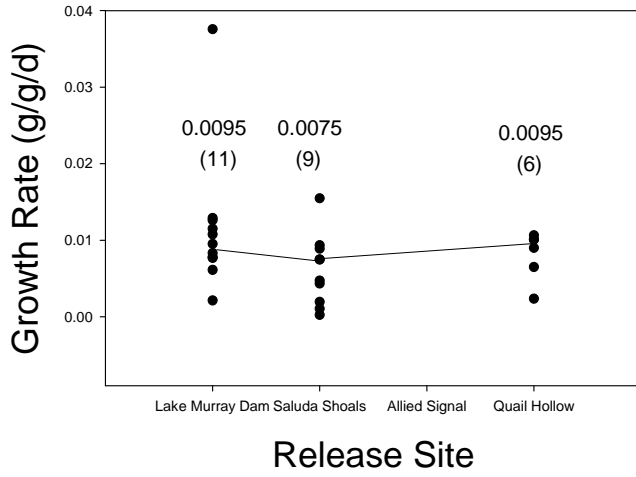


Figure B-2a: Growth Rate by Release Site for December and January Releases

Growth by Release Site
February Releases
median (n)



Growth by Release Site
March Release
median (n)

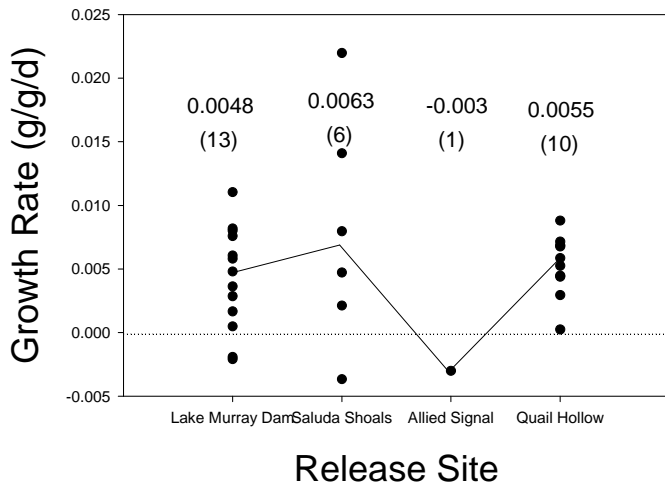


Figure B-2b: Growth Rate of Trout by Release Site for the February and March Releases

Growth vs Capture Site (all releases)
Release Points (dashed lines)

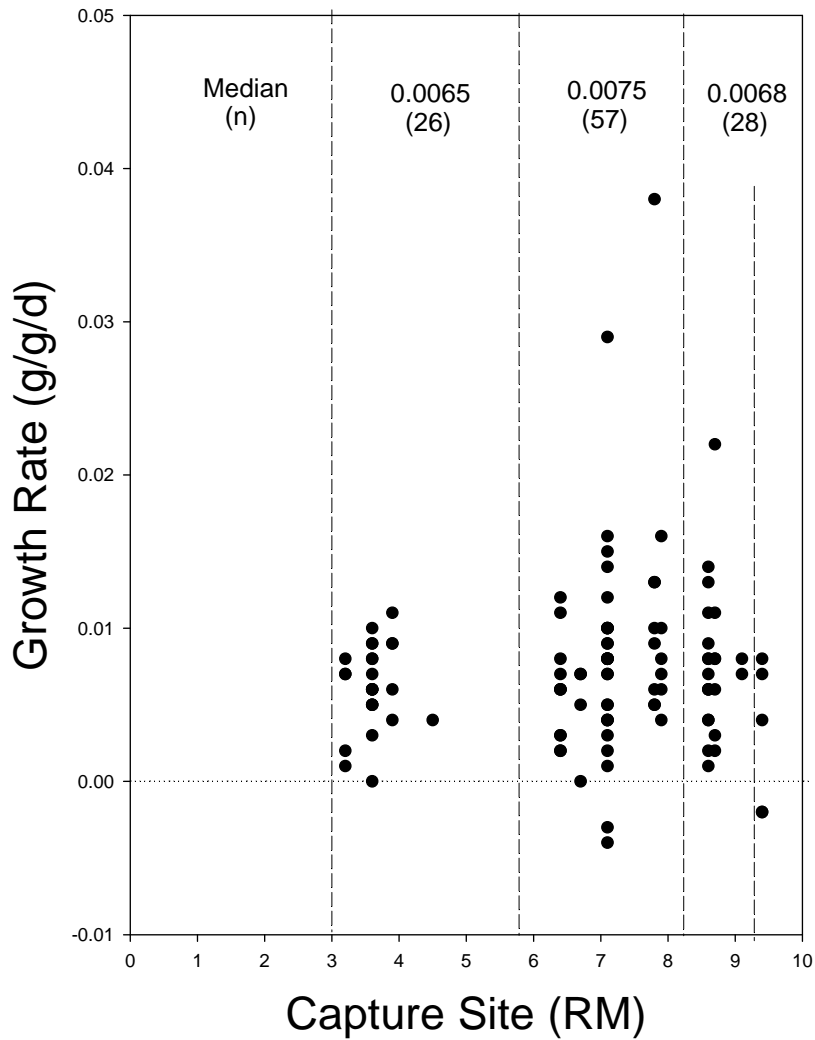


Figure B-3: Growth Rate is Shown as a Function of Recapture Location by River Mile. Release points are indicated by vertical dashed lines. From downstream to upstream these are Quail Hollow, Allied Signal, Saluda Shoals Park, and the immediate vicinity of the Lake Murray dam. No recapture efforts were made below the Quail Hollow release point (RM 3).

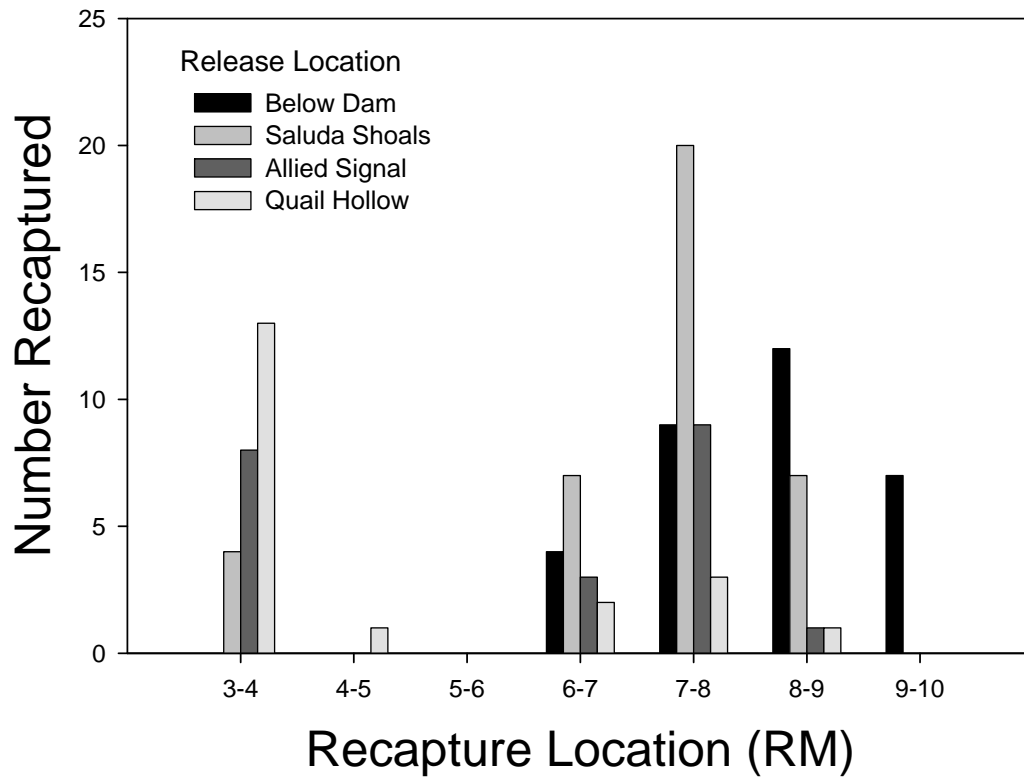


Figure B-4: Recapture Location (RM) and Site of Release. There was Limited Recapture Effort Between RM 4 and 6.

Distance moved from release site
and median (by release date)

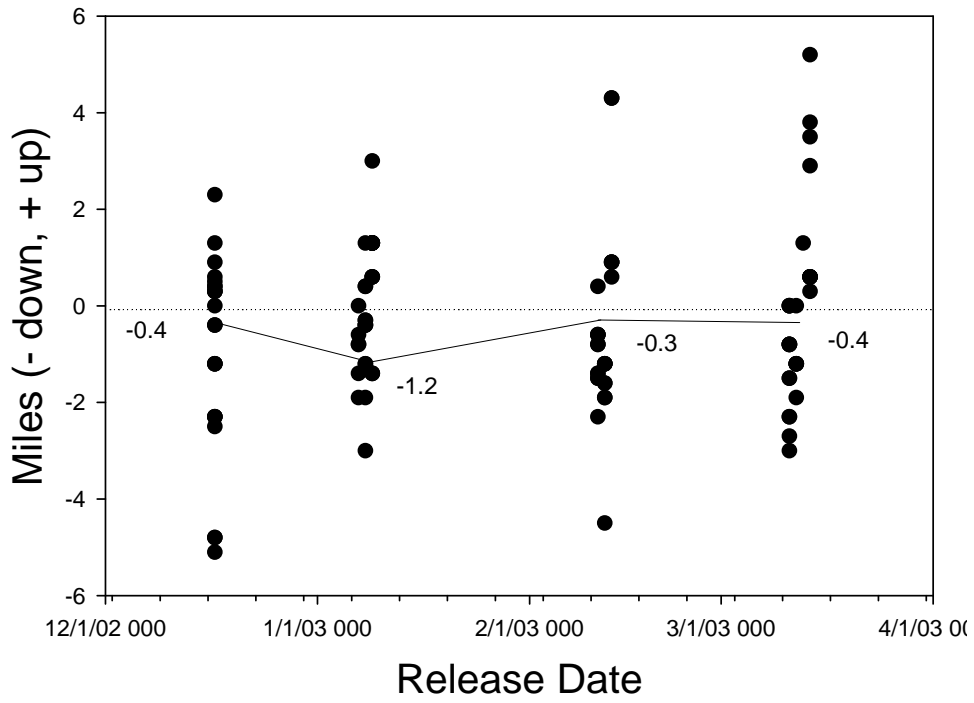


Figure B-5: Distance Moved from Release Site for Each Release Date. Median Distances are Shown on the Graph for each Release Date

Release Date and Movement
median (n)

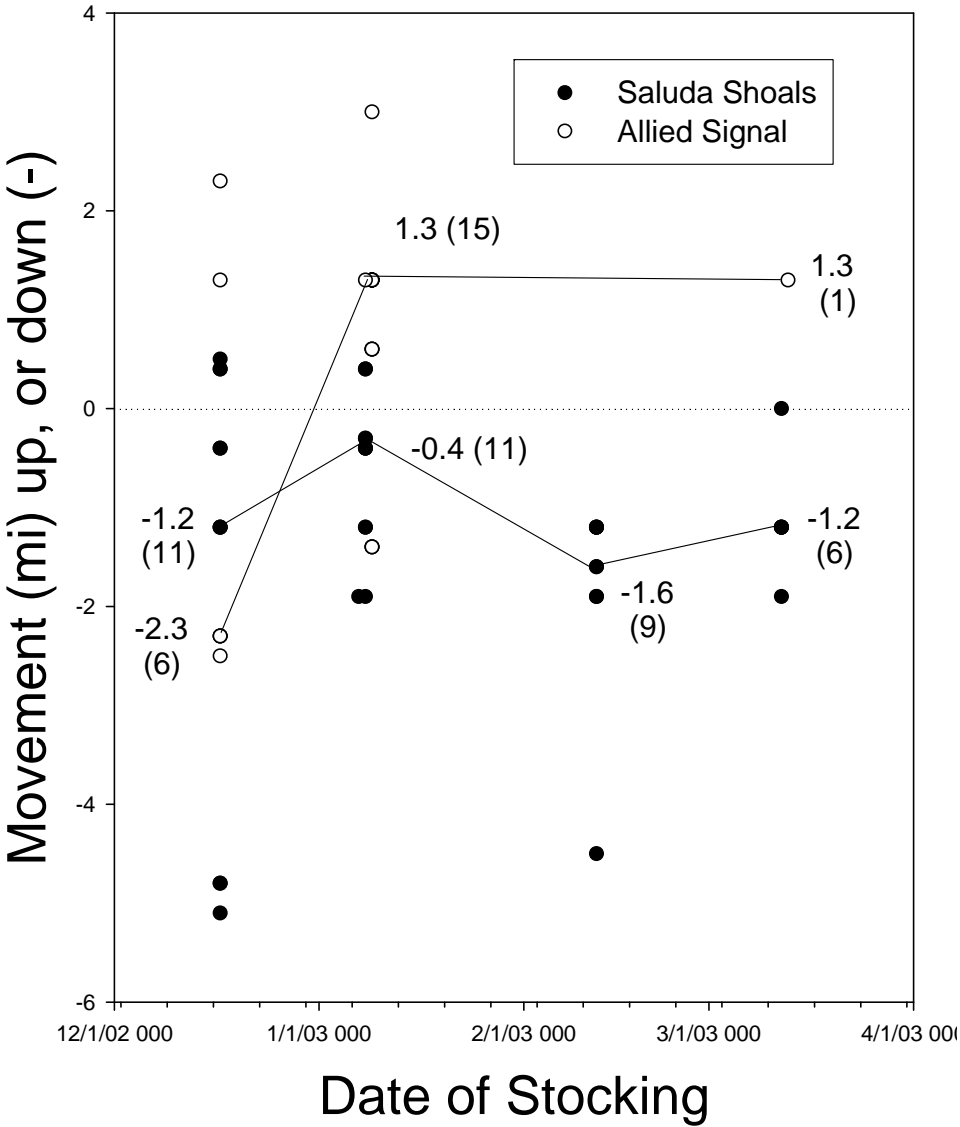


Figure B-6: Movement of Trout by Stocking Date from the Two Intermediate Release Sites where Upstream and Downstream Movement were not Limited by the Dam or by Sampling Site Limitations

Distance Travelled from Release Site
to Recapture Site (upper and lower releases)
median (n)

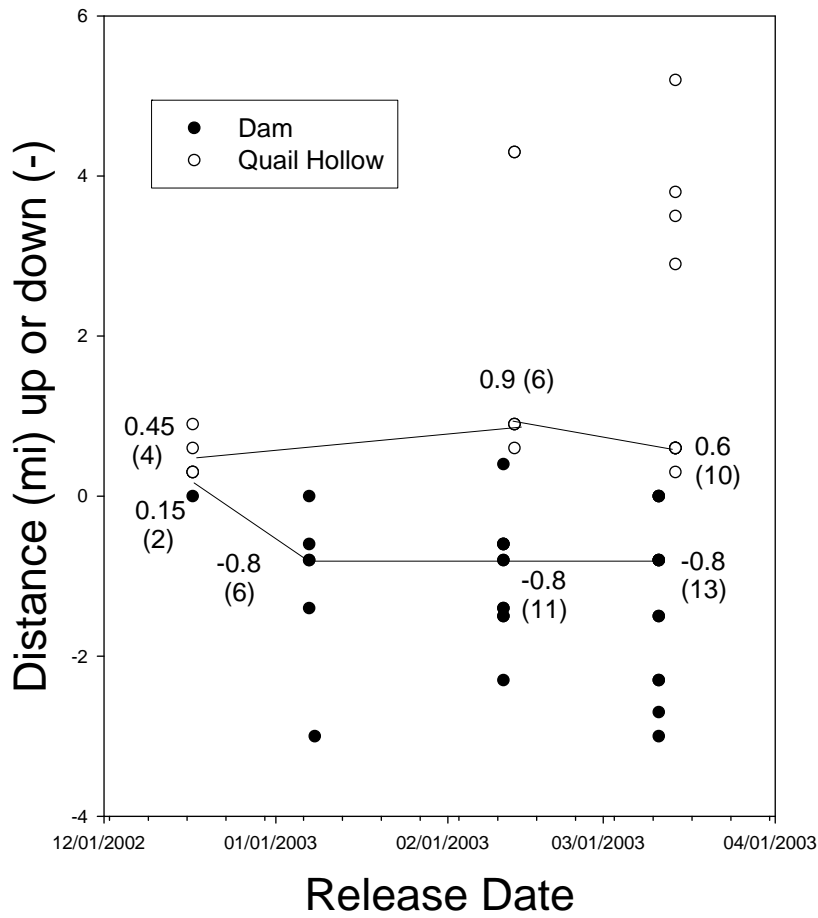


Figure B-7: Movement of Fish Following Release at Various Times at the Upstream Site Near Lake Murray Dam and at Quail Hollow

Growth and Distance Travelled
from Release Point

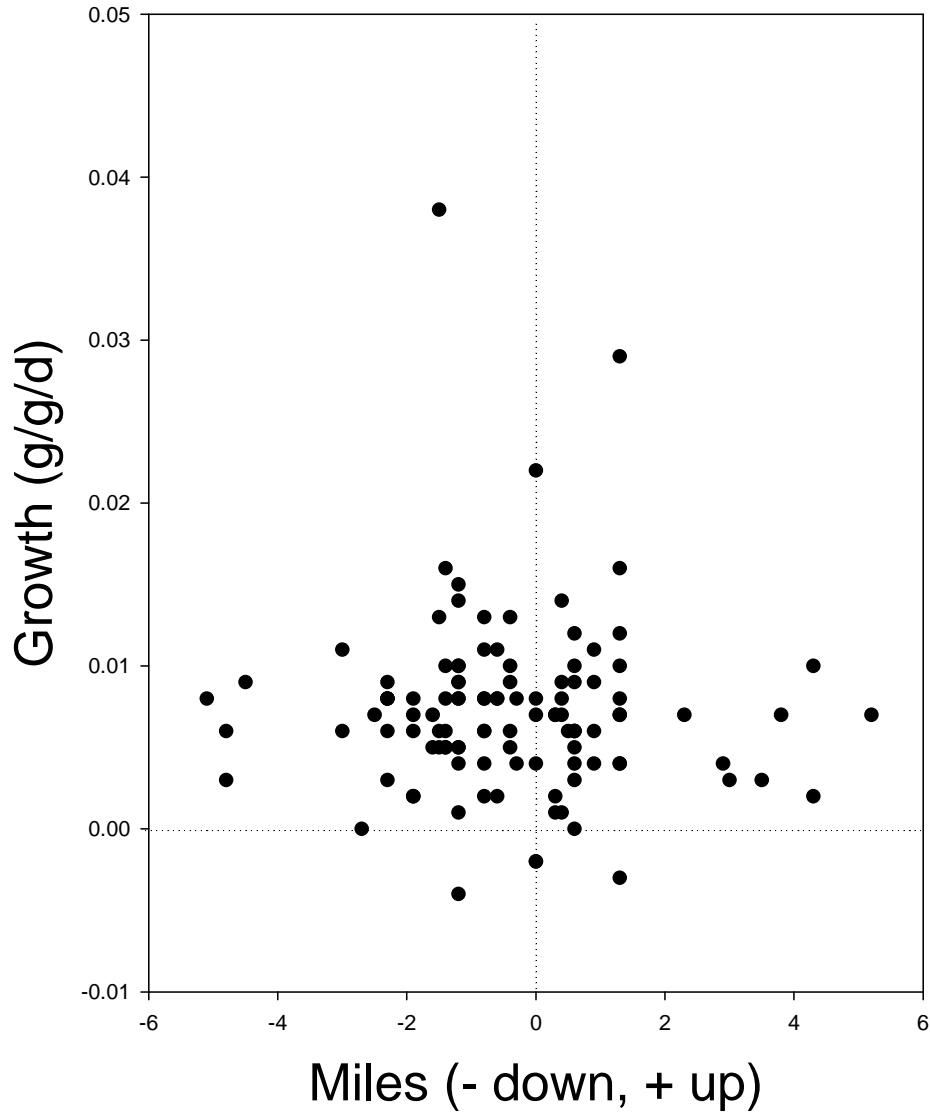


Figure B-8: This Figure Shows the Growth Rates for All 111 Fish as a Function of Their Movement Up or Downstream Following Release

December Release
Distance Travelled between
Release and Recapture Sites

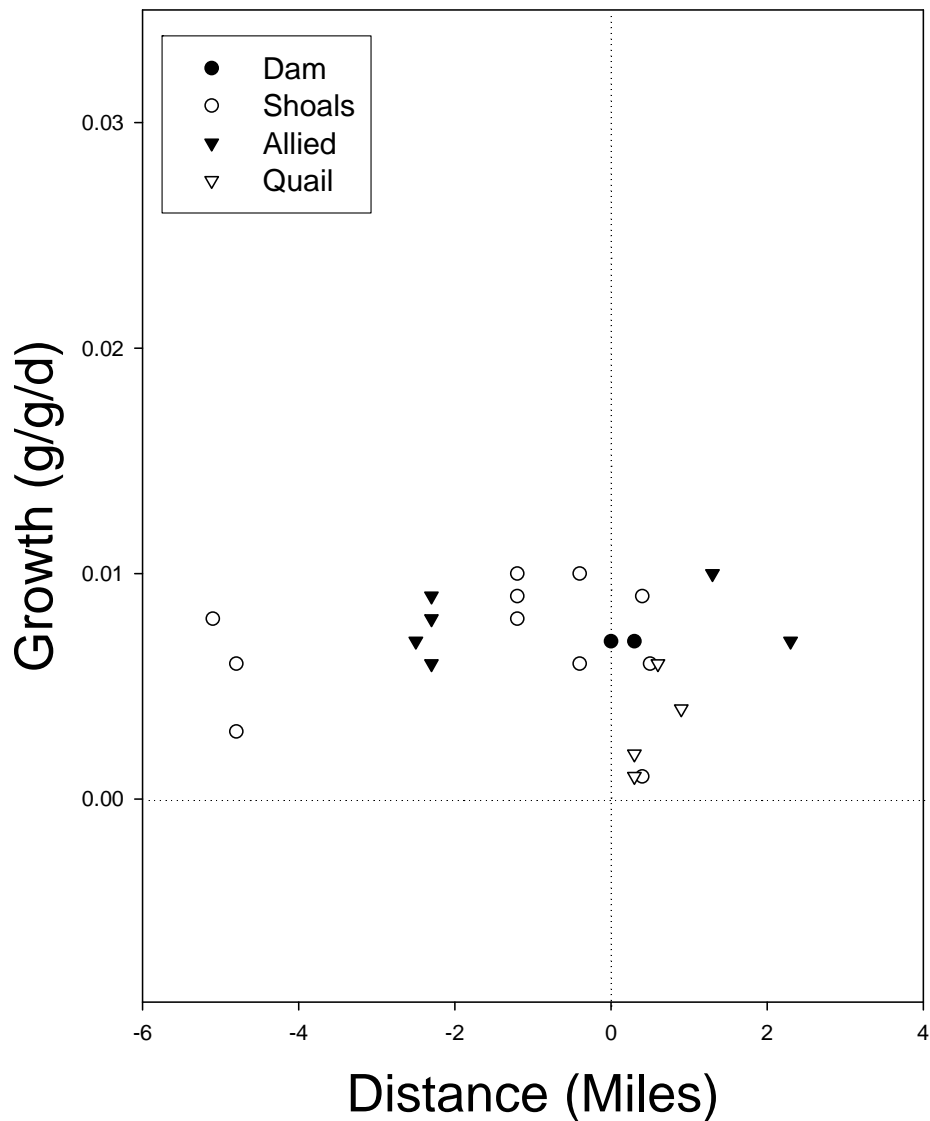


Figure B-9: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in December at the Four Release Sites

January Release
Distance Travelled between
Release and Capture Sites

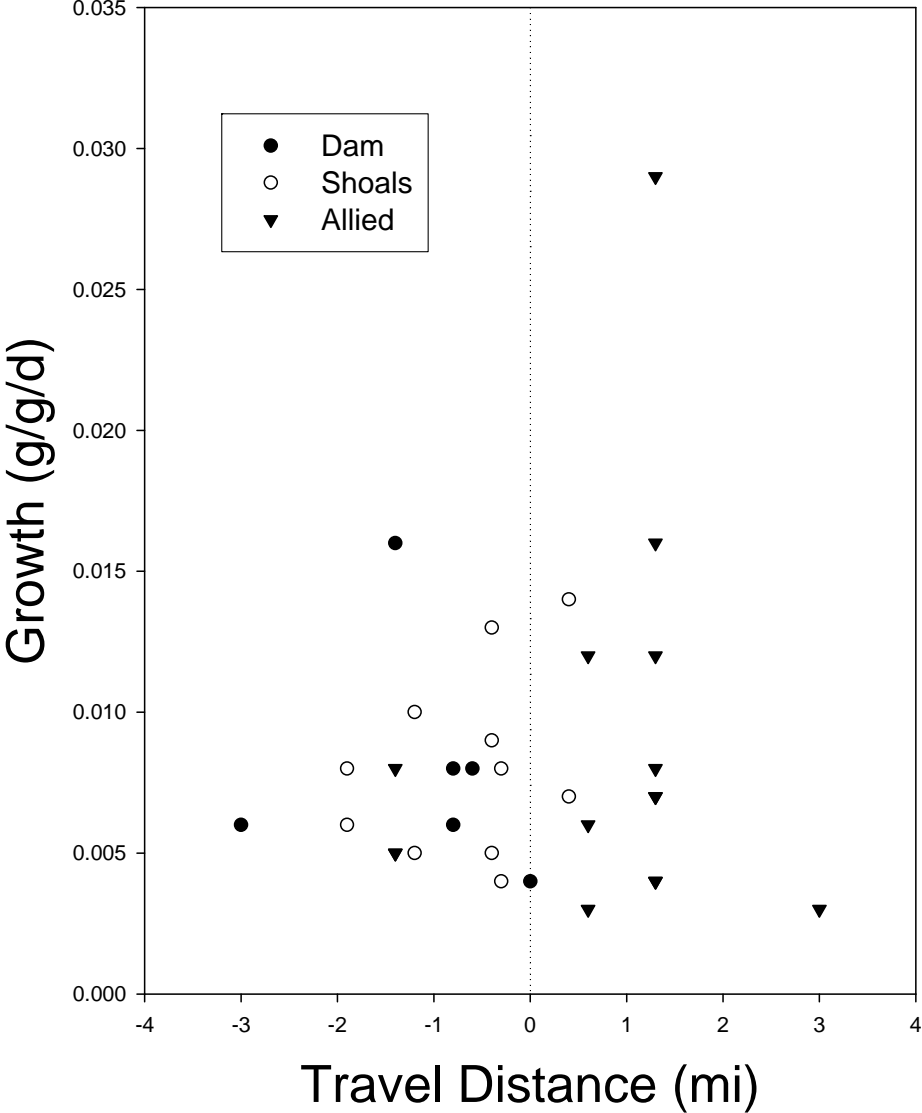


Figure B-10: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in January at the Three Release Sites

February Release Growth
Distance Travelled between
Release and Capture Sites

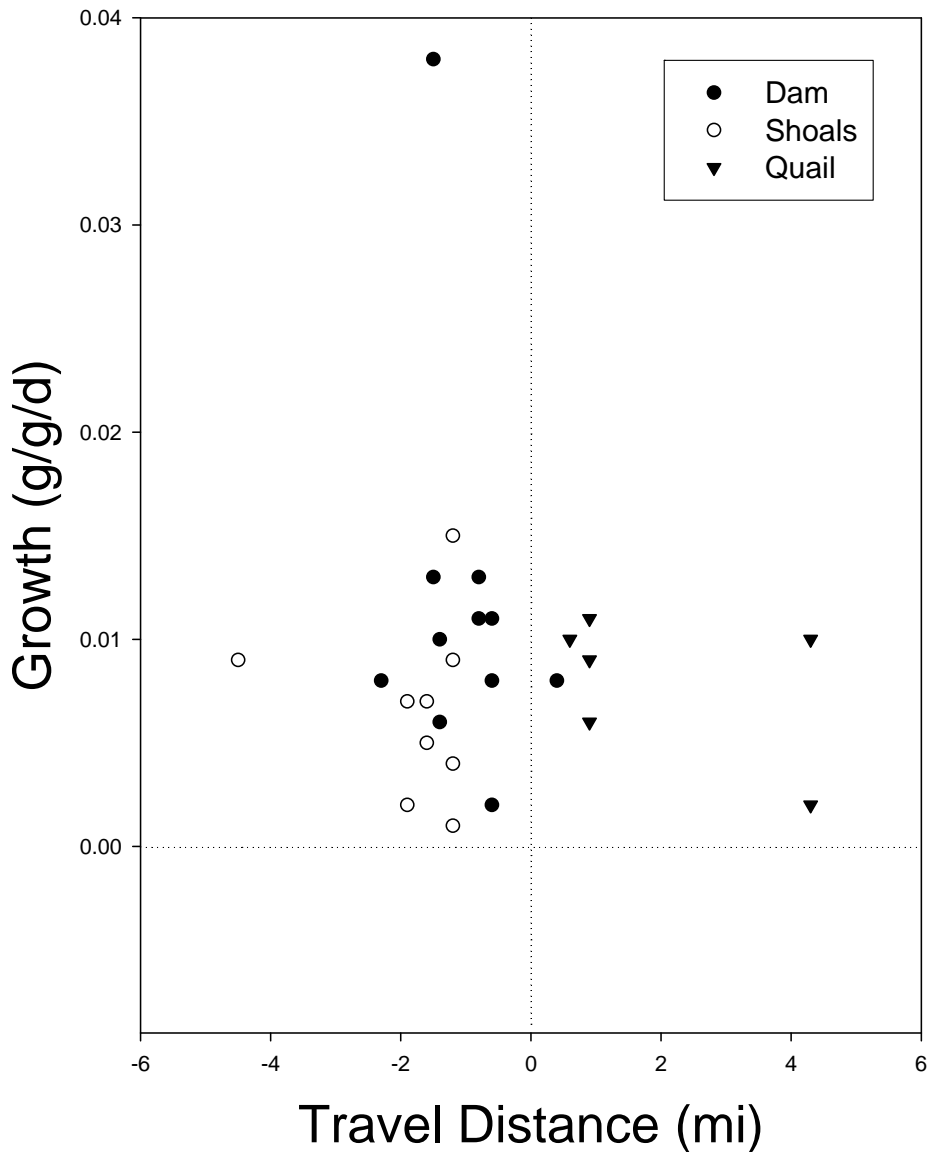


Figure B-11: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in February at the Three Release Sites

March Release Growth
Distance Travelled between
Release and Capture Sites

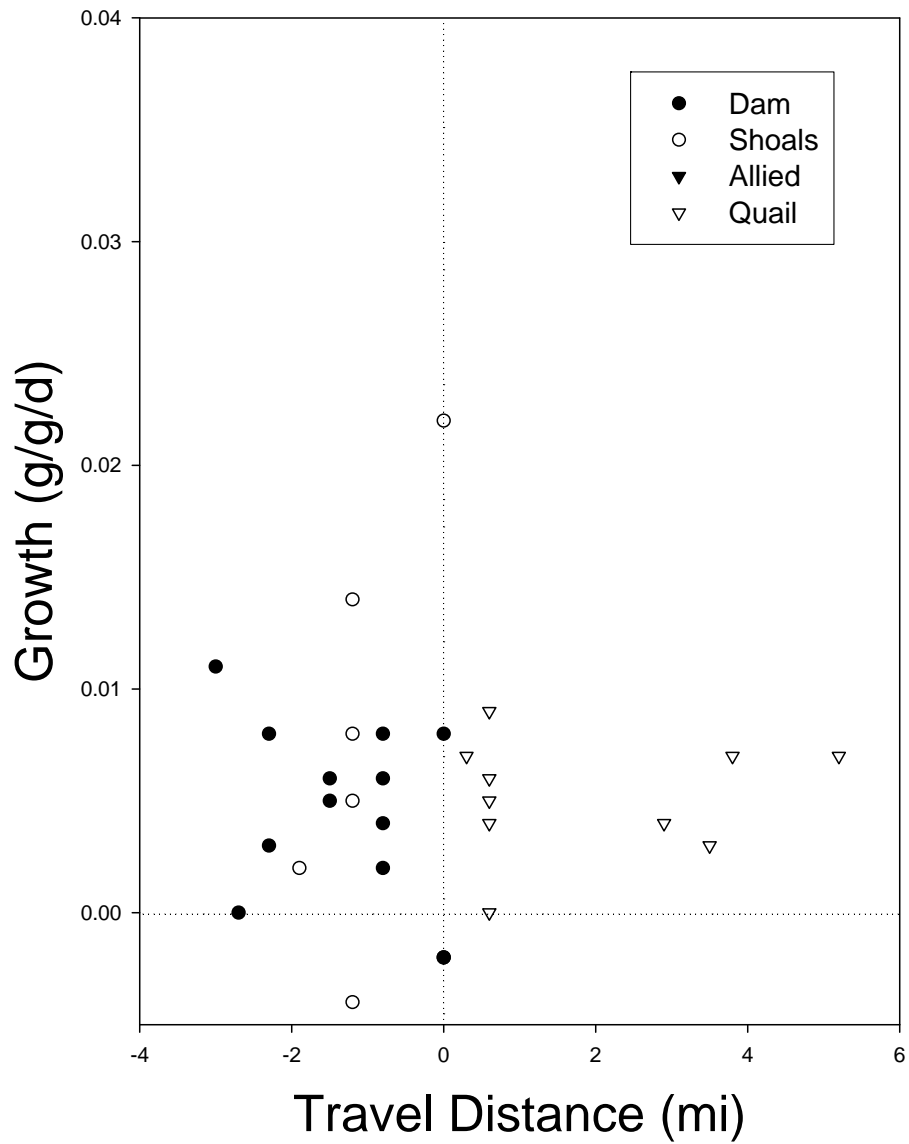


Figure B-12: Analysis of Growth Rate as a Function of Post-Release Movement for Fish Released in March at the Four Release Sites

Movement vs. Time in Stream

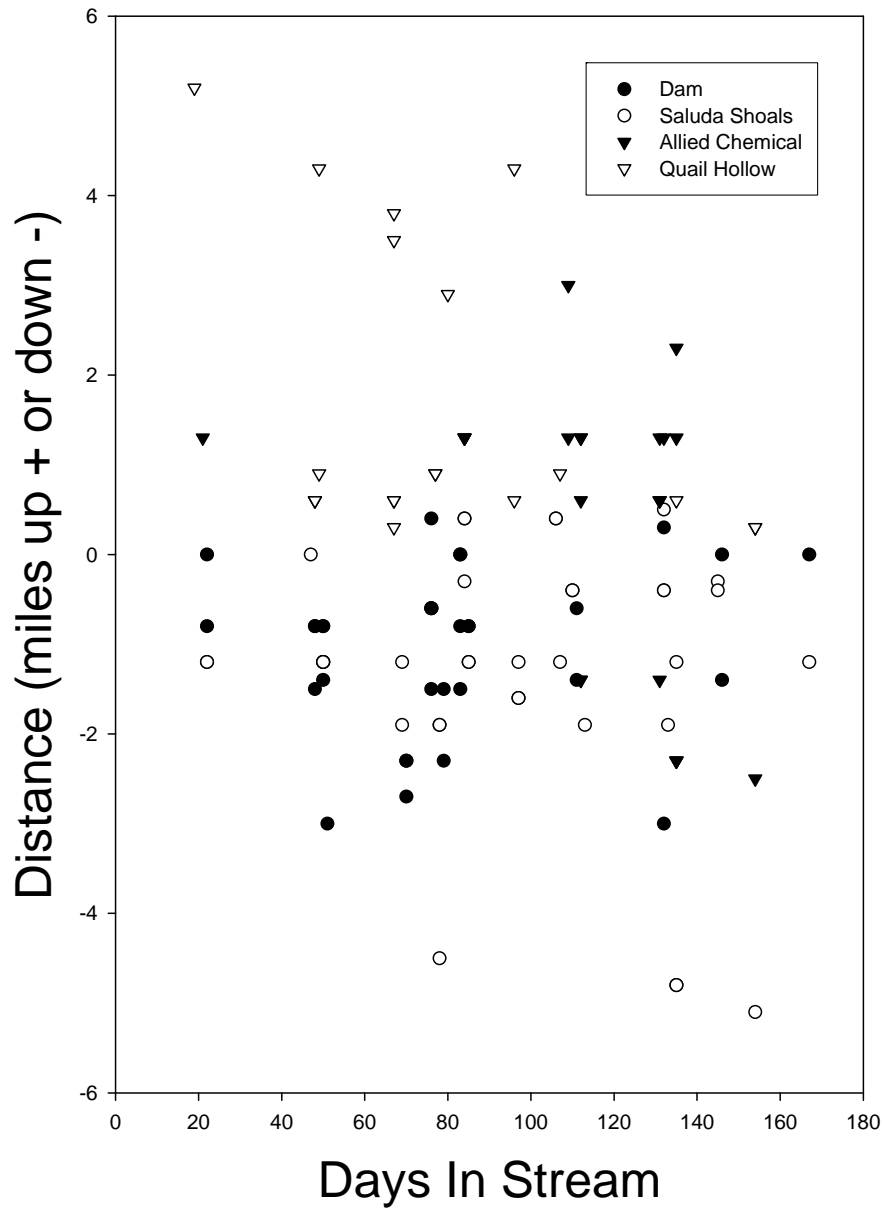


Figure B-13: Relationship Between Days in the Stream Between Release and Capture and the Distance Traveled from the Point of Release

Initial Weight vs. Growth Rate

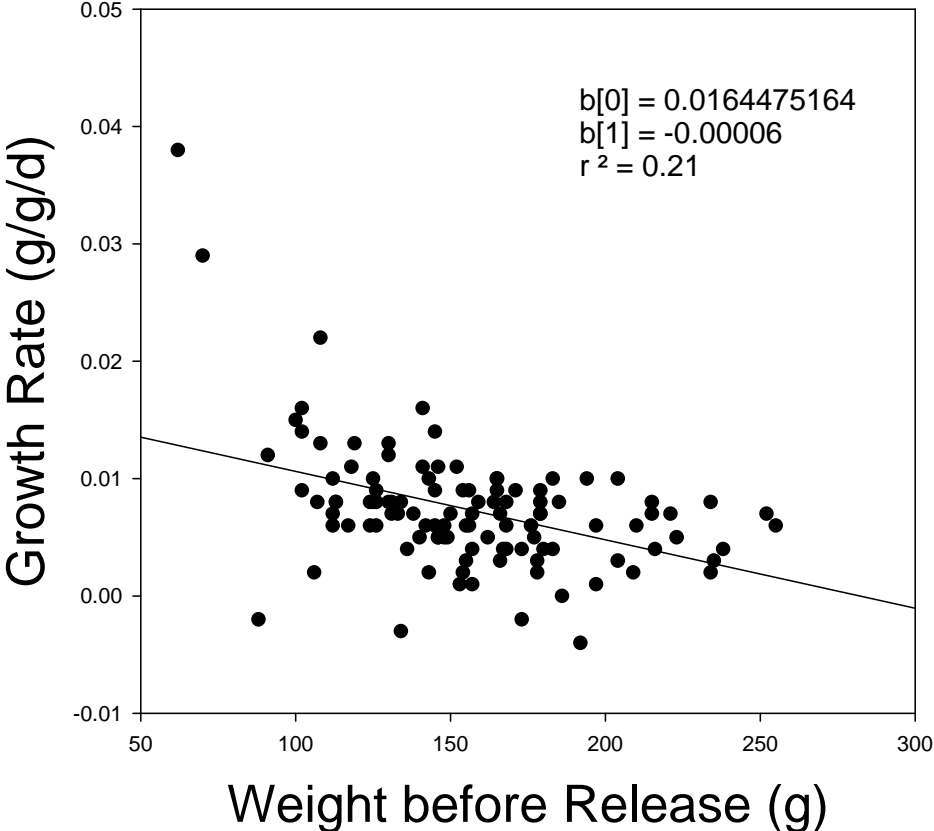


Figure B-14: The growth Rate of Trout in the LSR Showed a Slight Relationship with Size at Release

All Releases

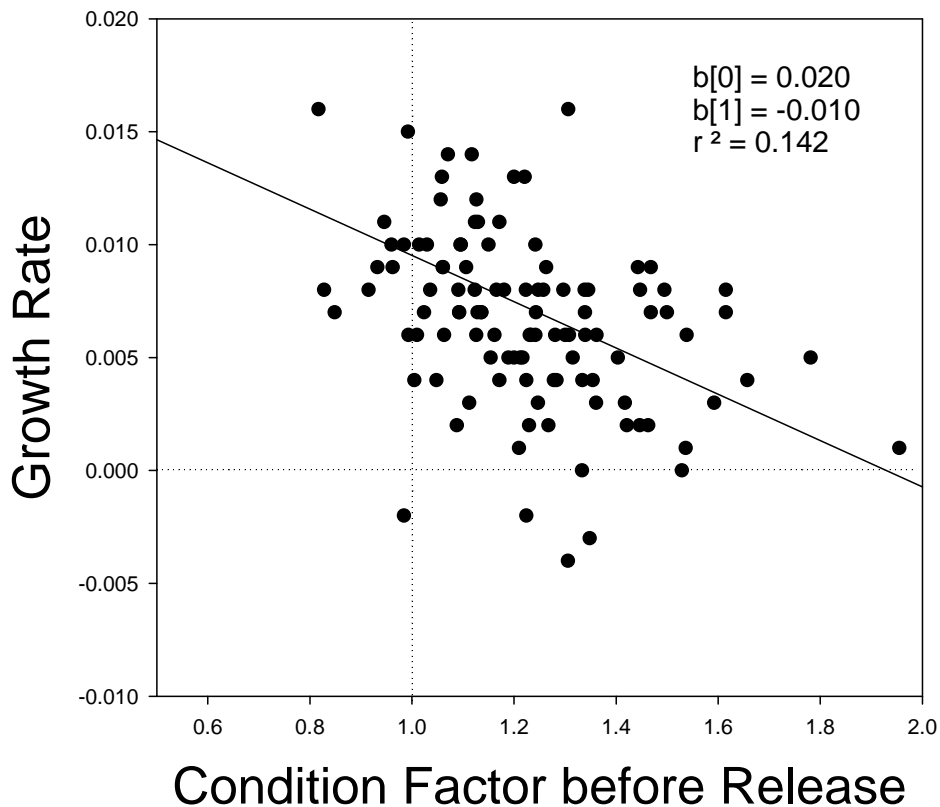


Figure B-15: Growth Rate was Greater in Fish with Lower Initial Condition Factors Following Release into the LSR

Comparison of Condition Factor at Release
and at Recapture (all releases)

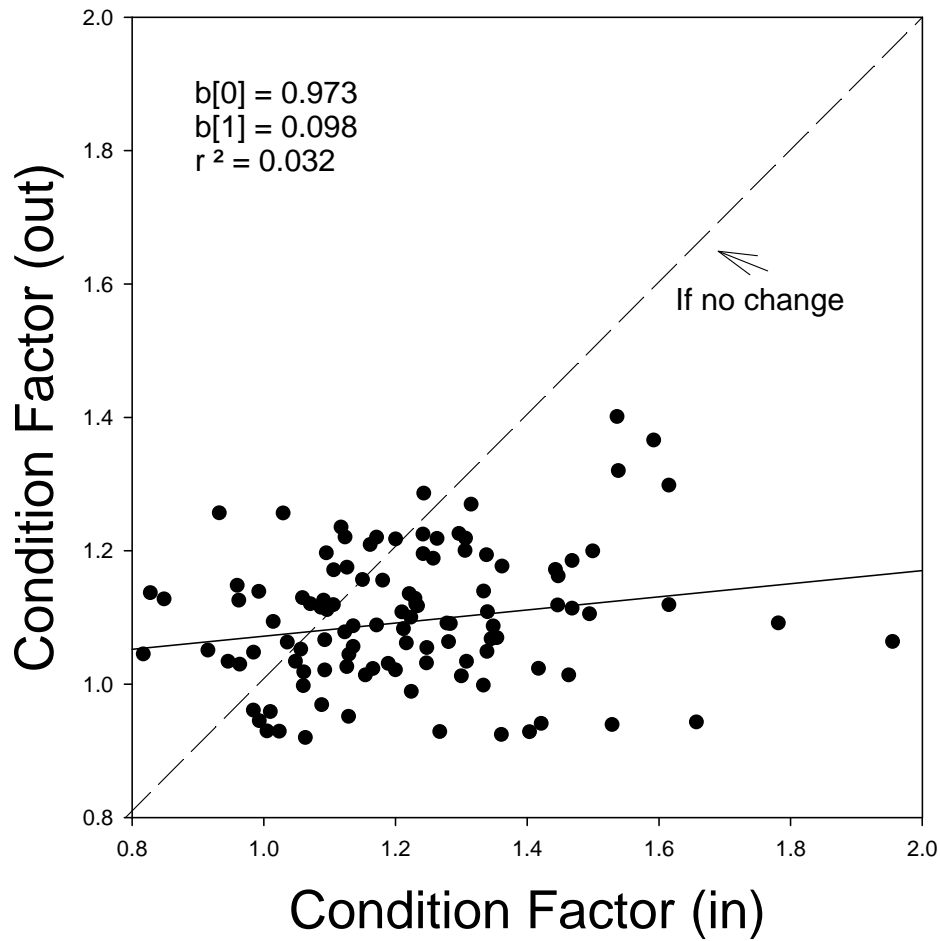


Figure B-16: The Condition of Trout in the LSR Became Much More Uniform Than That Seen at the Time of Release

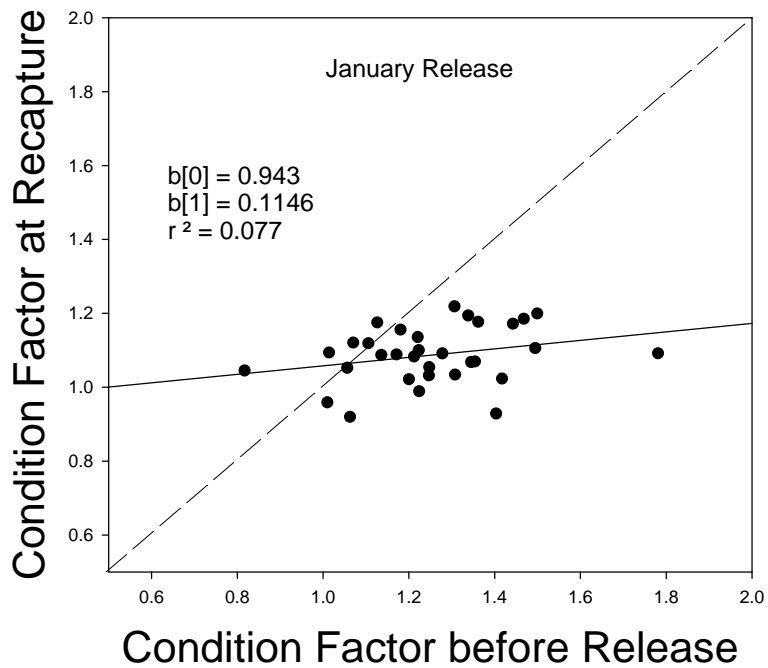
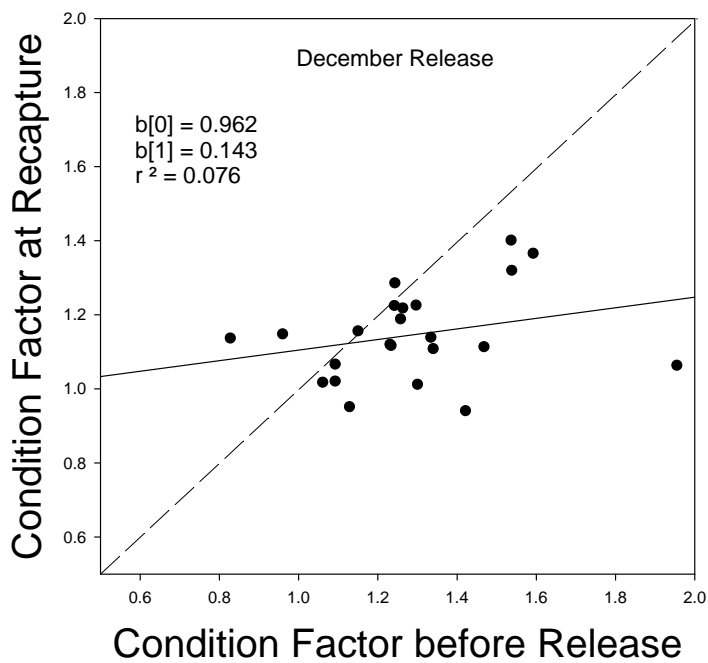


Figure B-17a: Condition Factor Change for December and January Releases

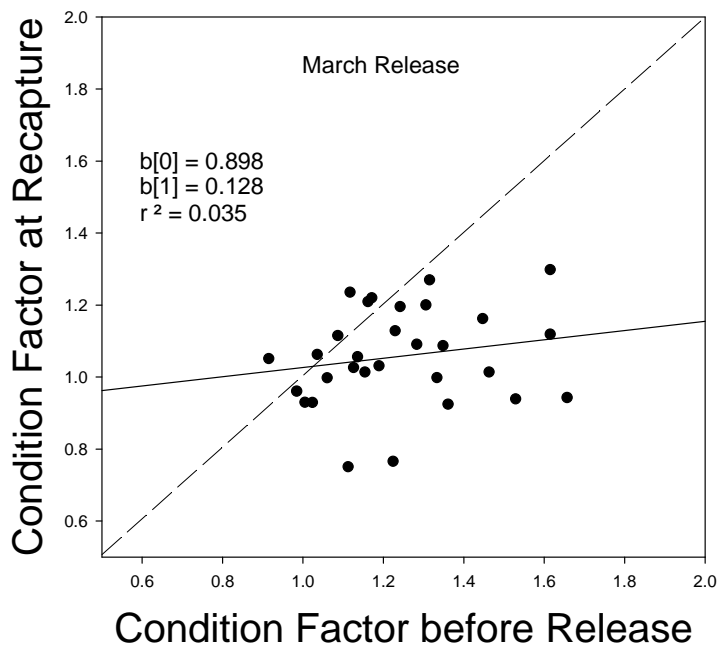
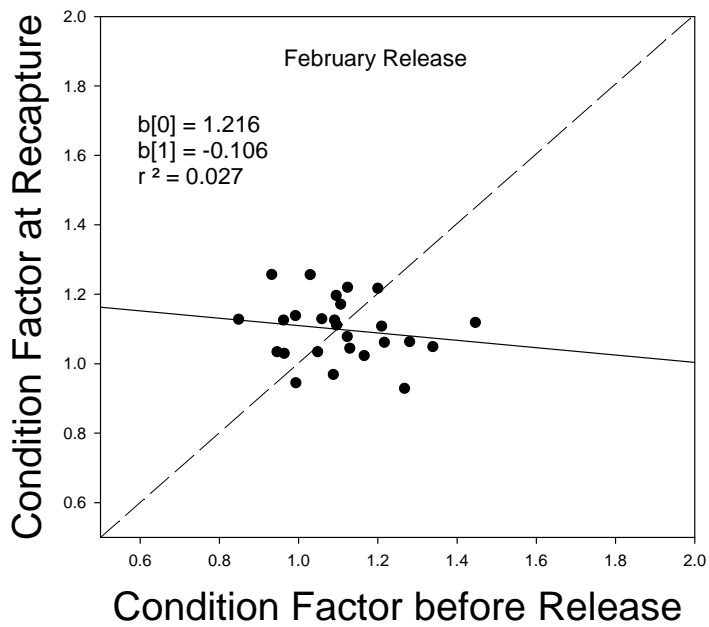


Figure B-17b: Condition Factor Change for January and March Releases

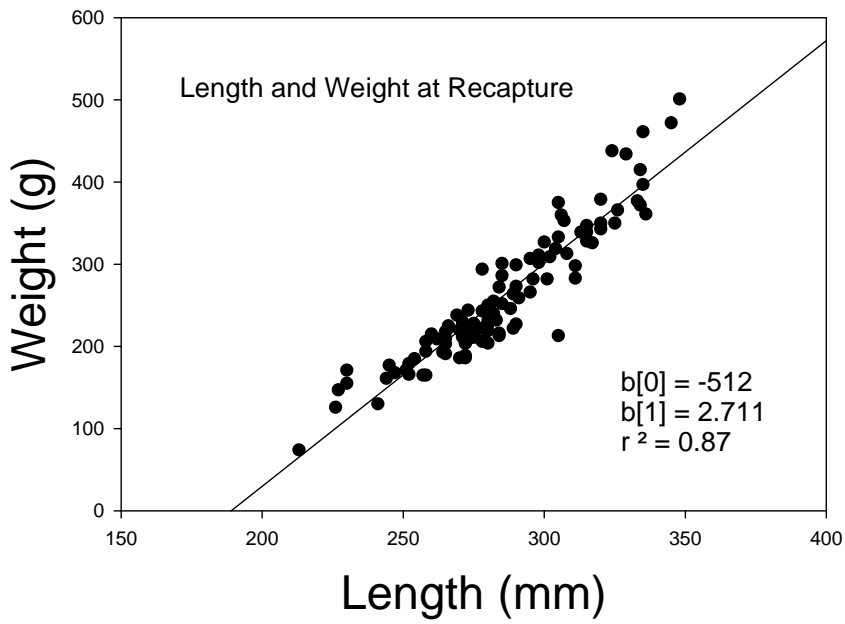
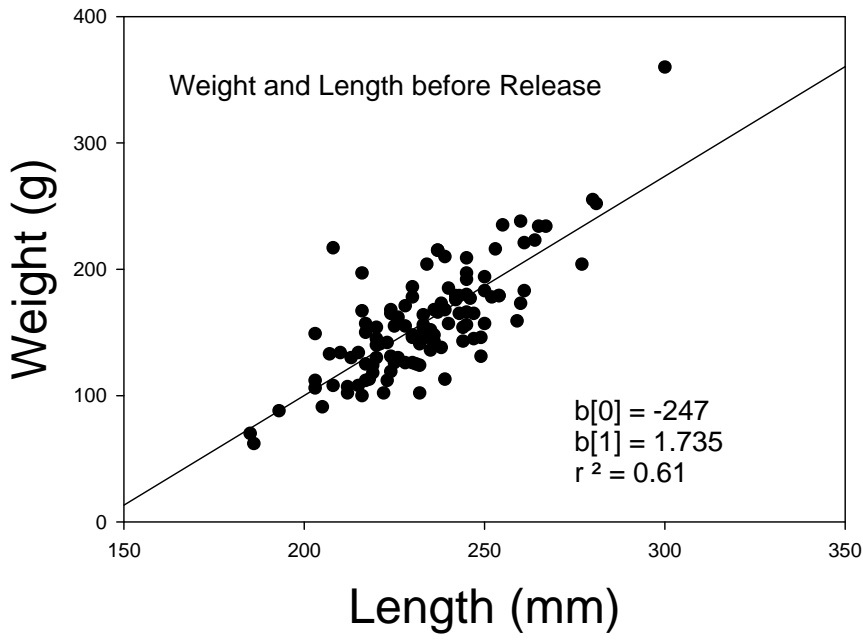


Figure B-18: Illustrating the Increased Uniformity of Trout Condition Following Release into the LSR

Condition Factor (in) vs. Travel in Stream

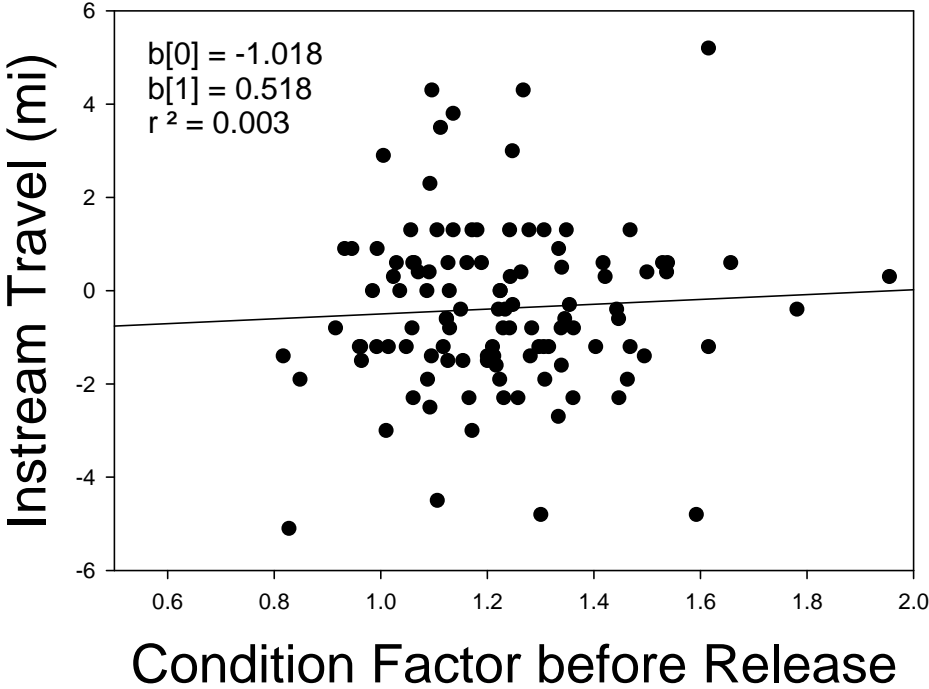


Figure B-19: There was No Significant Effect of Initial Condition Factor on the Tendency of Fish to Move Up or Downstream Following Release

Growth Rate vs. Days in Stream

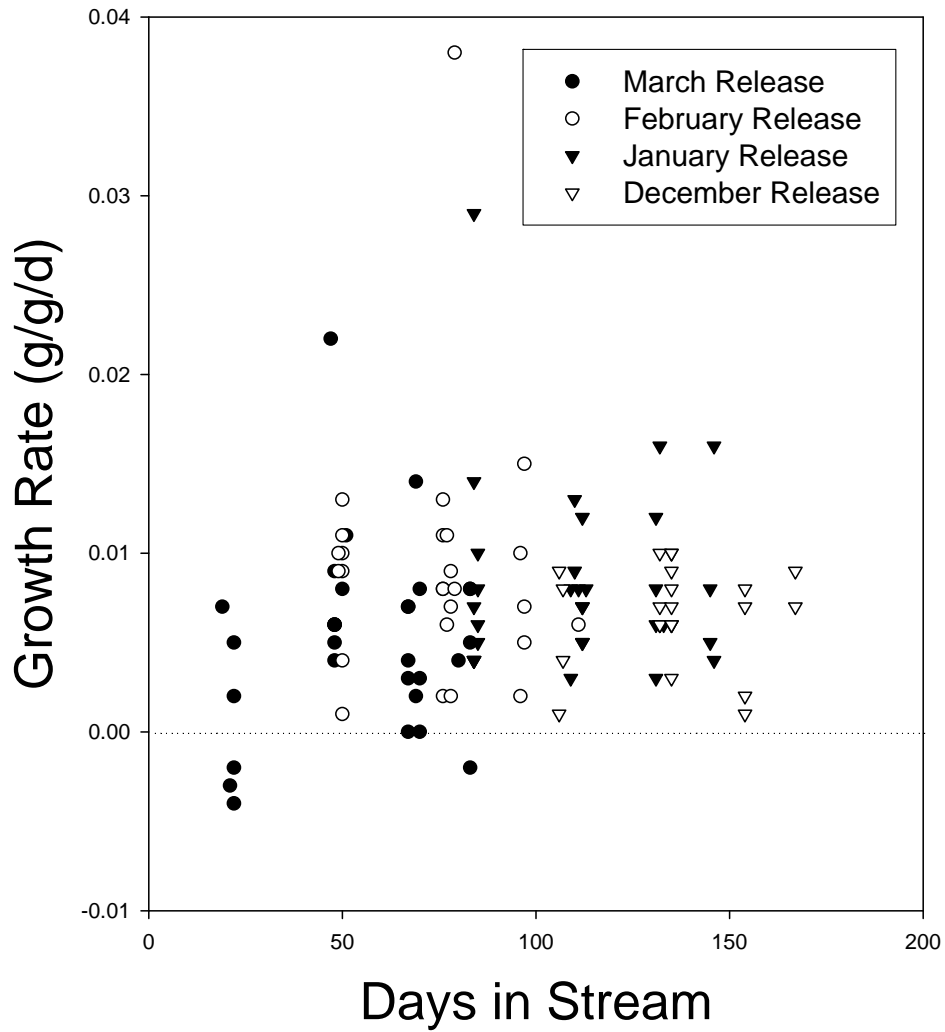


Figure B-20: There was No Appreciable Effect of Residency Duration on the Growth of Fish in the LSR

Length Frequency Distribuion

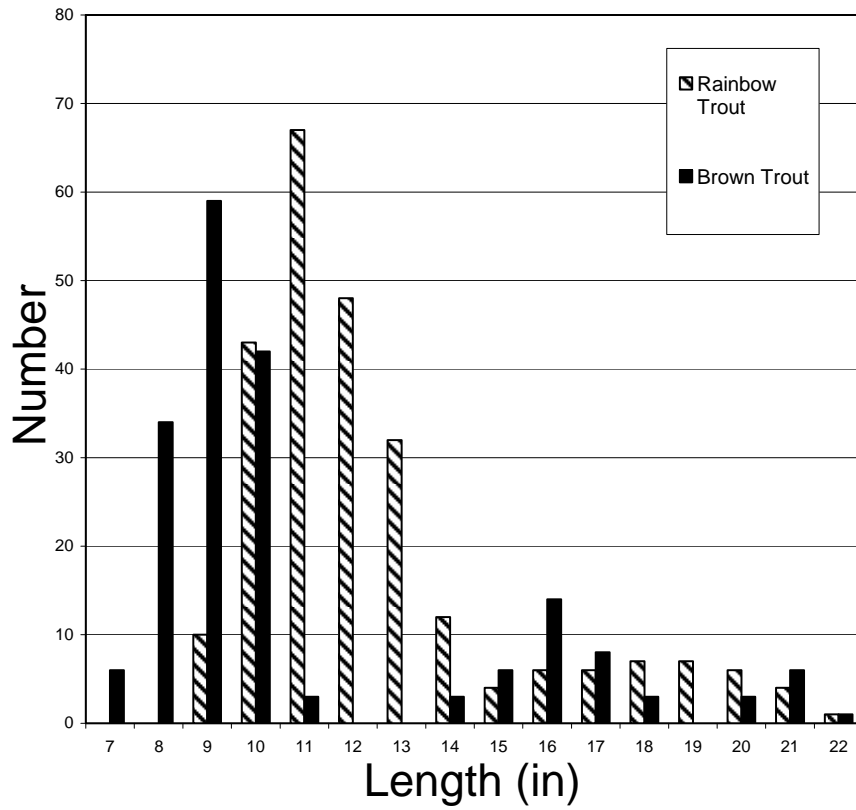


Figure B-21: Length Frequency Distribution of All Brown and Rainbow Trout Collected from the Lower Saluda River, April – June 2003

Alison Guth

From: Alison Guth
Sent: Friday, June 05, 2009 3:51 PM
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Subject: 4-13-09 draft meeting notes

Hello all,

Attached are the draft meeting notes from the 4-13-09 Lake and Land Management Settlement Agreement Meeting. If you have any comments or changes please provide them to me by June 19th. Thanks and have a great weekend. Alison



2009-4-13 draft
Meeting Minute...

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Alison Guth

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Sent: Friday, June 05, 2009 2:22 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: 4-3-09 draft Meeting Notes

Hello All,

Attached are the draft meeting notes from the April 3, 2009 water quality meeting. Please provide any comments on these notes back by June 19. Thanks, Alison



2009-4-3 draft
Meeting Minutes...

Alison Guth

Licensing Coordinator

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Alison Guth

From: Shane Boring
Sent: Friday, June 05, 2009 11:57 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
Subject: Saluda Relicense: Update Trout Program

Dear RCG Members:

In preparation for next week's Fish and Wildlife meeting, here the updated version of the Lower Saluda Trout Program for your review. Have a great weekend and do not hesitate to call with questions.

Shane



trout program draft
UPDATED 6-...

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

C. Shane Boring
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Fax: (803)462 - 5619

Alison Guth

From: Alison Guth
Sent: Thursday, June 04, 2009 4:38 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: 11th and 12th Meetings

Hello All,

I have been able to secure the Lake Murray Training Center for our meetings next week on the 11th and the 12th. Please let me know by Monday if you intend on coming to these meetings. Thanks! Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

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Alison Guth

From: Shane Boring
Sent: Wednesday, June 03, 2009 10:29 PM
To: Amanda Hill (amanda_hill@fws.gov)
Subject: Saluda Mussel Program

Hi Amanda,

Thanks for heading up the efforts to compile the agency interests regarding a mussel program for Saluda. SCE&G staff have a few questions regarding the proposal (see attached document), which we would like to discuss at your earliest convenience. Would you be available for a brief conference call prior to our meetings next week to discuss some of these issues, possibly Friday of this week or Monday or Tuesday of next week? Since we're dealing with mussels, it might also be a good idea to see if Lora Zimmerman could join us. Thanks again and please don't hesitate to call with questions.

Shane



Response to
FWS proposed mus

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

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Environmental Scientist
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The following are items for discussion as related to the USFWS proposed mussel program.

I. Additional Surveys:

USFWS requested the following:

- We recommend additional surveys in Lake Murray to further identify areas containing the Savannah liliput (*Toxolasma pullus*). This mussel is a federal species of concern and is proposed for listing under the Endangered Species Act. We also have been informed that *Toxolasma parvis* has been identified within Lake Murray and/or tributaries. This species is from the Mississippi River drainage and is not endemic to the Atlantic slope drainages. We have concerns that this species could compete with *Toxolasma pullus*. Surveys should be conducted for this species to identify its location and abundance.

SCE&G Questions about the requested proposed additional survey:

1. The language in the study proposal appears to describe that the specie is already going to be listed as endangered, will the study keep the specie from becoming listed? How is this data going to be used? If the study is conducted and the data provided to USFWS, will there be further action required by SCE&G?
2. A survey was already conducted during relicensing, why is it necessary to repeat the work? Has or will a management plan be prepared by the USFWS for this mussel? Is and when will it be made available to SCE&G? Shouldn't any efforts be consistent with a recovery strategy or management plan? We recommend that a survey be conducted once you have a management plan.
3. How is the introduction of *Toxolasma parvis* a project operations related issue?
4. Please explain what we are mitigating for with this study and how collection of this information may benefit the species in question. We believe we are mitigating for impacts of project operations by operating to the new guide curve (i.e., to minimize stranding) and significantly reducing reservoir level fluctuations.

II. Caged mussel experiments

USFWS requested the following:

- Caged Mussels should be placed in the 1) Broad River above the confluence with the LSR, 2) in the confluence area, 3) in the Congaree River on the Saluda River side and on the Broad River side below the confluence and further downstream. The objective of this study is to determine the extent downstream

that mussels are susceptible to the cold water in terms of survivability. The Broad River mussels are to be used as a control.

SCE&G Concern:

We have discussed the concept of caged mussel experiments with John Alderman, who expressed concern that sediment could affect a caged experiment. John was concerned that cages would need to be constantly tended and that may still not be enough to prevent silting in of cages (since the mussels cannot move as they normally would). Our biggest concern with this approach is the numerous variables affecting the survivability of the caged mussels. The mussels could die from too much sediment burying them and it could appear related to project operations.

III. Temperature shock study

USFWS requested the following:

- One theory to the absence of mussels in the LSR and the Saluda River side of the Congaree River is that the mussels are “shocked” by sudden surges of cold water associated with large releases from the dam. The increase of the minimum flows with the new license flow regime may actually protect the mussels from such shocks of colder water. Dr. Price has recommended a laboratory experiment in a controlled setting to investigate the effects of cold water shock.

SCE&G Concern:

Our biggest concern with the temperature shock study has to do with whether you believe the flow regime will be changed based on the results of this study? We believe that our surveys conducted during relicensing, as well as other existing data, suggest that the cold water is one of the limiting factors in preventing significant mussel populations from establishing on the Saluda side of the Congaree River. Therefore, why should we fund an additional study to prove this? Further, we believe that the additional surveys proposed in the first bullet under Additional Studies will provide us with the information needed to determine where the cold water impacts on the mussels occur.

IV. Habitat evaluation

USFWS requested the following:

- Based on the results of the surveys and caged mussel experiments, suitable habitats will be identified for mussel restoration. The Technical Mussel Working Committee will determine potential methods for mussel restoration. These could include, 1) identifying an area of river to stock mussels, or 2) engineering

techniques such as a small weir in the confluence area to expedite mixing of the Saluda and Broad waters.

SCE&G Concern:

Our biggest concern with the Habitat Evaluation section is the suggestion to build a weir in a navigable waterway. The Granby Dam currently serves as a weir. It is our understanding that this dam has been proposed for removal as part of the Santee Cooper relicensing? Further, the shoals at the confluence currently serve as natural weirs. There are several groups that have concerns about the River Alliance trying to build a walking bridge in the river at the confluence. They could have the same issues with other structures in a navigable waterway. We would much rather have our money be spent benefiting the resource and not tied up in litigation.

SCE&G alternative proposal for discussion:

We would like to suggest that we focus efforts on increasing the populations where habitat is suitable. A proposed alternative to Sections II, III, and IV would be to put money and in-kind services toward a restoration project instead of research. We propose conducting a survey as identified in the first bullet under Additional Studies while simultaneously collecting the initial brood stock for your propagation facility once it is up and running. SCE&G would assist USFWS in brood stock and host fish collection on an annual basis for 5 years. We also propose conducting a second survey, 10 years after the first survey, similar to the first bullet under Additional Surveys to determine effectiveness of the stocking program.

Alison Guth

From: Dave Anderson
Sent: Wednesday, June 03, 2009 2:58 PM
To: Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (jpitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Leao; Marty Phillips; Matthew Rice ; Mike Waddell; Miriam Atria; Norman Ferris; Patrick Moore ; Randy Mahan; Regis Parsons (Rparsons12@windstream.net); Richard Mikell; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tim Vinson; Tommy Boozer; Tony Bebber; Van Hoffman
Subject: Recreation Plan Documents

Recreation RCG Members,

As you have seen, Alison has distributed the draft Settlement Agreement that included a final Recreation Plan. I wanted to send out a couple of documents to the RCG to facilitate your review of the Recreation Plan.

The first document is the track changes version of the Recreation Plan. All of the changes indicated are reflected in the final version of the Plan.

The second document is the comments received on the RCG draft and SCE&G's response. This is in the Recreation Plan, but it's a little buried in Appendix B.

The final document is an example of printing Appendix B with two pages per sheet. If you have a lot of heartache with this, please let me know, but it significantly reduces the number of pages in the complete Plan (by about 100 pages of meeting notes).

I would also like to point out that the web page that Alison sent around contains a link to Appendix F (the as built and concept design drawings). If you have any comments on these, please get them to me by June 17th so we have time to turn around final drawings before the final Settlement Agreement is ready.

Let me know if have any questions.

Dave



Saluda Project
Recreation Plan...



Compiled RCG
Version Recreatio...



Two Pages per
Sheet Example.pd...

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT (FERC NO. 516)

RECREATION PLAN

FINAL

Deleted: RCG DRAFT

JULY 2009

Deleted: MARCH

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA
ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT
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**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

RECREATION PLAN

FINAL

Deleted: DRAFT

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**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

RECREATION PLAN

FINAL

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1.0 PROJECT DESCRIPTION

The Saluda Hydroelectric Project (FERC No. 516), which includes Lake Murray and portions of the lower Saluda River, is an existing hydroelectric facility owned and operated by South Carolina Electric & Gas Company (SCE&G). The Project is located in Richland, Lexington, Saluda, and Newberry Counties, SC. The Project impounds the 48,000 acre Lake Murray, a popular recreation area for boating and fishing, having numerous public access sites and supporting several popular recreational sport fisheries. The lower Saluda River, below the Saluda Dam, supports an active recreational fishery and offers a range of paddling experiences from flat water to whitewater with class II to class V rapids.

1.1 Regional Setting

Lake Murray, the lower Saluda River, and the four surrounding counties (Richland, Lexington, Saluda, and Newberry) make up one complete tourism region defined as the Capital City/Lake Murray Country region by the South Carolina Department of Parks, Recreation and Tourism (SCPRT). This region of the state is home to many state, local, and municipal parks which provide a wide range of water and land-based recreation opportunities including hiking, biking, swimming, boating, and angling.

The region surrounding the Saluda Hydro Project includes portions of the Sumter National Forest, Sesquicentennial State Park, Harbison State Forest, and Congaree National Park. Numerous trails, game management sites, and state heritage preserves are also located in close proximity to the Project. In addition, several regional, county, municipal, and local parks are located within close proximity to the Project or provide access to project waters.

1.2 Lake Murray

Lake Murray supports an active recreational fishery and is an important boating resource. The lake is host to numerous national and local fishing tournaments annually, and is stocked with striped bass each spring by the South Carolina Department of Natural Resources (SCDNR). Surplus bluegill and largemouth bass reared at the SCDNR hatcheries are occasionally stocked as well. The lake supports substantial boating activity, which includes power boats, canoes and kayaks, and sail boats. Lake Murray is the site of 6-8 regattas annually (Mead and Hunt, 2002). In addition, the lake is used as a focal point for holiday and tourist events such as the annual Lake Murray Poker Run and the Independence Day celebrations. There are 14 public access sites on Lake Murray owned by SCE&G. All but two, Dreher Island State Recreation Area and Larry L. Koon Boat Landing, are managed by SCE&G.

1.3 Lower Saluda River

The lower Saluda River extends 11 miles from the outflow of the Saluda Dam to its confluence with the Broad River to form the Congaree River near downtown Columbia. Approximately 8 miles of the lower Saluda River is within the project boundary line (PBL). Similar to the Lake, the lower Saluda River also supports an active recreational fishery. The cold waters of the river support a trout and striped bass fishery and offer a range of paddling experiences from flat water to whitewater with class II to V rapids. Approximately 10 miles of the river, from approximately one mile downstream of the Dam to the confluence with the Broad River, is designated by the South Carolina General Assembly (SC Code of Laws Title 49, Chapter 29 South Carolina Scenic Rivers Act) as a State Scenic River (SC Legislature, 1989). Segments of both the lower Saluda River and the Congaree River are also listed on the Nationwide Rivers Inventory (NRI) by the National Park Service (NPS) as possessing “outstandingly remarkable” natural or cultural values. The lower Saluda River from the dam to RM 3 is so designated because it “affords scenic wilderness experience in urban areas; diversified flora and fauna” (NPS, 2007). There are three formal public access sites owned by SCE&G on the lower Saluda River and two, Saluda Shoals Park and James R. Metts Landing, are managed by the Irmo-Chapin Recreation Commission (ICRC) and the Lexington County Recreation and Aging Commission (LCRAC), respectively.

2.0 DATA COLLECTION METHODS

As part of the Saluda Hydro Project relicensing process, several studies were undertaken during 2006 and 2007. These studies provide information and support conclusions and recommendations made in this Recreation Plan. A variety of data collection methodologies were employed during the performance of these studies. They included the following: vehicle counts, on-site interviews, literature searches, GIS and spatial analysis, carrying capacity analysis, level logger deployment, and HEC-RAS modeling, among other methods. The following are descriptions of the methodologies employed for each effort.

2.1 2006 Saluda Hydro Project Recreation Assessment

The purpose of the 2006 Saluda Hydro Project Recreation Assessment was to evaluate existing and future recreational use, opportunities, and needs for the Saluda Project (Kleinschmidt, 2007a). Specifically, the goals of this study were to characterize existing recreational use of SCE&G's recreation sites on Lake Murray and the lower Saluda River and examine future recreational needs relating to public recreation sites. Primary data collection included site inventories and assessments, counts of vehicles at recreation sites, user surveys, and a waterfowl focus group. Secondary data collection included information from the SCPRT, aerial photographs of boating use on the lake, and available relevant literature. Analyses included current recreation use estimates derived from both vehicle counts and people per vehicle information provided in the user surveys, future recreation use estimates calculated using population growth rates as a proxy for future recreation participation rates, and recreation site capacities using parking as the determinate. Recreation needs to accommodate existing and future use were based on site inventories, conditions, capacity assessments, use estimates and projections, user preferences and opinions, and consultation with relicensing stakeholders.

2.2 2007 Saluda Hydro Project Spring Use Addendum

In comments received on the draft 2006 Saluda Hydro Project Recreation Assessment described above, the SCPRT, SCDNR, and the Saluda River Chapter of Trout Unlimited (SRCTU) requested information concerning recreational use during winter/spring (January – May), particularly concerning specific user groups whom they expected to utilize lower Saluda River sites outside of the sampling frame of the 2006 Saluda Hydro Project Recreation Assessment. Therefore, the goals of the 2007 Saluda Hydro Project Spring Use Addendum were to collect additional information concerning spring use on Lake Murray and the lower Saluda River and to identify needs of selected recreational user groups for facilities on the lower Saluda River to support spring use (Kleinschmidt, 2007b). Primary data collection entailed facilitated meetings and personal interviews of recreationists who use recreation sites on the lower Saluda River. Secondary data collection included the 2006 Saluda Hydro Project Recreation Assessment, the Lower Saluda Corridor Plan and Update, and other relevant literature. As with the Recreation Assessment, analysis included calculating current recreation use estimates by applying the percent of total annual use attributable to the months of January and May at Dreher Island State Recreation Area and Saluda Shoals Park to Lake Murray and lower Saluda River recreation site use estimates for Memorial Day through September 30, respectively. Future recreation use estimates were calculated using population growth rates as a proxy for future recreation participation rates. Perceptions of site conditions and needs on the lower Saluda River were obtained from a variety of sources including a literature review, trout angler focus group discussions, and on-site interviews.

2.3 2007 Saluda Hydro Project Boating Density Assessment

The goals of the 2007 Saluda Hydro Project Boating Density Assessment were to identify the area available for recreational boating on Lake Murray by lake segment, to assess boat densities occurring under normal (weekend) and peak (holiday) use conditions, and to examine whether recreational boating use of Lake Murray is currently above, below, or at a desirable, or optimal, level (Kleinschmidt, 2007c). The methodology employed for this effort was derived from standard accepted practices

published in the Bureau of Outdoor Recreation (1977) *Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity and Management of Aquatic Recreation Resources* by Warren and Rea (1989). The data used for this study included an examination of existing aerial photographs (The Louis Berger Group, 2002) of recreational boating at the Project and information collected from the survey research portion of the 2006 Saluda Hydro Project Recreation Assessment. Combined, the information provided the inputs necessary to assess recreational boating densities on Lake Murray.

2.4 2007 Saluda Hydro Project Downstream Recreation Flow Assessment

The 2007 Saluda Hydro Project Downstream Recreation Flow Assessment examined downstream flows for the lower Saluda River for various types of recreation at different river reaches under different flow conditions (Kleinschmidt, 2008). The goals of the study included characterizing currently available recreation opportunities on the lower Saluda River, understanding the “rate of change” of the instream conditions of the lower Saluda River at various flows along various river reaches, and identifying potential public safety issues associated with lower Saluda River flows. This study undertook a three-phase approach. Phase I involved a literature review and desktop analysis of the recreation opportunities, patterns of use, physical characteristics, and hydrology of the lower Saluda River. Phase II involved a focus group, structured surveys and on-site reconnaissance of an expert panel of experienced recreationists to assess existing opportunities and the feasibility and potential quality of particular flow ranges for on-water activities. Phase III involved the deployment of water level data loggers at various predetermined intervals along the lower Saluda River. A HEC-RAS model was developed utilizing the level logger data for the purposes of determining maximum stages and rates of change (in feet) for scheduled flow events under simulated operating scenarios.

3.0 SITE DESCRIPTIONS, USE ESTIMATES, BOAT DENSITIES, AND RECREATIONAL FLOW RECOMMENDATIONS

The following is a summary of the results of the studies related to recreation performed in support of this plan. Detailed results can be found in respective reports (Kleinschmidt, 2007a; 2007b, 2007c; 2008).

3.1 Recreation Site Descriptions

As of 2007, within the project boundary, there are approximately 130 public, commercial, and private recreation sites¹ supporting such facilities as boat launches, marinas, boat slips, wet and dry storage, campgrounds, picnic areas, beaches, fishing areas and piers, trails, playgrounds, and other facilities. There are 17 “Existing Recreation Sites” owned by SCE&G that function primarily as lake or river access, providing boat launches, shoreline angling, picnicking, and swimming areas. SCE&G has also set aside 10 additional sites that are designated as “Existing Future Recreation Sites.” One of these “Existing Future Recreation Sites,” Bundrick Island, is currently used by boaters as an informal site; there is no road access to the site. The other nine “Existing Future Recreation Sites” are available to the public, but no facilities or amenities are provided on these sites. Collectively, the “Existing Recreation Sites” provide two designated swimming areas, 19 boat launches or carry-in launches, 19 courtesy or fishing piers, and one campground. Restroom facilities are provided at nine of the 20 sites, and picnic tables are provided at 12 sites (Table 3-1). In addition to these sites, there are two overnight anchoring areas required by FERC Order 107 FERC ¶ 62,273 to be designated as Special Recreation Areas: Two Bird Cove and Hurricane Hole Cove. Also, there are 62 islands on Lake Murray available for public recreation use, including primitive camping. Locations of “Existing Recreation Sites,” “Existing Future Recreation Sites,” private sites, and commercial sites on Lake Murray and the lower Saluda River can be found in [Appendix A](#). The following sections concentrate on the 17

¹ For purposes of this Recreation Plan, public recreation sites refer to sites that are open to the public without discrimination, and which are operated by federal, state, and local agencies or SCE&G. A commercial site refers to a site operated by a business for profit. A private site refers to a site open only to specific individuals via membership or residency requirements.

“Existing Recreation Sites,” as well as Bundrick Island and two informal access sites on the lower Saluda River that are owned by SCE&G but outside the PBL (Mill Race)².

² Although the Mill Race sites are located outside the PBL, they were included in the recreation studies performed during the Saluda Hydro Relicensing Process in order to determine Project effects on recreational use of these sites.

Table 3-1: Existing Recreation Sites and Existing Future Recreation Sites at the Saluda Hydro Project (2007)

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NAME	SITE NUMBER	TYPE OF FACILITY	Acres	# of Picnic Tables	# of Grills	# of Firepits/Rings	# of Boat Pump Outs	# of Trails	# of Shelters	# of Designated Swimming Areas	# of Stores	# of RV Dumping Stations	# of Potable Water	# of Boat Fuel Pumps	# of Trash Cans	# of Docks	# of Playgrounds	# of Showers	# of Concessions	# of Wet Slips	# of Parking Spaces	# of ADA Spaces	# of Flush Toilets	# of ADA Toilets	# of Portable Toilets	# of RV Sites	# of Cabin Sites	# of Tent Sites	# of Primitive Sites	# of Hard Surfaced Boat Launches	# of Gravel Boat Launches	# of Unimproved Boat Launches	# of Carry-in Launches	Total # of Boat Launch Lanes	# of Courtesy/Fishing Docks	# of ADA Compliant Courtesy/Fishing Docks	
LAKE MURRAY SITES																																					
Park Site - Lexington Side	1-01	Picnic Area	17.9	80	45	2	0	27	1	0	0	2	0	12	0	0	0	1		343	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Larry L. Koon Boat Landing	1-02	Launch Ramp	1.8	4	2	1	0	1	0	0	0	0	0	1	1	0	0	0		49	2	2	0	0	0	0	0	0	0	1	0	0	0	2	1	1	
Shull Island	1-02A	Future	22.4																																		
Shull Island	1-02B	Launch Ramp	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		8	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
Murray Shores	1-03	Launch Ramp	1.6	7	3	1	0	1	0	0	0	0	0	1	1	0	0	0		50	0	0	0	2	0	0	0	0	0	1	0	0	0	2	1	0	
River Bend	1-04	Launch Ramp	11.6	5	1	6	0	1	0	0	0	0	0	2	2	0	0	0		84	0	2	2	0	0	0	0	0	1	0	0	0	2	2	0		
Sunset	1-05	Launch Ramp	2.3	1	0	2	0	0	0	0	0	0	0	2	2	0	0	0		28	0	0	0	2	0	0	0	0	1	0	0	0	1	2	0		
Simpson's Ferry	1-05A	Future	11.6																																		
Rocky Point	1-06	Launch Ramp	1.7	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	
Long Pine	1-06A	Future	31.4																																		
Hilton	1-07	Launch Ramp	4.4	5	2	0	0	2	0	0	0	0	0	3	2	0	0	0		37	2	2	0	0	0	0	0	0	1	0	0	0	2	2	0		
Hilton	1-07A	Future	27.9																																		
Dam Site - Irmo Side	1-08	Picnic Area/ Launch Ramp	6.8	23	13	3	0	7	0	0	0	0	0	7	3	0	0	1		181	3	2	2	0	0	0	0	0	0	1	0	0	0	3	3	1	
Dreher Island State Recreation Area	1-11	Campground/ Launch Ramp	348.0	219	133	0	2	14	0	1	2	2	1	13	4	3	1	0	30		619	14	22	4	0	97	5	15	5	3	0	0	0	6	4	4	
Macedonia Church	1-12	Picnic Area	4.8	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0		12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Higgins Bridge	1-13	Launch Ramp	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		8	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0		
Kempson Bridge	1-14	Launch Ramp	2.9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0		16	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0		
Water Treatment Plant	1-16	Future	4.3																																		
Stone Mountain	1-17	Future	26.5																																		
Cloud's Creek	1-18	Future	3.0																																		
Big Creek	1-19	Future	22.3																																		
Little Saluda Point	1-20	Future	15.4																																		
Bundrick Island	1-21	Future/Informal Site	87.9	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lake Murray Estates Park	1-22	Launch Ramp	7.7	2	2	0	0	0	0	0	0	0	0	1	2	0	0	0		22	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	
Two Bird Cove ^a	1-23	Special Recreation Area																																			

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NAME	SITE NUMBER	TYPE OF FACILITY	Acres	# of Picnic Tables	# of Grills	# of Firepits/Rings	# of Boat Pump Outs	# of Trails	# of Shelters	# of Designated Swimming Areas	# of Stores	# of RV Dumping Stations	# of Potable Water	# of Boat Fuel Pumps	# of Trash Cans	# of Docks	# of Playgrounds	# of Showers	# of Concessions	# of Wet Slips	# of Parking Spaces	# of ADA Spaces	# of Flush Toilets	# of ADA Toilets	# of Portable Toilets	# of RV Sites	# of Cabin Sites	# of Tent Sites	# of Primitive Sites	# of Hard Surfaced Boat Launches	# of Gravel Boat Launches	# of Unimproved Boat Launches	# of Carry-in Launches	Total # of Boat Launch Lanes	# of Courtesy/Fishing Docks	# of ADA Compliant Courtesy/Fishing Docks				
Hurricane Hole Cove ^a	1-24	Special Recreation Area																																						
Islands ^b		Informal	100.0																																					
LOWER SALUDA RIVER SITES																																								
Saluda Shoals Park	1-09	Picnic Area/Launch Ramp	240.0	50	6	0	0	4	4	1	0	0	0	0	17	0	2	0	1		463	18	6	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
James R. Metts Landing	1-10	Launch Ramp	1.0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0		25	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Gardendale	1-15	Launch Ramp	4.7	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0		40	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

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^a SCE&G is proposing to remove the designation of "Special Recreation Area" from these two sites and remove them from the Recreation Plan.

^b There are 62 SCE&G-owned islands on Lake Murray that are available for public recreation use, including primitive camping. These islands have not been assigned a Site Number as there is no intention of developing the islands into formal recreation sites.

3.1.1 Lake Murray

SCE&G owns 14 “Existing Recreation Sites” on Lake Murray and has set aside 62 SCE&G-owned islands in Lake Murray as undeveloped, natural areas that are available for public recreation. Of the 14 “Existing Recreation Sites,” SCE&G operates 12 of them, and leases the remaining two sites, Dreher Island State Recreation Area and Larry L. Koon Boat Landing, to others for use as public recreation areas. With the exception of Dreher Island State Recreation Area and River Bend, all sites are operated for day-use only.

3.1.2 Lower Saluda River

There are several formal and informal public access sites on the lower Saluda River, providing a range of water- and land-based recreation opportunities. Boating access for motorized water-craft is limited to the two most upstream access sites, Saluda Shoals Park and James R. Metts Landing, while carry-in access is available at these sites plus Gardendale and Mill Race A (upstream of Riverbanks Zoo and outside of the project boundary) and Mill Race B (downstream of Riverbanks Zoo and outside of the project boundary). Shoreline access for angling and swimming, sunbathing, sightseeing, and/or picnicking is available at all public access sites on the lower Saluda River.

3.2 Existing and Future Recreation Use Estimates

Estimated and future recreation use estimates are compiled from two sources: the Recreation Assessment Study Report (Kleinschmidt, 2007a) and the Spring Use Addendum Study Report (Kleinschmidt, 2007b).

3.2.1 Existing Recreation Use

The Saluda Hydro Project supported approximately 634,000 recreation days at “Existing Recreation Sites” (plus Bundrick Island but excluding Two Bird Cove, Hurricane Hole Cove, and the islands) within the project boundary during

the 2006 peak recreation season, defined as April 1st through September 30th in the 2003 FERC Form 80 Report on Recreational Resources (Table 3-2). Lake Murray experienced approximately 463,000 recreation days during this time period (73 percent of total use), while the lower Saluda River (excluding Mill Race) experienced a total of approximately 172,000 recreation days during the peak recreation season (27 percent of total use). Weekday use accounted for 49 percent of total use; 40 percent of total use occurred on weekends; and 11 percent of total use occurs on holidays. June and July account for the majority (40 percent) of total use during this time period. Total use reported in the 2003 FERC Form 80 was 1,250,000 recreation days annually, while the 1997 FERC Form 80 reported 1,200,000 recreation days annually at the Project (SCE&G, 1997; SCE&G, 2003).

The most used “Existing Recreation Sites” on Lake Murray (including Bundrick Island) were Dreher Island State Recreation Area (116,670 recreation days or 25 percent of total use), and Bundrick Island (94,570 recreation days or 20 percent of total use), Dam Site - Irmo Side (54,460 recreation days or 12 percent of total use), and Larry L. Koon Boat Landing (54,080 recreation days or 12 percent of total use). The sites with the least amount of use, equal to or less than 1 percent of total use, were Rocky Point (330 recreation days), Higgins Bridge (3,090 recreation days), and Kempson Bridge (5,620 recreation days).

Because all of the “Existing Recreation Sites” provide access to Lake Murray, it is not surprising that the majority of activities that individuals participated in at these sites were water-based recreation activities (80 percent). Fishing, from either a boat or the bank, was by far the most participated in activity by users of Lake Murray sites (53 percent of total use). After fishing, motor boating (14 percent of total use), swimming (8 percent of total use), and picnicking (5 percent of total use) were popular activities. These sites also supported limited land-based activities such as walking/hiking, sightseeing, and picnicking.

Table 3-2: Estimate of Recreation Days for Saluda Hydro Project Existing Recreation Sites (plus Bundrick Island) by Month and Day Type, April 1 through September 30, 2006

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	Lake Murray Sites	Lower Saluda River Sites	Mill Race Sites ^a	Total
April				
Weekdays	42,830	17,400	5,570	65,800
Weekends	35,230	6,390	2,880	44,500
Holidays	0	0	0	0
Total	78,060	23,790	8,450	110,300
May				
Weekdays	31,100	16,180	3,190	50,470
Weekends	37,410	5,720	4,600	47,730
Holidays	20,220	4,430	1,570	26,220
Total	88,730	26,330	9,360	124,420
June				
Weekdays	52,800	23,850	13,390	90,040
Weekends	43,440	8,760	6,910	59,110
Holidays	0	0	0	0
Total	96,240	32,610	20,300	149,150
July				
Weekdays	34,300	22,780	4,200	61,280
Weekends	29,860	11,390	5,530	46,780
Holidays	20,950	6,500	1,690	29,140
Total	85,110	40,670	11,420	137,200
August				
Weekdays	26,170	8,180	3,360	37,710
Weekends	30,270	13,350	2,790	46,410
Holidays	0	0	0	0
Total	56,440	21,530	6,150	84,120
September				
Weekdays	20,310	16,310	1,790	38,410
Weekends	24,430	5,770	2,580	32,780
Holidays	13,210	4,480	880	18,570
Total	57,950	26,560	5,250	89,760
Total				
Weekdays	207,510	104,700	31,500	343,710
Weekends	200,640	51,380	25,290	277,310
Holidays	54,380	15,410	4,140	73,930
TOTAL	462,530	171,490	60,930	694,950

^a Outside the project boundary.

The lower Saluda River supported an estimated 232,420 recreation days total, 171,490 recreation days within the project boundary and roughly 60,930 recreation days outside the project boundary at the Mill Race sites, from April 1st through September 30th, 2006. The most used sites were Saluda Shoals Park (135,050 recreation days or 58 percent of total use on the lower Saluda River), Mill Race B (37,950 recreation days or 16 percent of total use), James R. Metts Landing (24,520 recreation days or 11 percent of total use) and Mill Race A (22,980 recreation days or 10 percent of total use). The site with the least amount of use was Gardendale (11,930 recreation days or 5 percent of total use).

Activities participated in by users of the lower Saluda River sites were varied. About half of the activities that individuals participated in at these sites were water-based recreation activities (51 percent). As with the Lake Murray sites, fishing, either wading or from a boat, pier, or the bank, was the most participated in activity at lower Saluda River sites (21 percent of total use). Canoeing and kayaking, both flatwater and whitewater, comprised 20 percent of total use, making paddling the second most popular activity. Sightseeing/wildlife viewing was the third most popular activity on the lower Saluda River (13 percent of total use), followed by hiking/walking (12 percent of total use).

3.2.2 Future Recreation Use

SCPRT reports that approximately 90 percent of participation in outdoor recreation occurs in an area close to a resident's home for day to day activities (SCPRT, 2002). Activities that require special environments, such as boating and fishing, generally occur within a region of slightly greater proportions around a resident's home, but still nearby to their residence. At the Saluda Hydro Project, a majority of the recreation activity occurring from "Existing Recreation Sites" was attributed to residents of nearby local communities, either shoreline property owners or individuals residing in Columbia, Irmo, Lexington, Gilbert, Newberry, Prosperity and Chapin, and other communities surrounding the lake and the lower Saluda River. A smaller portion of recreational use at the Project was attributed

to a more regional population from the outskirts of Richland, Lexington, Saluda, and Newberry Counties.

Because of the association of locality with recreation participation, population growth is typically a good indicator of future recreational use. Cordell et al. (2004) reports that “[p]opulation has been, is, and will be the major driver of outdoor recreation participation growth in this country.” In fact, between 1960 and 2000, the population of southern states grew more rapidly than any other region in the United States (Cordell and Tarrant, 2002). The population of the counties around the lake (Richland, Newberry, Saluda, and Lexington) increased by 4.1 percent between 2000 and 2005 and is projected to increase by another 24.0 percent by the year 2030 (SCBCB, 2005). For counties surrounding the lower Saluda River – Richland and Lexington – population is expected to increase by 31.3 percent from 2005 to 2030, with Lexington County having the fastest population growth of the area, at 41.6 percent from 2005 to 2030 (SCBCB, 2005). If participation in recreation increases at a similar rate, one can expect to see significant increased demand for recreation opportunities in the future, including at those sites that were estimated to be reaching capacity and, in a few cases, exceeding capacity under current use levels.

Estimated recreation use stemming from “Existing Recreation Sites” (including Bundrick Island) at the Saluda Hydro Project could total almost 784,270 recreation days during the recreation season, April 1st through September 30th in the year 2030 -- an increase of approximately 165,000 recreation days (24 percent) over 2006 levels (Table 3-3). Use of Lake Murray public access sites could increase by roughly 110,000 recreation days by the year 2030; use of lower Saluda River access sites (including Mill Race) could increase by approximately 55,000 recreation days in the same time period. Since this estimate of future recreation days was based on population projections, which will likely change over time, a process has been developed to adjust this plan periodically over the life of the license (see Section 6.2). Applying current outdoor recreation trends and existing public recreation facilities, fishing will likely continue to be the dominant activity at the Project in the year 2030.

Table 3-3: Estimated Future Recreation Days from Existing Recreation Sites (including Bundrick Island) at the Saluda Hydro Project

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	Use Estimates (2006)	Estimated Future Participation				
		2010	2015	2020	2025	2030
Population Growth Rates		4.87%	4.62%	4.37%	4.19%	3.68%
Lake Murray Sites	462,530	485,060	507,460	529,640	551,830	572,140
Lower Saluda River Sites	171,490	179,840	188,150	196,370	204,600	212,130
Mill Race Sites	60,930	63,900	66,850	69,770	72,690	75,370
TOTAL	694,950	728,790	762,460	795,780	829,130	859,640

3.2.3 Adequacy of Existing Recreation Sites to Accommodate Existing and Potential Future Recreational Use

During the 2006 recreation season, the capacities of “Existing Recreation Sites” around the lake and on the lower Saluda River were estimated. “Existing Recreation Sites” at the project were generally well used with several sites reportedly being used at their design capacity, particularly on weekends and holidays³. The current capacity at which public access sites are used was estimated for all sites with the exception of Bundrick Island, which does not have a parking area, and is used mainly by boaters.

Results suggested that Dam Site - Irmo Side, Park Site - Lexington Side, Rocky Point and Dreher Island State Recreation Area on Lake Murray are consistently used within their design capacities, regardless of day type (weekend, weekday or holiday), and could accommodate additional use. Three sites, River Bend, Higgins Bridge, and Kempson Bridge, are currently used at rates approaching capacity, though this trend was only observed on holidays for River Bend and Kempson Bridge.

³ For the purposes of this Plan, sites were considered to be utilized within their design capacities if parking areas were less than 75 percent full on weekends. Use is considered to be approaching capacity if parking areas were between 75 and 99 percent full on weekends. Use is considered to be exceeding capacity if parking areas were greater than 99 percent full on weekends.

The remaining seven sites were observed to be used at rates that regularly meet or exceed their design capacities on some or all day types. Larry L. Koon Boat Landing and Shull Island are used beyond their capacities, regardless of day type. Lake Murray Estates Park is utilized at rates that exceed its capacity on weekends, and use exceeds capacity on weekends and holidays at Sunset and Hilton. Capacity is exceeded on holidays at Murray Shores but this site is consistently used within its design capacity on weekdays and weekends. Use at Macedonia Church is considered to exceed design capacity on weekdays and weekends.

3.3 Boat Densities on Lake Murray

In addition to the capacity at which “Existing Recreation Sites” along Lake Murray are being used, the boating density study identified the area available for recreational boating on Lake Murray by lake segment ([Appendix A](#)), assessed boat densities occurring under normal (weekend) and peak (holiday) use conditions, and determined whether recreational boat use of Lake Murray was currently above, below, or at a desirable, or optimal, level.

Results of the boating density study (Kleinschmidt, 2007c) showed that Lake Murray is currently utilized well below its recreational boating capacity. Weekend percent capacity only exceeds 20 percent in Segment 2. Six segments (1, 6, 7, 8, 10, and 12) had weekend percent capacities between 10 percent and 20 percent, with the remaining five segments (3, 4, 5, 9, and 11) being below 10 percent capacity on weekends. Percent capacity averaged about 12 percent on weekends across the entire reservoir. Holiday use, which is the peak use time for the reservoir, was higher in most segments, leading to higher percent capacities on holidays. Four segments (1, 2, 10, and 12) had percent capacities over 20 percent, with Segment 1 having the highest percent capacity (26 percent). Six segments (3, 5, 6, 7, 8, and 11) had percent capacities between 10 percent and 20 percent. The remaining two segments (4 and 9) were still below 10 percent capacity on holidays. Percent capacity averaged about 16 percent on holidays across the entire reservoir.

As stated previously, about half of the total use at “Existing Recreation Sites” on the lower Saluda River is water-based activities. Based on the results of Kleinschmidt (2008), the range of acceptable flows for water-based activities varies by experience level. Generally, whitewater boating opportunities are available at all water levels ranging from 500 cfs and up and are favorable at flows of between 2,300 cfs (rated “good” to “excellent” during the on-site reconnaissance) up to 18,000 cfs. Flatwater canoeing/kayaking, like whitewater boating, is generally available at all water levels ranging from 500 cfs and up, from Metts Landing/Saluda Shoals Park to Gardendale. Power boating, including fishing from a boat, is generally best at flows between 1,000 cfs and 4,000 cfs.

Activities requiring lower flows include wade angling, swimming, and rock hopping. Because these activities involve full or partial body contact with the water, they are best suited at flows that provide minimized current, shallower depths, exposed rocks and shoals, and the presence of eddies. According to Kleinschmidt (2008), wade angling, swimming, and rock-hopping are best enjoyed at flows between 500 and 1,100 cfs.

To some degree, any number or all of the most popular on-water activities are available at flows of 4,000 cfs and less. Boating activities are generally available at flows of between 1,000 cfs and 4,000 cfs. Non-boating on-water activities, such as swimming and wade angling, are best suited for flows of 1,000 cfs or less. Daily average flows of less than 1,000 cfs are generally available 38 percent of the time year-round; hourly average flows of less than 1,000 cfs are generally available 60 percent of the time year-round. Flows of less than 4,000 cfs, daily average, are generally available 83 percent of the time year-round and flows of less than 4,000 cfs hourly average are generally available 27 percent of the time year-round. Higher flows, for whitewater activities such as canoeing/kayaking and rafting, of 12,000 cfs or greater are generally only available approximately 2 percent of the time year-round on a daily average and hourly average basis. However, daily average flows represent a range of flows provided on a daily basis and hourly average flows on an hourly basis. Therefore, peak flows of 12,000 cfs and higher for specific durations are provided much more often than 2 percent of the time year-round.

4.0 CONSULTATION PROCESS AND METHODOLOGY

Beginning in November 2005, SCE&G has undertaken an extensive consultation process associated with the Saluda Hydro Project Relicensing. After issuance of the Initial Consultation Document (ICD), SCE&G formed the Recreation Resource Conservation Group (RCG) to discuss and resolve recreation-related issues submitted in response to the ICD. The first meeting of the Recreation RCG was held on November 18, 2005. At subsequent meetings, smaller Technical Working Committees (TWC) were formed to deal with specific issues raised during the initial RCG meeting. In the Recreation RCG, three TWCs were formed to deal with recreation-related issues: Recreation Management, Downstream Flows, and Lake Levels. In total, the Recreation RCG and its associated TWCs met over 20 times from 2005 to 2008. Membership lists and meeting minutes are available in [Appendix B](#).

After the formation of the TWCs, the Recreation RCG continued to develop a Work Plan, which included a Mission Statement, Identified Issues, RCG Responsibilities, Tasks and Products, Schedule, and Possible Mitigation Measures to be Considered. The Recreation RCG also developed a Recreation Vision Statement for the Saluda Project and agreed on a Standard Process to aid in the development of this Plan. The Standard Process is further described in Section 4.1 and Section 4.2. The final Work Plan, Vision Statement, and Standard Process can be found in the Recreation RCG Working Documents in [Appendix C](#).

The Recreation Management TWC was tasked with dealing with issues associated with future recreational needs at the Saluda Hydro Project, including facility upgrades and policy. This TWC was used to complete three studies: the Recreation Assessment Study Report (Kleinschmidt, 2007a), the Spring Use Addendum Study Report (Kleinschmidt, 2007b), and the Boating Density Report (Kleinschmidt, 2007c). The results of these studies were described in previous sections and provide the necessary background information for recreation planning at the Saluda Hydro Project.

The Downstream Flows TWC was tasked with developing a schedule of recreational releases for the lower Saluda River. This TWC completed one study: the Downstream Recreation Flow Assessment Report (Kleinschmidt, 2008). The results of this study applicable

to recreational flows were described in a previous section. Upon completion of this report, the Downstream Flows TWC met several times to agree on a recreational flow schedule for the Saluda Hydro Project.

The Lake Levels TWC was tasked with determining an appropriate lake level for recreational activities and examining the effects of various lake levels on recreation. Using results from a previous study (The Lake Murray Association, 2006) and utilizing the Standard Process Questions, the Lake Levels TWC agreed on two lake level scenarios submitted to the Operations RCG.

4.1 Standard Process

In order to remain focused on those issues relevant to the Recreation RCG, the group agreed to use a Standard Process to guide decision making during the consultation process.

4.2 Standard Process Steps and Questions

The four steps of the Standard Process are intended to ensure that all facility improvements and needs identified through the consultation process are consistent with desired future conditions. The first step was to determine desired future condition. This was accomplished through identifying the issues, finalizing the Vision Statement, and completing the first set of questions on the Standard Process Form. The second step was to establish baseline conditions. This was accomplished through the various studies performed during the consultation process. The third step was to determine what actions are needed and when they should occur. This step was accomplished through consultation with the Recreation RCG and was based on results of the various studies performed. Finally, the final step was the consultation associated with various proposals for recreation facility improvements at the Saluda Hydro Project.

4.3 Recreation Solution Principles

Early in the consultation process, the Recreation RCG agreed that it needed a set of “guidelines” to assist with recreation planning to ensure any facility improvements would take into consideration the various issues at the Saluda Hydro Project. The result was a set of Solution Principles. These Solution Principles can be found in the Recreation RCG Working Documents in [Appendix C](#).

5.0 RECREATION SITE RECOMMENDED IMPROVEMENTS AND DEVELOPMENT

Perceptions of those interviewed at public recreation sites suggest that sites are generally not crowded and in good condition overall. It is desirable to maintain those perceptions and the diversity of the recreation experiences provided while accommodating additional use. However, while many sites accommodate American with Disabilities Act (ADA) compliant parking, few sites are developed to provide a high level of barrier free access. Most sites are not staffed but are frequented regularly by managing personnel and/or law enforcement to check on site and safety conditions. Nonetheless, improved maintenance was recommended for the majority of recreation sites. Specific improvement to “Existing Recreation Sites” and development of “Proposed Recreation Sites” are described in Section 5.1 and 5.2. “Existing Recreation Sites” that do not need improvement, whether because they are not well used or are in satisfactory condition, are described in Section 5.3.

5.1 Proposed Improvements at Existing Recreation Sites

Lake Murray Sites

Larry L. Koon Boat Landing (1-02; 1.8 acres)

Larry L. Koon Boat Landing is a large formally developed boat launch. The site is considered in very good condition by visitors. It ranks 4th in patronage among Lake Murray public access sites, accommodating 12 percent of all use estimated for the peak season. The site is partially ADA compliant. This site is most commonly used for boat fishing. This is a very popular boat launch, and is well used, frequently to capacity. Of all public access sites on the lake, patrons rated this site as being most crowded. SCE&G owns the site but it is leased to the LCRAC. The LCRAC will continue to be responsible for operation and maintenance (O&M) of the site. At this site, in order to relieve the capacity issues, enhance barrier free access, and eliminate an issue related to the entrance/exit, SCE&G will:

- Evaluate alternatives to increase parking capacity (such as overflow parking at Shull Island [1-02A]);
- Identify substitute sites through education (web site, maps, etc.);
- Pave an ADA compliant path from the parking lot to the restroom facilities; and
- Widen the existing driveway to eliminate the “trailer drop” into the drainage ditch.

Shull Island (1-02B; 0.4 acres)

Shull Island is located adjacent to Larry L. Koon Boat Landing. It is relatively undeveloped site with a gravel lot and launch. This site generally serves as overflow for Larry L. Koon Boat Landing. The site is considered by users to be in very good condition. It ranks 6th in patronage among all public access sites at the Lake, accommodating approximately 5 percent of all use. This site is not ADA compliant. Boat fishing and swimming are the primary uses of this site. This site is a popular boat launch, frequently used to its capacity. This site should be managed in concert with Larry L. Koon Boat Landing, to accommodate additional parking. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

Murray Shores (1-03; 1.6 acres)

Murray Shores is predominantly a boat launch site. Boat fishing is the most popular activity at this location. It is well developed, and also supports SCE&G’s Shoreline Stabilization Demonstration Project. Murray Shores is considered by its users to be a little above average in its condition. It ranks 7th in use among all public access sites, accommodating approximately 5 percent of all estimated use at public access sites at Lake Murray. This site is not ADA compliant. The site accommodates current levels of use and can absorb additional use. SCE&G owns the site and will continue to be

responsible for O&M of the site. At this site, in order to make the site easier to find, enhance barrier free access, improve safety, and relieve potential future capacity issues, SCE&G will:

- Install additional directional signs to the site (working with Lexington and/or Saluda counties);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Stripe the existing parking lot;
- Install additional lighting; and
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility.

River Bend (1-04; 11.6 acres)

River Bend is a formal day use access site, with facilities to support shoreline fishing, picnicking, and boat launching. It is considered by patrons to be slightly above average in condition. It ranks 5th in usage among the public access sites on the lake, accommodating approximately 7 percent of all estimated use. This site is partially compliant with the ADA. This site is estimated to be used below design capacity (except for holidays) and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve barrier free access, relieve potential future capacity issues, and expand the site for potential future use, SCE&G will:

- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);

- Pave and stripe the existing overflow parking area; and
- Add 5.9 acres for future use (Site 4B).

Sunset (1-05; 2.3 acres)

Sunset is a day use site used primarily for picnicking, shoreline fishing, and some swimming. The site is considered by users to be in very good condition. It ranks 8th in usage among the lake sites, accounting for approximately 4 percent of total estimated use. This site does not provide barrier free access. Estimated use is at the site's design capacity. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to provide barrier free access, relieve potential future capacity issues, and expand the site for potential future use, SCE&G will:

- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Pave and stripe existing parking area;
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Install stabilization material on the sides of the existing boat ramp to eliminate drop-off conditions;
- Construct an additional ADA compliant paved parking lot; and
- Add 29.9 acres for future use.

Hilton (1-07; 4.4 acres)

Hilton is a formal day use site with a boat launch, picnic facilities, and a fishing pier. The site is considered to be in near excellent condition by its users, and ranks 9th in

usage among all lake sites. It accommodates approximately 3 percent of all estimated use at the lake stemming from public access sites. Boat fishing is reported as the primary activity at this site. This site does not offer barrier free access. Estimated use is at the site's design capacity. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve barrier free access and improve safety, SCE&G will:

- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Install additional lighting; and
- Construct an ADA compliant fishing pier (including an ADA compliant path, as necessary).

Dam Site - Irmo Side (1-08; 6.8 acres)

Dam Site - Irmo Side is a well-developed day use recreation area that functions primarily as a boat launch. It is located on the north side of the Saluda Dam. The site is considered well maintained by users. It ranks third in patronage among all public access sites at the Lake, accommodating 12 percent of all estimated use during the peak season. Primary uses of this site are fishing from shore, pier/dock, or boat. It is partially compliant with the ADA. This site is estimated to be used below design capacity and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve barrier free access and relieve potential future capacity issues, SCE&G will:

- Construct an ADA compliant courtesy dock (including an ADA compliant path, as necessary);

- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary); and
- Pave an ADA compliant path to the existing restroom facilities.

Higgins Bridge (1-13; 1.1 acres)

Higgins Bridge is a rural site with a small, single lane boat launch. It provides access to the upper Saluda River. This site is considered by users to be in average condition. There are no support facilities at this location. The site ranks 14th in usage among all 15 public access sites on the lake, accounting for approximately 1 percent of estimated use. This site does not offer barrier free access. Estimated use at this site is approaching design capacity but the site can absorb some additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

Kempson Bridge (1-14; 2.9 acres)

Kempson Bridge is a newly redeveloped site used primarily for boat launching and shoreline fishing. It is considered to be in near excellent condition. It is ranked 13th in usage with about 1 percent of all estimated use for the lake. This site is partially compliant with the ADA. The site is estimated to be used below design capacity (except for holidays) and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve available amenities, SCE&G will:

- Install an ADA compliant vault type restroom facility (including an ADA compliant path, as necessary); and
- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

Lake Murray Estates Park (1-22; 7.7 acres)

Lake Murray Estates Park is a formal day use site, with facilities supporting shoreline fishing, boat launching, and picnicking. The site is located in a residential neighborhood, near a gated community. This site is difficult to find without detailed directions. Users of this site consider it to be in very good condition. It is ranked 10th in usage among all 15 public access sites, accommodating approximately 3 percent of all estimated use. This site does not provide barrier free access. This site is estimated to be approaching design capacity but can absorb some additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to make the site easier to find, improve available amenities, and relieve potential future capacity issues, SCE&G will:

- Install additional directional signs to the site (working with Saluda County);
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Pave and stripe existing parking area; and
- Pave an ADA compliant path from the parking lot to the existing fishing pier.

Two Bird Cove and Hurricane Hole Cove (1-23 and 1-24)

On February 1, 2000, SCE&G filed an application to modify the Saluda Project Land Use and Shoreline Management Plan as part of a five-year review cycle required by the FERC. On October 31, 2003, FERC published a draft Environmental Assessment (EA) to determine the effects of the proposed modifications and provided a 30-day comment period on the draft EA. On November 25, 2003, Windward Point Yacht Club submitted comments on the draft EA in which they requested protection of the land

surrounding two coves on Lake Murray (Two Bird Cove and Hurricane Hole Cove). The purpose of protecting these coves was to provide natural shoreline in areas that overnight anchoring occurred on Lake Murray. On June 23, 2004, FERC issued an order to SCE&G approving revisions to the Exhibit R (Recreation Plan) including “designation of Two Bird Cove and Hurricane Hole Cove as special recreation areas.” The order provided an additional explanation for the justification for these designations:

The two coves recommended for preservation as overnight anchoring areas have a unique and historical project-related recreation use that precedes any development in these areas. There are few such coves for this boating use left on the lake, and preserving them is warranted. These coves should be designated as water-based (only) recreation areas and included in the project’s Exhibit R. Although the shoreline’s 75-foot vegetated buffer should screen these coves from development, SCE&G should also consider other means of protecting them for overnight anchoring. This should include placing approved residential docks, if any, in such a way as to not interfere with boat anchoring.

In subsequent filings to FERC and in the Recreation Plan consultation process, surrounding property owners of Two-Bird Cove expressed their concerns the special designation may have on their property.

SCE&G believes the original intent of the request to protect these two coves was to preserve the natural shoreline in order to provide recreation users a more natural experience when mooring. As part of the Lake Murray Shoreline Management Plan, SCE&G is proposing to reclassify 1.5 miles of shoreline (including 36.8 acres of property inside the PBL) surrounding Hurricane Hole Cove from Future Development to Recreation. SCE&G is also proposing to reclassify 1.2 miles of shoreline (including 23 acres of property inside the PBL) surrounding Two Bird Cove from Future Development to Forest Management. SCE&G believes the reclassification of this land satisfies the original intent of protecting these coves for overnight anchoring while taking into consideration the concerns of surrounding property owners. Therefore, upon FERC approval of this plan, the designation required by FERC Order 107 FERC ¶ 62,273 for Two Bird Cove and Hurricane Hole Cove will be removed.

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Lower Saluda River Sites

James R. Metts Landing (1-10; 1.0 acres)

James R. Metts Landing is predominantly a boat launch site located across the river from Saluda Shoals Park. This site was ranked by its patrons as being in very good condition, the largest percentage of whom use the site for fishing. It ranks 3rd in usage among all the lower Saluda River sites, accommodating approximately 11 percent of estimated use. This site is used at capacity. SCE&G owns the site but it is operated by the LCRAC. The LCRAC will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary); and
- Construct a bank fishing area.

Gardendale (1-15; 4.7 acres)

Gardendale is a relatively informal access site, with walk-in access and a carry-in launch. Canoeing/kayaking was the most popular activity at this site. Park patrons rated the condition of this site as good to very good. Gardendale is the least used of all the lower Saluda River sites, ranking 5th, and accounting for approximately 5 percent of all use. This site does not provide barrier free access. The site is estimated to be used at capacity on weekends. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Explore a lease for the property to the ICRC.

5.2 Proposed Future Recreation Sites

In addition to the above proposed improvements at “Existing Recreation Sites,” stakeholders recommended that SCE&G set aside additional project lands for future recreation development. As part of the rebalancing of shoreline classifications conducted

in the Lake and Land Management TWC, which included input from the Recreation Management TWC, SCE&G agreed to designate approximately 200 acres and 10 shoreline miles as Recreation (project lands) as well as to include 900 acres of land from outside the project (proposed project lands) in the Recreation classification. These lands have been determined to be topographically suitable for recreational use, free of sensitive resources such as rare, threatened, or endangered (RTE) species, fish spawning beds, wetlands, etc.; and would not be expected to exacerbate current on-water use patterns. These lands include the “Existing Future Recreation Sites” shown in Table 3-1 as well as some additional lands to accommodate future recreational use of the Project. The location of these proposed lands is shown in [Appendix D](#). SCE&G currently owns these properties but may lease the property during the new license term. If the property is leased during the new license term, SCE&G will inform FERC as to the change in status of the property. These “Proposed Future Recreation Sites” (pending FERC approval of this plan) are:

Table 5-1: Existing and Proposed Future Recreation Sites on Lake Murray and the Lower Saluda River

LAKE MURRAY	
EXISTING FUTURE RECREATION SITES	PROPOSED FUTURE RECREATION SITES
Shull Island (1-02A; 22.4 acres)	Old Corley Bridge Road (1-25; 2.0 acres)
Simpson’s Ferry (1-05A; 11.6 acres)	Shealy Point Tract (1-26; 40.1 acres)
Long Pine (1-06A; 31.4 existing acres, additional 20 acres proposed)	Shealy Road Access Area (1-27; 27.6 acres)
Hilton (1-07A; 27.9 acres)	Rocky Creek (1-28; 648.0 acres)
Water Treatment Plant (1-16; 4.3 acres)	Little River/Harmon’s Bridge (1-29; 2.8 acres)
Stone Mountain (1-17; 26.5 acres)	Crayne’s Bridge Public Park (1-30; 47.9 acres)
Cloud’s Creek (1-18; 3.0 acres)	
Big Creek (1-19; 22.3 existing acres, additional 15 acres proposed)	
Little Saluda Point (1-20; 15.4 existing acres, additional 14.2 acres proposed)	
Bundrick Island (1-21; 87.9 acres)	

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LOWER SALUDA RIVER	
EXISTING FUTURE RECREATION SITES	PROPOSED FUTURE RECREATION SITES
	Twelve-mile Creek (1-31; 52.0 acres)
	Candi Lane (1-32; 3.1 acres)
	Lower Saluda River (320.2 acres) ^a

^a There are 14 tracts of land associated with the Lower Saluda River Property. These properties will be available for passive public recreation and in support of the Lower Saluda Scenic Corridor Plan and the Three Rivers Greenway. These tracts have not been assigned a Site Number as there is no intention of developing the property into formal recreation sites.

5.3 Proposed Development of Future Recreation Sites

Several locations have been identified through review of existing recreation management plans, consultation with the Recreation Management TWC, and results of relicensing recreation studies conducted for the Project. As a result, the following sites will be developed within the first ten years of license issuance to accommodate increased future recreational use of project waters.

Lake Murray Sites

Cloud's Creek (1-18; 3.0 acres)

Cloud's Creek is located on the south side of the reservoir at the Spann Road bridge, near the intersection of Spann Road and US Hwy 378. SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to provide a take-out/put-in on the Cloud's Creek Canoe Trail, SCE&G will:

- Construct a gravel parking lot for approximately 8 to 10 vehicles; and
- Construct a carry-in launch; and
- Install directional signs to the site (working with Saluda County).

Little Saluda Point (1-20; 29.6 acres)

Little Saluda Point is located on the south side of the reservoir at the Hwy. 391 bridge, near the intersection of Highway 391 and US Highway 378, adjacent to an existing commercial site, Little River Marina. The existing gravel parking lot, which contains an estimated 10 spaces for vehicles, will be utilized for parking (with permission of Little River Marina). SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to improve bank fishing access on Lake Murray, SCE&G will:

- Construct two ADA compliant fishing piers (including an ADA compliant path, as necessary); and
- Install shoreline stabilization materials as necessary.

Old Corley Bridge Road (1-25; 2.0 acres)

Old Corley Bridge Road is located on the west side of Cloud's Creek approximately four miles off of US Highway 378 on Corley Bridge Road. SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to provide a take-out/put-in on the Cloud's Creek Canoe Trail, SCE&G will:

- Construct a gravel parking lot for approximately 8 to 10 vehicles;
- Construct a carry-in launch; and
- Install directional signs to the site (working with Saluda County).

Lower Saluda River Sites

Twelve-mile Creek (1-31; 52.0 acres)

Twelve-mile Creek is located approximately 3.5 miles below the Saluda Dam and about 2 miles from the boat launches at Saluda Shoals Park and James R. Metts Landing.

The site can be accessed via Corley Mill Road from US Highway 378. At this site, SCE&G will:

- Explore a lease for the property to the LCRAC.

Candi Lane (I-32; 3.1 acres)

Candi Lane is located approximately 8.5 miles below the Saluda Dam and about 3.5 miles below the Gardendale site. This site is primarily intended to be a take-out above the Mill Race rapids, approximately 0.5 miles downstream. The site can be accessed via Greystone Blvd from Interstate 126. At this site, SCE&G will:

- Explore a lease for the property to the City of Columbia.

5.4 Existing Recreation Sites Not Needing Improvements at This Time

During the course of development of this Recreation Plan, several sites were identified that may need improvements but which are unfeasible for a given reason. SCE&G will continue to monitor site conditions over time to check on user perceptions of the condition ratings at these sites. This will be done informally by staff. If conditions warrant improvements at these sites, they will be detailed in future addenda (see Section 6.2).

Lake Murray Sites

Park Site - Lexington Side (I-01; 17.9 acres)

Park Site - Lexington Side is a newly renovated seasonal, day use site, positioned on the south side of the Saluda Dam. Park Site - Lexington Side is the only site that was rated as being in poor condition by patrons, and then only on weekdays. Patronage was also lower than expected at this site. However, it is likely that these results were due to low water levels, beach closure early in the season at a site that is first and foremost a swimming beach, and heavy road construction on Route 6 in 2006. Internal records of

revenue collected at this site show that 2006 use at this site was just two percent of historical use (prior to construction beginning on the back-up Saluda Berm). It ranks 12th in patronage among all public access sites at the Lake, accommodating one percent of all estimated use during the peak season. Primary use of this site is picnicking (although swimming may increase in use as road and site construction are now concluded). This site provides very good compliance with the ADA. This site is estimated to be used below design capacity and can absorb additional use.

No improvements are schedule for Park Site - Lexington Side during the first ten years of the new license. Park Site - Lexington Side was recently renovated (completed in 2007); therefore, Recreation RCG members felt that no improvements were needed. Site conditions will continue to be monitored informally by SCE&G staff. SCE&G will continue to be responsible for O&M at this site.

Rocky Point (1-06; 1.7 acres)

Rocky Point is a relatively rural day use site. It is small compared to other locations with a boat launch. Rocky Point receives very limited usage, ranking 15th (last) in usage among all the lake sites. It accommodates less than one percent of all estimated use for the public access areas on the lake. This site does not provide barrier free access. This site is estimated to be used below design capacity and can absorb additional use.

Since Rocky Point receives such little use, Recreation RCG members decided that no improvements were needed at this time. Site conditions will continue to be monitored informally by SCE&G staff. SCE&G will continue to be responsible for O&M at this site.

Dreher Island State Recreation Area (1-11; 348.0 acres)

Dreher Island State Recreation Area is the largest park on the lake in terms of physical area. The Park is formally developed, managed by SCPRT, and provides numerous facilities for day use (boat launches, picnic areas, etc.) and overnight use (campground, villa rentals). The site is considered by its users to be in very good

condition. Dreher Island ranks 1st in usage among all lake sites. It accommodates approximately 25 percent of all estimated use at the lake. This site is in compliance with the ADA. This site is estimated to be used below design capacity for day use activities and can absorb additional use.

Although Dreher Island State Recreation Area accommodates the most use of all sites on Lake Murray, the site was designed to receive this much use and appears to be used below its capacity. SCE&G will continue to informally consult with park staff to determine if future improvements are necessary. SCPRT will continue to be responsible for O&M at this site.

Macedonia Church (1-12; 4.8 acres)

Macedonia Church is a shoreline area used primarily for bank fishing. The site is located adjacent to the church for which it is named. It is considered by users to be in very good condition. It ranks 11th in usage among all of the lake access sites, accommodating 1 percent of estimated use. This site does not provide barrier free access. Estimated use is at the site's design capacity; however, patrons frequently use the church parking area for overflow parking.

Since this site receives little use overall, and is considered to be in satisfactory condition, no improvements to this site have been scheduled at this time. SCE&G will continue to informally monitor site conditions. SCE&G will continue to be responsible for O&M at this site.

Bundrick Island (1-21; 87.9 acres)

Bundrick Island is an undeveloped area on a peninsula that juts into the Lake. It provides a fairly remote, undeveloped wooded setting with natural sand beaches on the shoreline. Vehicular access is prohibited. The site serves primarily as a day use area for boaters. The site is very popular, ranking 2nd in patronage among all public access sites, accommodating approximately 20 percent of all estimated use. This site is not ADA

compliant. In addition to boating activities, this site supports primitive camping, picnicking and bicycling.

Although Bundrick Island could potentially be a large park on the southern side of the reservoir near the town of Lexington, Recreation RCG members felt that the site should continue to be managed in its current state for as long as possible. The site serves a unique population and is obviously well liked by patrons. SCE&G will continue to informally monitor this site to see if perceptions change.

Lower Saluda River Sites

Saluda Shoals Park (1-09; 240.0 acres)

Saluda Shoals is a large community park on the lower Saluda River. It provides two miles of trail along the river, access for wade and bank fishing, boat launch, picnic shelters, and a water spray park. It is the only site with a dog park and bridle trails. Saluda Shoals was rated by respondents as being in nearly excellent condition. The site ranks 1st in usage, accounting for 58 percent of all use estimated for the lower Saluda River public access sites. Much of this site accommodates barrier free access. The site is well used and enjoyed by patrons. It is used below capacity.

Although Saluda Shoals Park is the most used site on the lower Saluda River, it is currently used within designed capacity. The ICRC monitors site conditions and is in frequent contact with SCE&G regarding site needs. SCE&G will continue to be an active member in this partnership. The ICRC will continue to be responsible for O&M at this site.

Mill Race (MILLA & MILLB; 0.9 acres)

Mill Race A and B are informal shoreline areas on the lower Saluda River, outside the project boundary. They are located at Riverbanks Zoo. Mill Race A is particularly popular with whitewater boaters as it provides access to a short section of whitewater rapids on the lower Saluda River. Mill Race B also provides access to the

rapids and may be used as a take-out area. Both sites are used for sunbathing, picnicking, and other leisure activities along the shoreline and on rocky outcroppings in the river. There are no formal facilities at these sites beyond parking associated with the zoo. Mill Race A and B are ranked 4th and 2nd, respectively, in usage among all the public access river sites. Collectively, these sites accommodated approximately 26 percent of the total estimated use at public access sites on the lower Saluda River. These sites do not provide barrier free access.

SCE&G is not proposing any improvements to these sites as they are located outside the project boundary. The Saluda River Walk, a portion of the Three Rivers Greenway pathway, is being planned by the River Alliance and City of Columbia and will provide significant access in this area. If completed, this phase of the project will provide access to these two sites. While SCE&G is supportive of the River Alliance's plans, it cannot guarantee the Three River's Greenway Project will be constructed. However, SCE&G will continue to work with the River Alliance, City of Columbia, and other groups, with a view toward the ultimate construction of the Three Rivers Greenway pathway.

5.5 Recommended Improvements Not Incorporated at This Time

During the course of development of this Recreation Plan, several improvements were recommended but are not scheduled during the first ten years of the new license. Although members of the Recreation Management TWC made these recommendations, there was not a strong consensus that these improvements were necessary at this time. These improvements are included here for the record and for consideration during future consultation. If conditions warrant these improvements can be made in the future, they will be detailed in future addenda (see Section 6.2).

Park Site - Lexington Side (1-01)

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- Expand the parking area

Larry L. Koon Boat Landing (1-02)

- Provide ADA accessible fishing pier with hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Expand the parking area

Shull Island (1-02B)

- Rehabilitate existing ramp to provide steeper slope and access deeper water
- Provide an ADA accessible floating courtesy dock system to allow use at low lake levels
- Pave and delineate parking area to eliminate the migration of sediments into the lake and to provide organized traffic flow and parking
- Expand the parking area

Murray Shores (1-03)

- Provide ADA accessible fishing pier with hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Improve access drive by paving to eliminate the migration of sediments into the lake and control dust
- Expand the parking area or add additional overflow parking

River Bend (1-04)

- Expand the parking area or add additional overflow parking

Rocky Point (1-06)

- Expand the parking area

Hilton (1-07)

- Provide hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Improve access drive by paving to eliminate the migration of sediments into the lake and control dust
- Expand the parking area or add additional overflow parking

Dam Site - Irmo Side (1-08)

- Provide ADA accessible fishing pier to allow deep-water fishing during lake drawdowns to level 345'

Saluda Shoals Park (1-09)

- Provide bank access area to deep water for fishing opportunities up-stream
- Provide ADA accessible fishing pier with a hard surface area
- Extend the trail network into the additional property recently acquired by ICRC
- Expand the parking area

James R. Metts Landing (1-10)

- With the cooperation of the LCRAC, add restroom facilities that meet ADA Standards
- Expand the parking area

Dreher Island State Recreation Area (1-11)

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- Install an additional 200 slips at marina
- Create a sailboat mooring area
- Install fishing piers

- Expand the parking area
- Upgrade electrical service at campground
- Install shoreline stabilization

Deleted: Expand wet storage to accommodate 200 slips

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Macedonia Church (1-12)

- Expand the parking area or add additional overflow parking

Higgins Bridge (1-13)

- Pave access drive and existing parking area to eliminate the migration of sediments into the lake and to provide organized parking and traffic flow
- Access drive should allow for two-way traffic flow for safety concerns
- Expand the parking area

Kempson Bridge (1-14)

- Provide hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Provide additional paved, organized parking for vehicle/trailer use
- Provide proper number of handicap parking spaces for both vehicle/trailers and car only spaces. There are currently none provided
- Expand the parking area or add additional overflow parking

Gardendale (1-15)

- Pave access road
- Add picnic tables
- Add restroom facilities (ADA compliant)
- Increase capacity
- Pave parking lot
- Improve carry-in access (reduce distance from parking area to launch)

- Share cost with ICRC
- Expand the parking area

Little Saluda Point (1-20)

- Expand the parking area

Bundrick Island (1-21)

- Explore lease /development alternatives with the LCRAC and/or SCPRT
- Develop into a formal site
 - A small portion should be utilized for parking area and boat launching facilities should be constructed. Walking trails with an occasional picnic area would protect the natural setting. The Sandy Beach area should remain pristine to continue to protect this unique setting.

Lake Murray Estates Park (1-22)

- Rehabilitate the existing floating courtesy dock system to comply with ADA Standards for use at low lake levels
- Expand the parking area or add additional overflow parking

Shealy Point Tract (1-26)

- Install a gravel parking lot to accommodate approximately 8 to 10 vehicles (no trailers)
- Install fishing piers
- Install picnic shelters
- Create walking trails

Rocky Creek (1-28)

- Conduct a stakeholder/community planning process to determine appropriate improvements
- Install lake access for the non-boating public
- Construct walking/biking trails, perhaps connecting all portions of the park
- Construct fishing piers and/or bank fishing areas
- Construct restrooms
- Construct parking lots and access roads
- Construct tent and group camping areas
- Construct picnic shelters/tables
- Construct facilities needed for onsite management

Twelve-mile Creek (1-31)

- Construct gravel access road and parking lot
- Construct carry-in boat launch

Candi Lane (1-32)

- Install a gravel parking lot to accommodate approximately 20 vehicles (no trailers)
- Install carry in access

6.0 SCHEDULE AND FUTURE CONSULTATION

Improvements at the Existing Recreation Sites and Proposed Future Recreation Sites will occur according to a schedule as outlined below. In order to accommodate the adaptive nature of recreation planning, the schedule is presented in five-year increments. Additional consultation will be required upon approval of this plan to accommodate additional improvements and/or development of the Proposed Future Recreation Sites beyond the ten year schedule presented here. This future consultation is outlined in Section 6.2.

6.1 Implementation Schedule

Many of the improvements at Existing Recreation Sites are scheduled to be completed within the first five years of license issuance (Table 6-1). Collectively, these improvements should alleviate some congestion at Existing Recreation Sites immediately, improve ADA compliance at the majority of Existing Recreation Sites, provide for more shore-based fishing access, and provide for more shore-based activities. Additionally, possible development of Existing and Proposed Future Recreation Sites are identified beyond the initial ten-year period based on perceived needs for these sites. The development of these sites may change based on additional information and/or the consultation process outlined in Section 6.2. Improvements during the first ten-year period, as noted on Table 6-1, are proposed for completion as noted. Recommendations listed during the second ten-year period, as noted on Table 6-1, are not proposed at this time, but will be evaluated during the second 10-year review period as outlined in Section 6.2.

Table 6-1: Schedule of Improvements at Existing Recreation Sites and Development of Proposed Future Recreation Sites

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NAME	SITE NUMBER	TYPE OF FACILITY	EXISTING ACRES	YEARS 1 – 5	YEARS 6 – 10	YEARS 11 – 15	YEARS 16 – 20
LAKE MURRAY SITES							
Park Site - Lexington Side	1-01	Picnic Area	17.9				
Larry L. Koon Boat Landing	1-02	Launch Ramp	1.8	Evaluate alternatives to increase parking capacity; Identify substitutes through education; Pave an ADA compliant path from the parking lot to the restroom facilities; Widen the existing driveway			
Shull Island	1-02A	Future	22.4				
Shull Island	1-02B	Launch Ramp	0.4	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary)			
Murray Shores	1-03	Launch Ramp	1.6	Install additional directional signs to the site; Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary); Stripe the existing parking lot; Install additional lighting; Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary)			
River Bend	1-04	Launch Ramp	11.6	Add 5.9 acres; Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary); Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary)	Pave and stripe the existing overflow parking area		
Sunset	1-05	Launch Ramp	2.3	Add 29.9 acres; Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary); Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary); Pave and stripe the existing parking area; Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary); Install stabilization material on the sides of the existing boat ramp	Construct an additional ADA compliant paved parking lot		
Simpson's Ferry	1-05A	Future	11.6				
Rocky Point	1-06	Launch Ramp	1.7				
Long Pine	1-06A	Future	31.4	Add 20 acres		Possible development of site (or Site 1-17) depending on Year 9 consultation	Possible development of site (or Site 1-17) depending on Year 9 consultation
Hilton	1-07	Launch Ramp	4.4	Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary); Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary); Install additional lighting	Construct an ADA compliant fishing pier (including an ADA compliant path, as necessary)		
Hilton	1-07A	Future	27.9				

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NAME	SITE NUMBER	TYPE OF FACILITY	EXISTING ACRES	YEARS 1 – 5	YEARS 6 – 10	YEARS 11 – 15	YEARS 16 – 20
Dam Site - Irmo Side	1-08	Picnic Area/Launch Ramp	6.8	Construct an ADA compliant courtesy dock (including an ADA compliant path, as necessary); Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary); Pave an ADA compliant path to the existing restroom facilities			
Dreher Island State Recreation Area	1-11	Campground/Launch Ramp	348.0				
Macedonia Church	1-12	Picnic Area	4.8				
Higgins Bridge	1-13	Launch Ramp	1.1	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary)			
Kempson Bridge	1-14	Launch Ramp	2.9	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary); Install an ADA compliant vault type restroom facility (including an ADA compliant path, as necessary)			
Water Treatment Plant	1-16	Future	4.3				
Stone Mountain	1-17	Future	26.5			Possible development of site (or Site 1-06A) depending on Year 9 consultation	Possible development of site (or Site 1-06A) depending on Year 9 consultation
Cloud's Creek	1-18	Future/Proposed Carry-in Launch	3.0	Construct a gravel parking lot; Construct a carry-in launch; Install directional signs to the site			
Big Creek	1-19	Future	22.3	Add 15.0 acres			
Little Saluda Point	1-20	Future/Proposed Angling Access	15.4	Add 14.2 acres	Construct two ADA compliant fishing piers (including an ADA compliant path, as necessary); Install shoreline stabilization materials as necessary		
Bundrick Island	1-21	Future/Informal Site	87.9				
Lake Murray Estates Park	1-22	Launch Ramp	7.7	Install additional directional signs to the site; Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary); Pave and stripe existing parking area; Pave an ADA compliant path from the parking lot to the existing fishing pier			
Two Bird Cove	1-23	Special Recreation Area		Remove designation required by FERC Order 107 FERC ¶ 62,273			
Hurricane Hole Cove	1-24	Special Recreation Area		Remove designation required by FERC Order 107 FERC ¶ 62,273			
Old Corley Bridge Road	1-25	Proposed Future/Carry-in Launch	0	Add 2 acres; Construct a gravel parking lot; Construct a carry-in launch; Install directional signs to the site			
Shealy Point Tract	1-26	Proposed Future	0	Add 40.1 acres		Possible development of site (or Site 1-27) depending on Year 9 consultation	Possible development of site (or Site 1-27) depending on Year 9 consultation
Shealy Road Access Area	1-27	Proposed Future	0	Add 27.6 acres		Possible development of site (or Site 1-26) depending on Year 9 consultation	Possible development of site (or Site 1-26) depending on Year 9 consultation
Rocky Creek	1-28	Proposed Future	0	Add 648.0 acres; Explore adding site to SCDNR Wildlife Management Area lease program for 10 years		Possible development of site depending on Year 9 consultation	
Little River/Harmon's Bridge	1-29	Proposed Future	0	Add 2.8 acres			

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NAME	SITE NUMBER	TYPE OF FACILITY	EXISTING ACRES	YEARS 1 – 5	YEARS 6 – 10	YEARS 11 – 15	YEARS 16 – 20
Crayne's Bridge Public Park	1-30	Proposed Future	0	Add 47.9 acres		Possible development of site depending on Year 9 consultation	
Islands ^a		Informal	100.0				
LOWER SALUDA RIVER SITES							
Saluda Shoals Park	1-09	Picnic Area/Launch Ramp	240.0				
James R. Metts Landing	1-10	Launch Ramp	1.0	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary)	Construct a bank fishing area		
Gardendale	1-15	Launch Ramp	4.7	Explore a lease for the property to the ICRC		Possible development of site depending on execution of lease and Year 9 consultation	
Twelve-mile Creek	1-31	Proposed Future	0	Add 52.0 acres; Explore a lease for the property to the LCRAC			Possible development of site depending on lease exploration and/or Year 9 consultation
Candi Lane	1-32	Proposed Future	0	Add 3.1 acres; Explore a lease for the property to the City of Columbia			
Lower Saluda River Property ^b		Proposed Informal	0	Add 320.2 acres			

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^a There are 62 SCE&G-owned islands on Lake Murray that are available for public recreation use, including primitive camping. These islands have not been assigned a Site Number as there is no intention of developing the islands into formal recreation sites.

^b There are 14 tracts of land associated with the Lower Saluda River Property. These properties will be available for passive public recreation and in support of the Lower Saluda Scenic Corridor Plan and the Three Rivers Greenway. These tracts have not been assigned a Site Number as there is no intention of developing the property into formal recreation sites.

6.2 Future Consultation Process

A process has been developed to review and develop future addenda to this Plan beyond the initial ten years after license issuance and over the licensing term. Recreation use levels, site capacities, and needs will be reviewed every 10 years using the most recent FERC Form 80 Recreation Report. The Recreation RCG members will review the results of this periodic assessment, in light of the proposed improvements that have been implemented to date, and make appropriate recommendations for the following ten year period to account for changing needs. Such recommendations could include identification of new sites on lands set aside for future recreation development and the continued improvement to existing recreation sites. Recommendations may also include additional studies as determined by the Recreation RCG, understanding that the cost of the study will be considered by SCE&G in developing the following ten year plan. During Year 9 of the current ten year period (i.e., 9 years after license issuance, 19 years after license issuance, etc.), SCE&G will host a public meeting with interested stakeholders at which time they will review the most recent use and capacity assessment, make recommendations for the following ten years, and receive comments from stakeholders on what improvements need to be considered. Within 30 days of this meeting, SCE&G will provide a draft copy of the ten year plan to meeting participants and ask for written comments. A 30-day comment period will be observed. Upon receipt of these written comments, SCE&G will file a Recreation Plan Addenda with FERC. The final addendum will include any comments or edits provided by the stakeholders, as appropriate, as well as a consultation record and table of responses to stakeholder comments.

7.0 OTHER ISSUES ADDRESSED WITHIN THE RECREATION RCG CONSULTATION PROCESS

Over the course of the consultation process, several issues were identified in the Recreation RCG that did not directly apply to this plan. The Recreation RCG agreed that “Issue Recommendations” would be drafted and finalized as part of the consultation process. These recommendations were then sent to other RCGs in the Saluda Hydro Relicensing Process for their consideration. For example, minimum lake levels were identified as an issue that has an effect on recreational use of the lake from private docks. A recommendation was sent from the Recreation RCG to the Operations RCG requesting that new minimum lake levels be considered as part of the operations of the Saluda Hydro Project. One exception is the recreational flow releases drafted by the Downstream Flows TWC. These releases are meant to be managed through the Recreation RCG. Further descriptions of the issues and associated recommendations are provided below. Complete issue recommendations can be found in [Appendix E](#).

7.1 Minimum Lake Levels for Lake Murray

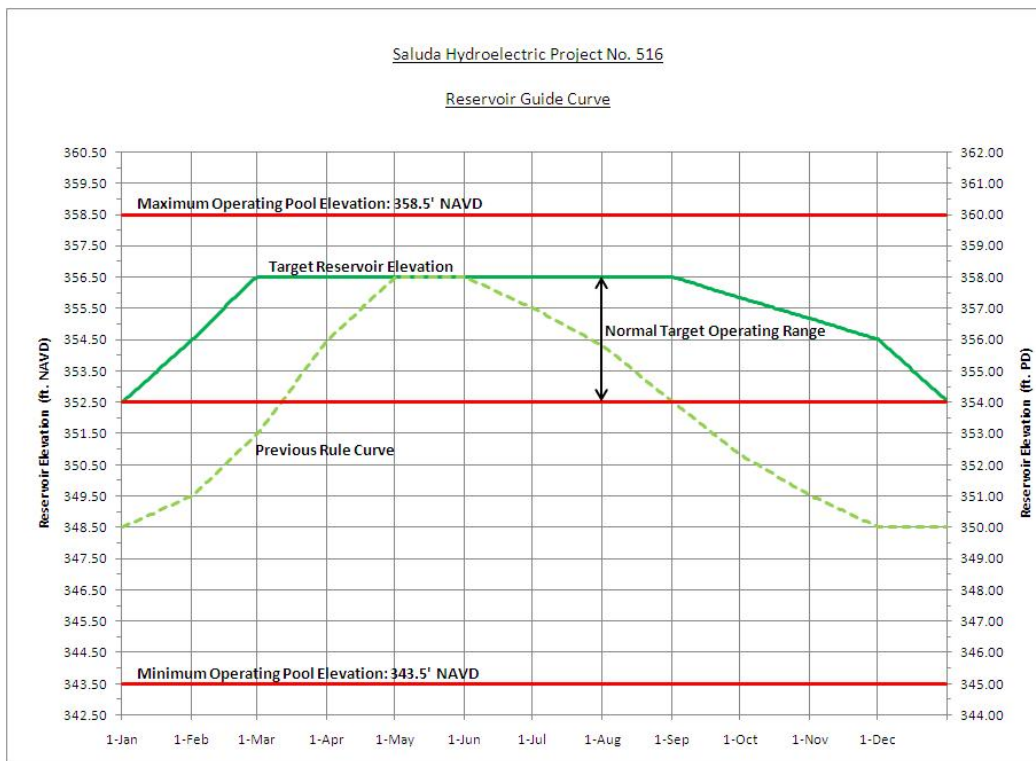
The Lake Murray Association (LMA), Lake Murray Homeowners Coalition (LMHOC), and Lake Murray Watch (LMW) expressed concerns that elevations less than 354 ft. Plant Datum (PD) at Lake Murray impede recreational use of the reservoir. According to a 2005 survey of Lake Murray users conducted by LMA, over half (51%) of lake users who responded, responded that 354 ft. PD was the minimum lake level needed for “year around safe lake use” at their “normal site or dock”; 98% of respondents indicated 356 ft. PD.

The Recreation RCG recommended two operating scenarios be modeled within the Operations RCG. Both scenarios entail a target elevation (358 ft. PD) being reached by April 1 of each year and held until the first Monday of September (to coincide with Labor Day). The difference in the two scenarios is the minimum lake level: 354 ft. PD vs. 356 ft. PD.

Currently, the lake typically reaches 358 ft. PD at the beginning of June. Beginning in September, water is released, via generation, to achieve 350 ft. PD by December 31. Rising lake levels begin again around January 1 with the objective to continue to allow the rise so as to reach approximately 358 ft. PD by June 1.

Under the proposed guide curve submitted with the Final License Application, a target elevation of 358 ft. PD will be reached by March 1 and will be maintained until September 1. The lake will remain above 356 ft. PD until December 1 and then drop to 354 ft. PD by December 31, when refilling will begin. Figure 7-1 provides the proposed guide curve submitted with the Final License Application.

Figure 7-1: Previous Rule Curve and Proposed Guide Curve for the Saluda Hydroelectric Project



7.2 Protection of Natural/Undeveloped Lands for Public Recreation

The LSSRAC, SCPRT, LMW, and Coastal Conservation League/American Rivers (CCL/AR) expressed concerns regarding the conservation of lands to enhance recreational use around Lake Murray and in the lower Saluda River corridor, protect the scenic integrity of the Project, protect wildlife habitat, and provide informal recreational opportunities.

The Recreation Management TWC drafted a recommendation for the Lake and Land Management TWC (L&LMTWC) that outlined appropriate activities on each classification of Project land. During the drafting of this recommendation, a focus group of stakeholders met outside of the consultation process and drafted recommendations for submission to the L&LMTWC. The Recreation Management TWC agreed to forward these recommendations from the focus group to the L&LMTWC although not all recommendations had the full endorsement of the entire Recreation Management TWC. Both recommendations are included in [Appendix E](#), along with the memorandum sent to the L&LMTWC.

As a result of the discussions and rebalancing efforts in the L&LMTWC, SCE&G is proposing a new Shoreline Management Plan (SMP) that will include over 9,000 acres in a shoreline classification that allows for recreation. This includes approximately 500 acres in “Natural Areas,” 3,700 acres in “Forest Management,” and 2,150 acres in “Recreation.” In addition, SCE&G is proposing to lease to the SCDNR approximately 2,754 acres outside the PBL for wildlife management. The 2,150 acres proposed for “Recreation” includes 658 acres of non-project lands proposed to be included in the project, as well as the 320 acres along the lower Saluda River outlined in Section 5.2 and Table 6-1.

7.3 Warning System for Rising Water on the Lower Saluda River

The Lower Saluda Scenic River Advisory Council, American Whitewater, Trout Unlimited, SCPRT, ~~South Carolina Wildlife Federation, American Rivers, and other~~ interested stakeholders have expressed concern over the safety of river users due to the unscheduled flows from the Project, as well as the rates that the river level changes due to the higher flows (> 10,000 cfs).

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The Recreation RCG has developed numerous recommendations to improve river user safety on the lower Saluda River. These include continued consultation with river stakeholders to improve the current warning system and the installation of additional warning devices on the lower Saluda River. SCE&G is proposing to install additional warning devices on the lower Saluda River that will expand the warning system to include the entire lower Saluda River from the dam to the confluence with the Broad River. These sirens ~~will be installed in three phases; additional details regarding the~~ warning devices are contained in Appendix A-1 of the Saluda Hydroelectric Project (FERC Project No. 516) Relicensing Comprehensive Settlement Agreement.

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Deleted: in 2008 between the Saluda Hydro powerhouse and Saluda Shoals Park (Phase I). Phase II will be installed within one year of license issuance and consist of: sirens at Corley Island, Gardendale, and downstream of the Interstate 26 bridge; and strobe lights at Corley Island and on the upstream and downstream sides of the Interstate 26 bridge. Phase III will be installed within two years of Phase II completion and may (as determined by the coverage of Phase I and Phase II) consist of: sirens at Saluda Shoals Park, downstream of the Interstate 20 Bridge, and two additional sirens downstream of the Interstate 26 bridge; and a strobe light upstream of the Interstate 20 bridge.

Additionally, SCE&G is proposing to continue managing an electronic ring-down call system (operational on April 14, 2008) that is activated by the SCE&G System Dispatchers upon initiation of significant generation at Saluda. Upon activation, a message is sent to registered individuals via e-mail and telephone, alerting them to the initiation of generation. Registration for this ring-down service can be made at SCE&G's website (<http://www.sceg.com/en/my-community/lower-saluda-river/>). This system was developed in response to Safety RCG member requests for notification of initiation of Saluda Hydro generation. Information about current and planned operations is also provided on a website maintained by SCE&G.

7.4 Recreational Flow Releases on the Lower Saluda River

The LSSRAC, SCPRT, SCDNR, AW, SRCTU, and CCL/AR have requested instream flows for the lower Saluda River to support recreational uses such as small boat navigation, swimming, wade and boat fishing, and other downstream uses.

AW, CCL/AR, and the City of Columbia Parks and Recreation Department have also requested scheduled recreational releases for whitewater boating, wade fishing, and special events.

As a result of consultation with the aforementioned groups, SCE&G is proposing to schedule recreational releases that will be administered through compliance with this Recreation Plan. The recommendation includes the flexibility to change the recreational flow schedule yearly in consultation with affected groups and provides for those times when inflow to the reservoir has triggered the Low Inflow Protocol.

The recreational releases will be scheduled as follows:

1. SCE&G will release approximately 45,000 acre feet of water per year for recreational flows in the lower Saluda River. These flows will occur on no more than 51 days. The Saluda Hydro Project will be removed from reserve status during the recreational flow hours on those 51 days;
2. SCE&G will host an annual meeting during October of each year to review the previous year's flows, set the specific dates for the following year's flows (with the understanding that the volume of water and number of days will remain consistent from year to year, even if the schedule varies), and discuss any outstanding issues with appropriate stakeholders;
3. SCE&G will host triennial meetings for comprehensive reviews of the recreation flow schedule for the purpose of reviewing recreation trends, trout reproduction and holdover, etc.;
4. SCE&G will meet with the Recreation Flow Technical Working Committee to determine a schedule for the reduction and elimination of recreational flows based on criteria from the Low Inflow Protocol; and
5. SCE&G will make reasonable efforts to provide the requested flow releases. However, due to Project equipment, it is recognized that these are "target" flows and they may vary to some extent. Make-up days will be allowed; no more than 5 recreational days per year can be lost to operational or maintenance emergencies before make up days will be

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required to be scheduled; make-up days must occur within three months of the scheduled flow. The annual flow release schedule will be posted on the SCE&G website.

The initial schedule of release is:

	EVENT NAME	REC. FLOWS					
		DAYS ALLOCATED	HOURS /DAY	START TIME	END TIME	CFS	AC-FT*
January	Iceman Race	1	6	8:00	14:00	4,000	1,636
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	MLK Day	1	5	7:00	12:00	700	0
February	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	President's Day	1	5	7:00	12:00	700	0
March	WW Festival	1	6	8:00	14:00	8,650	3,941
	WW Festival	1	3	10:00	13:00	3,300	644
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
April	General Recreation (Sat.)	1	5	12:00	17:00	1,000	0
	General Recreation (Sun.)	1	5	7:00	12:00	1,000	0
May	CFK	1	9	7:30	16:30	10,000	6,470
	Wade Fishing	1	9	8:00	17:00	700	0
	Memorial Day/ General Recreation	1	9	8:00	17:00	1,000	0
June	Rescue Rodeo	2	9	7:00	16:00	2,111	2,099
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
July	WW Rodeo	2	8	9:00	17:00	3,300	3,437
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
	Ind. Day/ General Recreation	1	9	8:00	17:00	1,000	223
August	USTWWR Prac.	2	8	8:00	16:00	10,000	12,295
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0

	EVENT NAME	REC. FLOWS					
		DAYS ALLOCATED	HOURS /DAY	START TIME	END TIME	CFS	AC-FT*
September	High Boating (Sat. and Sun.)	2	6	10:00	16:00	4,500	3,768
	Labor Day/ General Recreation	1	9	8:00	17:00	1,000	223
October	CFK	1	7	9:30	16:30	2,400	983
	High Boating (Sat. and Sun.)	2	6	10:00	16:00	4,500	3,768
November	Low Boating (Sat.)	1	6	10:00	16:00	2,400	843
	High Boating (Sun.)	1	6	10:00	16:00	4,500	1,884
December	Low Boating (Sat.)	1	6	10:00	16:00	2,400	843
	High Boating (Sun.)	1	6	10:00	16:00	4,500	1,884
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Totals>>>>	51					44,940

*Increment Above Minimum Flow

In addition to the recreational releases outlined above, SCE&G will provide the City of Columbia Fire Department (CFD) with flow releases to allow them to train for swift water rescue on the lower Saluda River. SCE&G has proposed a schedule for these releases to the CFD and upon concurrence will detail the releases in this section.

7.5 Placement and Maintenance of Shoal Markers

Lake Murray is a large reservoir and, like many other reservoirs, has hazards that present a danger to boaters and other recreationists. The LMW and the LMA have raised the issue of the responsibility for marking these hazards to make Lake Murray safer for the boating public. SCE&G has historically depended on the SCDNR to bear responsibility for the marking of hazards. Stakeholders contend that the SCDNR system is not as effective as it could be because of the yearly fluctuations in water level, unmarked hazards, and missing/damaged shoal markers.

The Recreation RCG is recommending SCE&G continue to cooperate with the SCDNR in the marking of hazards in Lake Murray. This includes support for public communication regarding locations of unmarked hazards and a system whereby the

Deleted: These flows will be as follows.¶
 ¶<#>During a "normal" flow year, SCE&G will provide 6 days (8 hours per day) of flows ranging from 12,000 cfs to 15,000 cfs in March. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.¶
 ¶<#>During a "normal" flow year, SCE&G will provide 5 days (8 hours per day) of flows ranging from 8,000 cfs to 10,000 cfs in the September to December months. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.¶
 ¶<#>Reduced flows will be made available to the CFD based on the Low Inflow Protocol (LIP). The flows will range from 12,000 cfs to 15,000 cfs in March, but will be reduced to 3 days (10 hours per day). The September to December flows will range from 8,000 cfs to 10,000 cfs but will be reduced to 3 days (10 hours per day). SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times. The triggers for implementing these reduced flows and the elimination of the swift water rescue training flows during low inflow periods will be determined once the LIP is finalized. This issue has not been resolved at this time.¶
 ¶As with the recreation flow releases, flows will be measured at the USGS gage below the Saluda Dam (02168504). Actual flows may vary ± 10%.

SCDNR can be made aware of these areas. As a result of these discussions, SCE&G is hosting a Navigational Aids Marking Form on it's website to make it easier for the public to report unmarked hazards and/or damaged or missing markers. The form is available at: <http://www.sceg.com/en/my-community/lake-murray/lake-management/>.

7.6 Protection of the Trout Fishery in the Lower Saluda River

The lower Saluda River is successfully managed (and classified by the SCDHEC) as a put, grow, and take trout fishery by the SCDNR. Currently, annual stockings of brown and rainbow trout species are necessary to support the trout fishery in the lower Saluda River.

Trout stockings vary in number depending primarily on availability of fish from the SCDNR Walhalla Fish Hatchery. Stocking records suggest that typically the SCDNR stocks approximately 30,000 to 34,000 trout annually in the lower Saluda River, with approximately 60% being rainbow trout. The length of the fish at the time of stocking is typically 6-8" for brown trout and 9-10" for rainbow trout.

Trout are typically stocked from November – March throughout the lower Saluda River after the dissolved oxygen (DO) levels in the releases of water from Lake Murray have improved to safer levels for fish. The initial stocking event is typically done by the use of helicopter to facilitate distribution of both species along the lower Saluda River. Subsequent stockings are conducted by truck with stocking limited to three locations along the lower Saluda River. Intense fishing pressure, predation, potential late-summer and fall low DO concentrations, and thermal regimes affect both carryover and incidental reproductive success of adult trout in the lower Saluda River. Recent turbine improvements have increased DO concentrations. However, while continued stocking efforts by the SCDNR will be required to support the trout fishery, changes in project operations (i.e., minimum flows) should facilitate increased carryover of stocked trout. Increased adult carryover could provide increased opportunities for natural reproduction of trout, further enhancing the lower Saluda River trout fishery.

The Recreation RCG recommended a number of measures to support the trout fishery in the lower Saluda River. These include providing sufficient access points, maintaining state water quality standards, and continuing relationships with appropriate agencies to support the health and survival of the trout in the lower Saluda River. During the relicensing process, several of these recommendations have been incorporated into various management plans, including the additional access areas outlined in the Plan on the lower Saluda River, the additional warning devices on the lower Saluda River, scheduled flows for wade fishing, and development of a trout ~~monitoring~~ program.

Deleted: management

8.0 AS BUILT AND CONCEPT DESIGN DRAWINGS

SCE&G is providing as built drawings and/or concept design drawings of all recreation sites referenced in this plan in [Appendix F](#). These drawings are provided to show detail regarding site amenities (i.e., location of boat ramps, docks, etc.) and the relation of the site to the existing project boundary. Pending FERC approval of this plan, these drawings will be updated as sites are modified and/or the project boundary is approved. For those sites where no updates are scheduled and no property is being added (i.e., the project boundary is not being changed), the drawings reflect best available information regarding site amenities. SCE&G will update these drawings as necessary during the 10 year review process incorporated in Section 6.2.

9.0 REFERENCES

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APPENDIX A

MAPS OF EXISTING RECREATION SITES, EXISTING FUTURE RECREATION SITES,
AND SEGMENTS OF LAKE MURRAY USED FOR THE BOATING DENSITY ANALYSIS

APPENDIX B
MEETING NOTES

APPENDIX C

RECREATION RESOURCE CONSERVATION GROUP WORKING DOCUMENTS

APPENDIX D

MAPS OF PROPOSED FUTURE RECREATION SITES

APPENDIX E

RECREATION RESOURCE CONSERVATION GROUP ISSUE RECOMMENDATIONS

APPENDIX F

AS BUILT AND CONCEPT DESIGN DRAWINGS

Alison Guth

From: Alison Guth
Sent: Wednesday, June 03, 2009 12:27 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman
Subject: Draft Settlement Agreement Document

Good Morning All,

Attached to this email is a link created to house the Draft Settlement Agreement Document and its associated, non-attached appendices. Please note that as this document is still in draft form, it is not for public dissemination. Even though the document appears to be attached to the public Saluda website, there are no external links to the webpage.

The Draft Settlement Agreement document is in Microsoft Word form in order to allow for track changes. Those appendices to the Draft Settlement that are also in Word form have been attached directly to the document. Those appendices in PDF form (such as WMA Maps, Recreation Plan, SMP, etc.) are included as separate links on the web page. You will also notice there are a couple place-holders in the Settlement for the Trout Plan and Mussel Plan, as those will be discussed in the meetings next week. Feel free to email me if you have any questions or problems accessing the webpage. Thanks, Alison

<http://www.saludahydrorelicense.com/DraftSettlementAgreement.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Fish and Wildlife RCG/TWC/Settlement Agreement Meeting
Location: TBA
Start: Thu 6/11/2009 9:30 AM
End: Thu 6/11/2009 4:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Required Attendees: All RCG & TWC Members

Hello All,

June 11th seems to fit the best with everyone's schedules, therefore we will be holding a Fish and Wildlife TWC/RCG/Settlement Agreement Meeting on Thursday, June 11th at 9:30 to discuss the Trout and Mussel Plans. I am still working out the details of the meeting location and will update everyone regarding that as soon as I know something. Please RSVP by Monday, June 8th. Thanks, Alison

Alison Guth

From: Shane Boring
Sent: Wednesday, June 03, 2009 9:20 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
Subject: Saluda Relicensing: Updated Text for Draft RT&E Species Brochure

Dear Fish and Wildlife RCG Members:

In preparation for the June 11 Fish and Wildlife meeting, I have attached the updated text of the Rare, Threatened and Endangered Species public education brochure for your review. As we have previously discussed, this is just the text, which will be turned into a tri-fold or something of the like by a graphic designer. Thanks to all who contributed to developing this information.

Shane

** Please note that the South Carolina office phone numbers have changed. Updated numbers are provided below.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)462-5620
Fax: (803)462 - 5619



RTE Brochure CSB
06-02-09.doc ...

Alison Guth

From: Shane Boring
Sent: Wednesday, June 03, 2009 9:20 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
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RTE Brochure CSB
06-02-09.doc ...

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Tuesday, June 02, 2009 4:00 PM
To: Alison Guth
Subject: RE: Organization descriptions

Alison,

Here is American Rivers' signatory name and title for the settlement.

Rebecca R. Wodder, President

Gerrit

Gerrit Jöbsis, American Rivers
Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, S.C. 29205
803.771.7114 (t) 803.771.7580 (f)
gjobsis@americanrivers.org

American Rivers helped secure passage of the second-largest Wild and Scenic Rivers package in history. Read more about it at www.AmericanRivers.org.

American Rivers protects and restores healthy natural rivers for the benefit of people, wildlife, and nature.

From: Gerrit Jobsis
Sent: Tuesday, June 02, 2009 3:06 PM
To: Alison Guth
Subject: RE: Organization descriptions

American Rivers is the leading conservation organization fighting for healthy rivers so communities can thrive. American Rivers protects and restores America's rivers for the benefit of people, wildlife and nature. Founded in 1973, American Rivers has more than 65,000 members and supporters, with offices in Washington, DC, Columbia, SC and nationwide. We have been involved in the relicensing of more that 40 dams in South Carolina and the Southeast that affect some 1000 miles of river. Visit www.AmericanRivers.org

Gerrit Jöbsis, American Rivers

Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, S.C. 29205
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American Rivers protects and restores healthy natural rivers for the benefit of people, wildlife, and nature.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Tuesday, June 02, 2009 2:48 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rparsons12@windstream.net; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Organization descriptions

Good Afternoon Folks

During last Tuesday's meeting there was a discussion on the signatory page to the Settlement Agreement. It was suggested that in addition to the signatures provided by the entities signing, there would also be a short description of that entity, it's mission statement, or major goals etc. Using Kleinschmidt as an example, we have created the strawman below. Please keep them to a paragraph or less. Thanks, Alison

Kleinschmidt Example:

Founded in 1966, Kleinschmidt has focused on the needs of energy and water resource clients throughout the United States. Kleinschmidt has provided engineering, environmental and regulatory services over 100 clients in 10 countries including at the Saluda Hydroelectric Project relicensing. Kleinschmidt's roles in the Saluda relicensing have been to ensure impacts of continued operation of the Saluda Project are addressed as required under the National Environmental Policy Act, work with interested stakeholder groups to develop Protection Mitigation and Enhancement measures whose scopes are consistent with

the level of impact from project operation and secure an operating license that maintains operational flexibility for the continued long term viability of Project 516.

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

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Subject: Organization descriptions

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Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, May 28, 2009 10:41 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman
Subject: Dates for Fish and Wildlife and Water Quality Settlement Meetings

Hello All,

As Alan noted in Tuesday's meeting, there is still a need to hold Fish and Wildlife and Water Quality TWC/RCG/Settlement Agreement Meetings to finish up discussions on the Trout and Mussel plans, as well as drawdown discussions. Therefore I propose the following meeting dates:

June 4th - Fish and Wildlife
June 5th - Water Quality

Please let me know if these dates will work for you. Alternatively we could meet on June 11th/and or the 12th. Please let me know something by Friday if possible. Thanks! Alison

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Alison Guth

From: Alison Guth
Sent: Wednesday, May 27, 2009 3:38 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Presentation from Tues. May 26



LIP Stage & Flow
Comparison 20...

Hello All,

Attached is the presentation that Ray Ammarell provided at yesterday's Settlement Agreement Meeting. This will also be posted to the website. Thanks, Alison

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Alison Guth

From: Alison Guth
Sent: Tuesday, May 26, 2009 2:50 PM
To: 'adventurec@mindspring.com'
Subject: RE: Meeting this week

Hello Richard,

Unfortunately the meeting was today at 9:30. If you every have any questions about the meeting dates just check the calendar at www.saludahydrorelicense.com . I usually try to keep it pretty updated. The meeting notes from today's meeting will be out soon as well. Thanks, Alison

-----Original Message-----

From: Richard Mikell [mailto:adventurec@mindspring.com]
Sent: Tuesday, May 26, 2009 9:50 AM
To: Alison Guth
Subject: Meeting this week

When and where do we meet this week about the one and two foot rule?

I never got the final meeting date and would like to attend.

Thanks,

Richard Mikell

Adventure Carolina

Alison Guth

From: Alan Stuart
Sent: Monday, May 25, 2009 2:17 PM
To: Alison Guth; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: W2 results and Unit 5 Operation Assessment



Lake Murray
Settlement Agreement.

Dear Water Quality Stakeholders,

Attached are the results of the additional modeling conducted by Jim Ruane and Andy Sawyer of a high, low, and normal year based on the new guide curve and low flow criteria, as well as results with and without unit 5 being operated as first on, last off. These data were compiled as a result of requests made at our Settlement Agreement meeting convened on April 1st.

In the interest of pressing forward on the Settlement Agreement, we will be scheduling a water quality meeting in early June to discuss the results of the analyses and also the independent review of the proposed water quality maintenance drawdowns in Lake Murray. We will be proposing some dates for the meeting this week.

In the interim, please review the attached analyses and be prepared to discuss them in the near future.

Thank you for all of your hard work !
Alan

Supplemental CE-QUAL-W2 Model Runs to Assess Effects of Reservoir Operations under the Saluda Hydro Relicensing Comprehensive Settlement Agreement

Prepared by Jim Ruane and Andy Sawyer, Reservoir Environmental Management, Inc
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Overview of the Assessment

[Note: this overview and the conclusions in the next section are intended to serve as a free-standing summary that can be reviewed by those who are interested primarily in the summary information and conclusions. It includes plots and tables that present the main results of the assessment, but also references figures and tables in the more detailed sections of the assessment.]

The Water Quality Group decided at their Settlement Agreement Meeting on April 1, 2009, to request that REMI conduct model runs to assess the effects of proposed changes in reservoir operational guides. Since the previous CE-QUAL-W2 water quality model results presented in the report “Applications of the CE-QUAL-W2 Model for Lake Murray Relicensing Issues” dated December 2007, the following changes in the operational guides are now being considered (i.e., Saluda Hydroelectric Project (FERC Project No. 516) Relicensing Comprehensive Settlement Agreement (February 19, 2009)):

- Fill pool of Lake Murray to elevation 358 feet msl by March 1
- Provide special flow releases from Saluda Hydro during the period April 1 through May 10 to provide for striped bass in the Congaree River on bases that are linked to flow in the Congaree River and pool elevation of Lake Murray
- Increase minimum flows to levels that are higher than were assumed for the December 2007 assessment
- Change the operation of Unit 5 so that it is operated on a first-on basis for flows greater than 1500 cfs (instead of all flows less than 6000 cfs as was assumed for the December 2007 assessment) up to July 31 (instead of June 15 as was assumed for the December 2007 assessment).

Since these potential changes in reservoir operations could affect the water quality and the fishery resource assessments reported in the December 2007 assessment, it was decided that the 2007 model runs should be up-dated using the Settlement Agreements dated February 19, 2009.

Sensitivity of water quality and the fishery resource to Unit 5 operations. It was also requested that model runs be made with the operational restrictions on Unit 5 (as stated in the settlement agreement and under the last bullet item above) significantly reduced to test

sensitivity of water quality and the fishery resource to Unit 5 operations. The reason for making these runs was due to the lack of information regarding operating restrictions that might be placed on the new unit that is to be installed at a later date. Therefore, this assessment included model runs with Unit 5 operated on a “last-on, first-off” basis for project flows exceeding the capacity of the of three of the lower units, i.e., assumed to be 9600 cfs.

The group requested that the assessment focus on the effects of the changes in the operational guides on volume of striped bass habitat in Lake Murray and temperature in the tailwater. The bases for comparison were to be actual conditions and the final cases in the 2007 assessment that were developed to enhance striped bass habitat in Lake Murray and coolwater temperature in the tailwater.

It was decided that REMI would model three years that represented a range of hydrologic conditions using the operating guides specified in the comprehensive settlement agreement. The model was set up for a low flow year, a normal flow year, and a high flow year. The years selected were 2000, 1997, and 1998 [note: the bases for selecting these years is presented in the section Selection of Years to Model]

Conclusions

In both the 1997 and 1998 settlement agreement scenario runs, the bottom of Lake Murray and the tailwater did not warm up as much as it did under actual conditions. While this result was true for both the “first-on, last-off” and the “last-on, first-off” operations of Unit 5, the “first-on, last-off” operations of Unit 5 resulted in cooler water in the bottom of Lake Murray as well as in the tailwater. With cooler water preserved in the bottom of Lake Murray, DO in the releases was higher; and there was an increase in the availability of “tolerable” striped bass habitat in Lake Murray. [see Figures 1 and 2 and Table 1; also for more details see section Model Results from Assessment of Settlement Agreement Operational Guides.]

In the 2000 settlement agreement scenario run, the bottom of Lake Murray and the tailwater warmed up more than they did under actual conditions, especially for the case with Unit 5 last-on, first-off. These increases in temperature in the lake bottom and tailwater were caused by the increase in outflow during the spring months in the settlement agreement scenarios (Tables 1 and 4; Figures 32-33, 35-37). The monthly average outflow was over 100% higher in March, April and May in the settlement agreement scenario than under actual conditions in 2000. The minimum flow in the settlement agreement scenarios included the Striped Bass Enhancement Flow Regime (STB) flows (Table 4). These higher flows in March and April caused temperature to increase in the bottom of the lake and in the tailwater.

Although the temperature in bottom of Lake Murray and release temperatures were warmer in the settlement agreement scenarios in 2000, the temperatures were still significantly cooler than in normal and high flow years. Under all conditions in 2000 the release temperatures were relatively cool and should not be a significant issue for trout in the Saluda Dam tailwater, even with the increase in temperature that occurs as the water travels from Saluda Dam to the mouth of the Saluda River. The effect that the different operational scenarios had on striped bass habitat in Lake Murray was very negligible (Figure 3).

In all years modeled the Unit 5 last-on, first-off scenario (i.e., with the first 9600 cfs passing through the lower units) had warmer temperatures in Lake Murray and warmer releases from

Saluda Hydro than the Unit 5 first-on, last-off scenario. Therefore, to the extent that Unit 5 can be used in the mode of first-on, last-off for the months November through July, it would be best for temperature in the bottom of the lake and in the tailwater as well as for striped bass habitat in the lake.

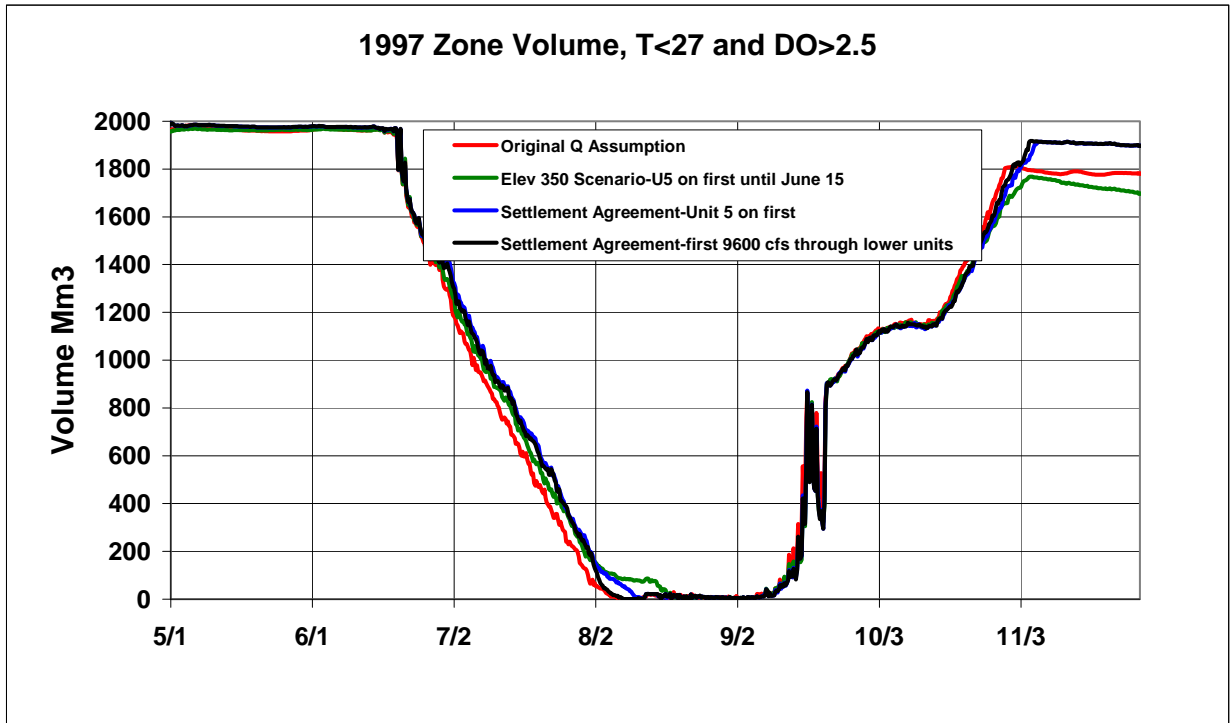


Figure 1. 1997 Volume of “Tolerable” Striped Bass Habitat

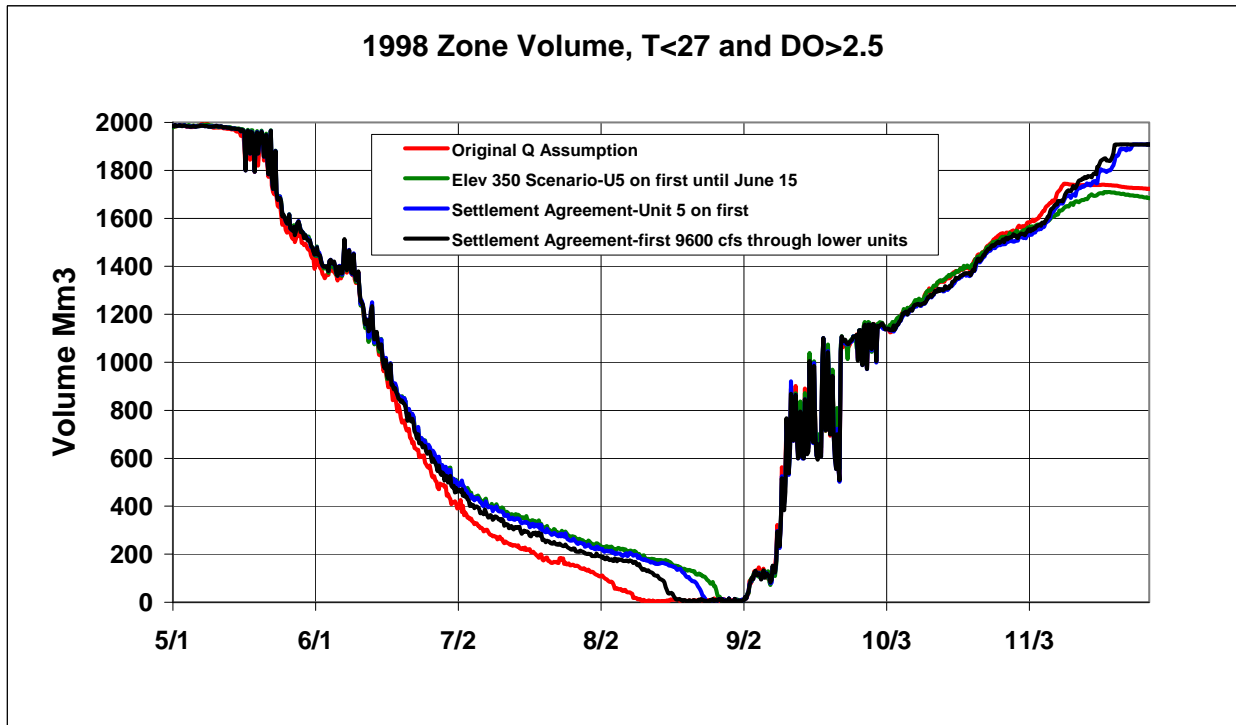


Figure 2. 1998 Volume of “Tolerable” Striped Bass Habitat

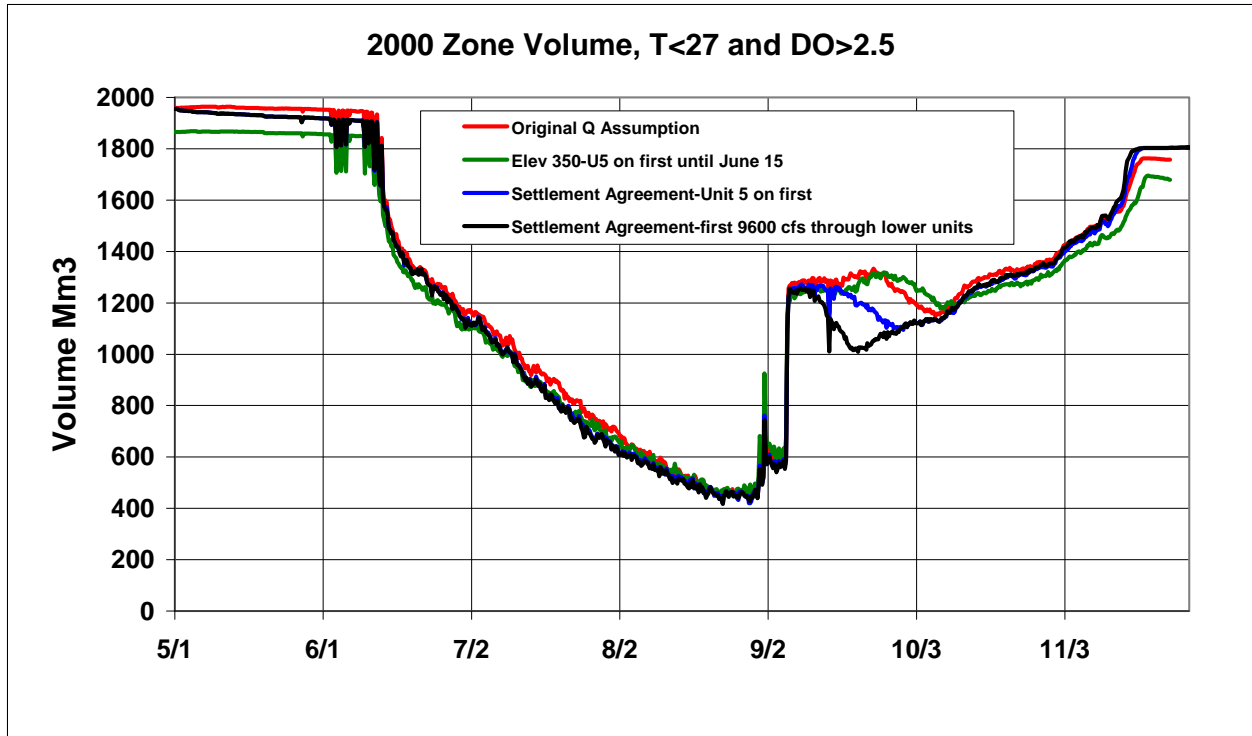


Figure 3. 2000 Volume of “Tolerable” Striped Bass Habitat

Table 1. Summary of Model Results on Temperature in the Bottom of Lake Murray and the Saluda Hydro Tailwater (see notes below)

	Forebay Bottom Temperature			Release Temperature during Minimum Q		
	1-Aug	1-Sep	1-Oct	1-Aug	1-Sep	1-Oct
1997 Actual	16.2	17.8	18.7	16.6	18.2	19.0
1997 Unit 5 on first until June 15	14.1	15.4	16.1	14.5	15.7	16.4
1997 Settlement Agreement Unit 5 on first	15.5	16.6	17.2	15.8	16.8	17.4
1997 Settlement Agreement Unit 5 on last	16.2	17.2	17.8	16.4	17.5	18.0
1998 Actual	15.3	16.2	17.0	15.7	16.6	17.3
1998 Unit 5 on first until June 15	13.8	14.7	15.5	14.1	15.0	15.8
1998 Settlement Agreement Unit 5 on first	14.5	15.3	16.0	14.7	15.5	16.2
1998 Settlement Agreement Unit 5 on last	14.9	15.7	16.4	15.1	15.9	16.6
2000 Actual	13.8	14.7	15.3	14.1	15.0	15.6
2000 Unit 5 on first until June 15	12.9	14.0	14.8	13.3	14.3	15.0
2000 Settlement Agreement Unit 5 on first	14.4	15.1	15.7	14.6	15.3	15.9
2000 Settlement Agreement Unit 5 on last	14.9	15.6	16.1	15.1	15.7	16.2

NOTES: “Unit 5 on first until June 15” involved the conditions used in the 2007 Model Applications report where U5 was used on a “first-on” basis for all flow levels up to 6000 cfs November 1 through June 15; “Settlement Agreement Unit 5 on first” involved operating U5 when flow levels were between 1500 and 6000 cfs until August 1; “Settlement Agreement Unit 5 on last” involved operating U5 when flow levels were between 9600 and 15600 cfs

Selection of Years to Model

The three years selected for modeling were chosen from the years for which calibrated models had previously been developed, i.e., 1991, 1992, 1996, 1997, 1998, 2000, 2001, and 2005. The calibrated modeled years were categorized based on mean inflows for the time period March-September:

- Low flow years—2000 and 2001
- Normal flow years—1991, 1992, 1996, 1997 and 2005
- High flow year—1998

Table 2 shows the monthly mean flows, the annual mean flows, and the March-September mean flows at the Chappells USGS gage for the years with calibrated models. The mean flows for each month based on all available data for this site since 1927 are shown at the bottom of the table, and the levels of flow that are at 75% and 125% of these monthly means are also shown. These mean flows with their 75-125% ranges were used to categorize each month and year as to their low, normal, and high flow designations. The monthly mean values are color-coded based on this calculation so that low, normal, and high flow mean values are highlighted in orange, green and blue, respectively. The March-September mean flows were used to categorize the years for the settlement agreement simulations since these months are the most critical time period for conserving cold water in Lake Murray.

The selection of each year to be modeled within the three hydrologic categories for the settlement agreement runs was based primarily on the following considerations:

- Those years with the highest temperatures in the bottom of Lake Murray in late summer
- Those years with the highest temperatures in the releases from Saluda Hydro in late summer when the Saluda River might warm up enough to stress trout near the mouth of the Saluda River
- Those years with the greatest amount of flow that would be released from Saluda Hydro for striped bass enhancement in the Broad River.

Figure 4 shows the August forebay temperature profiles for all years modeled. Generally, bottom temperatures were elevated in higher flow years since higher flows through Saluda Hydro drain the cool water resource from the bottom of Lake Murray. Figure 5 shows the temperature in the Saluda River at the USGS gage (No. 02168504) below Saluda Hydro for the years modeled. This also illustrates that when outflow is higher, release temperatures are elevated. This connection is apparent by comparing Figures 4 and 5 to Table 3 that shows the monthly and annual mean flows as well as the March-September mean flows at the USGS gage downstream from Saluda Dam.

To consider those years with the greatest amount of flow that would be released from Saluda Hydro for the Striped Bass Enhancement Flow Regime (STB flows), the STB flows were determined for each of the modeled years. The STB flows would involve an extra required outflow in addition to minimum flow, recreational flow, and reserve generation flow that would be released from Saluda Hydro. Per the Draft Settlement Agreement dated February 19, 2009, the STB flow would occur during the period April 1 through May 10 each year. The STB flow would be required when the previous day's daily average flow in the Broad River (measured at Alston gage) was between 2,900 CFS and 7,700 CFS. The STB target flow would be released as a continuous 24-hour flow and would be equal to the lesser of 45% of the previous day's daily average flow in the Broad River at the Alston gage or the balance of what was required to create a flow of 9,000 cfs in the Congaree River. Figure 6 shows the daily mean flows in the Broad River at Alston for the April 1 through May 10 time period for all the modeled years. In all these years Saluda Hydro would have released water for STB flows because in each year there were at least some days that the daily mean flow in the Broad River at Alston was below 7,700 cfs. Table 4 shows a summary of characteristics used to assist in determining the years to model for this assessment. This table shows the number of days that STB flows were required each year as well as the average of the Saluda Hydro releases on these days—the table also shows the average minimum flows required for the period April 1 through May 10 each year.

Of the two low flow years (2000 and 2001), 2000 was chosen as the year to run the settlement agreement simulation. The primary reason for choosing 2000 over 2001 was the difference in the STB flows from Saluda Hydro. As shown in Table 4, the STB flows from Saluda Hydro

would be required for 30 days in 2000, whereas in 2001 the STB flows would be required for only 14 days. The difference in the number of days is due to the daily average flow in the Broad River at the Alston gage in 2001 being below the 2900 cfs threshold for 22 days. On these days the required minimum flow from Saluda Hydro would be 1000 cfs. Therefore, the year 2000 was considered a better year to model since the required minimum flow would be 51% greater than for 2001. As seen in Figures 1 and 2, 2000 was generally warmer than 2001 based on the August lake temperature and the Saluda Hydro release temperature, which made it a more challenging year for both the trout in Saluda tailwater and the striped bass in Lake Murray.

Of the normal flow years (1991, 1992, 1996, 1997 and 2005), 1997 was chosen. As shown in Figures 4 and 5, 1997 was one of the warmest years of the years modeled. Although 1991 was warmer than 1998 in August and September, it was not considered for further modeling due to the actual temperature in the releases that year being affected by relatively high releases from Saluda Hydro during the summer (Table 3) and the pool level being drawn down more than normal. 1992 was a relatively cool year and therefore was not considered a good candidate for further modeling. 1996 was ruled out due to the actual temperature in the releases that year being affected by a maintenance drawdown of Lake Murray that started in September. 2005 was similar to 1997 both in flow and water temperature (Tables 2 and 3 and Figures 4 and 5). However 1997 was warmer than 2005 in late September by 0.5 to 1.0 °C, and 2005 had relatively high summer flows.

Of the years in which calibrated models were available only 1998 had high inflows during the months of March, April and May (Table 2), and was the only year that qualified as a high flow year when the average flow for the March-September time period is considered.

These three years—1997, 1998, and 2000—provide a wide range of conditions for the objectives of the requested model runs.

Table 2. Monthly Means of Flow in the Saluda River at the USGS gage at Chappells (Modeled Years Only)

	Monthly mean streamflow, in ft ³ /s												Annual Avg	Mar-Sept
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1991	2,800	2,454	2,896	2,498	2,616	1,669	1,138	2,111	1,138	678	768	1,331	1841	2009
1992	1,280	1,860	2,501	1,545	1,044	1,321	702	918	1,320	1,635	3,269	3,852	1771	1336
1996	3,059	4,449	3,806	2,162	2,181	1,078	789	1,010	1,318	1,268	1,090	2,021	2019	1763
1997	2,601	2,938	3,322	1,869	1,889	1,530	1,431	878	877	1,222	1,621	2,203	1865	1685
1998	4,089	5,288	4,059	5,054	3,076	1,472	778	824	1,155	781	768	1,006	2363	2345
2000	1,905	1,234	1,721	1,157	695	410	365	446	954	384	481	727	873	821
2001	1,213	609	1,794	1,081	616	736	853	542	809	426	385	587	804	919
2005	1,949	2,109	2,450	2,925	1,660	2,428	2,647	1,681	671	1,064	773	1,819	1848	2066
Mean from USGS (all years 1927-2008)														
Mean	2,520	2,550	2,870	2,470	1,740	1,430	1,230	1,340	1,280	1,410	1,380	1,840	1,838	1,766
75%	1,890	1,913	2,153	1,853	1,305	1,073	923	1,005	960	1,058	1,035	1,380	1,388	1,323
125%	3,150	3,188	3,588	3,088	2,175	1,788	1,538	1,875	1,600	1,763	1,725	2,300	2,313	2,205

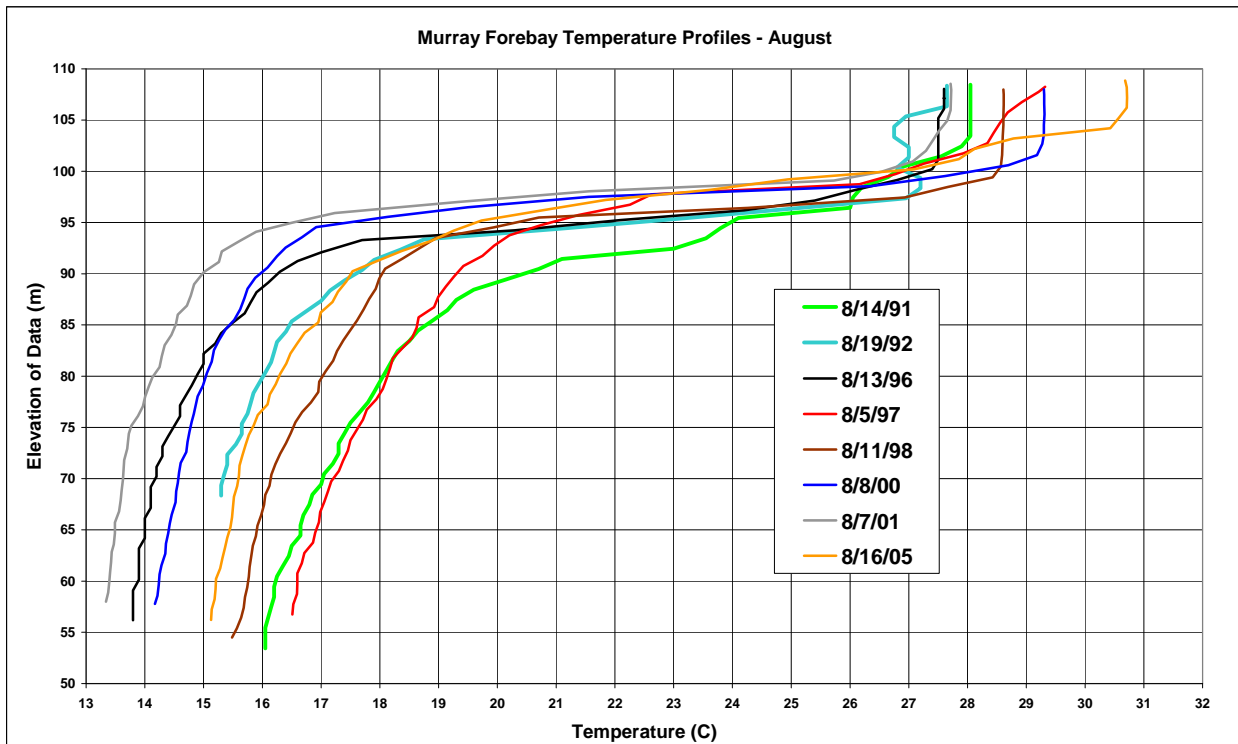


Figure 4. Lake Murray August Forebay Temperature Profiles (modeled years only)

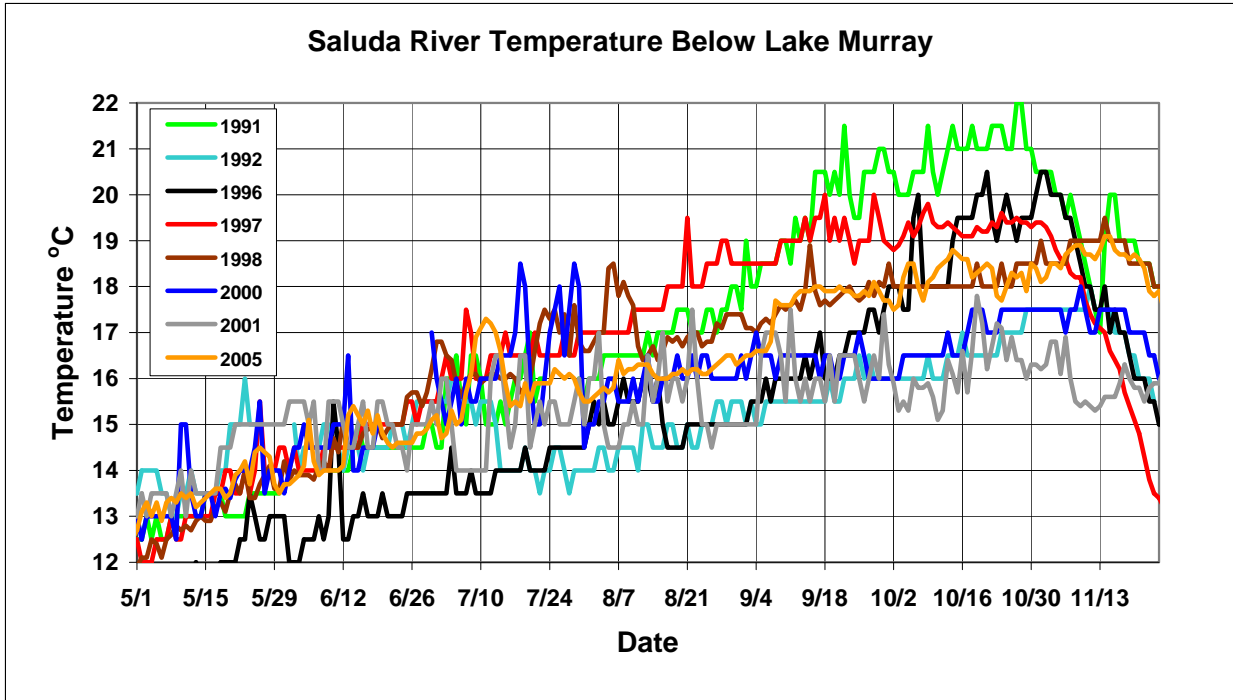


Figure 5. Daily Average Temperature in the Saluda River below Saluda Hydro for the May through November Time Period (modeled years only)

Table 3. Monthly Means of Flow in the Saluda River at the USGS gage Below Lake Murray (Modeled Years Only)

	Monthly mean streamflow, in ft ³ /s												Annual Avg	Mar-Sept Avg
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1991	1034	2449	4495	3754	3700	2201	3574	3483	2619	1665	2130	606	2,642	3,404
1992	1171	998	3001	2117	923	2506	2277	2349	3009	2923	4579	5773	2,635	2,312
1996	3123	4450	5625	1989	2396	2171	2012	2030	7837	2054	912	566	2,930	3,437
1997	976	4251	3896	1748	2069	2624	2546	2685	1762	1771	3115	2666	2,509	2,476
1998	6558	8396	5942	6595	4617	2293	1176	1983	2460	2087	2250	1919	3,856	3,581
2000	3661	1616	1272	887	589	644	595	1422	1502	2044	1164	1646	1,420	987
2001	690	590	518	577	536	584	1035	2071	1004	1843	1362	646	955	904
2005	2121	1797	3045	3862	1213	3495	2908	1850	1709	1938	758	3335	2,336	2,583
Mean from USGS (all years 1927-2008)														
	2950	3060	3470	2220	1610	1670	1960	2160	2330	2080	1850	2200	2,297	2,203
75%	2213	2295	2603	1665	1208	1253	1470	1620	1748	1560	1388	1650	1723	1652
125%	3688	3825	4338	2775	2013	2088	2450	2700	2913	2600	2313	2750	2871	2754

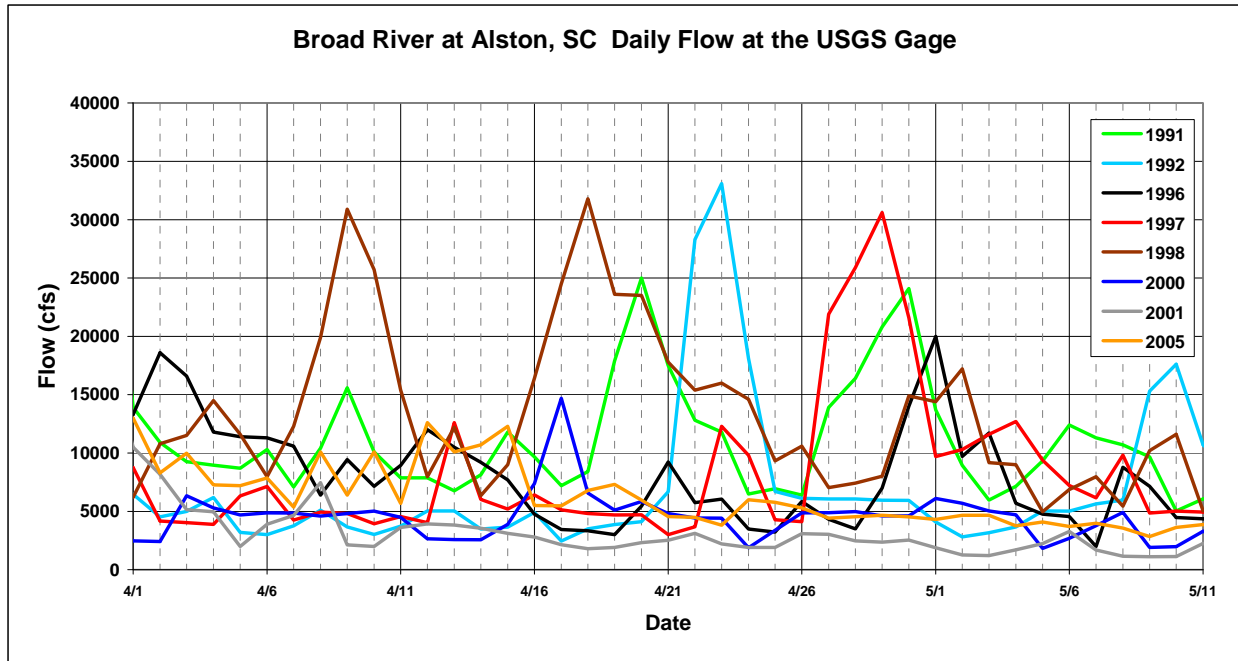


Figure 6. Average Daily Flows in the Broad River at the Alston Gage.

Table 4. Summary of Characteristics Used for Selection of Years to Model

	1991	1992	1996	1997	1998	2000	2001	2005
Jan-Sept flow at Chappells (cfs)	2147	1388	2206	1926	2866	987	917	2058
Mar-Sept flow at Chappells (cfs)	2009	1336	1763	1685	2345	821	919	2066
STB Flow Days (Days when outflow is > Min Q)	8	34	20	25	8	30	14	28
Average Daily Flow on STB Flow Days (cfs)	2208	2103	1992	2072	2268	2165	1694	2107
Average Minimum Flow Required from April through May 10 (cfs)	1242	1937	1496	1670	1254	1874	1243	1775
Daily Avg. Temp. at USGS gage below Saluda Dam on Sept. 30 (°C)	21.0	16	17.5	19.5	18.1	16.0	16.0	17.9

Model Set Up for Settlement Agreement Operational Guides

Consistent with the Comprehensive Settlement Agreement dated February 19, 2009, the following operational guides were used for modeling all years:

- Reserve generation was assumed to be 18000 cfs for 3 hours every 14 days
- Minimum Q = 700 cfs for 1/1 - 3/30 and 6/1 - 12/31; unless the 14-day mean inflow drops below 700 cfs and the reservoir level falls to more than 1.0 ft. below the current target reservoir elevation. When the 14-day mean inflow is less than 700 cfs and the reservoir level falls to more than 1.0 ft. below the current target reservoir elevation the minimum Q is 500 cfs
- Minimum Q = 1000 cfs for 4/1 - 5/31; unless the 14-day mean inflow drops below 1000 cfs and the reservoir level falls to more than 1.0 ft. below the current target reservoir elevation—when the 14-day mean inflow is less than 1000 cfs the minimum Q is 700 cfs—when the 14-day mean inflow is less than 700 cfs the minimum Q is 500 cfs
- April 1st – May 10th: Each day that the previous day’s daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of 45% of the previous day’s daily average flow in the Broad River at the Alston gage, or the balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day’s daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.
- All Recreational Flow Requirements as listed in “Operations Model Input.pdf” were met regardless of Low Inflow Protocol. However, if the recreational flow conflicted with the striped bass request flow on a particular day, the striped bass request flow took precedent. This conflict only occurred when the recreational flow was for wade fishing on April 15 or 16 when the minimum flow (1000 cfs) was the requested recreational flow.
- Minimum flows will be accomplished mainly with the bottom oriented units (Units 1 through 4).
- For generation flows (flows in excess of minimum flows): Unit 5 shall be operated preferentially as “first on, last off” from November 1 through July 31 of each year. The bottom-oriented units (Units 1 through 4) shall be operated preferentially as “first on, last off” during the months of August through October.

- Considering the uncertainty regarding restrictions that might be placed on the new Unit 5 turbine operations at low gate settings, a model run was set up for each year to test sensitivity of the Unit 5 operations as stated under the Settlement Agreement (see previous bullet) to determine how much effect such restrictions could have on results attained using the Unit 5 operations as stated in the February 19 Settlement Agreement

The effects of applying these operational guides can be seen in the results of the model runs showing the pool elevations (see the next section) and the hourly outflow plots by unit in the Appendix.

Model Results from Assessment of Settlement Agreement Operational Guides

The following plots and tables in this section present the results of the CE-QUAL-W2 model runs for 1997, 1998 and 2000. These plots and tables show comparisons between the modeled results from the Settlement Agreement scenarios (Unit 5 on first and last, with applicable restrictions noted previously) and the actual conditions as well as the earlier modeled scenario reported in December 2007 where Unit 5 was operated on a “first-on” basis for all flows less than 6000 cfs prior to June 15 and following November 1 each year.

Following is a summary of the plots and tables that are presented:

- Lake Murray water surface—Figures 7, 19, and 31
- Comparison of cumulative outflow at Saluda Hydro for the scenarios assessed—Figures 8, 20, and 32
- Saluda Hydro Release Temperature—Figures 9, 21, and 33
- Saluda Hydro Release DO—Figures 10, 22, and 34
- Lake Murray bottom temperature—Figures 11, 23, and 35
- Lake Murray forebay temperature profiles from April 1, May 15, July 1, August 1, September 1 and October 1—Figures 12-17, 24-29, and 36-41
- Volume of “tolerable” striped bass habitat—Figures 18, 30, and 42
- Summary tables of available “tolerable” striped bass habitat—Tables 5, 6, and 7
- Summary table of model results on temperature in the bottom of Lake Murray and the Saluda Hydro tailwater—Table 8—this table summarizes the results that were presented

graphically in Figures 9, 21, and 33; Figures 11, 23, and 35; and Figures 12-17, 26-29, and 36-41

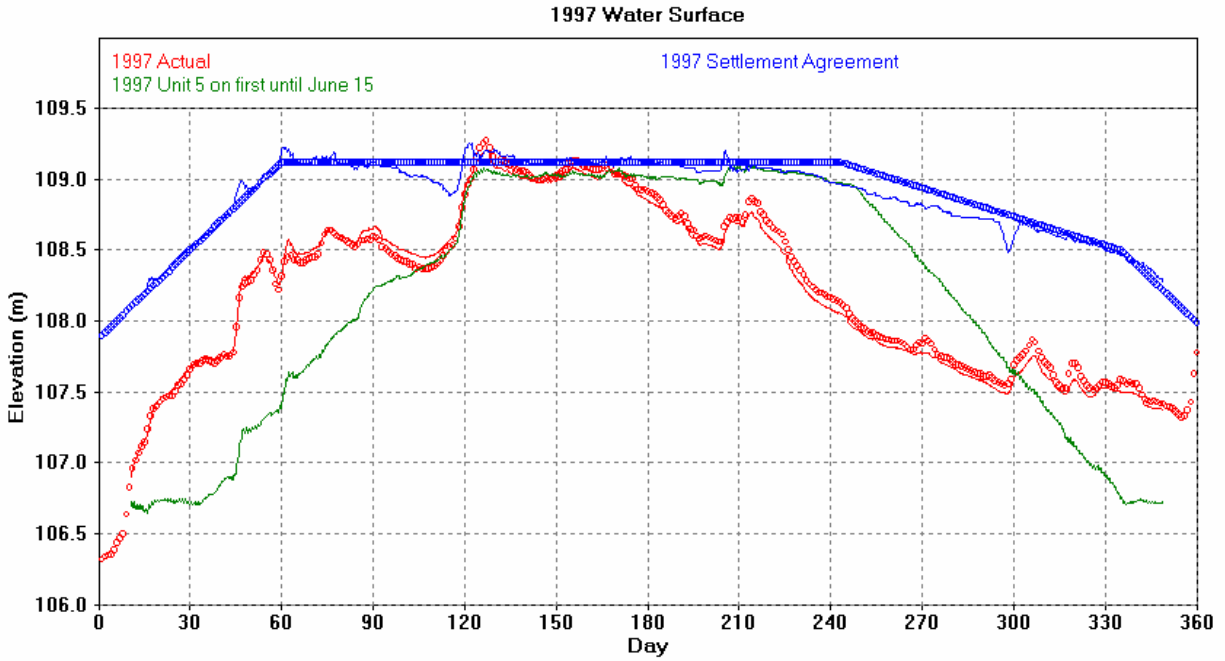


Figure 7. 1997 Water Surface

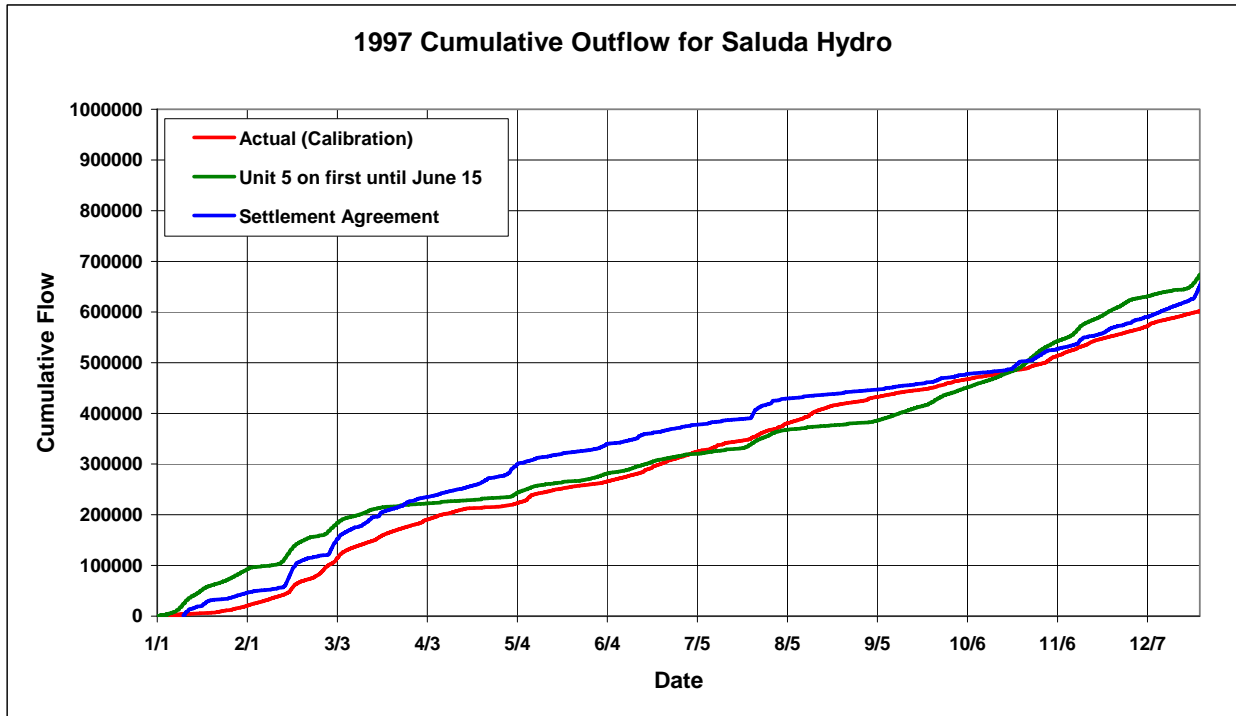


Figure 8. 1997 Cumulative Outflow

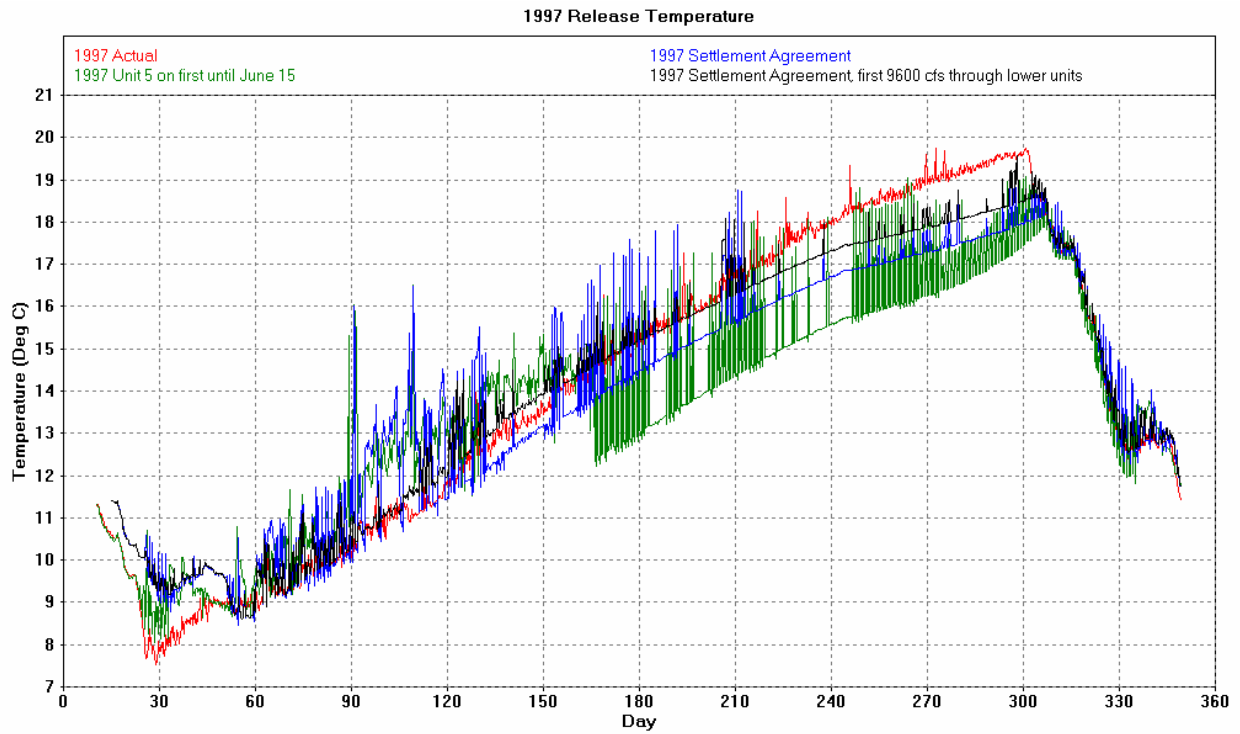


Figure 9. 1997 Release Temperature

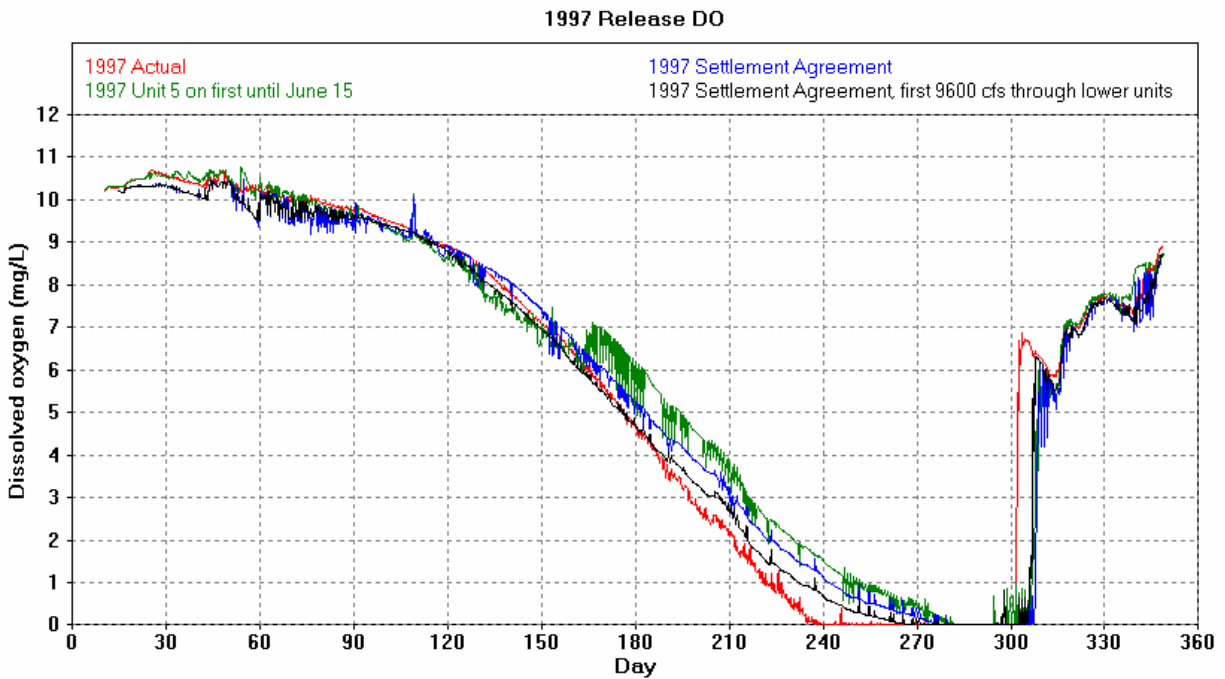


Figure 10. 1997 Release DO

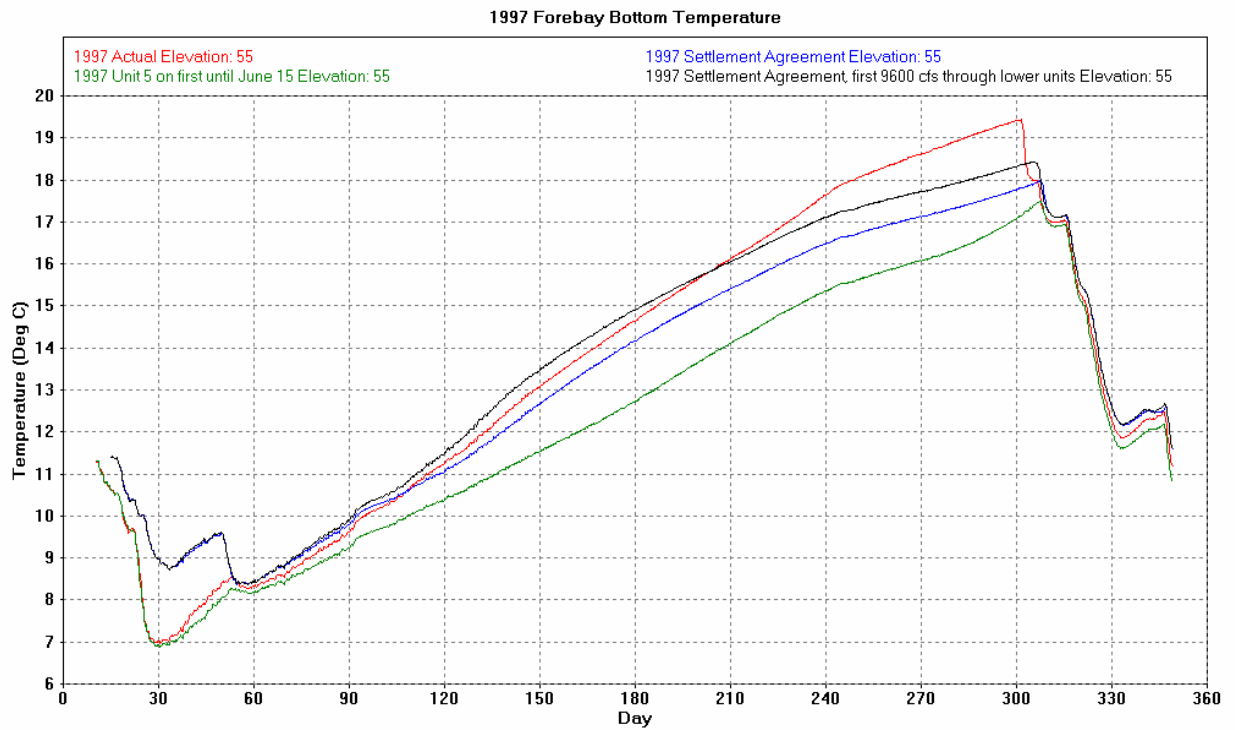


Figure 11. 1997 Temperature near bottom of Reservoir

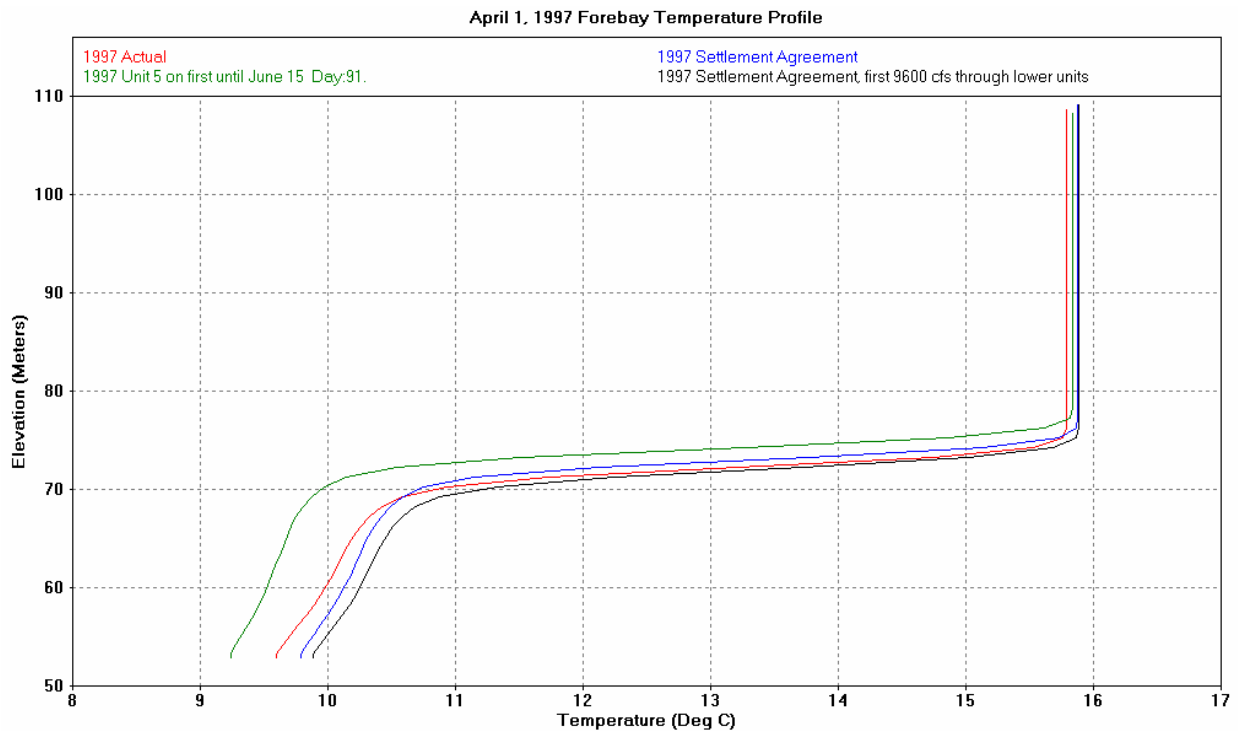


Figure 12. April 1, 1997 Forebay Temperature Profiles

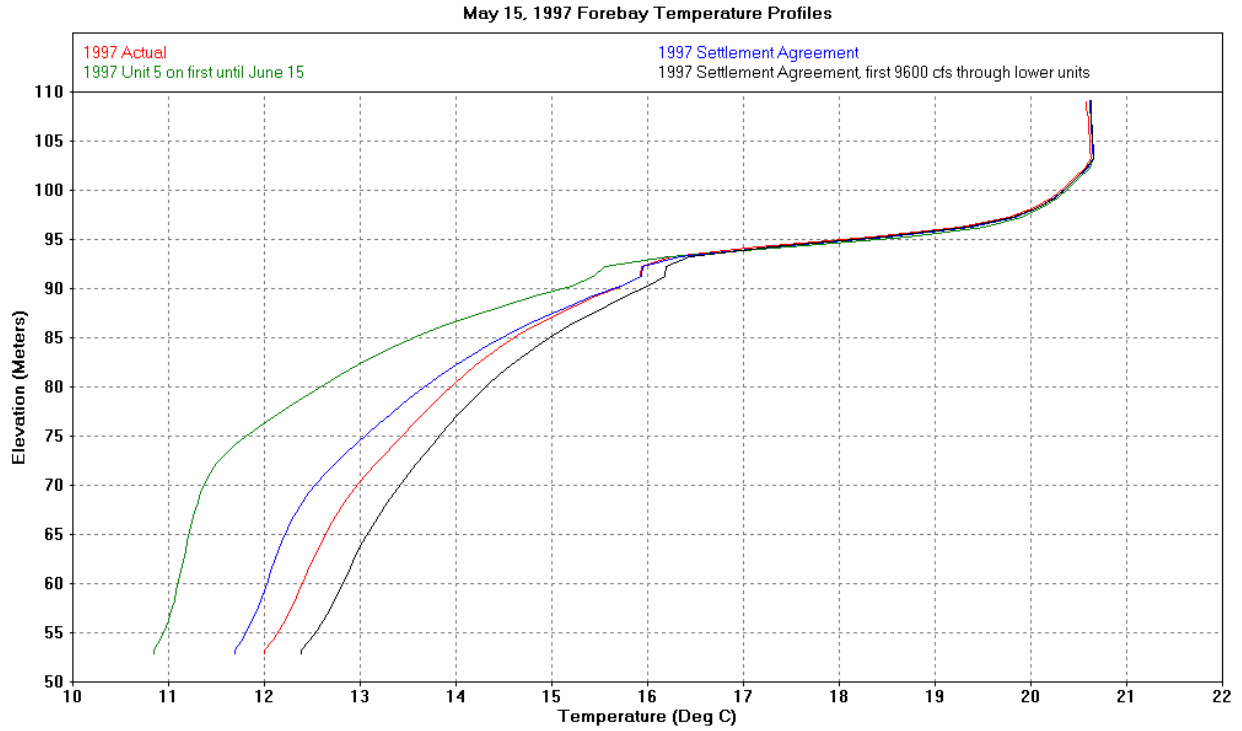


Figure 13. May 15, 1997 Forebay Temperature Profiles

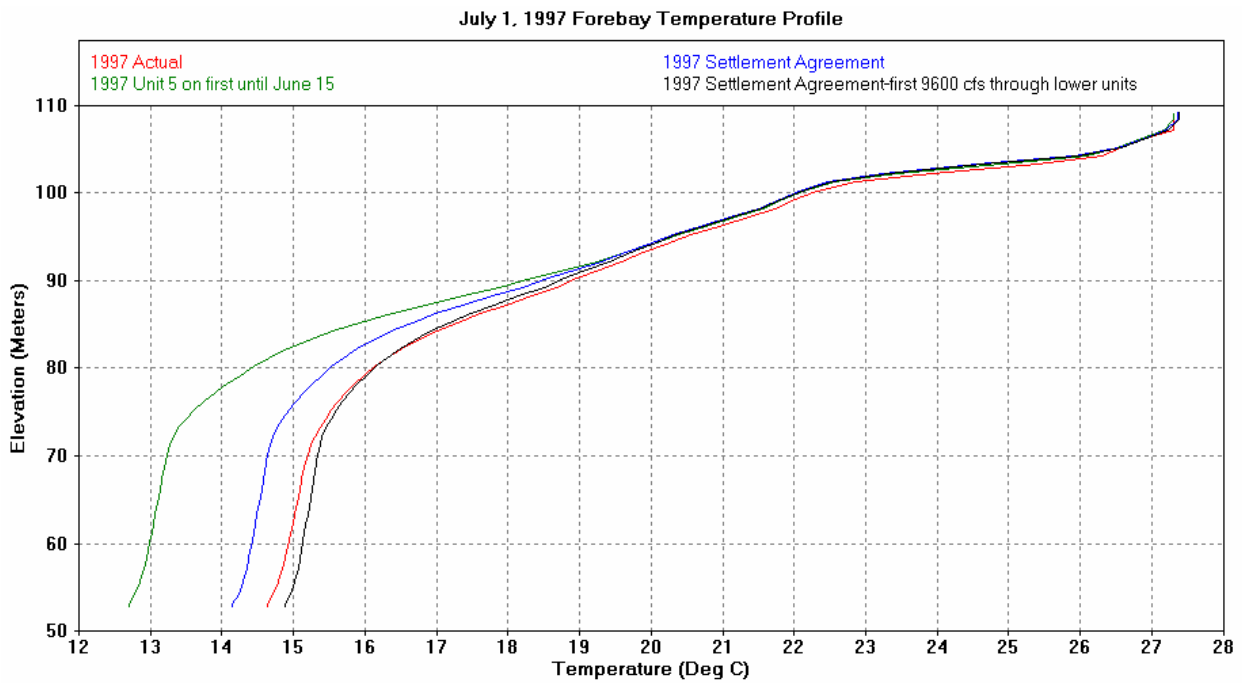


Figure 14. July 1, 1997 Forebay Temperature Profiles

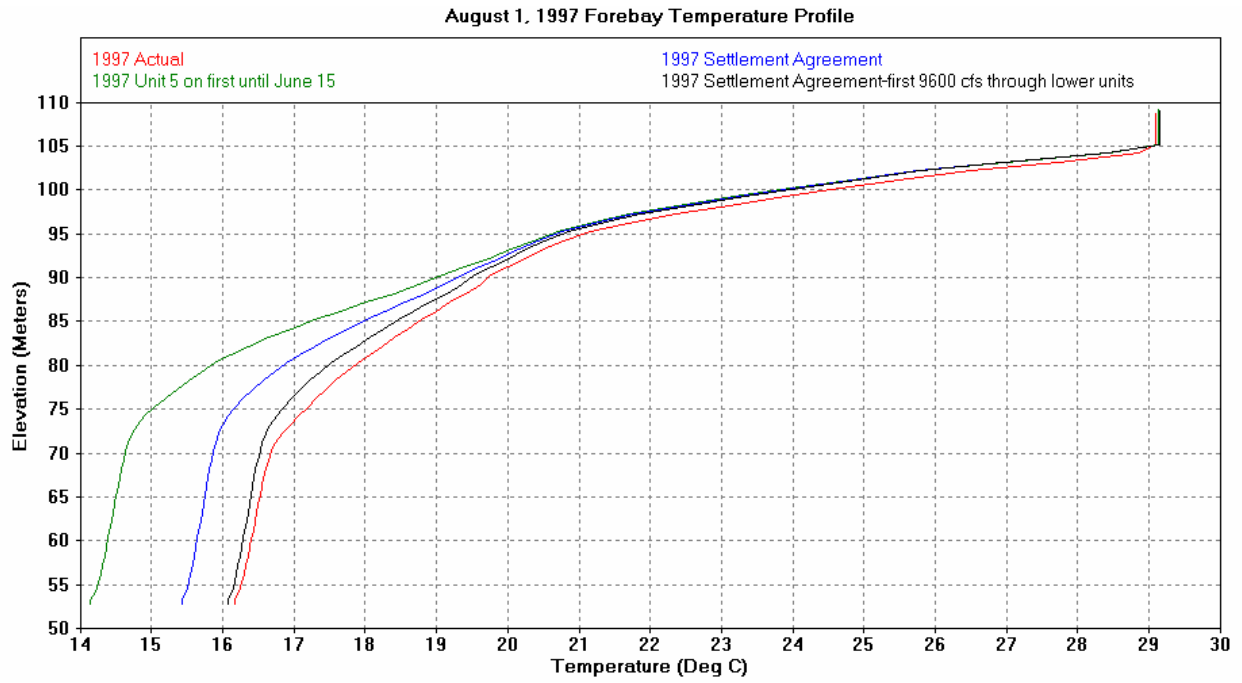


Figure 15. August 1, 1997 Forebay Temperature Profiles

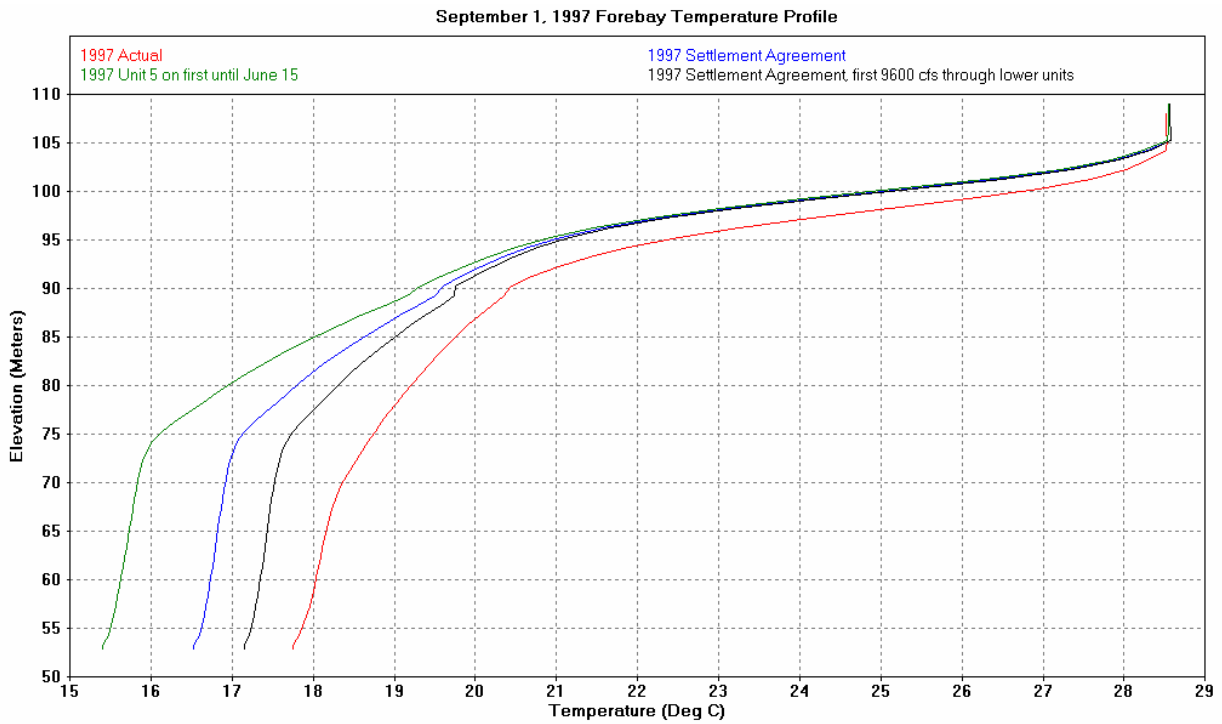


Figure 16. September 1, 1997 Forebay Temperature Profiles

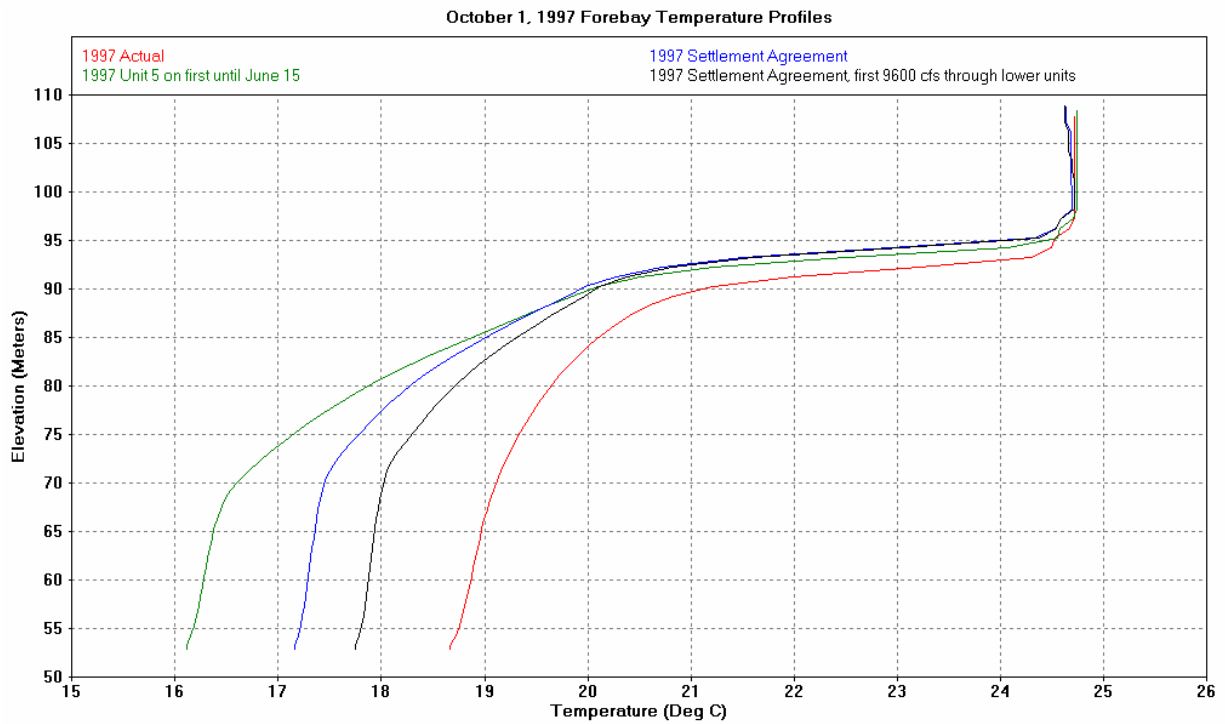


Figure 17. October 1, 1997 Forebay Temperature Profiles

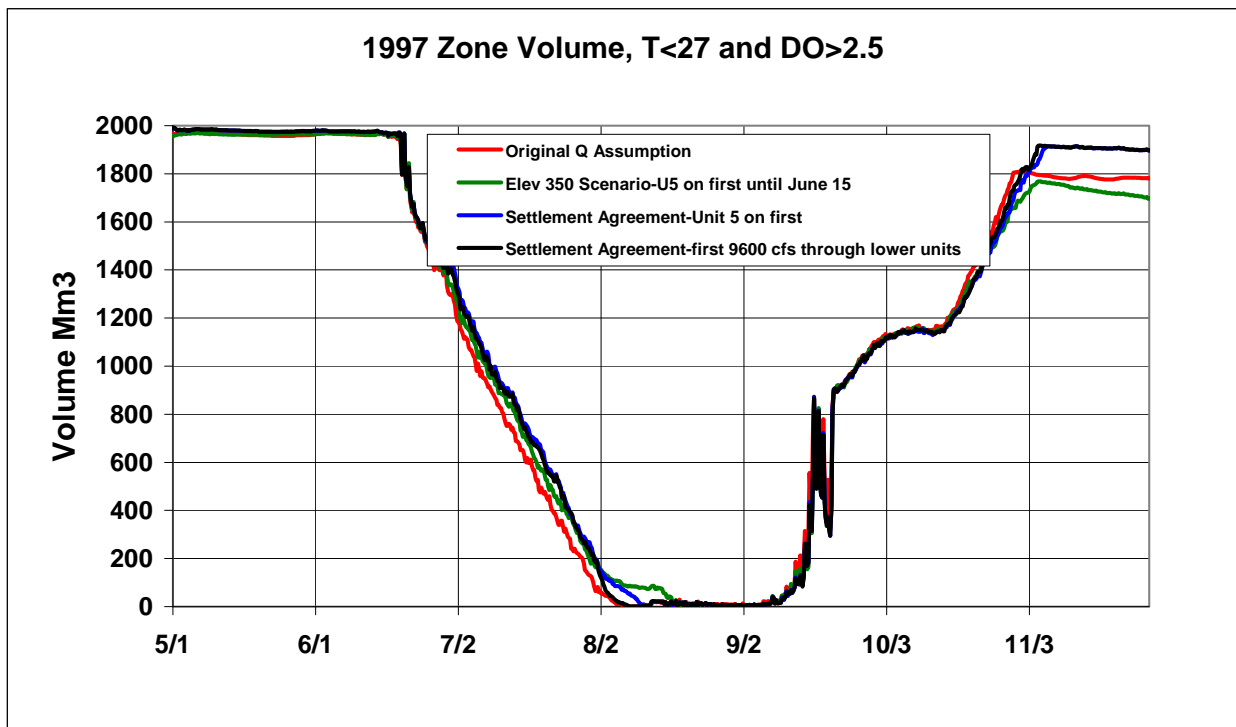


Figure 18. 1997 Volume of "Tolerable" Striped Bass Habitat

Table 5. 1997 Volume Table

Date	% of Total Volume That Meets Criteria - T < 27 °C and DO > 2.5 mg/l			
	Original Q Assumption	Elev 350 Scenario- U5 on first until June 15	Settlement Agreement-Unit 5 on first	Settlement Agreement-first 9600 cfs through lower units
6/1/1997	100	100	100	100
6/15/97	100	100	100	100
7/1/97	67	68	71	70
7/15/97	38	41	44	43
8/1/97	6	10	12	11
8/15/97	1	4	1	1
9/1/97	1	0	0	0
9/15/97	7	6	5	5
10/1/97	60	57	55	56
10/15/97	65	62	59	59
11/1/1997	100	93	90	91

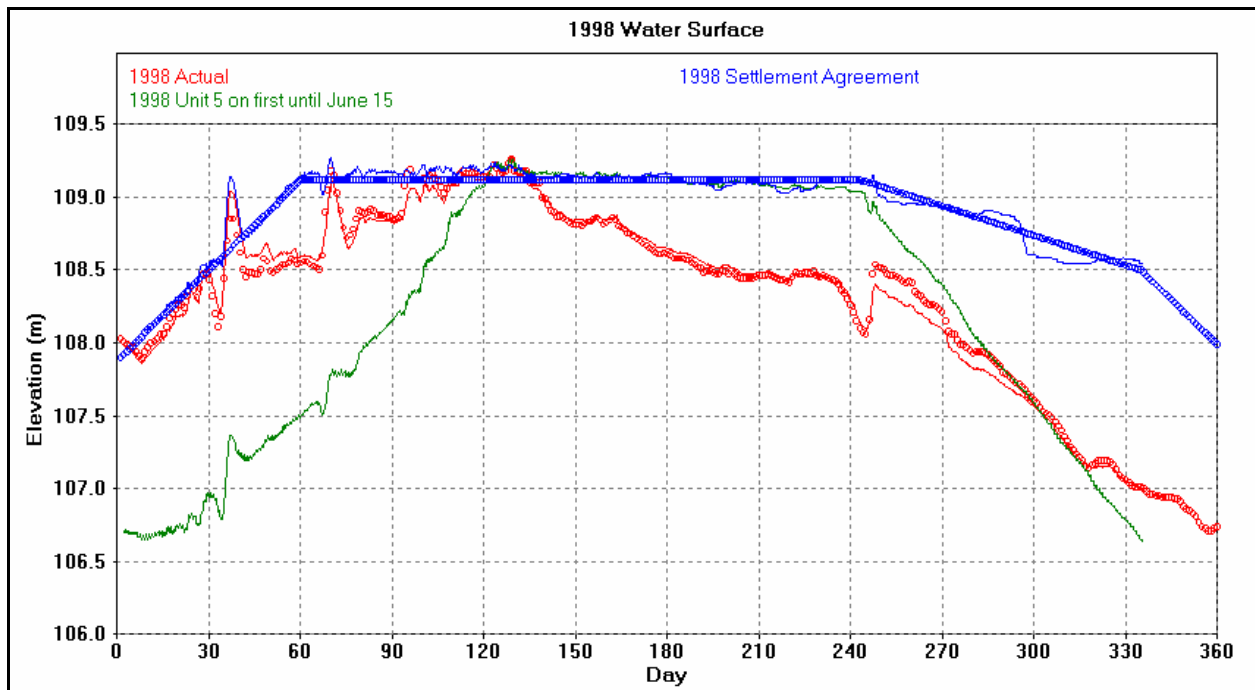


Figure 19. 1998 Water Surface

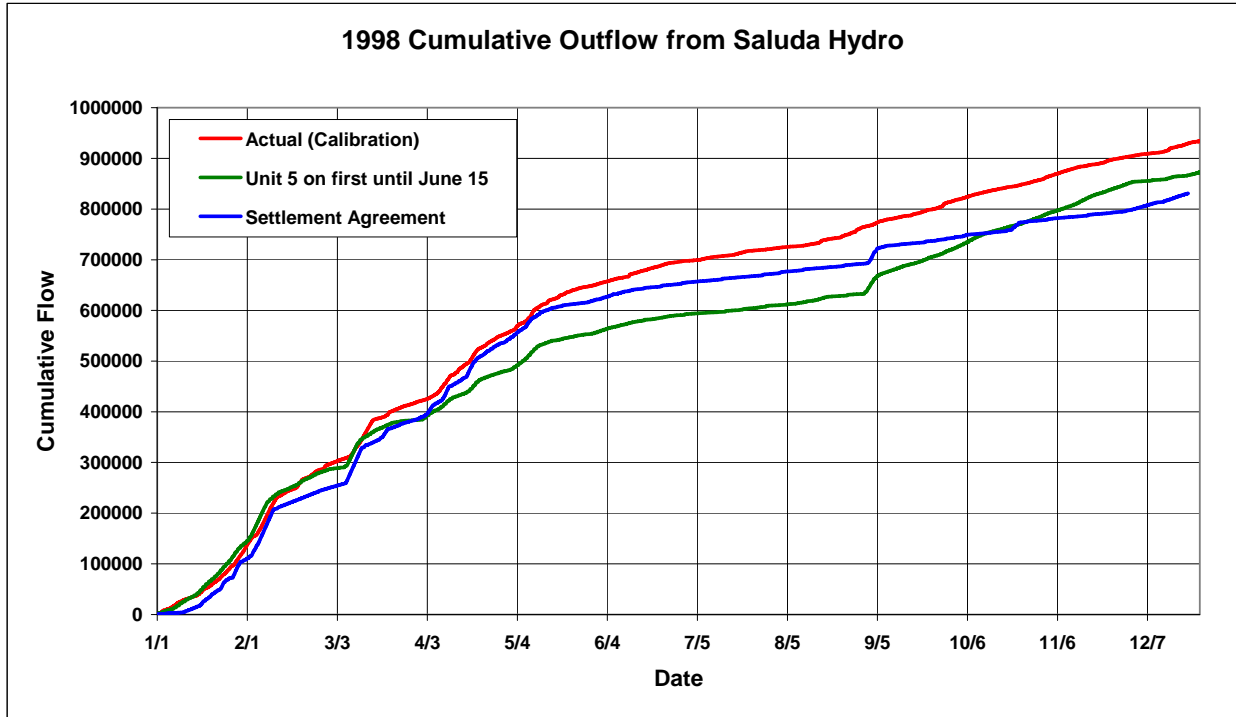


Figure 20. 1998 Outflow

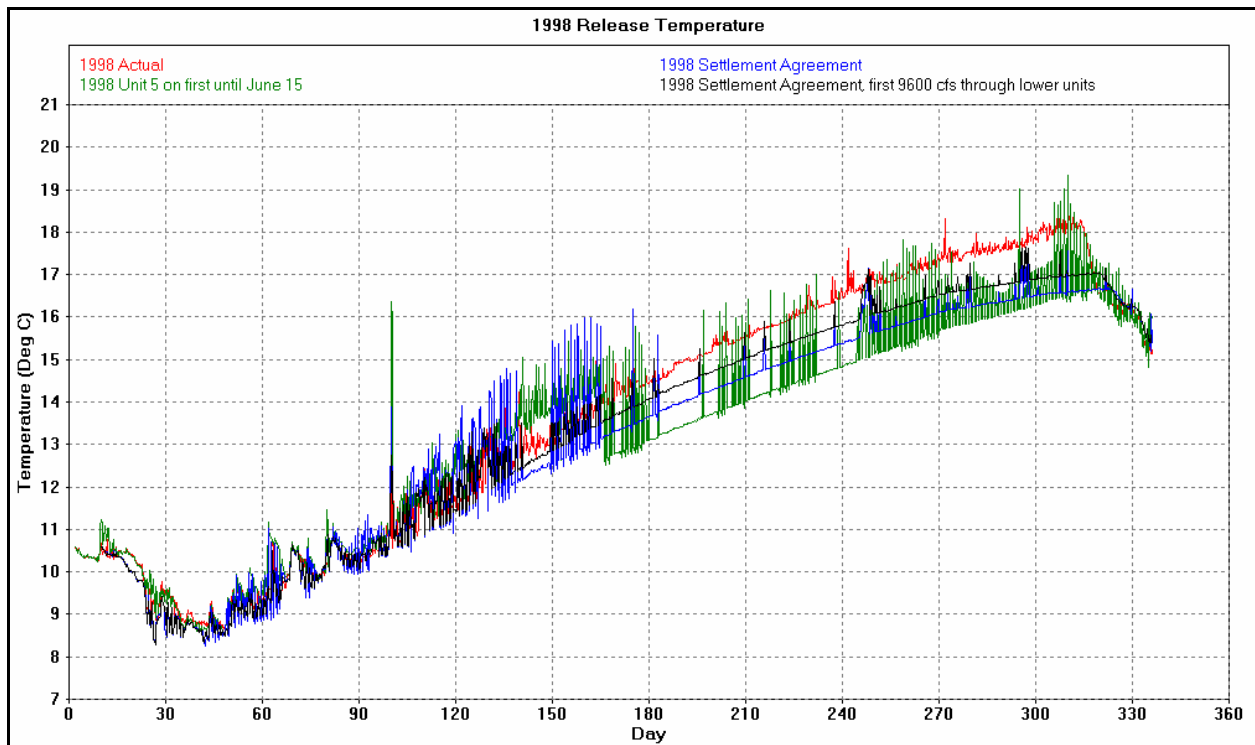


Figure 21. 1998 Release Temperature

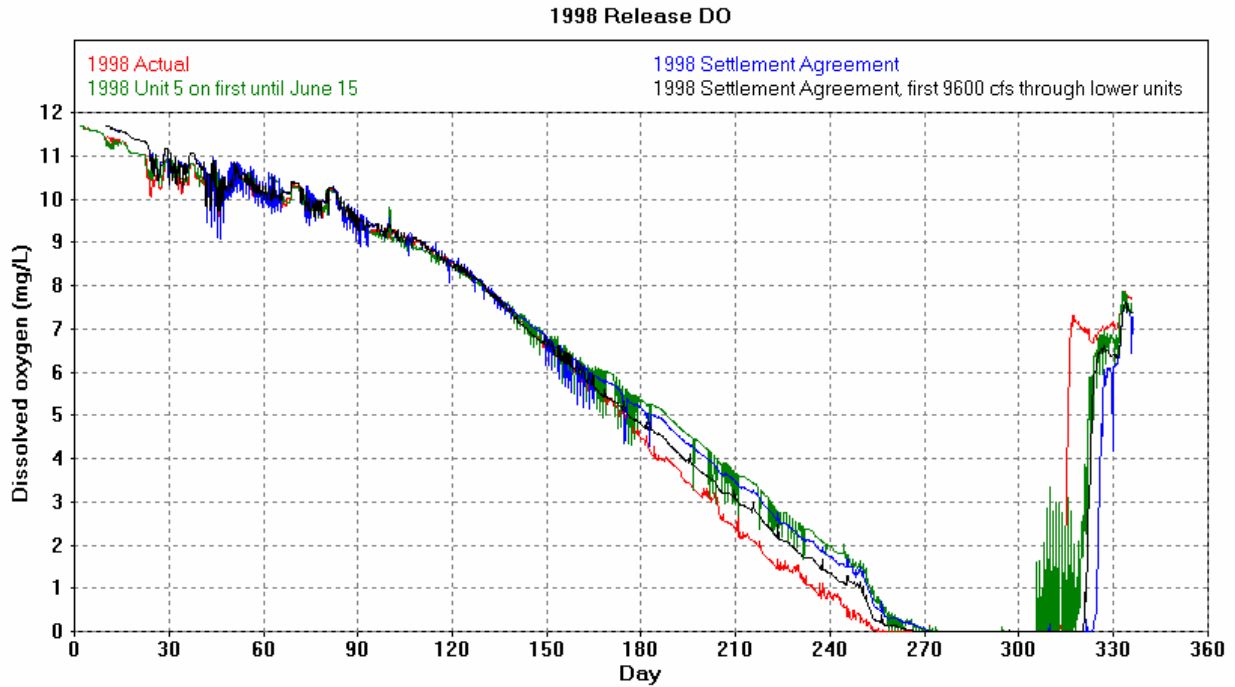


Figure 22. 1998 Release DO

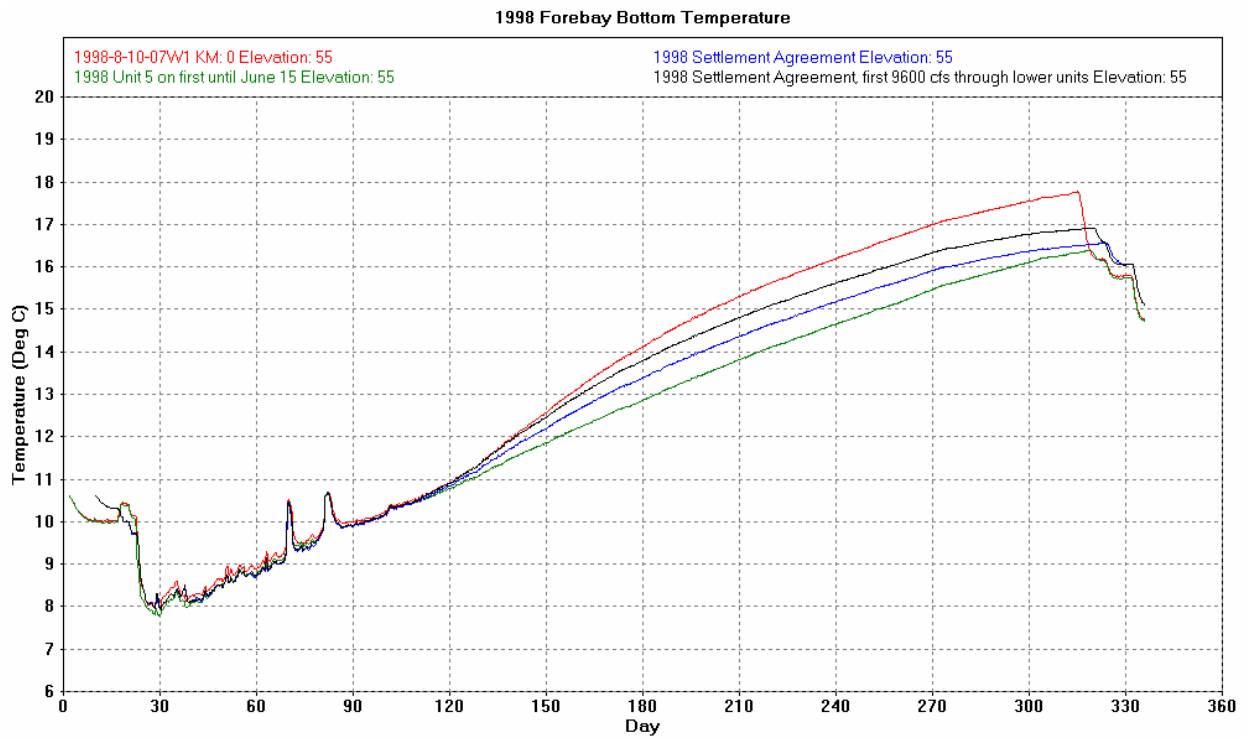


Figure 23. 1998 Temperature near bottom of Reservoir

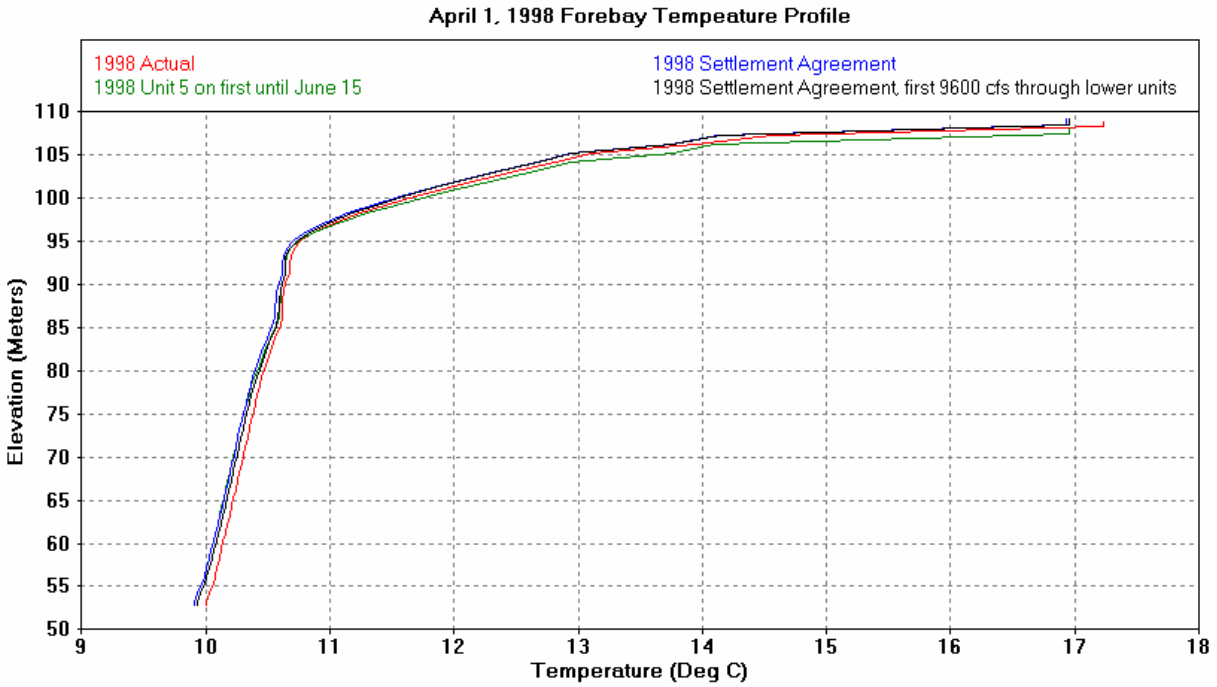


Figure 24. April 1, 1998 Forebay Temperature Profiles

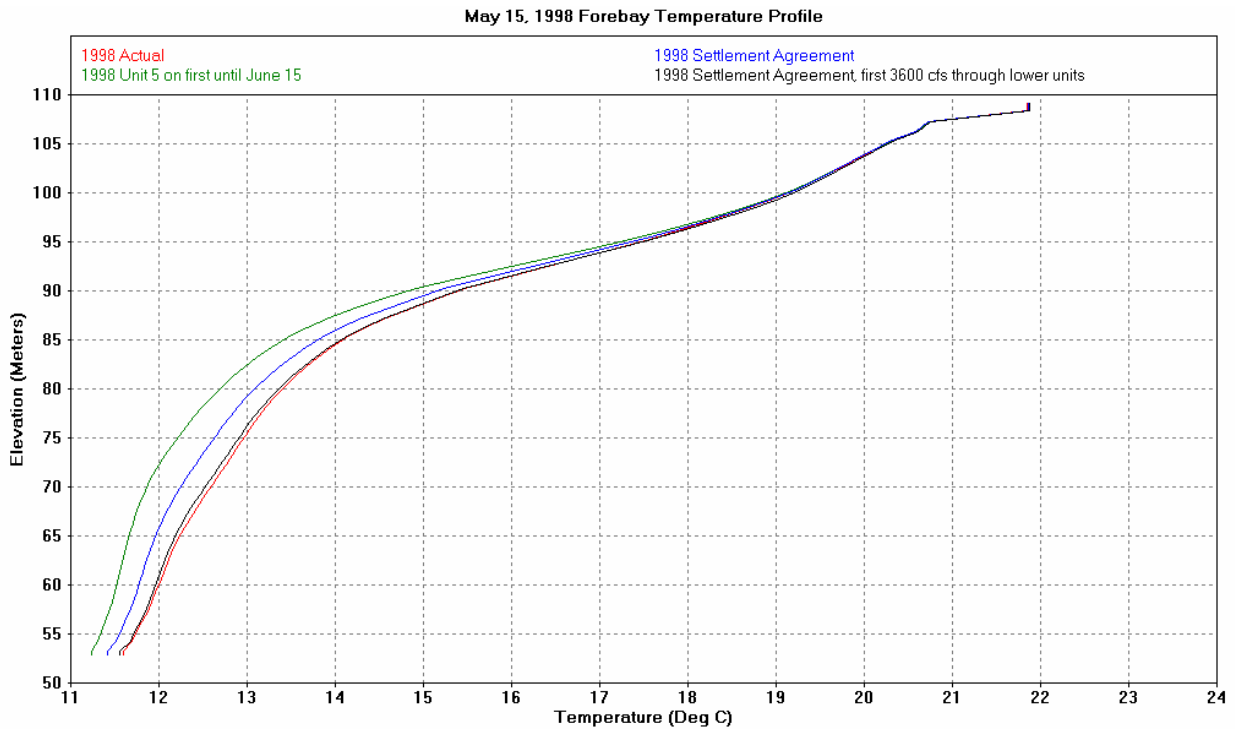


Figure 25. May 15, 1998 Forebay Temperature Profiles

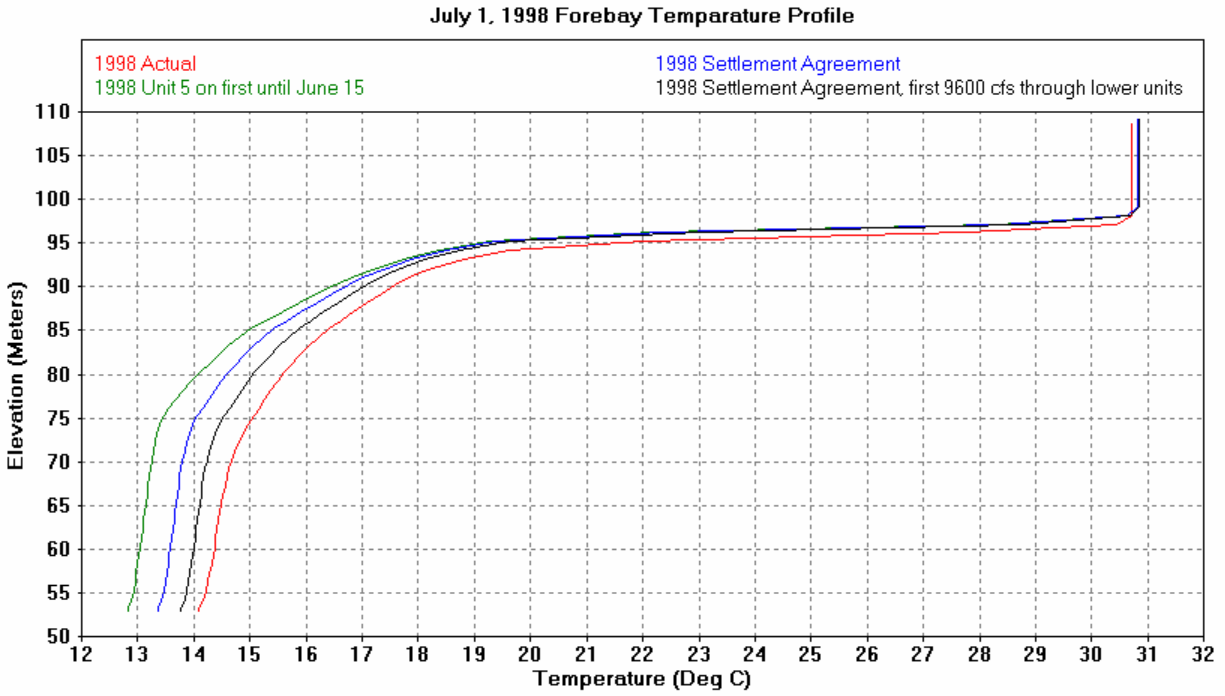


Figure 26. July 1, 1998 Forebay Temperature Profiles

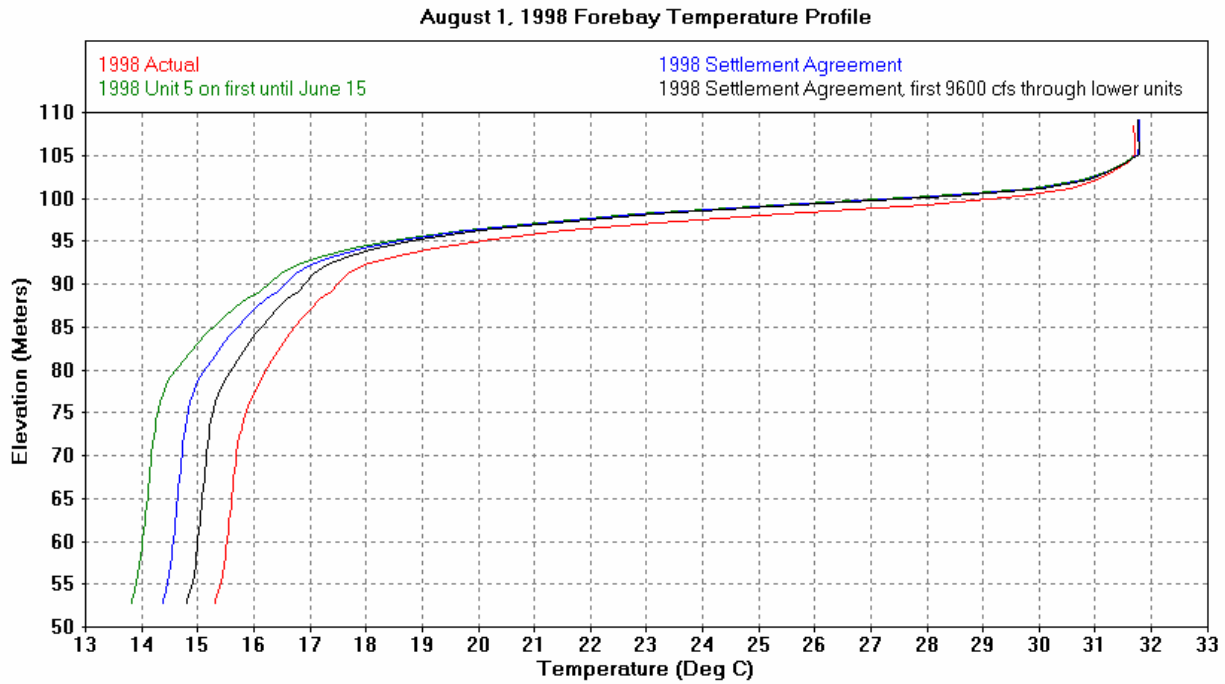


Figure 27. August 1, 1998 Forebay Temperature Profiles

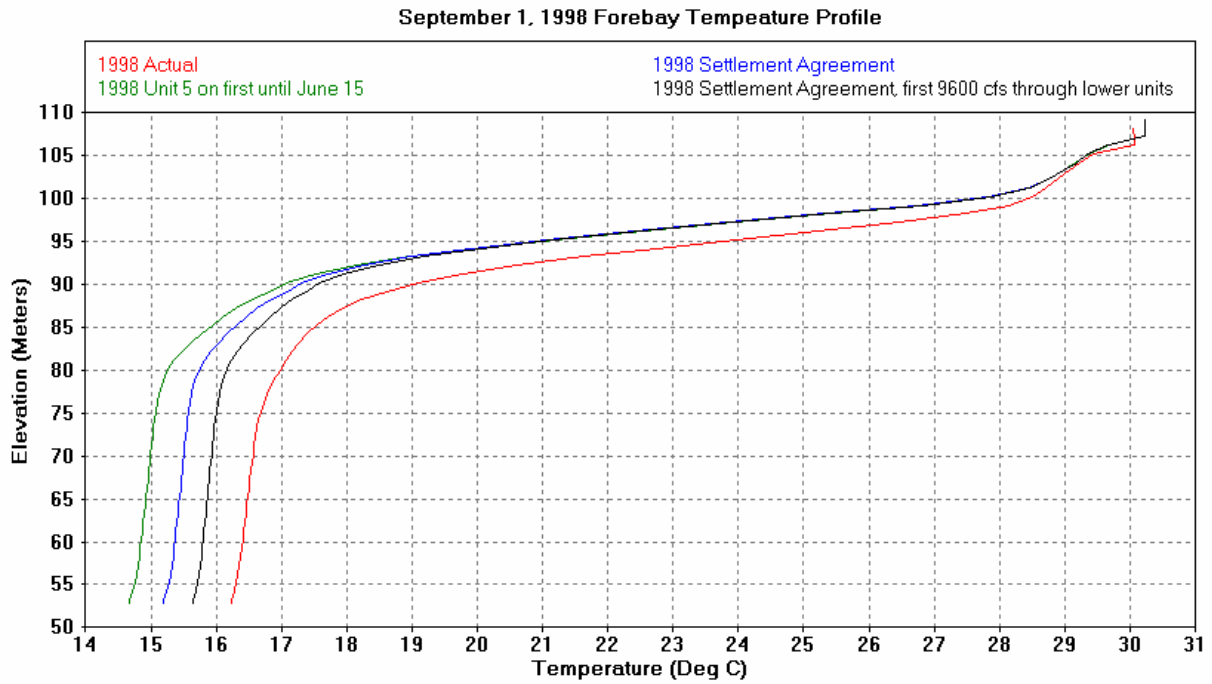


Figure 28. September 1, 1998 Forebay Temperature Profiles

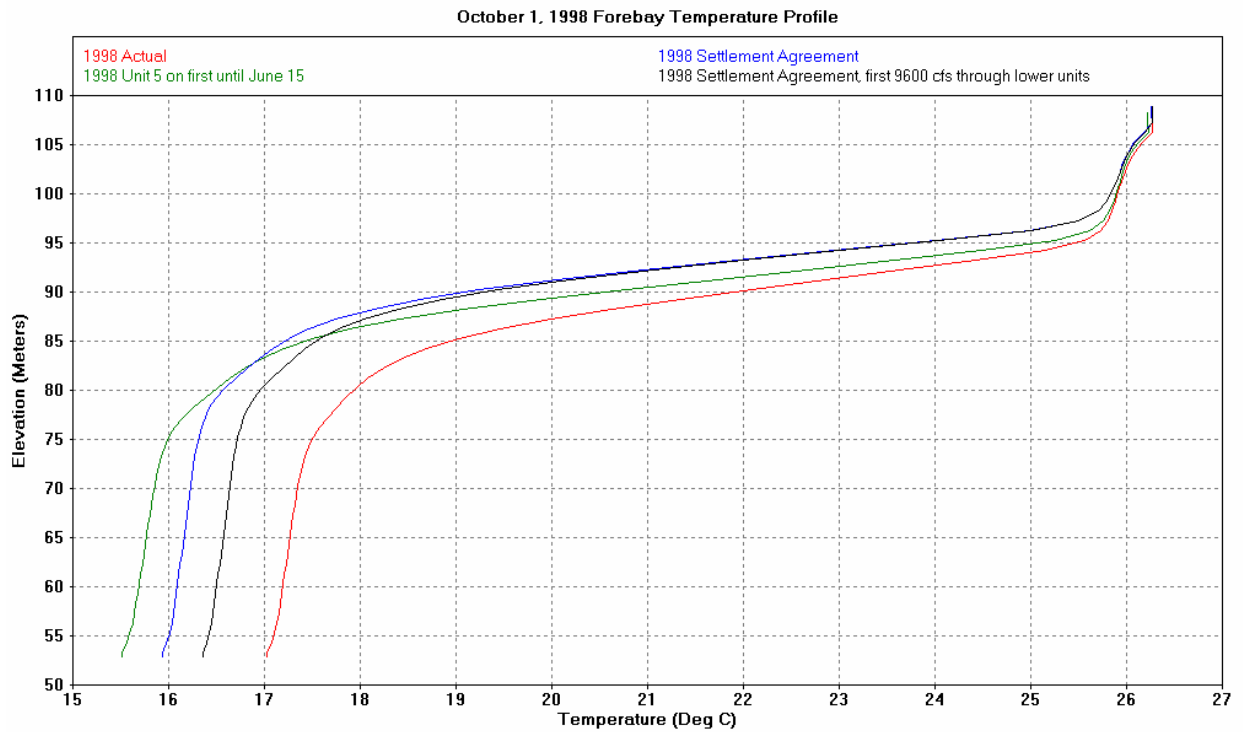


Figure 29. October 1, 1998 Forebay Temperature Profiles

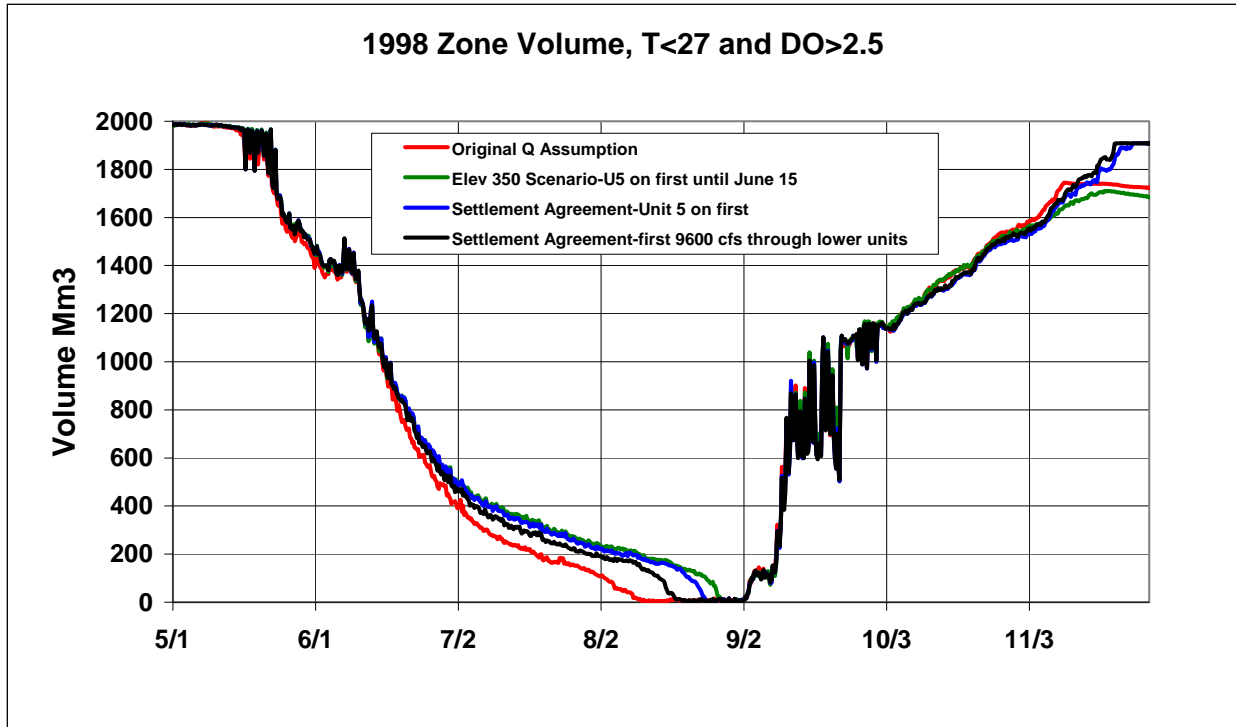


Figure 30. 1998 Volume of “Tolerable” Striped Bass Habitat

Table 6. 1998 Volume Table

Date	% of Total Volume That Meets Criteria - T < 27 °C and DO > 2.5 mg/l			
	Original Q Assumption	Elev 350 Scenario-U5 on first until June 15	Settlement Agreement-Unit 5 on first	Settlement Agreement-first 9600 cfs through lower units
6/1/1998	74	75	75	75
6/15/98	57	55	56	56
7/1/98	23	28	28	26
7/15/98	12	18	17	15
8/1/98	7	12	11	10
8/15/98	0	9	8	6
9/1/98	0	0	1	1
9/15/98	37	36	32	32
10/1/98	63	62	59	60
10/15/98	74	73	67	66
11/1/1998	87	87	79	80

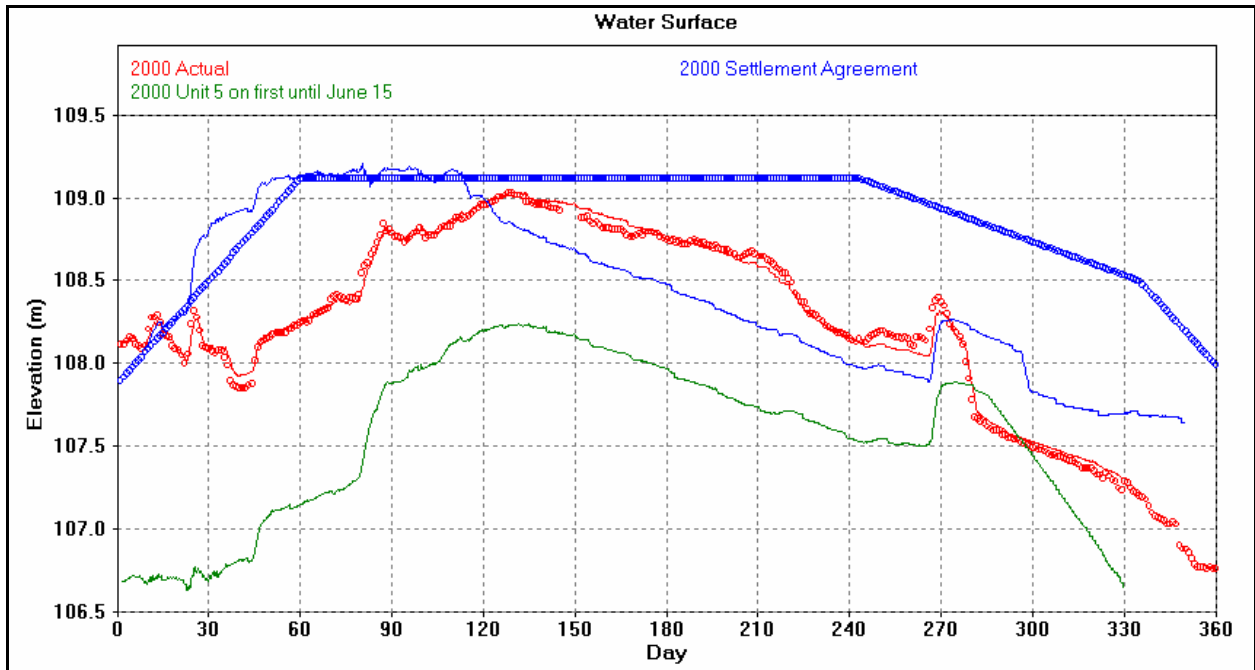


Figure 31. 2000 Water Surface

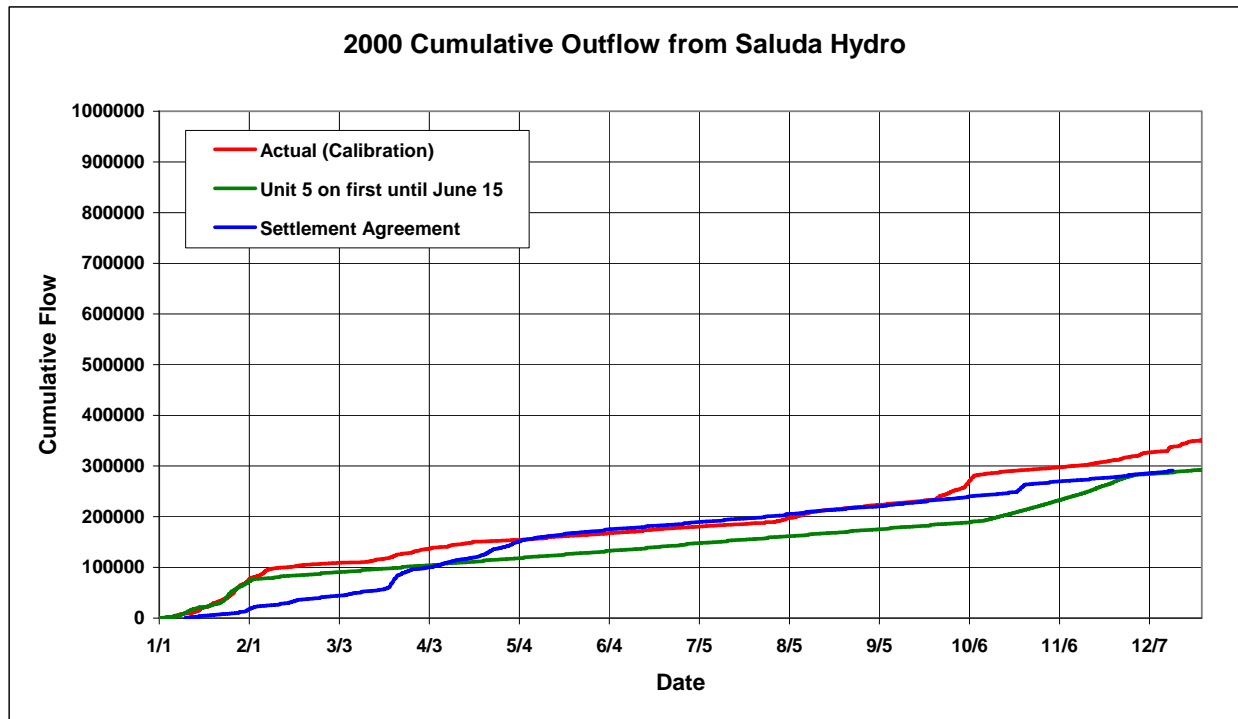


Figure 32. 2000 Cumulative Outflow

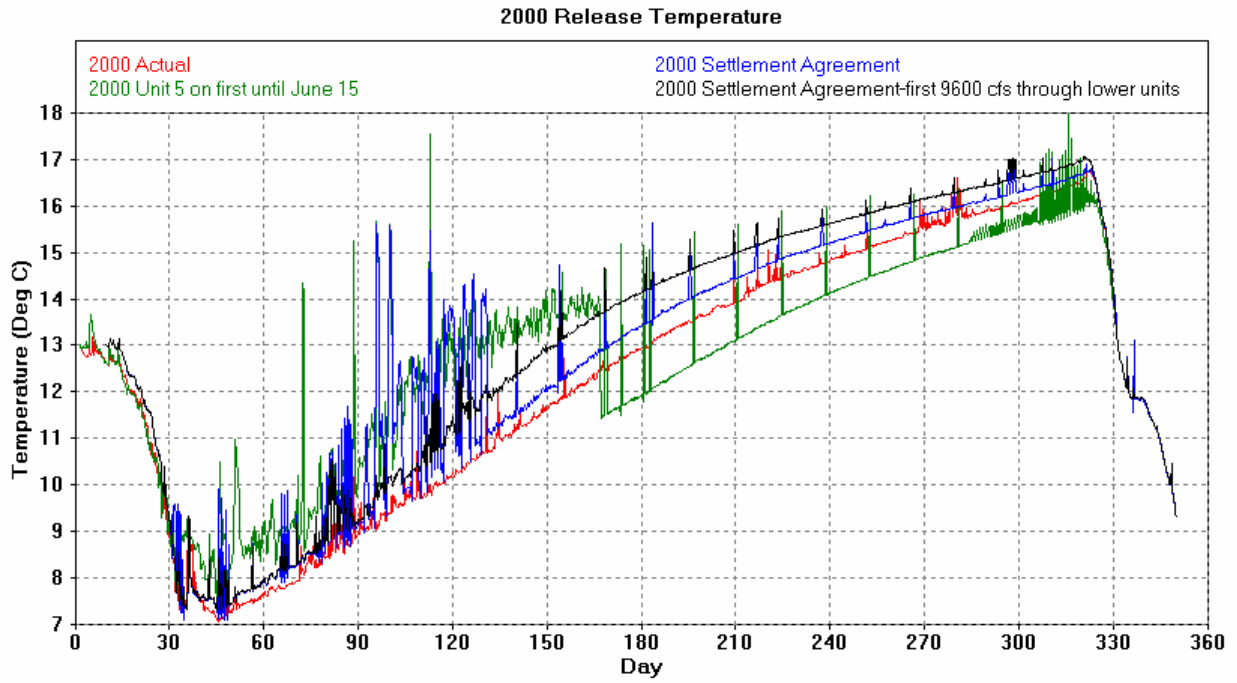


Figure 33. 2000 Release Temperature

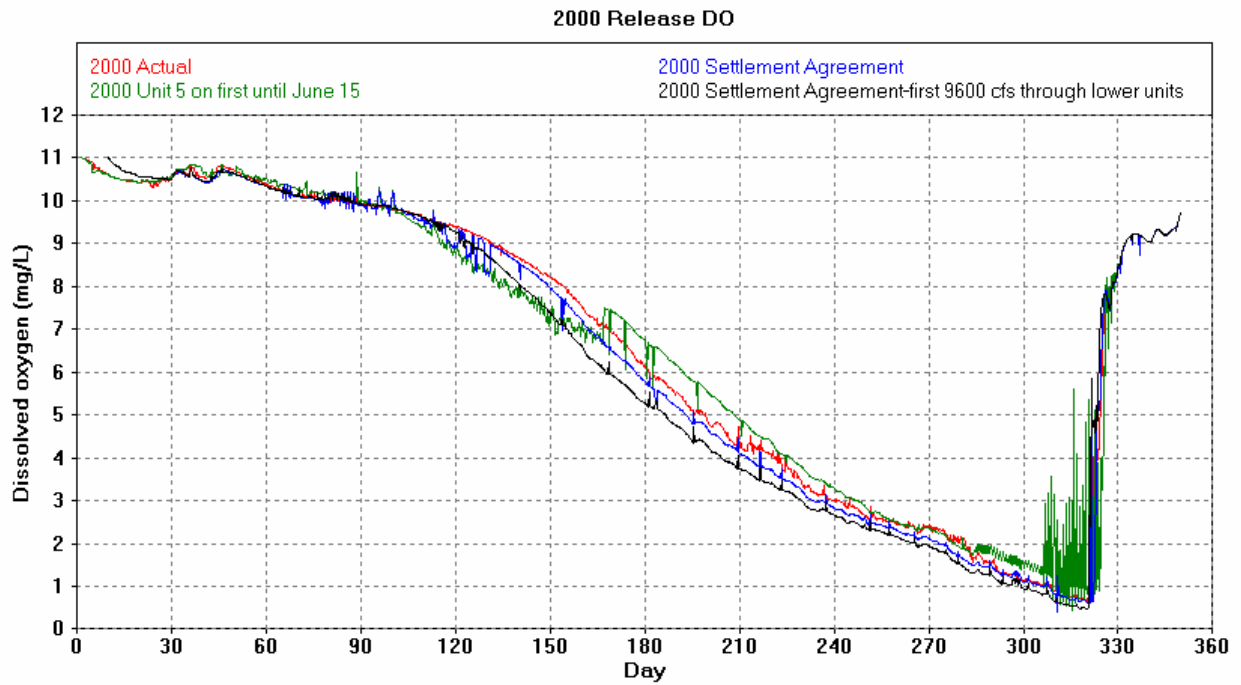


Figure 34. 2000 Release DO

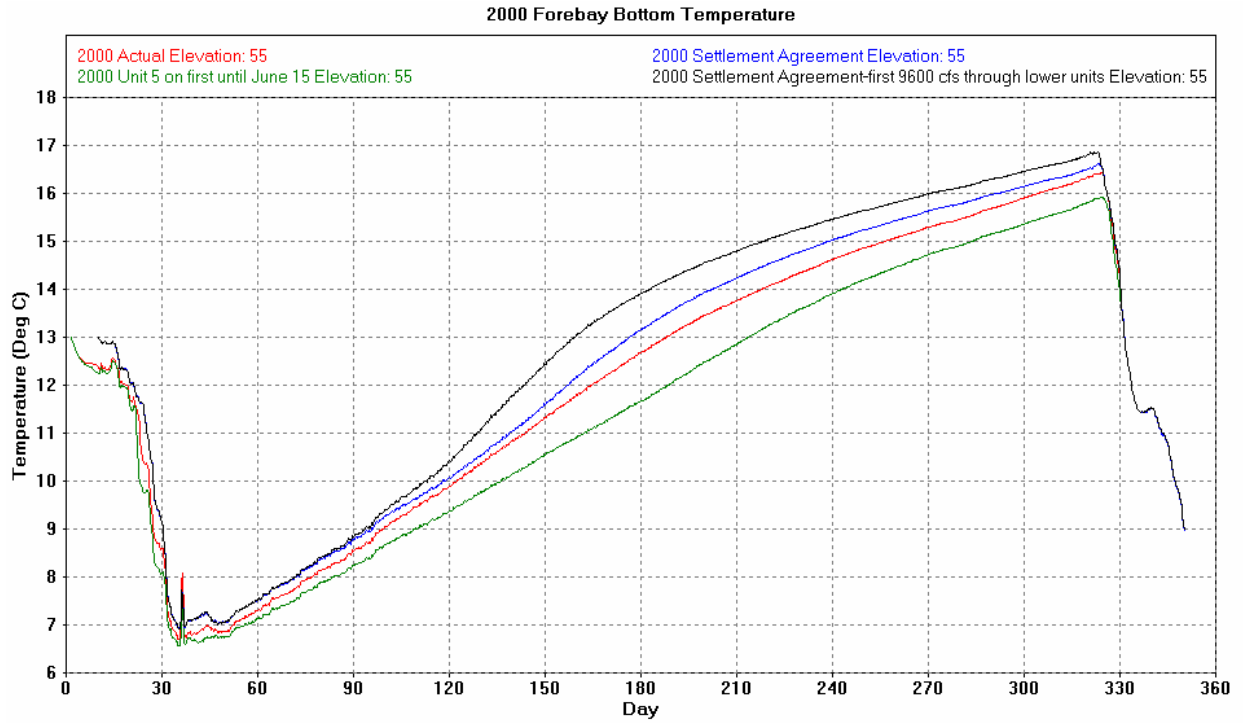


Figure 35. 2000 Temperature near bottom of Reservoir

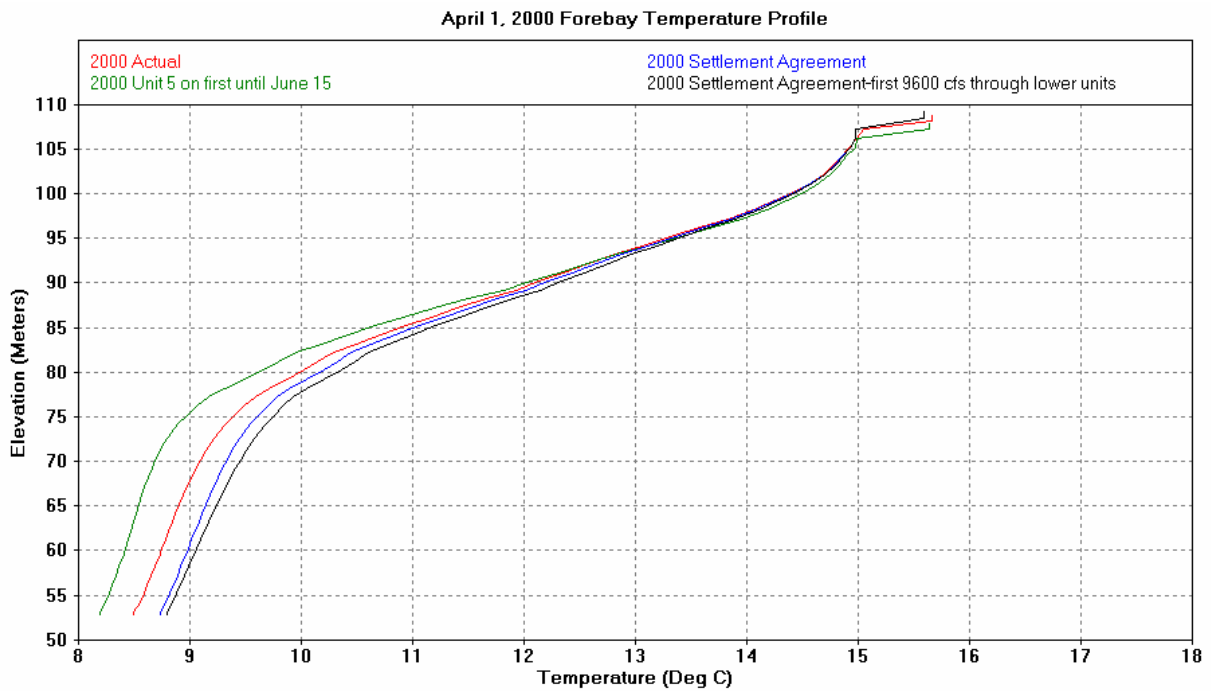


Figure 36. April 1, 2000 Forebay Temperature Profiles

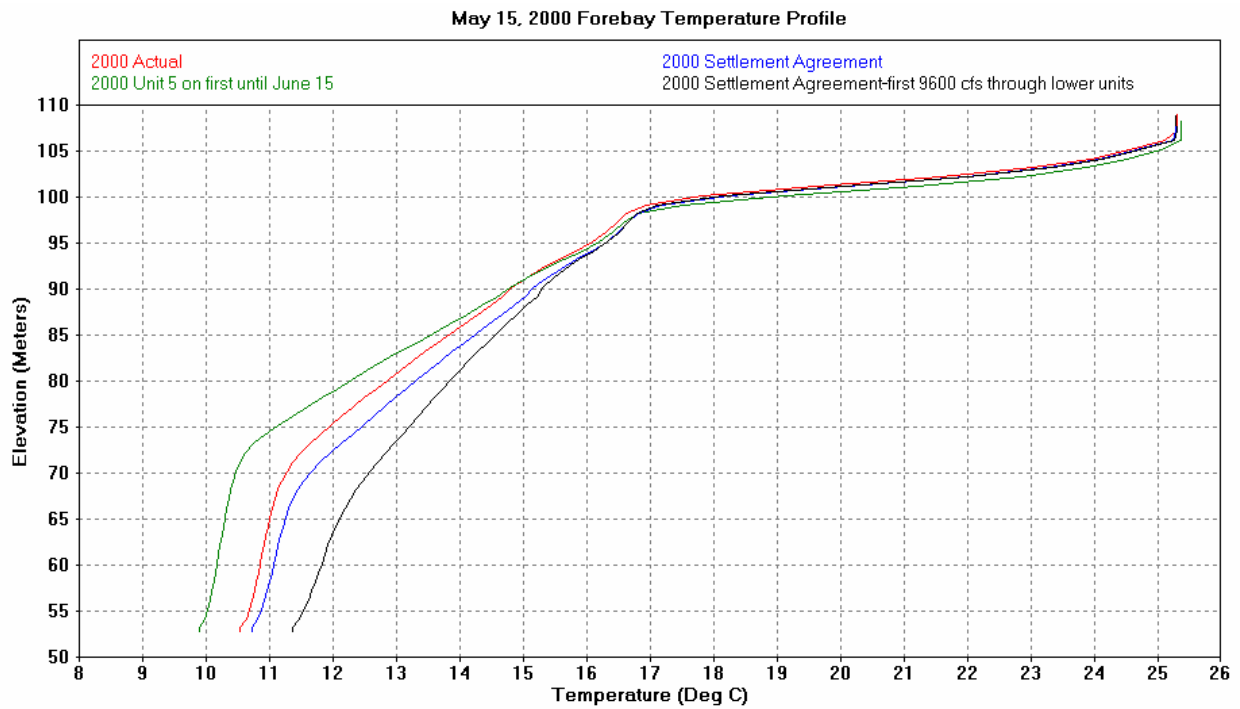


Figure 37. May 15, 2000 Forebay Temperature Profiles

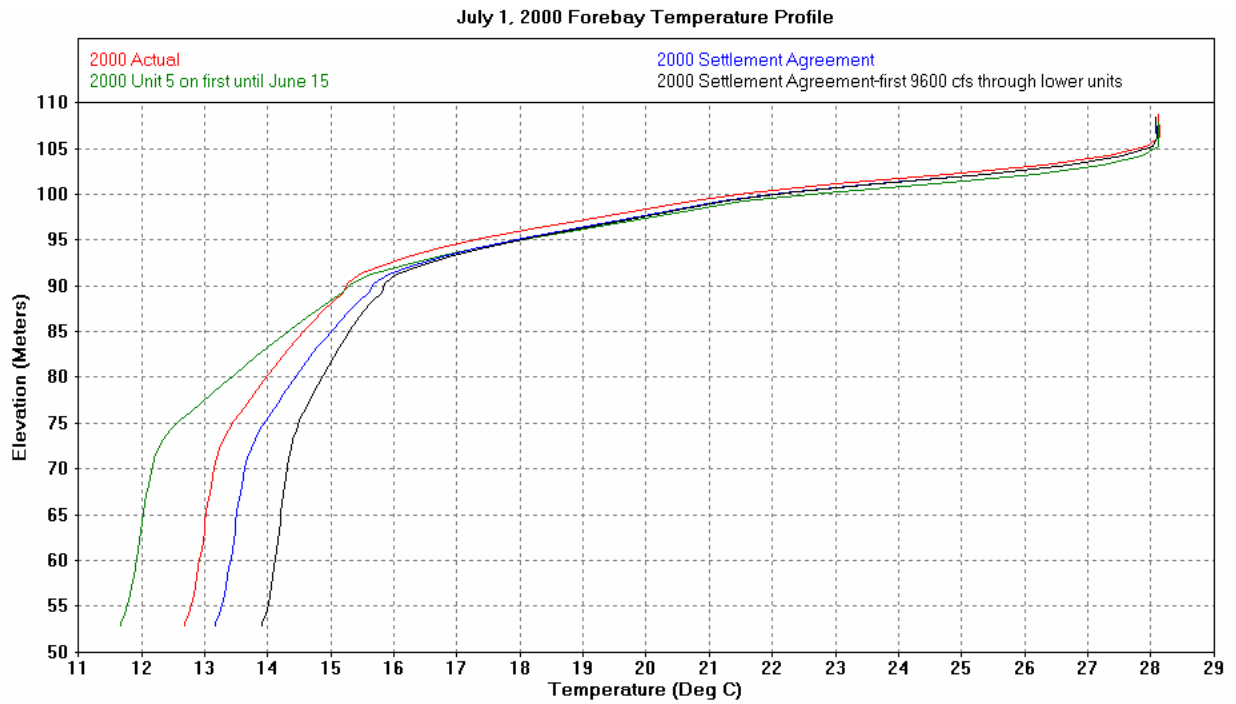


Figure 38. July 1, 2000 Forebay Temperature Profiles

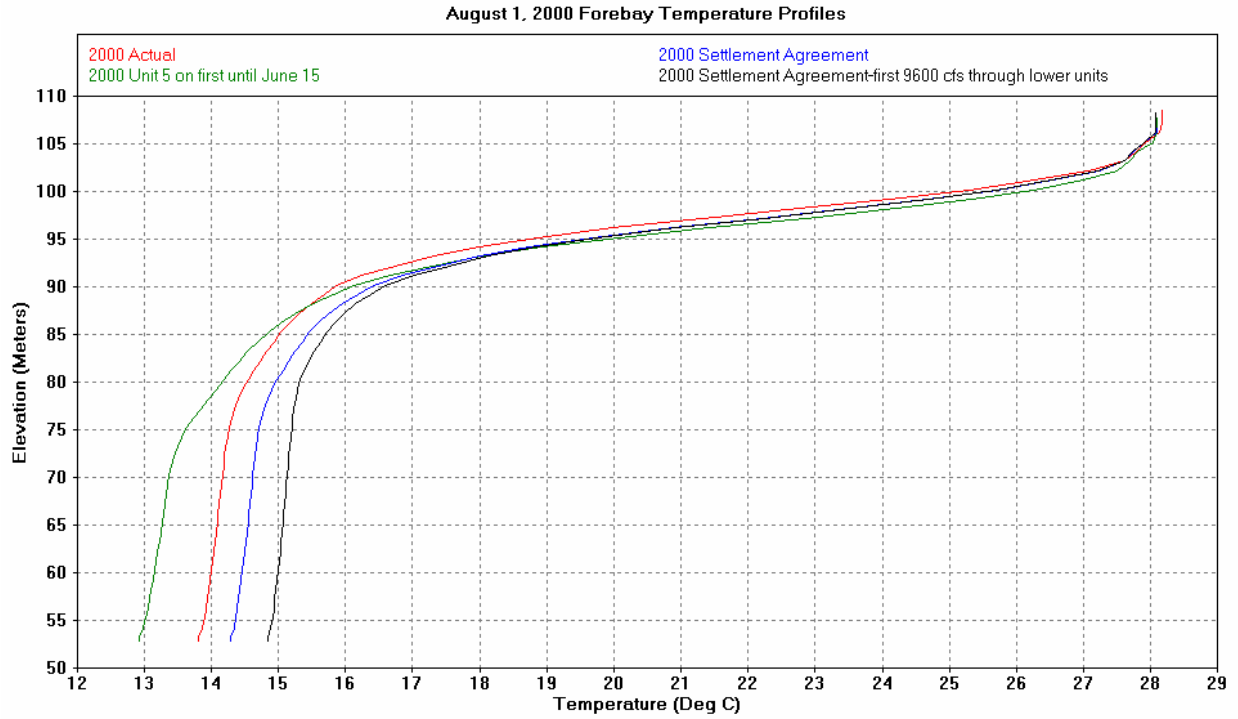


Figure 39. August 1, 2000 Forebay Temperature Profiles

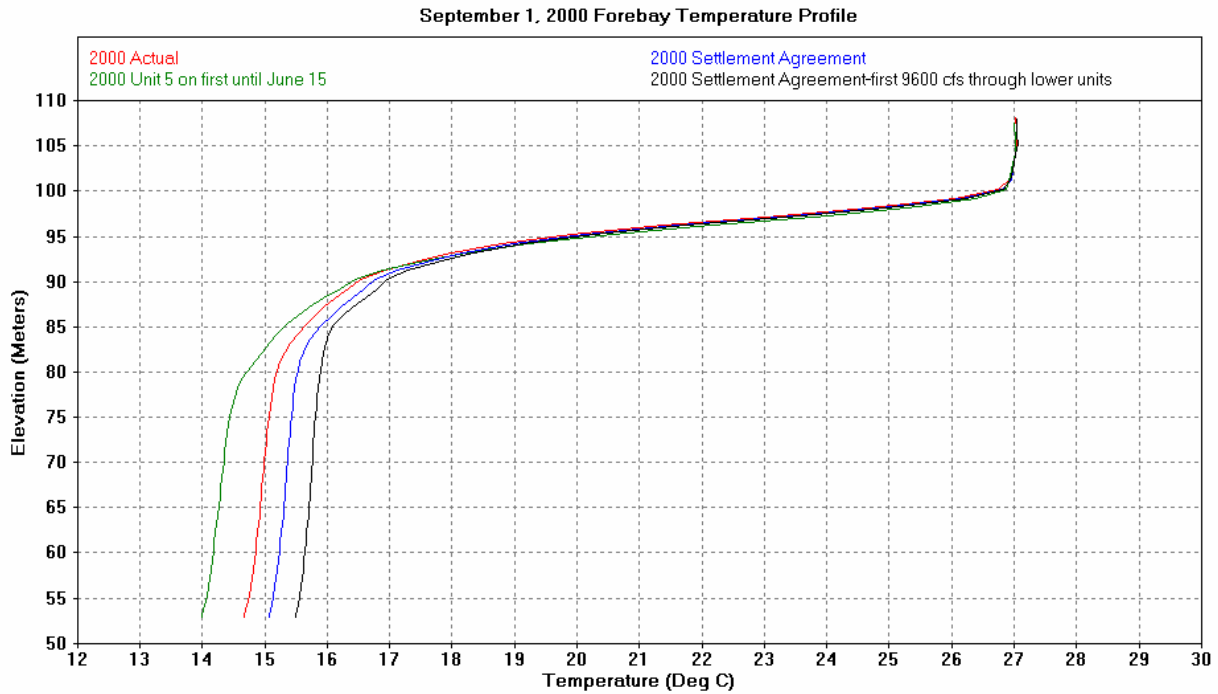


Figure 40. September 1, 2000 Forebay Temperature Profiles

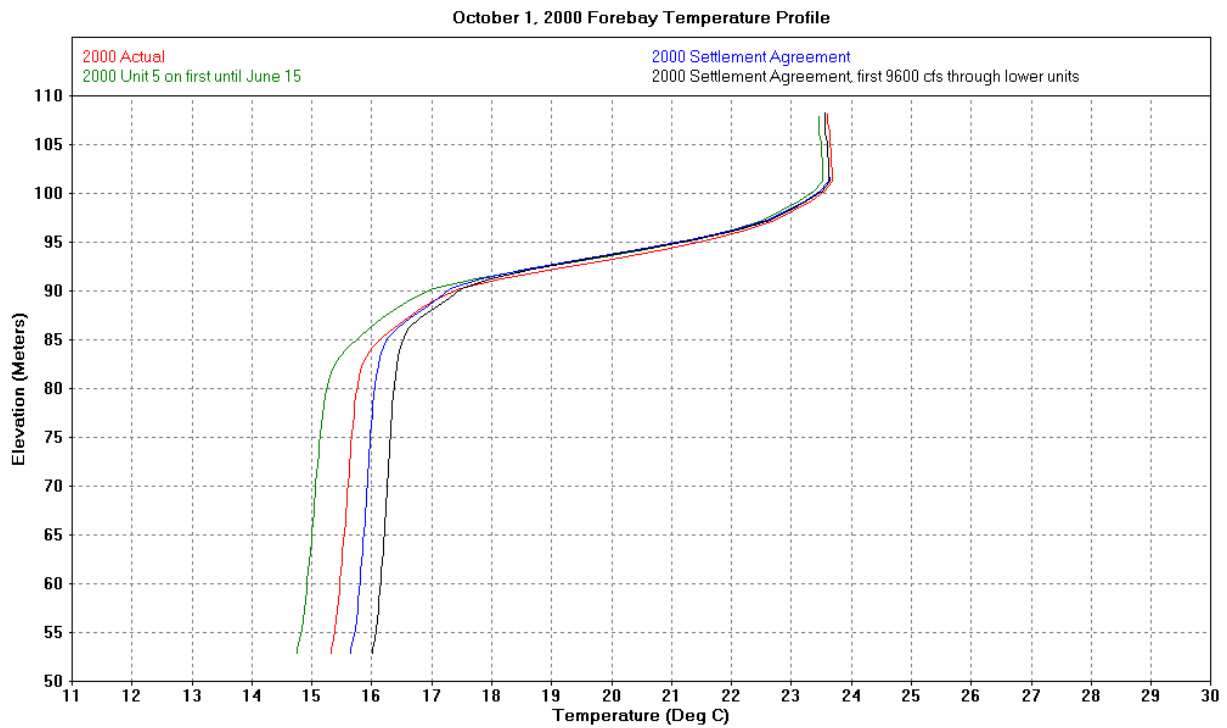


Figure 41. October 1, 2000 Forebay Temperature Profiles

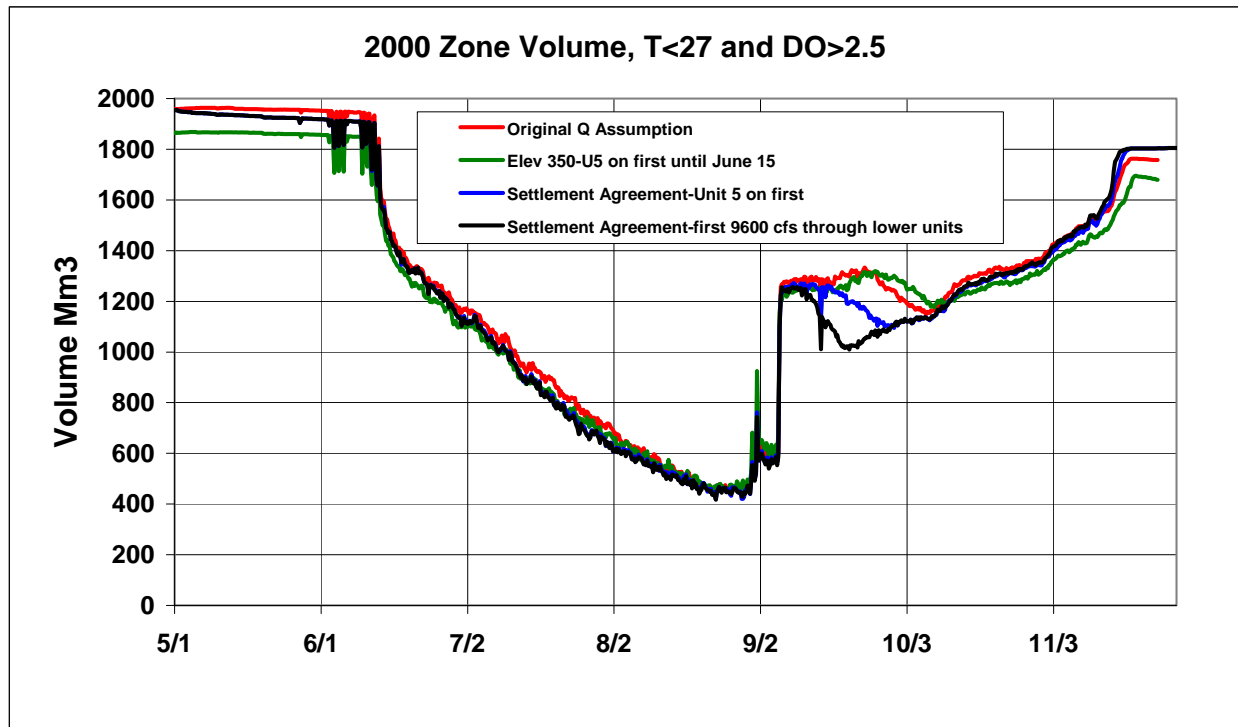


Figure 42. 2000 Volume of "Tolerable" Striped Bass Habitat

Table 7. 2000 Volume Table

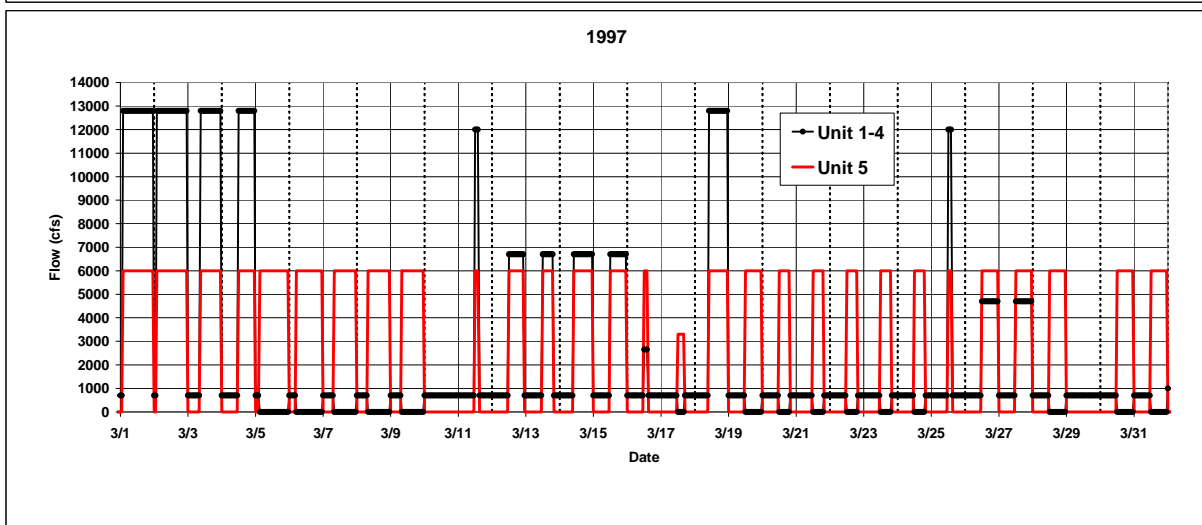
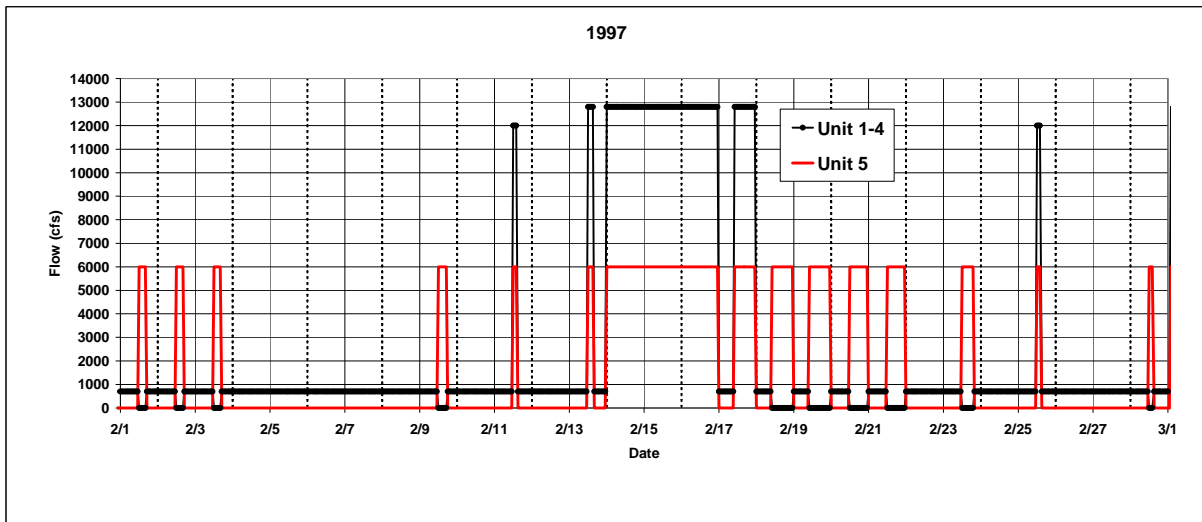
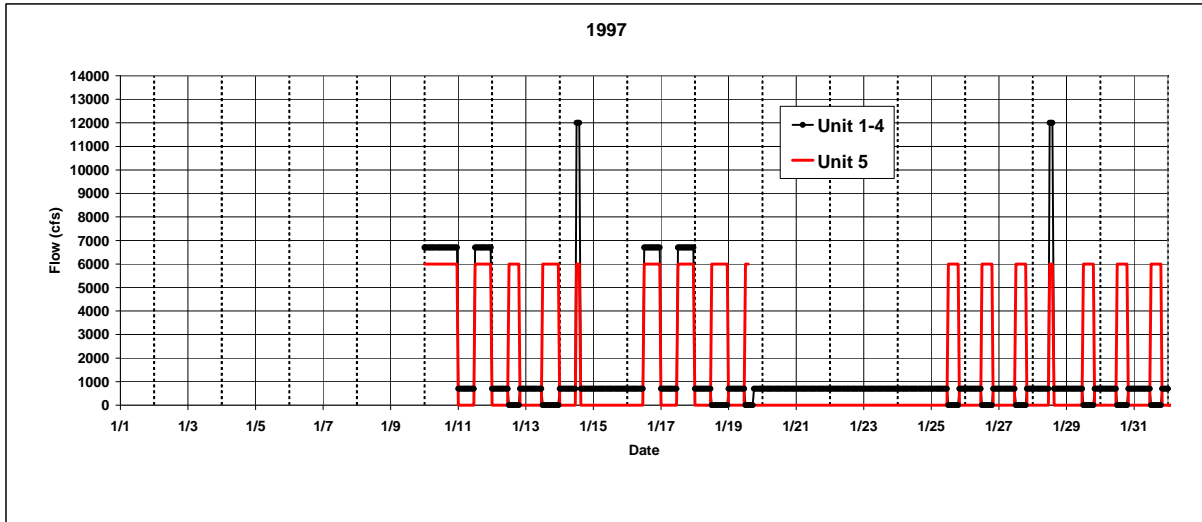
Date	% of Total Volume That Meets Criteria - T < 27 °C and DO > 2.5 mg/l			
	Original Q Assumption	Elev 350 Scenario-U5 on first until June 15	Settlement Agreement-Unit 5 on first	Settlement Agreement-first 9600 cfs through lower units
6/1/2000	100	100	100	100
6/15/00	78	78	78	78
7/1/00	60	61	60	59
7/15/00	50	50	47	47
8/1/00	37	38	34	33
8/15/00	28	29	28	27
9/1/00	30	32	28	29
9/15/00	70	70	69	62
10/1/00	65	70	59	59
10/15/00	72	68	67	68
11/1/2000	78	76	75	75

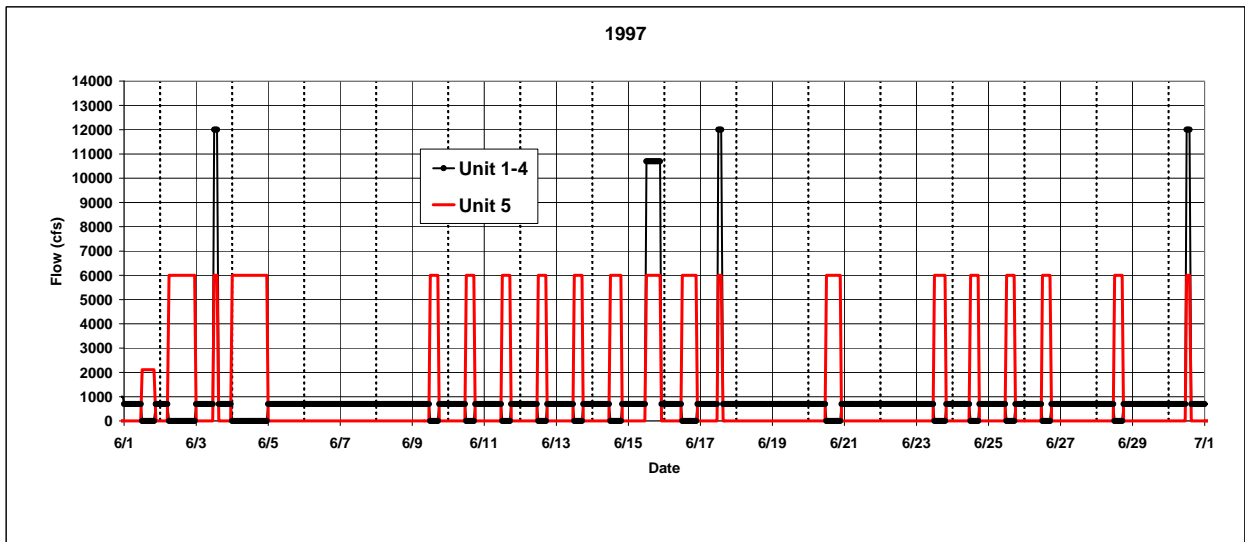
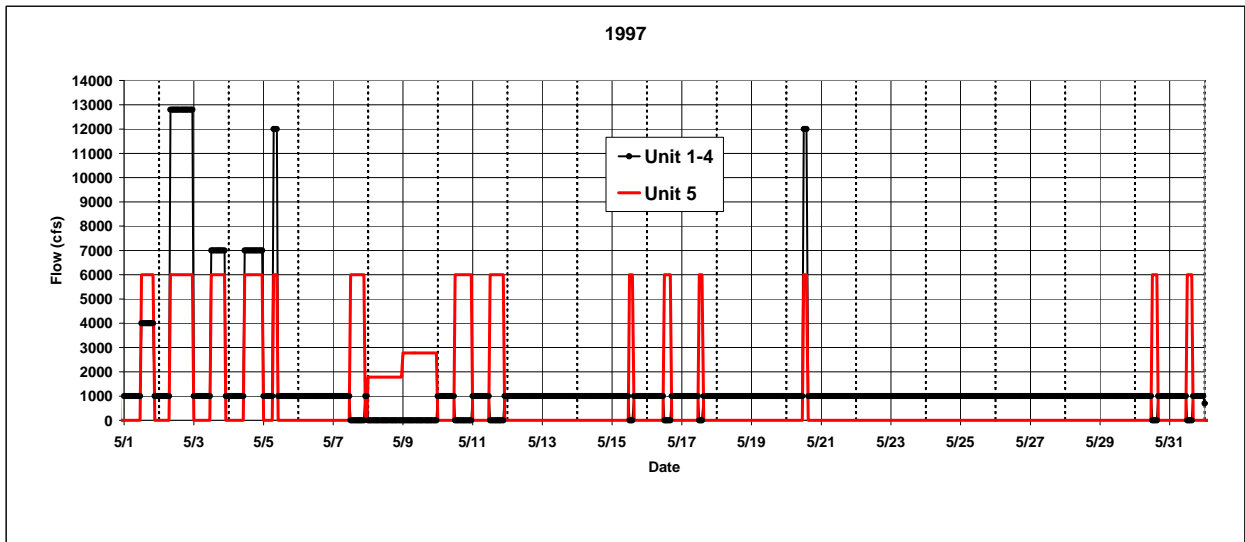
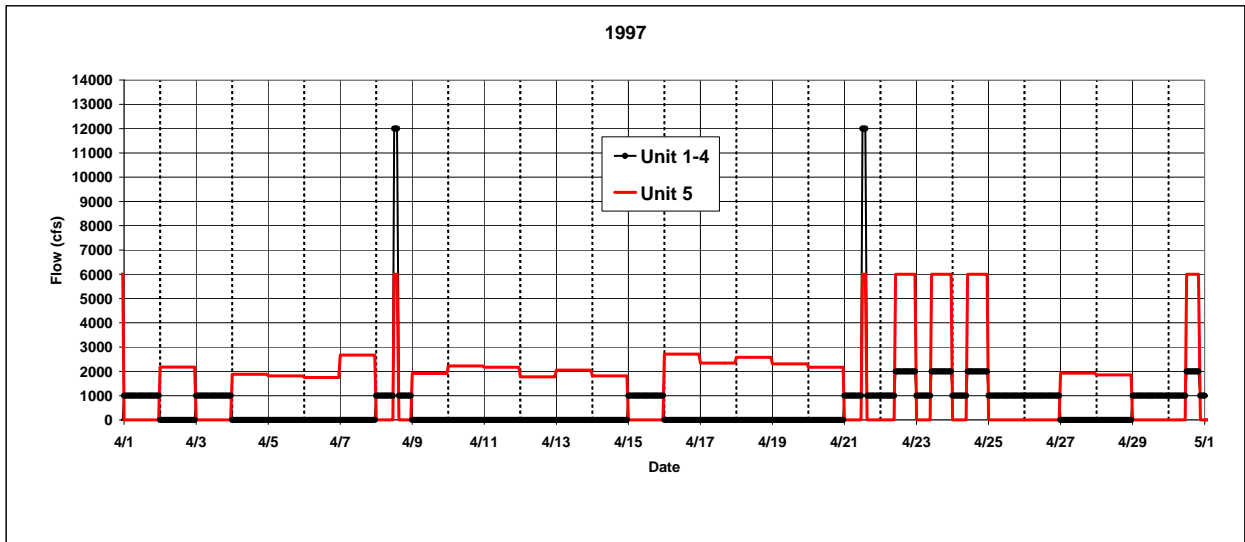
Table 8. Summary of Model Results on Temperature in the Bottom of Lake Murray and the Saluda Hydro Tailwater

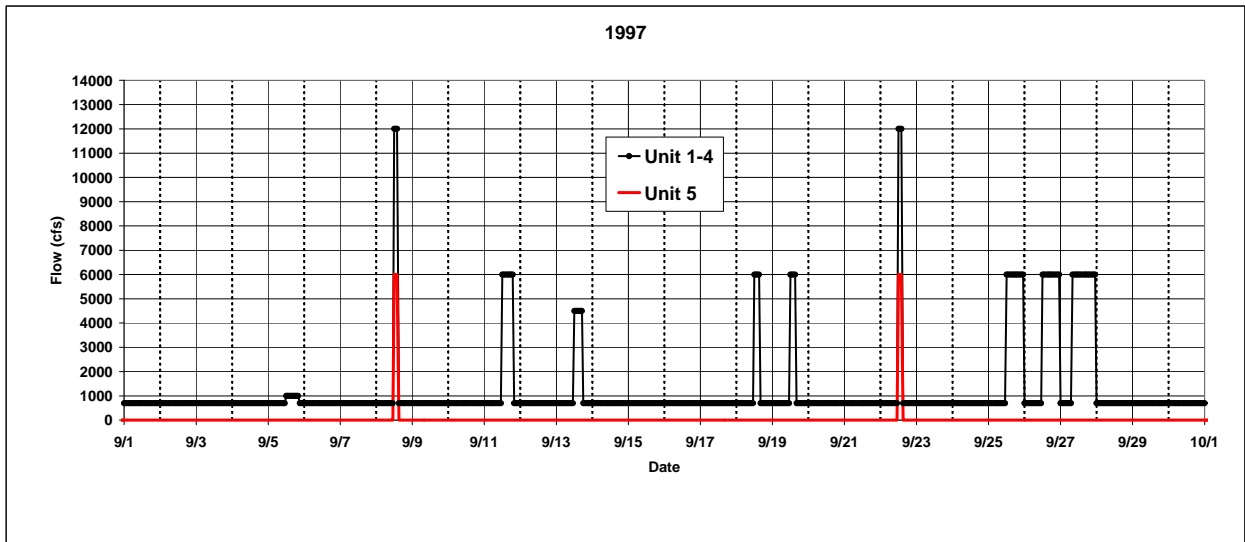
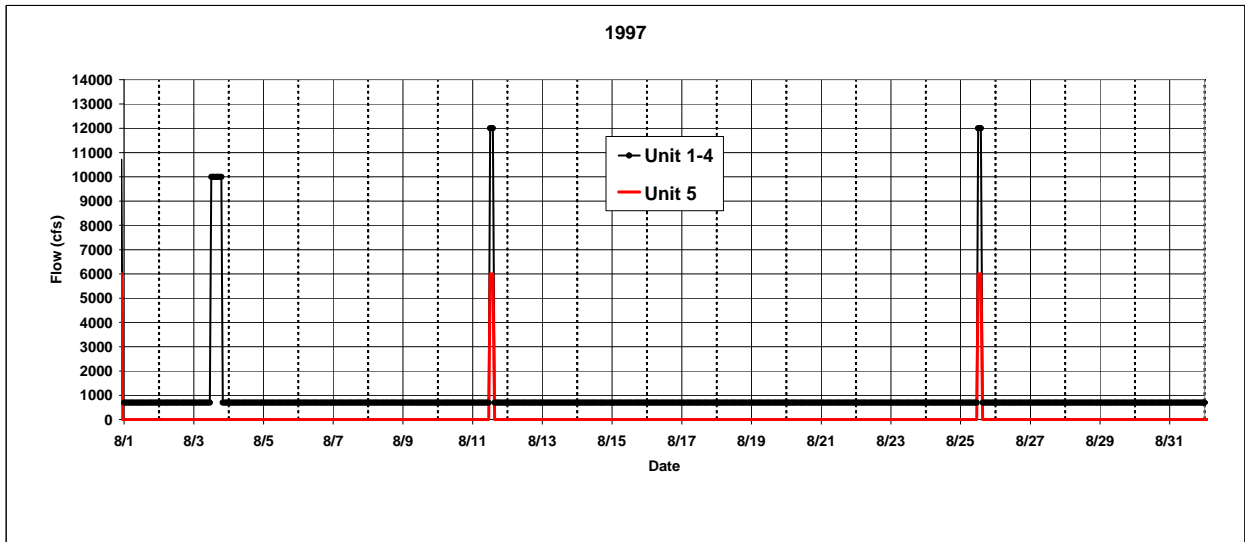
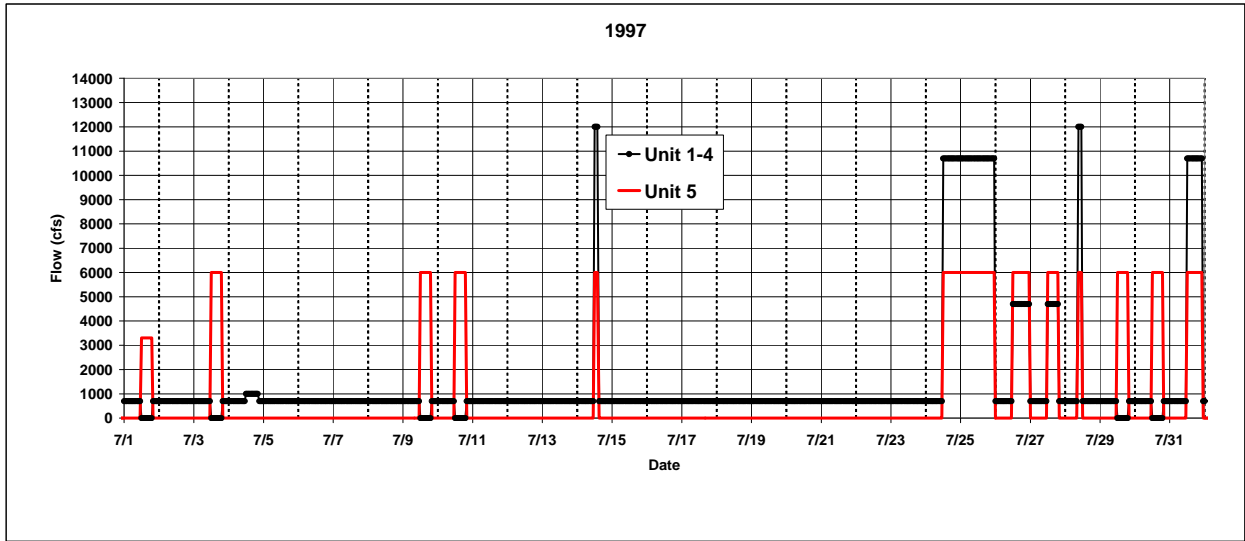
	Forebay Bottom Temperature			Release Temperature during Minimum Q		
	1-Aug	1-Sep	1-Oct	1-Aug	1-Sep	1-Oct
1997 Actual	16.2	17.8	18.7	16.6	18.2	19.0
1997 Unit 5 on first until June 15	14.1	15.4	16.1	14.5	15.7	16.4
1997 Settlement Agreement Unit 5 on first	15.5	16.6	17.2	15.8	16.8	17.4
1997 Settlement Agreement Unit 5 on last	16.2	17.2	17.8	16.4	17.5	18.0
1998 Actual	15.3	16.2	17.0	15.7	16.6	17.3
1998 Unit 5 on first until June 15	13.8	14.7	15.5	14.1	15.0	15.8
1998 Settlement Agreement Unit 5 on first	14.5	15.3	16.0	14.7	15.5	16.2
1998 Settlement Agreement Unit 5 on last	14.9	15.7	16.4	15.1	15.9	16.6
2000 Actual	13.8	14.7	15.3	14.1	15.0	15.6
2000 Unit 5 on first until June 15	12.9	14.0	14.8	13.3	14.3	15.0
2000 Settlement Agreement Unit 5 on first	14.4	15.1	15.7	14.6	15.3	15.9
2000 Settlement Agreement Unit 5 on last	14.9	15.6	16.1	15.1	15.7	16.2

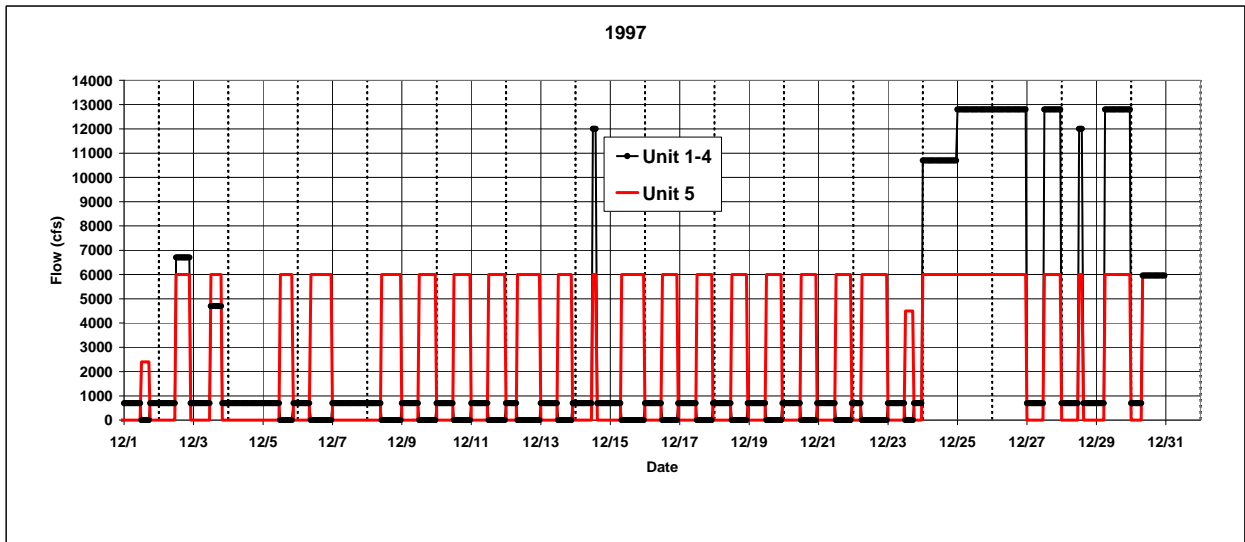
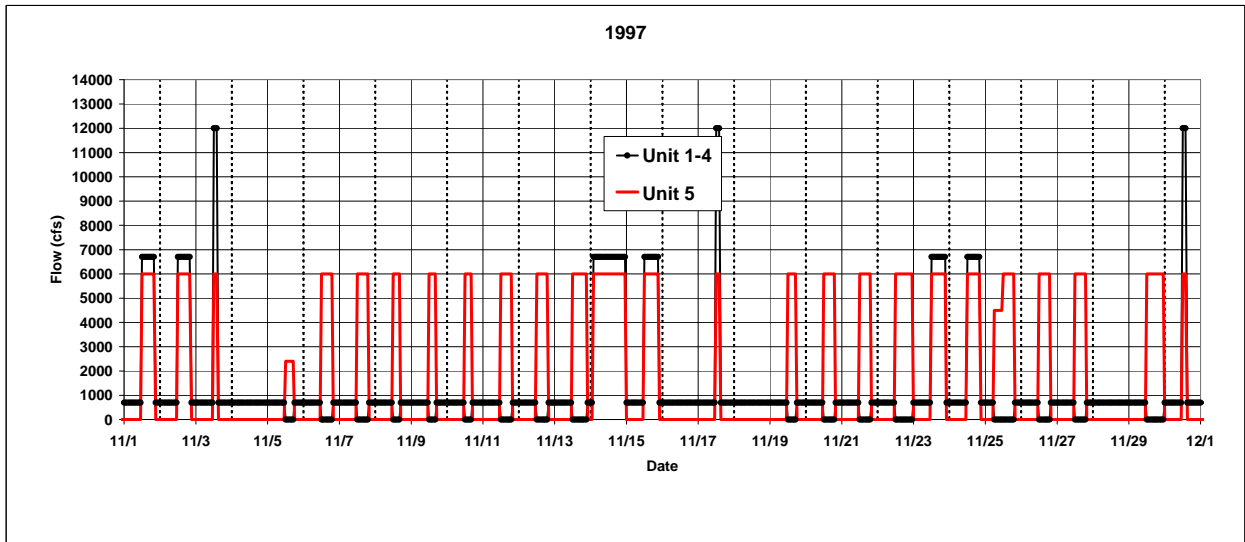
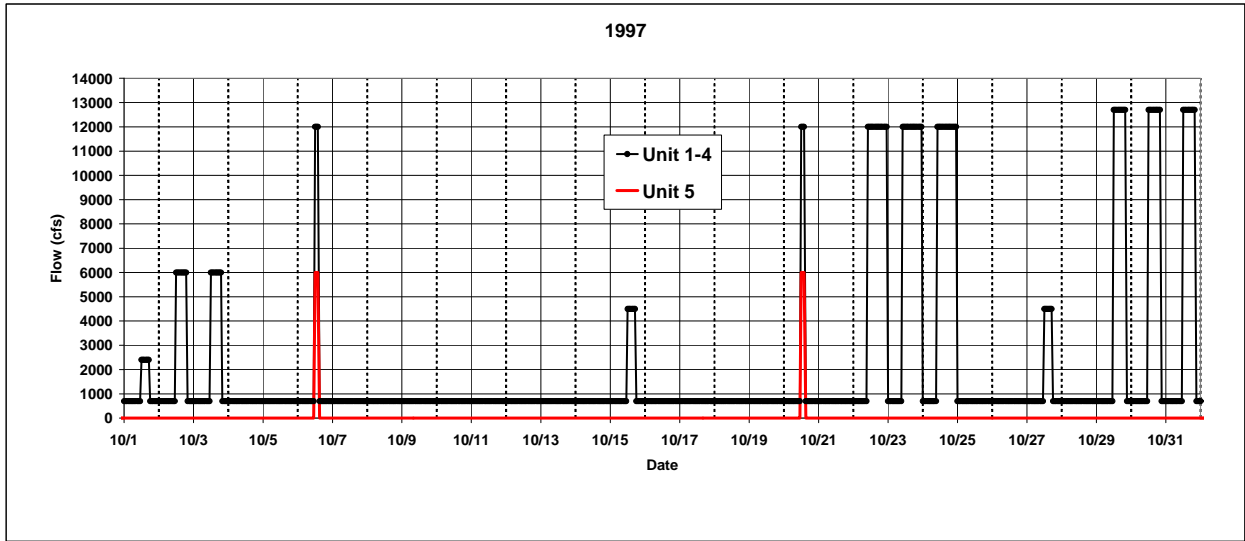
Appendix—Hourly Outflow Plots for 1997, 1998 and 2000

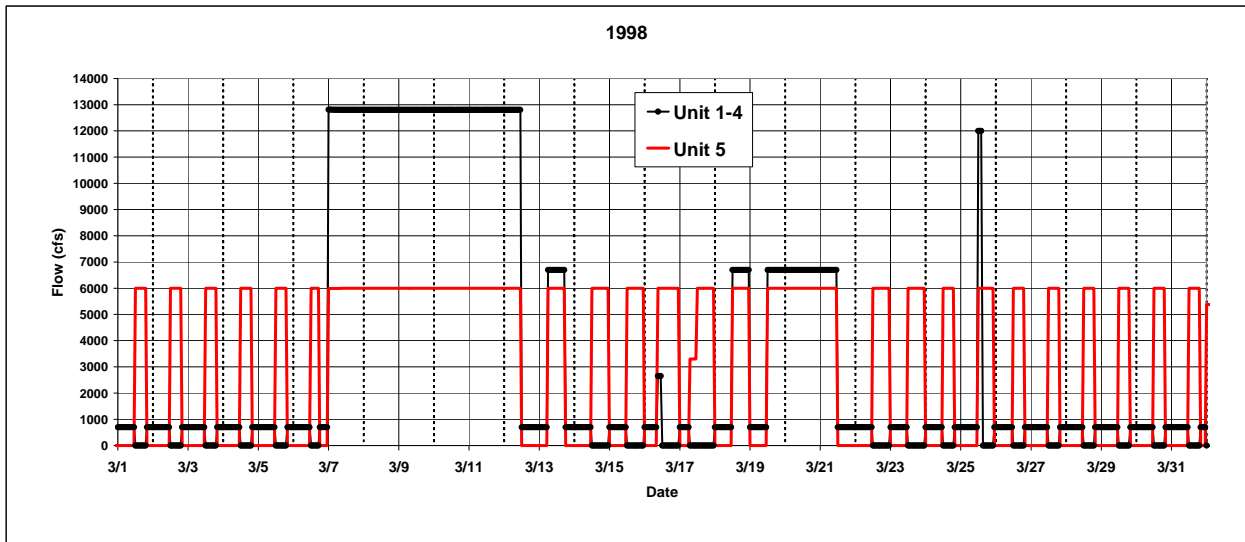
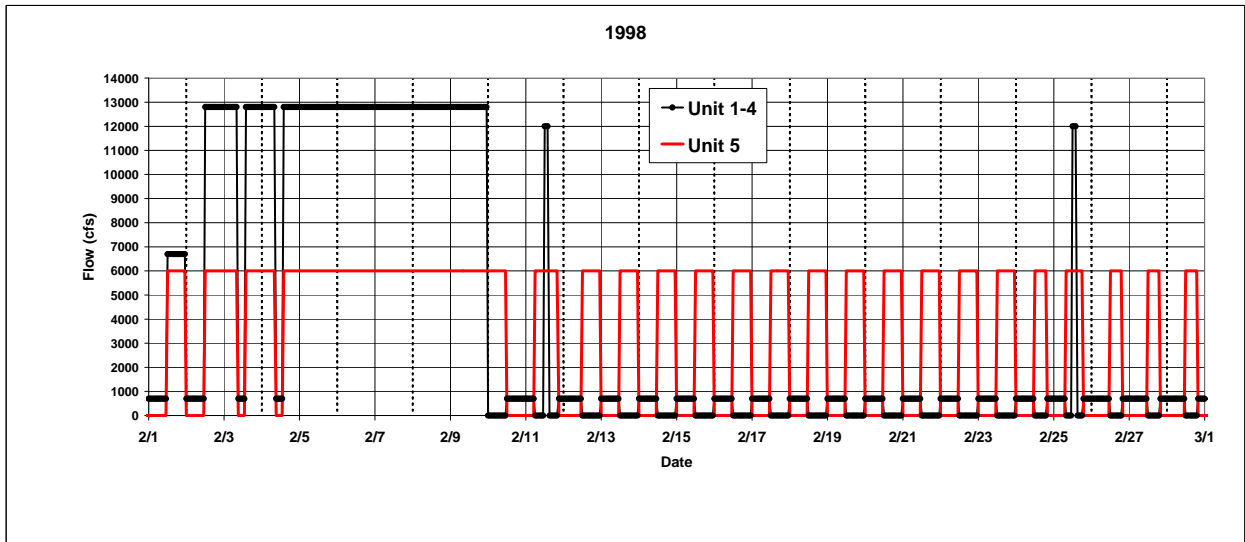
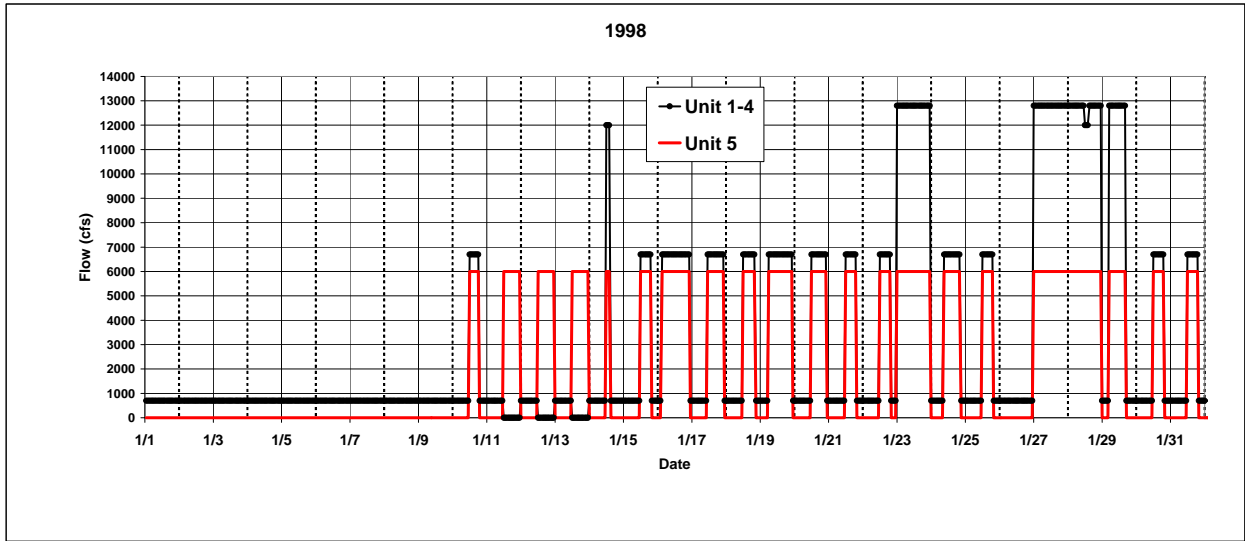
Note: These plots represent flows for the Settlement Agreement Scenario

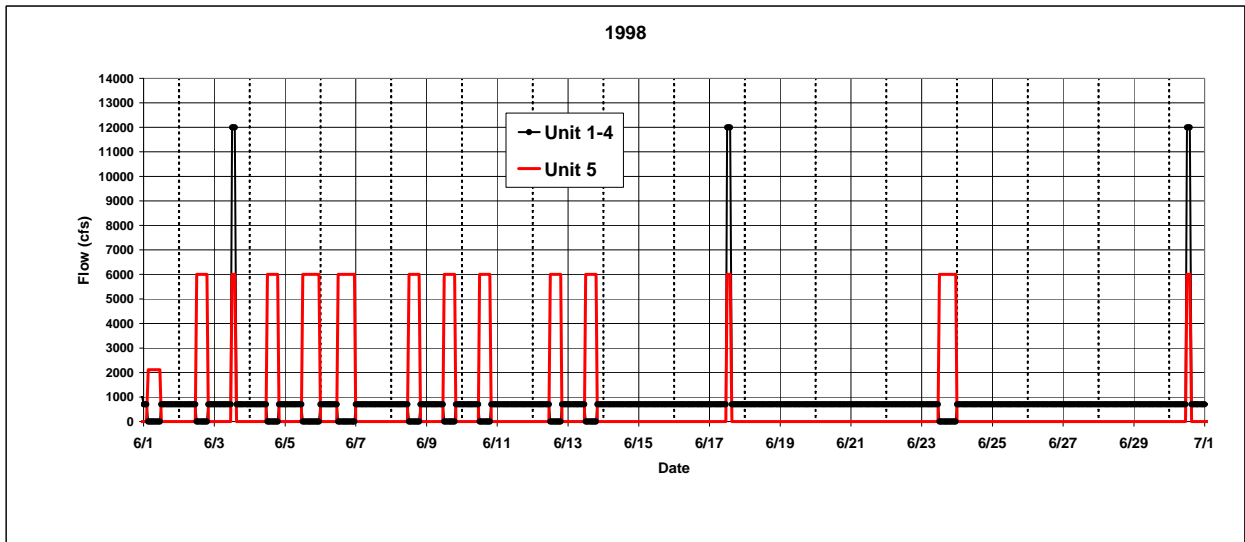
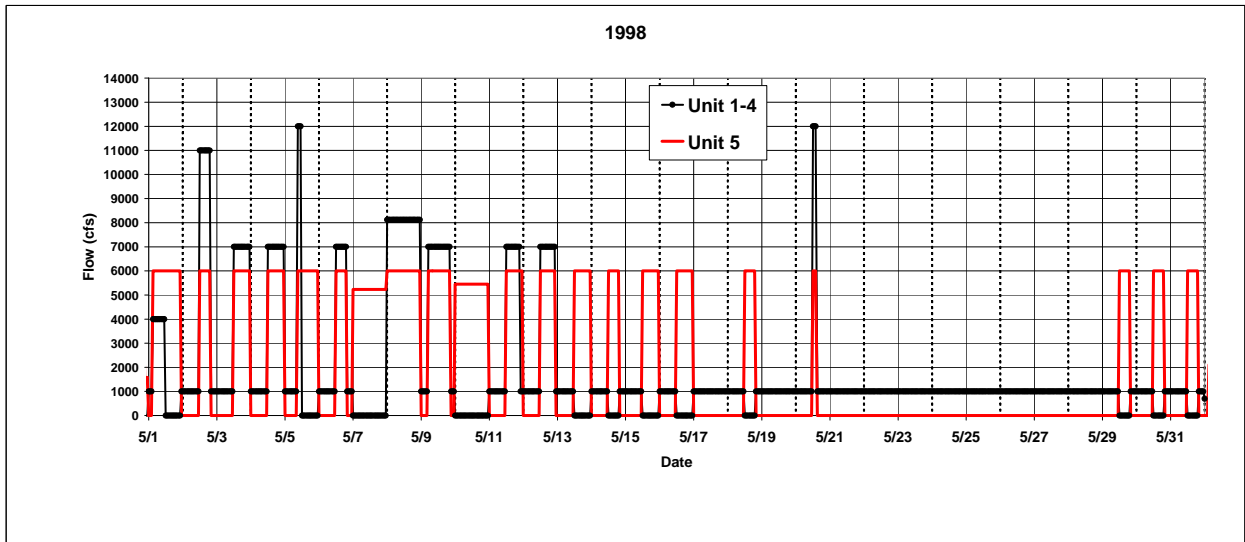
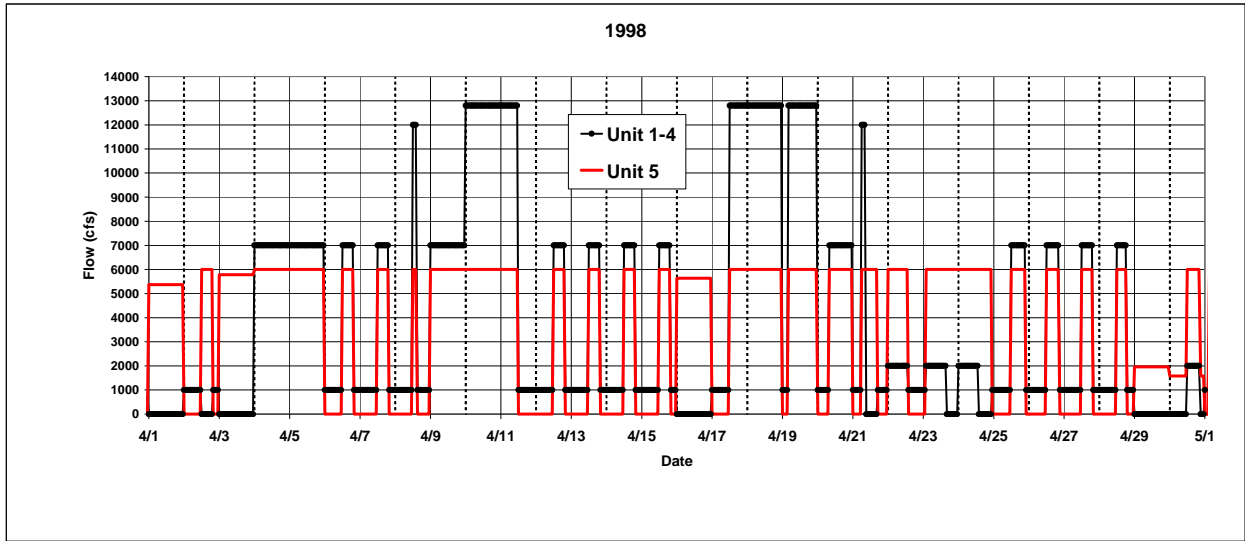


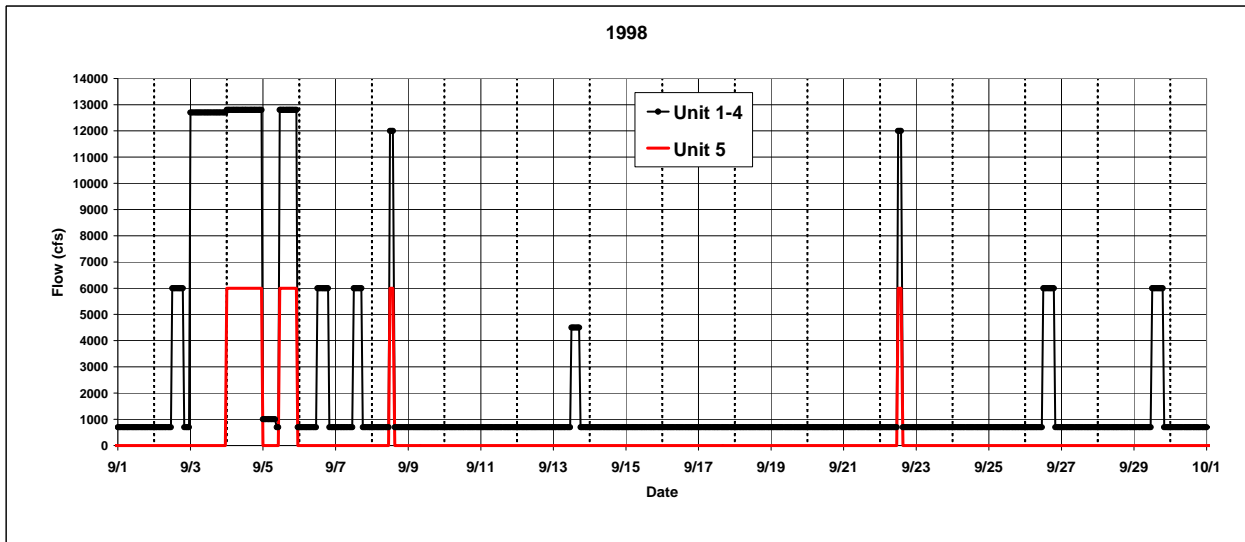
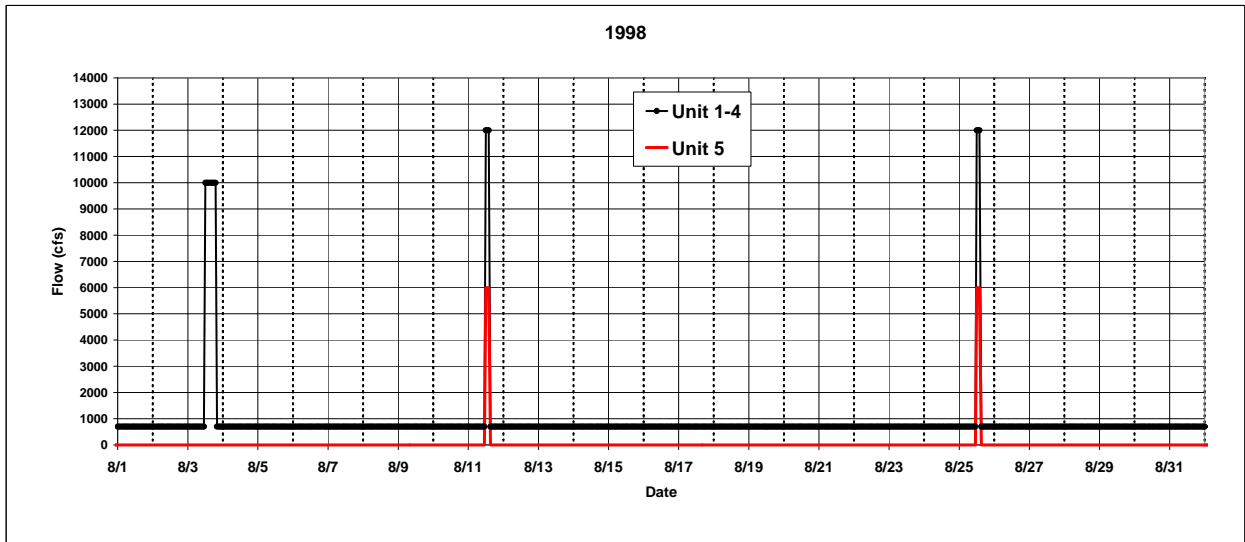
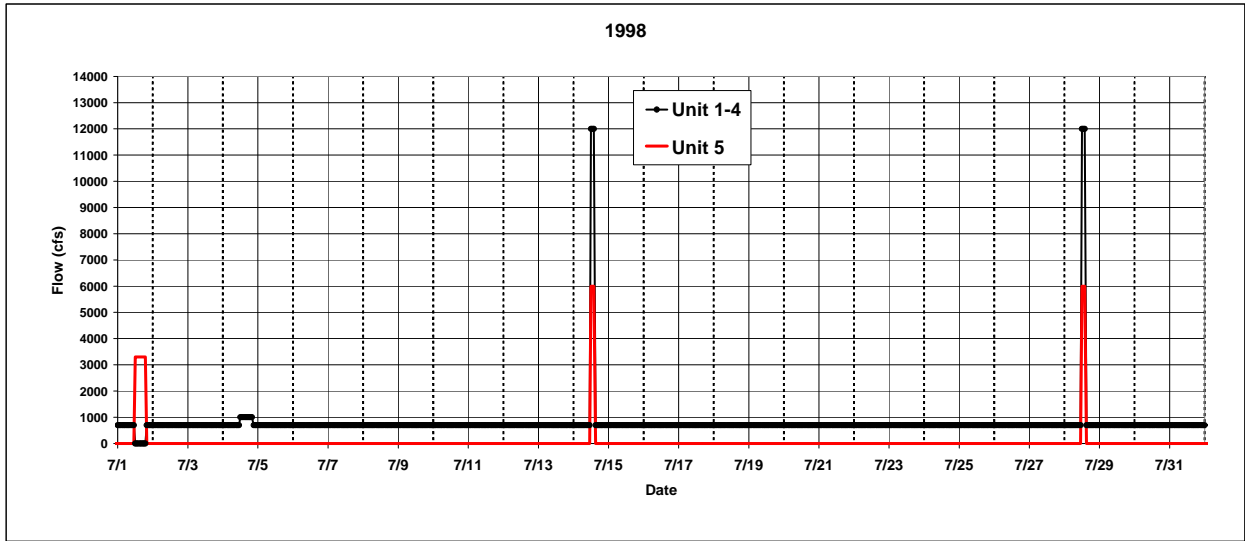


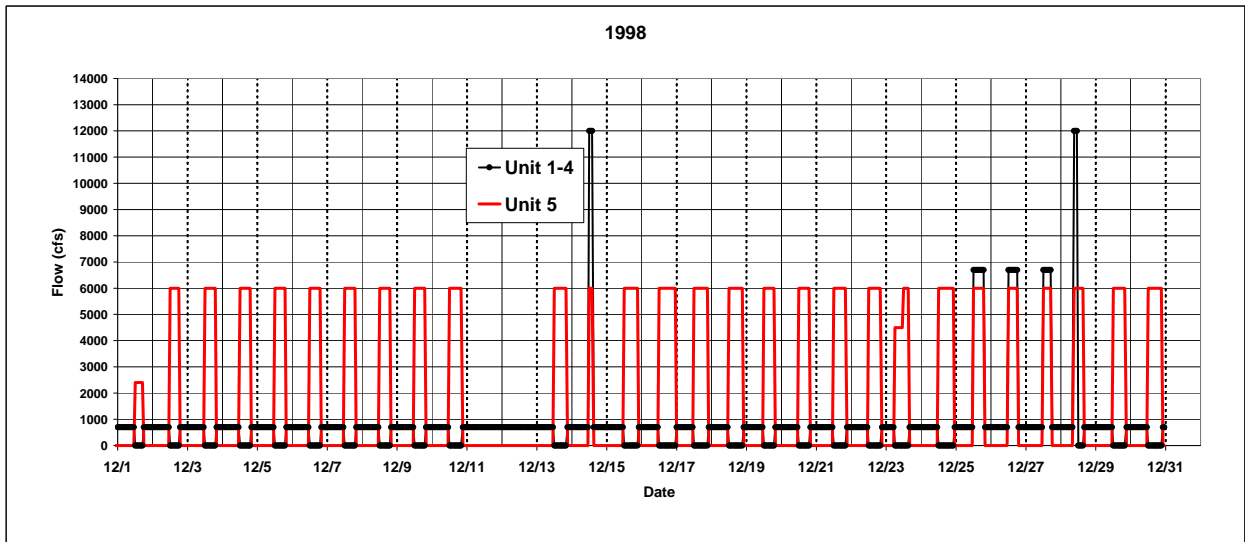
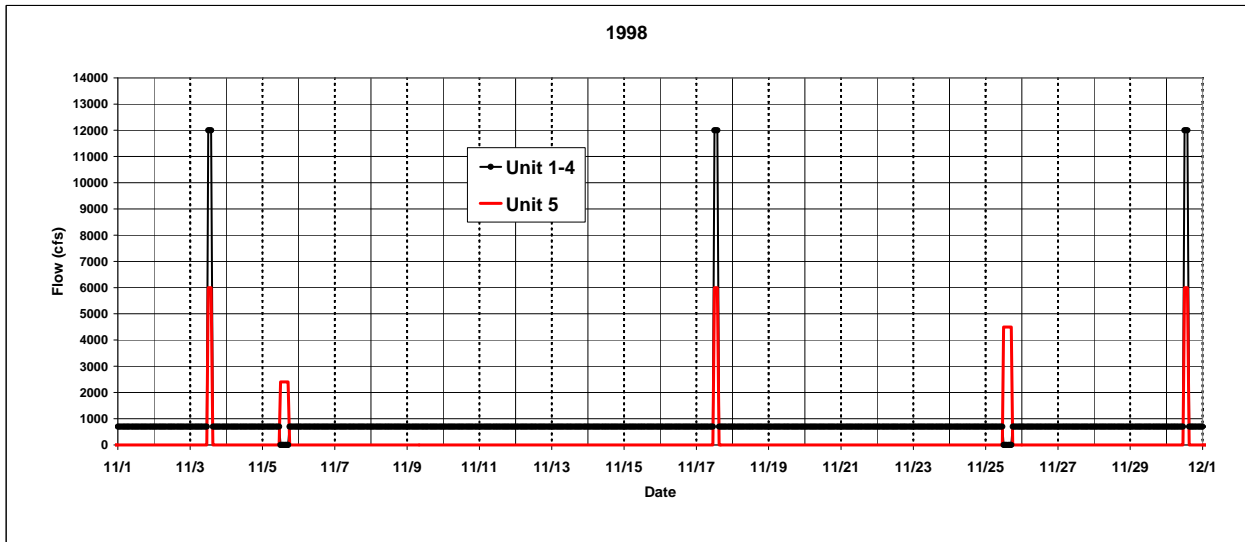
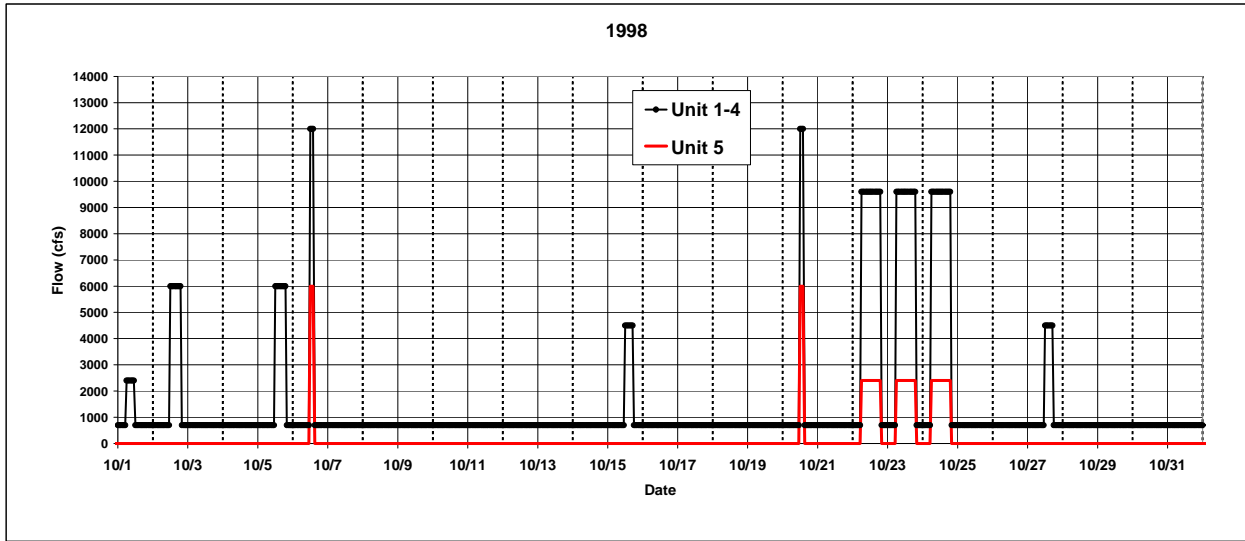


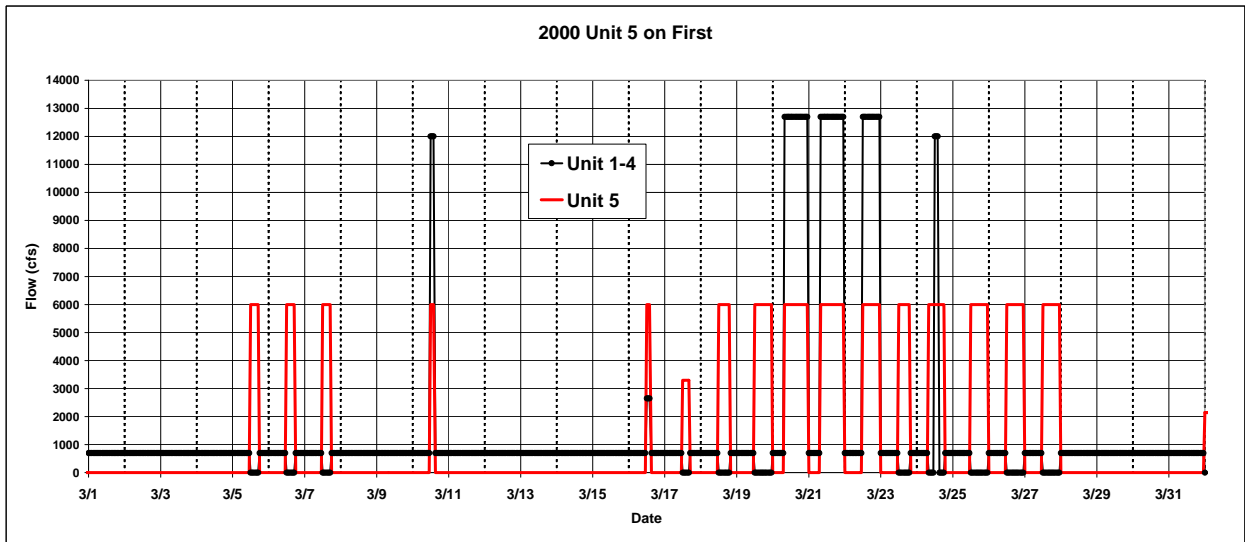
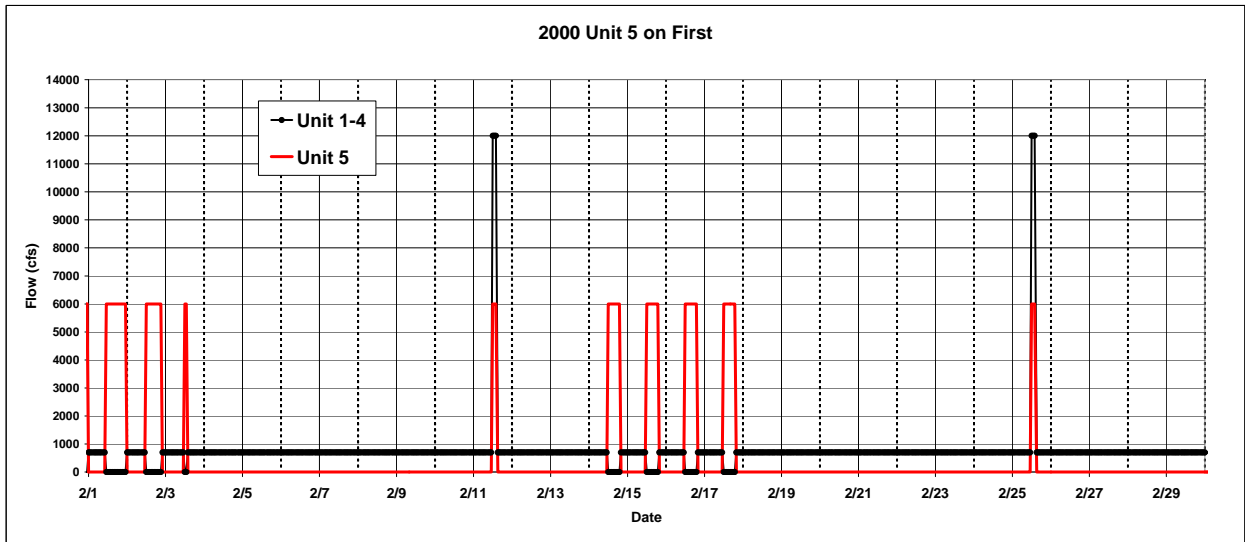
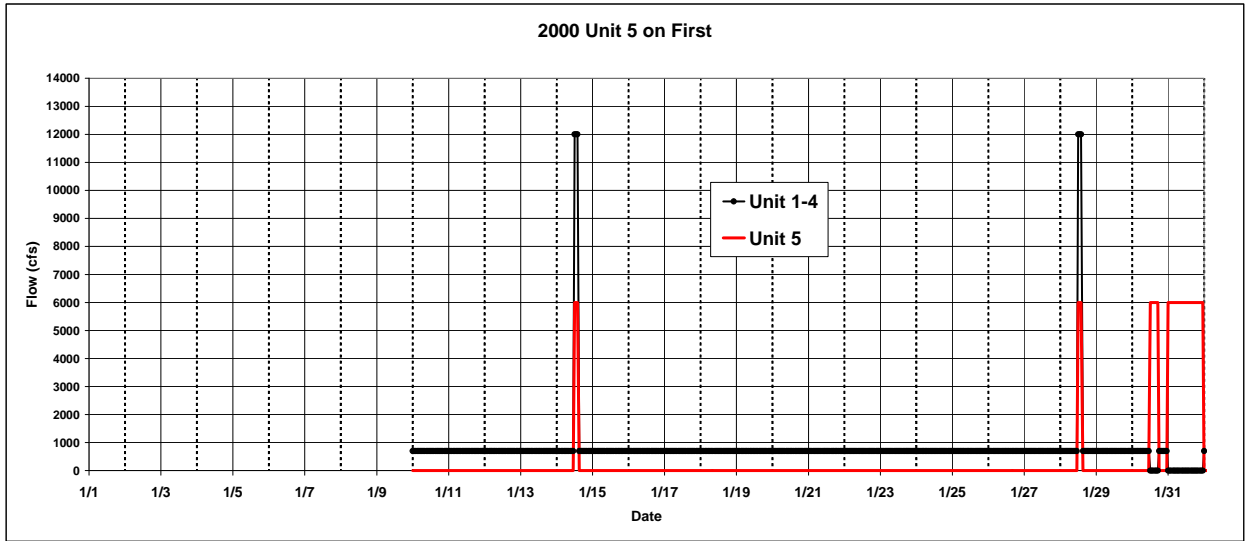


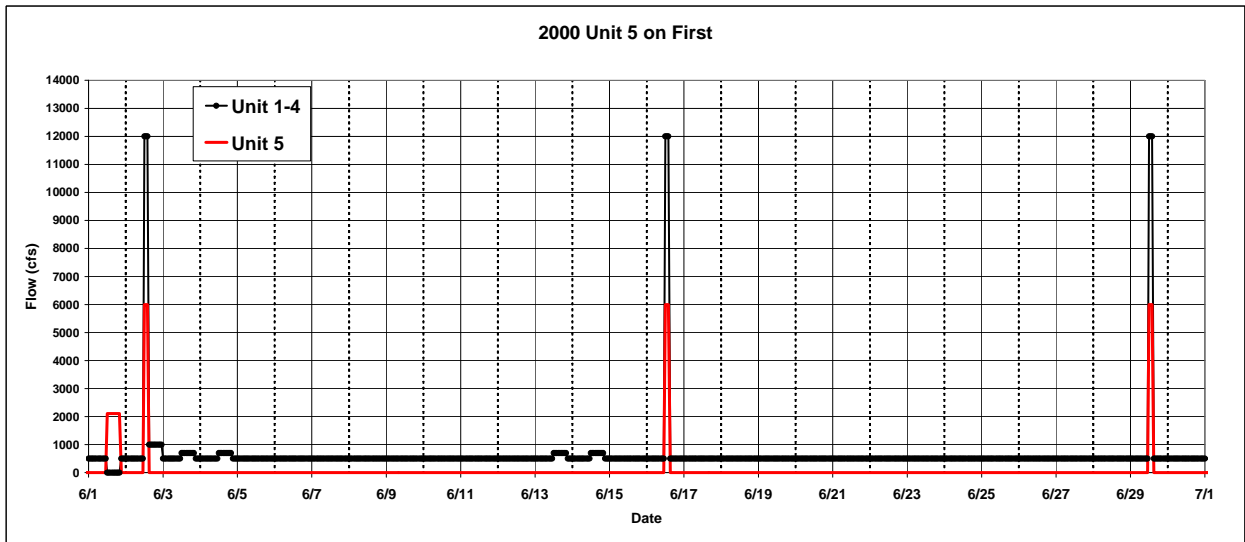
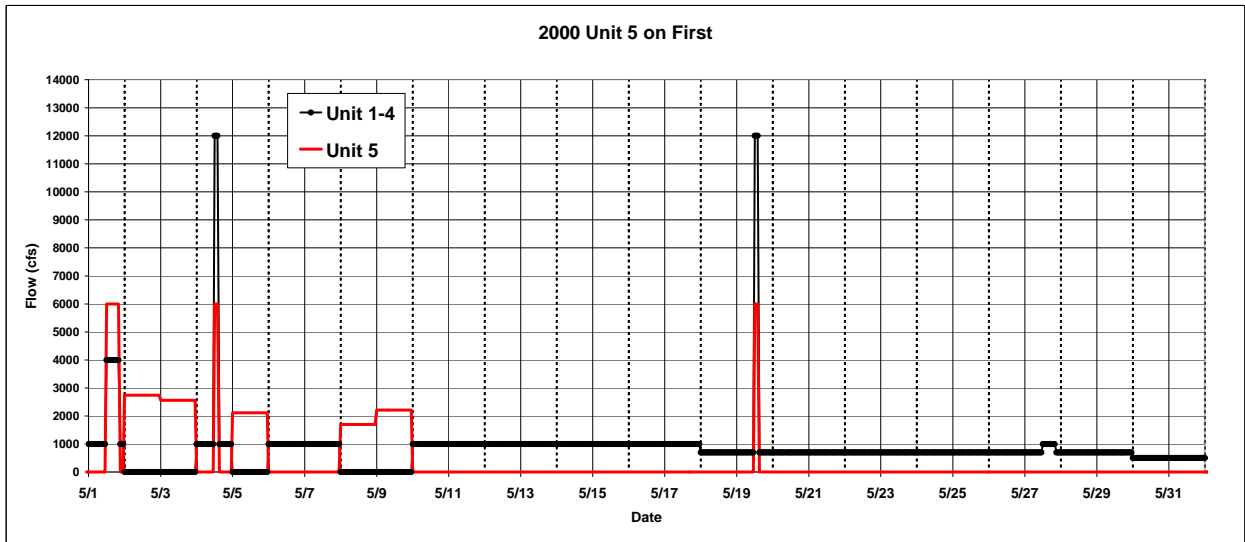
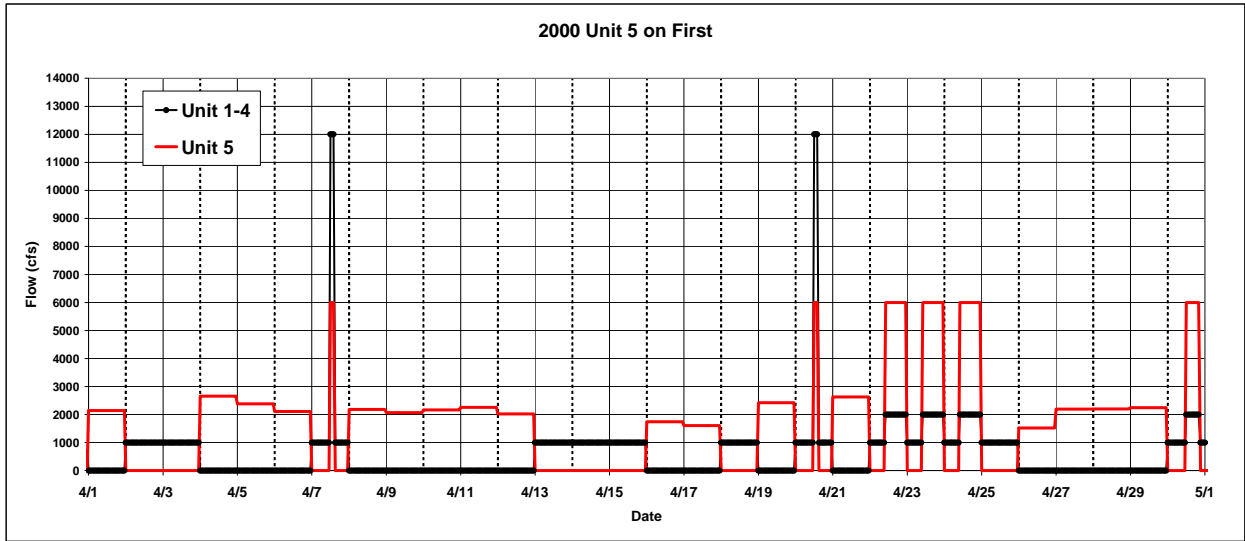


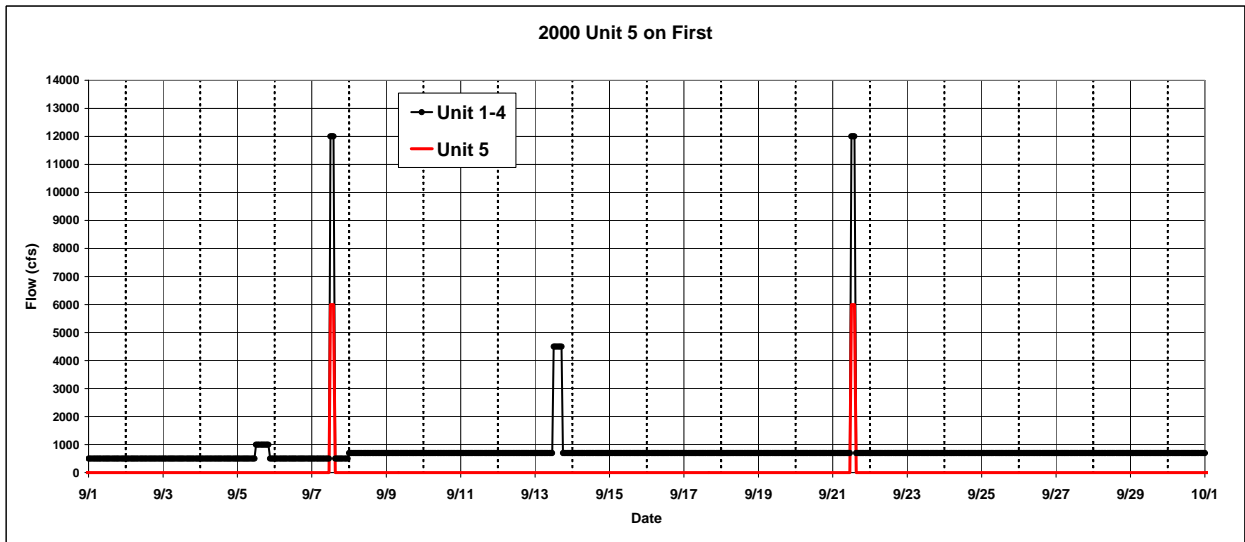
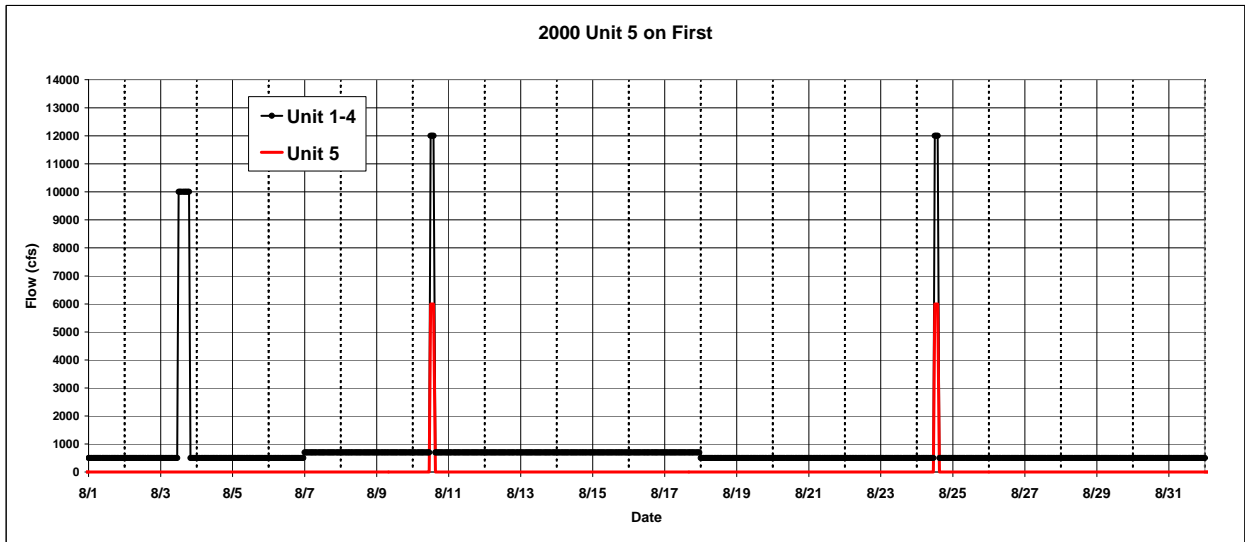
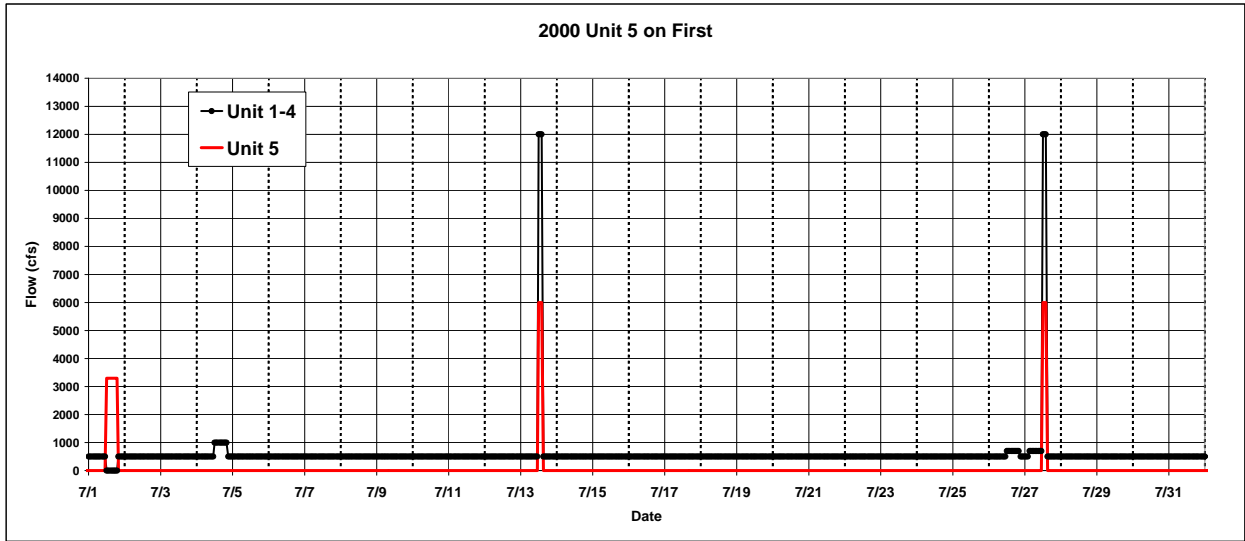


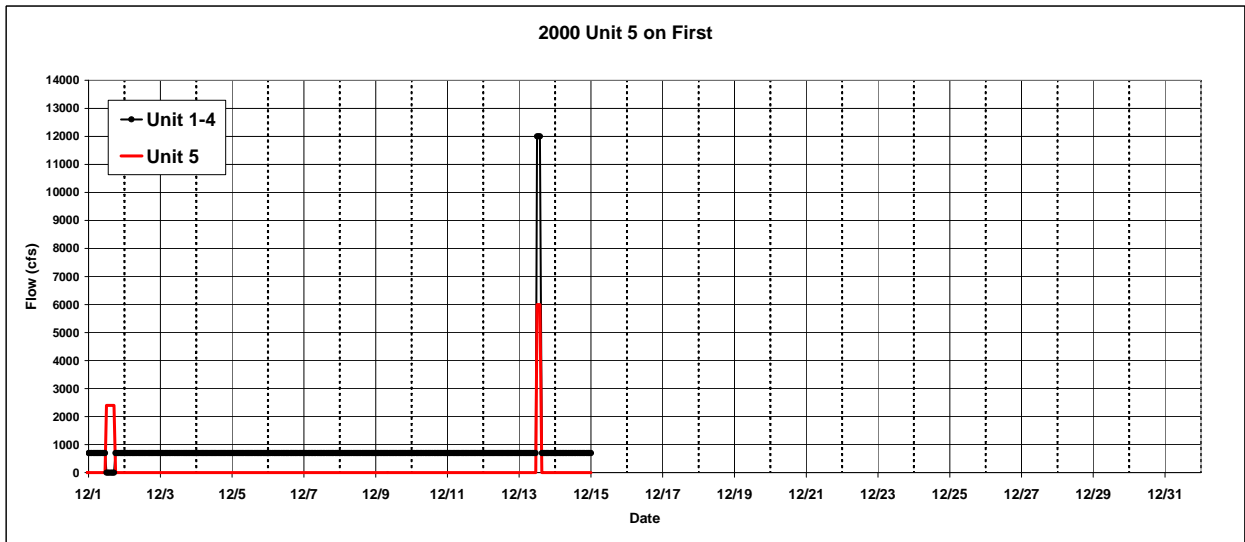
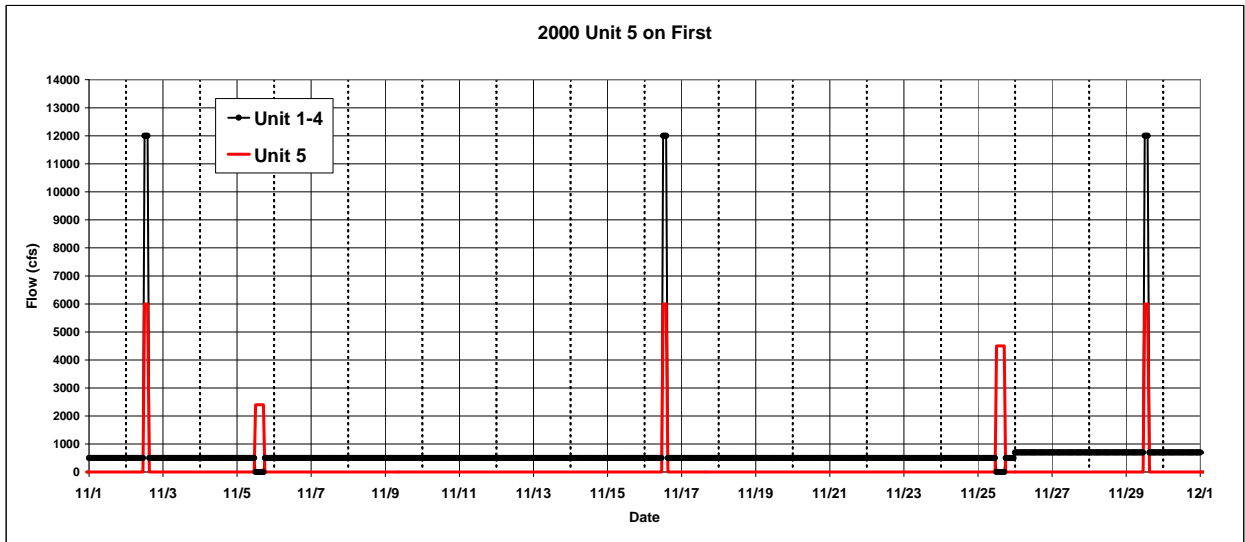
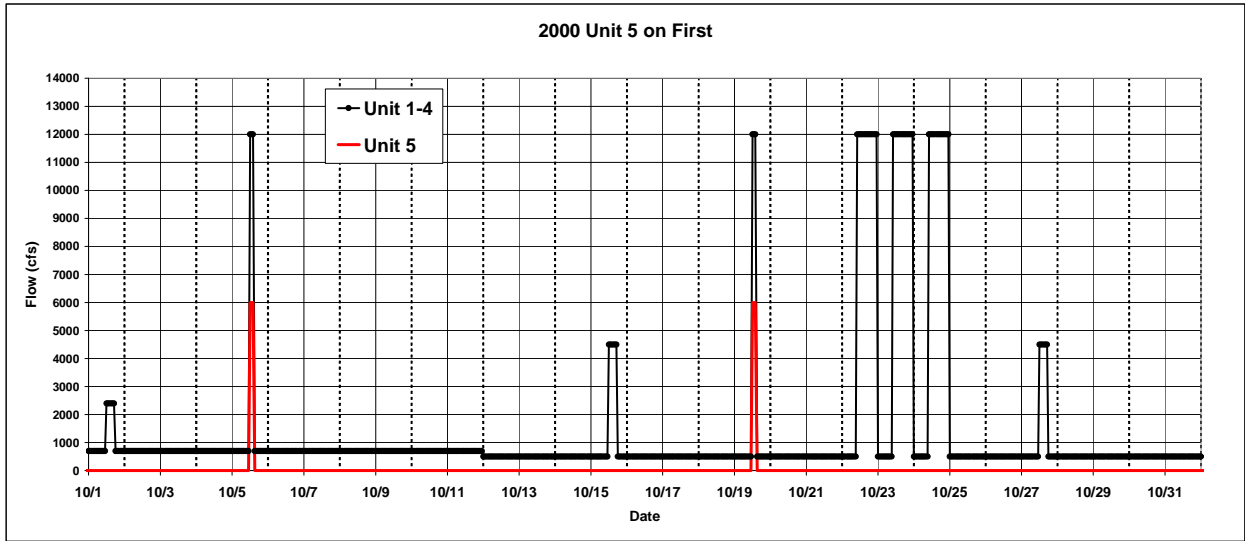












Alison Guth

From: Alan Stuart
Sent: Monday, May 25, 2009 2:02 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; 'Dchristie@coporium.net'; 'Giffinma@dhec.sc.gov'
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane'; 'MQuattlebaum@scana.com'
Subject: FINAL 2008 Operations Report and 2009 Operations Plan For Saluda Hydro



FINAL 2008
Operations Report a.

Dear Settlement Participants,

We did not receive any additional comments on the 2008 Operations Report or appended 2009 Operations Plan for Saluda Hydro. I did however find one typo and one grammatical error which I corrected. Attached is the final document.

In moving forward on this issue, we will file the attached document with the FERC this week to comply with Article 31 of the current FERC License and the terms of the Settlement Agreement. A condition of the Settlement Agreement requires filing of the annual operations plan by June 30.

Thanks to all for your efforts and we look forward to another highly successful year in 2009.

best regards,
Alan

From: Alan Stuart
Sent: Mon 5/4/2009 2:32 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; 'Dchristie@coporium.net'; 'Giffinma@dhec.sc.gov'
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane'; 'MQuattlebaim@scana.com'
Subject: RE: 2008 Operations Report For Saluda Hydro

Good Afternoon,

Attached is the revised 2008 Operations Report for Saluda Hydro with the 2009 Operations Plan Appended. The revised report reflects changes discussed at the March 24, 2009 meeting. The 2009 Operations Plan is basically the same plan as 2008 as no changes were made. Please review the attached document and respond with comments by **May 18, 2009**. We will be filing the document with the FERC once finalized.

If you have questions, please let us know.

Thanks, Alan

From: Alan Stuart
Sent: Sun 3/8/2009 7:57 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina

Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; Dchristie@coporium.net; Giffinma@dhec.sc.gov
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane';
'MQuattlebaim@scana.com
Subject: 2008 Operations Report For Saluda Hydro

Good morning all,

Attached to this email is a draft copy of the 2008 Operations report for Saluda Hydro. As has been the case in both 2006 and 2007, dissolved oxygen levels in the lower Saluda River were at or above standards for most of the low DO season during 2008. We are planning to have our annual meeting on **March 24, 2008 at 9:30 am** at the Lake Murray Training Center. Please review the document and be prepared to ask any questions or provide comment at that meeting. Our goal as always will be to discuss the findings from 2008 and begin developing the operating plan for the 2009 low DO season.

As I am technologically challenged, Alison will send out an Outlook reminder for everyone on Monday.

thanks,
Alan

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT

2008 ANNUAL REPORT ON WATER QUALITY AND AERATION OPERATIONS AT THE SALUDA PROJECT

May 2009

Prepared by: Jim Ruane and Andy Sawyer, Reservoir Environmental Management, Inc

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

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2008 ANNUAL REPORT ON WATER QUALITY AND AERATION OPERATIONS AT THE SALUDA PROJECT

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2008 ANNUAL REPORT ON WATER QUALITY AND AERATION OPERATIONS AT THE SALUDA PROJECT

INTRODUCTION

As required by Section 8.5 of the Offer of Settlement on Complaint Regarding Water Quality in the Lower Saluda River (“Settlement Agreement”), submitted to the Federal Energy Regulatory Commission on May 19, 2004 and approved by the Commission in an order issued on July 15, 2004, as modified by an order issued on December 21, 2004, South Carolina Electric & Gas Company (“SCE&G” or “Company”), as the licensee for the Saluda Hydroelectric Project (“Saluda Project” or “Project”) has prepared this annual summary of the following topics:

1. Dissolved Oxygen (“DO”) and other water quality monitoring results for Lake Murray and the Lower Saluda River (“LSR”);
2. A preliminary evaluation of the implementation of the prior year’s Operating Plan; and
3. Preliminary recommendations for the coming year’s Operating Plan

This report will present the results of water quality monitoring, as based on data obtained from the United States Geological Survey (“USGS”),¹ for the period June 1 through the time of lake turnover that occurred in mid-November 2008. Then, an evaluation of maintaining the goal of the water quality standard, as expressed in Sections 9.2 and 9.3 of the Settlement Agreement, will be presented, subject to the conditions identified in Section 9.3.

The following background considerations are restated from the 2004 Operating Plan, the initial operating plan submitted in compliance with the Settlement Agreement:

¹ As with any *in-situ* continuous monitor, anomalous readings occur from time to time, due to equipment fouling or malfunction. If the USGS determines the data are suspect through their Quality Control/Quality Assurance Program, that data may be ignored, appropriately adjusted, or otherwise dealt with according to their final determination. It is acknowledged that the USGS data is reported initially as “provisional.” SCE&G will use it subject to the data error issues discussed here.

- The Company is committed to complying with the DO standard for the Saluda River downstream from Saluda Project to the extent practicable. Factors affecting the ability to insure continuous compliance include:
 - the limited capability for aeration of water released through the turbine units;
 - the requirement that SCE&G manage water levels in Lake Murray for project safety and other reasons;
 - the need to use Saluda Hydro for the special operating needs specified under Item 9.3 of the Settlement Agreement; and
 - the need to meet SCE&G’s reserve obligation to maintain electric load-generation balancing and management of local voltages and system frequency in real time.
- Generators sometimes fail, and generation failures generally are unpredicted and sudden, upsetting the load-generation balance. Because electricity cannot be stored, any sudden reduction in generation cannot be handled by an inventory, as might happen in most other kinds of business. Instead, generation losses must be met by reserve generation that can be dispatched instantly, before voltage sags or frequency excursions lead to local or widespread blackouts. The Company is a member of the Virginia-Carolinas Southeastern Electric Reliability Council sub-region (“VACAR”), whose members are bound in a reserve-sharing agreement by which each has agreed to assist any other member in generation emergencies. As part of its obligations as a member of VACAR, SCE&G must employ its reserves to meet its own generation emergencies before calling on assistance from other VACAR members, and it must be constantly ready to provide reserve generation to other VACAR members. Generally, the reserves required to be maintained by SCE&G are in the range of 190-200 MW, which matches the capacity of the Saluda Project and its ability to respond quickly to any generation outage on its system.

During the low DO period of 2008, SCE&G implemented the operating plan summarized below and contained in Appendix A:

- The plan addressed the limited objectives identified in the settlement agreement, i.e., doing what reasonably could be done to improve the likelihood that stream-specific

DO standards would be met in the LSR, while, at the same time, not constraining in any manner SCE&G's ability to use the Saluda Project to meet its reserve obligations.

- The plan also included evaluations of hub baffles, headcover seals, and existing water quality monitoring equipment.

Overview of 2008 Aeration Operations:

The site-specific DO standard for the LSR was maintained during most of the period June through November.

Positive developments for the 2008 low DO period were the effectiveness of the aeration systems on Units 1 through 4 with hub baffles installed and reduced headcover seal leakage, and the availability of relatively higher DO levels at the intake of Unit 5 starting about October 26. The aeration systems currently in place reflect implementation of best attainable turbine venting systems for the original units at Saluda Hydro.

The DO measured by the water quality monitor (02168504) maintained by the United States Geological Survey ("USGS") some 755 yards downstream from the project's powerhouse was less than the standard on nine occasions for system reserve when the flow through the Saluda Project was greater than flow levels at which current turbine aeration can attain the DO standard:

1. August 24, DO less than 4 mg/L for two hours
2. August 28, DO less than 4 mg/L for three hours
3. August 30, DO less than 4 mg/L for one hour
4. September 6, DO less than 4 mg/L for six hours
5. September 9, DO less than 4 mg/L for one hour
6. September 26, DO less than 4 mg/L for three hours
7. October 5, DO less than 4 mg/L for three hours
8. October 6, DO less than 4 mg/L for seven hours
9. November 3, DO less than 4 mg/L for five hours

All the excursions are summarized in a summary section following the presentations of each period of excursions.

SUMMARY OF 2008 OPERATIONS AND WATER QUALITY MONITORING RESULTS

Water Management and Reserve Obligations:

The gauged inflows and pool level elevations of Lake Murray over the period of assessment are presented in Figures 1 and 2.

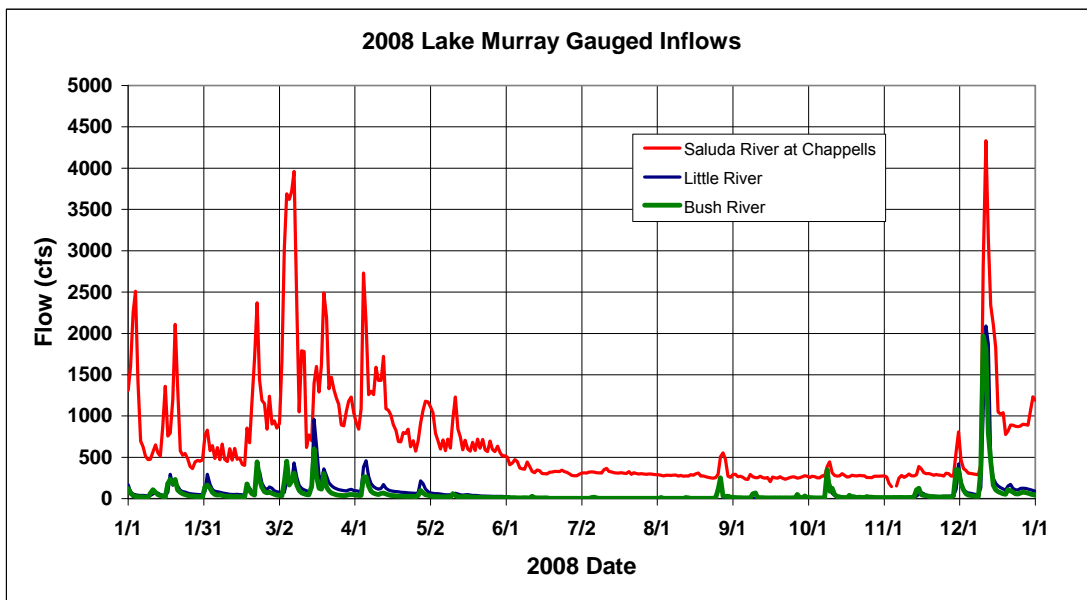


Figure 1: 2008 Lake Murray Gauged Inflows.

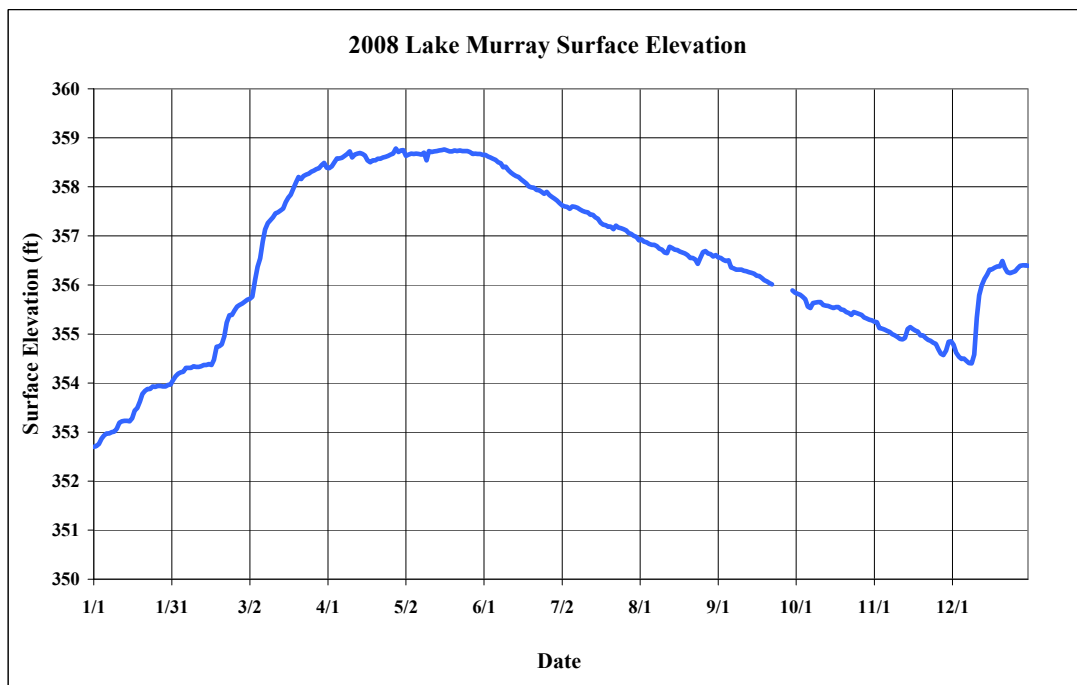


Figure 2: 2008 Pool Elevation of Lake Murray.

The Saluda Project was called upon to meet the Company's reserve obligation during the low DO period on the following dates: July 11, 17, 18, 28, and 31; August 1, 24, 28, and 30; September 6, 9, and 26; October 5 and 6; and November 3 and 11.

Unit Operations and Aeration Systems:

All air valves were 50% open starting on July 7 and 100% open as of July 22, and continued to be open during the rest of the low DO period.

Unit 5 was operated on the basis of "last unit on, and first unit off" during the low DO period. Unit 2 draws about 25-33% less air than Unit 1 (the best aerating unit), and Unit 3 draws about 50% less air than Unit 1. Larger hub baffles were installed on Unit 5 in 2007, but air flow did not increase significantly.

Water Quality Data:

Figures 3 and 4 present the profiles of temperature and DO collected in the forebay of Lake Murray in 2008. These profiles show that DO in front of the intakes for Units 1-4 was near zero starting in mid-September.

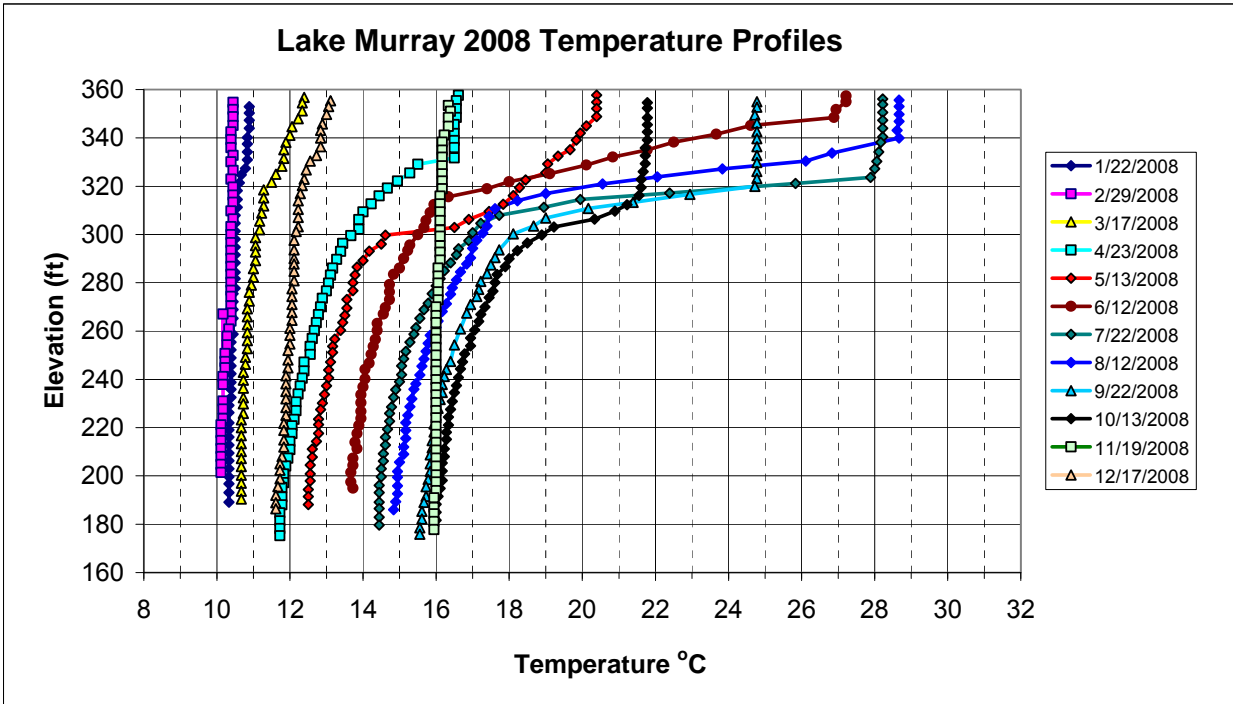


Figure 3: 2008 Temperature Profiles in Lake Murray

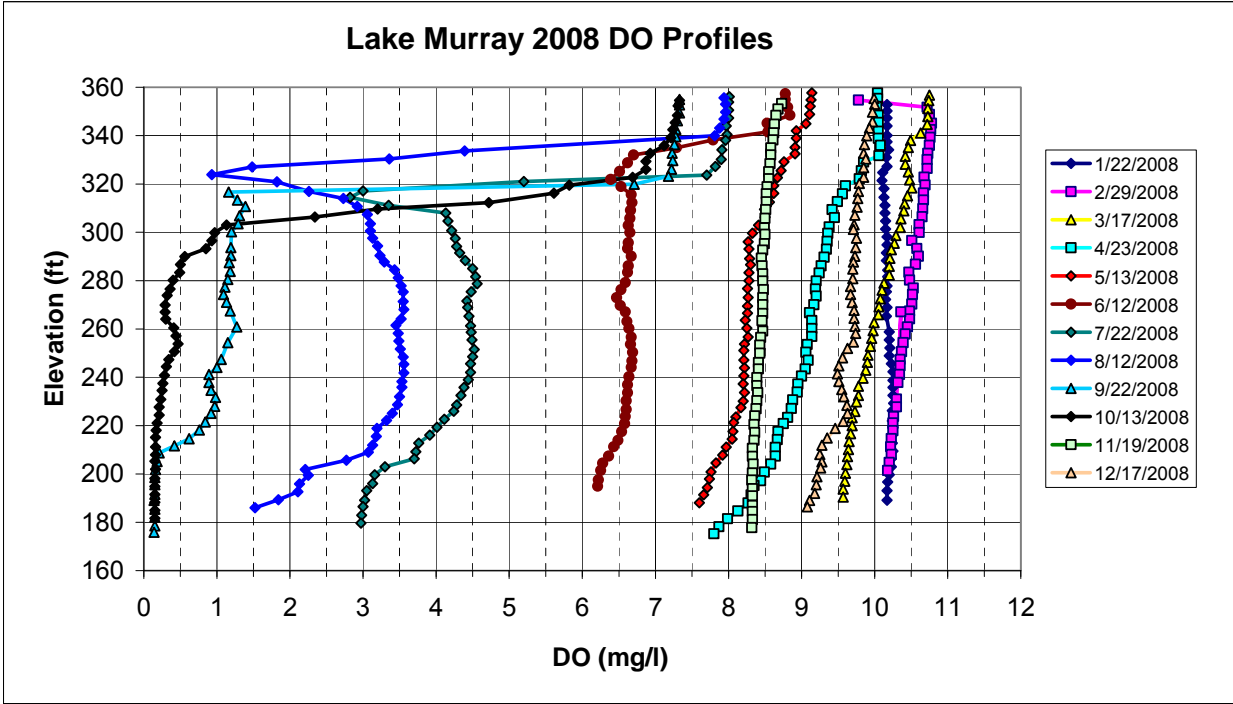


Figure 4: 2008 DO Profiles in Lake Murray

Figure 5 presents the temperature and DO results from the USGS monitors in the forebay of Lake Murray. Figure 5 shows that the temperature and DO at the intake for Unit 5 (i.e., DO-Bottom) increased to about the same level as the surface water in the lake in late October, preceded by transient changes in temperature and DO.

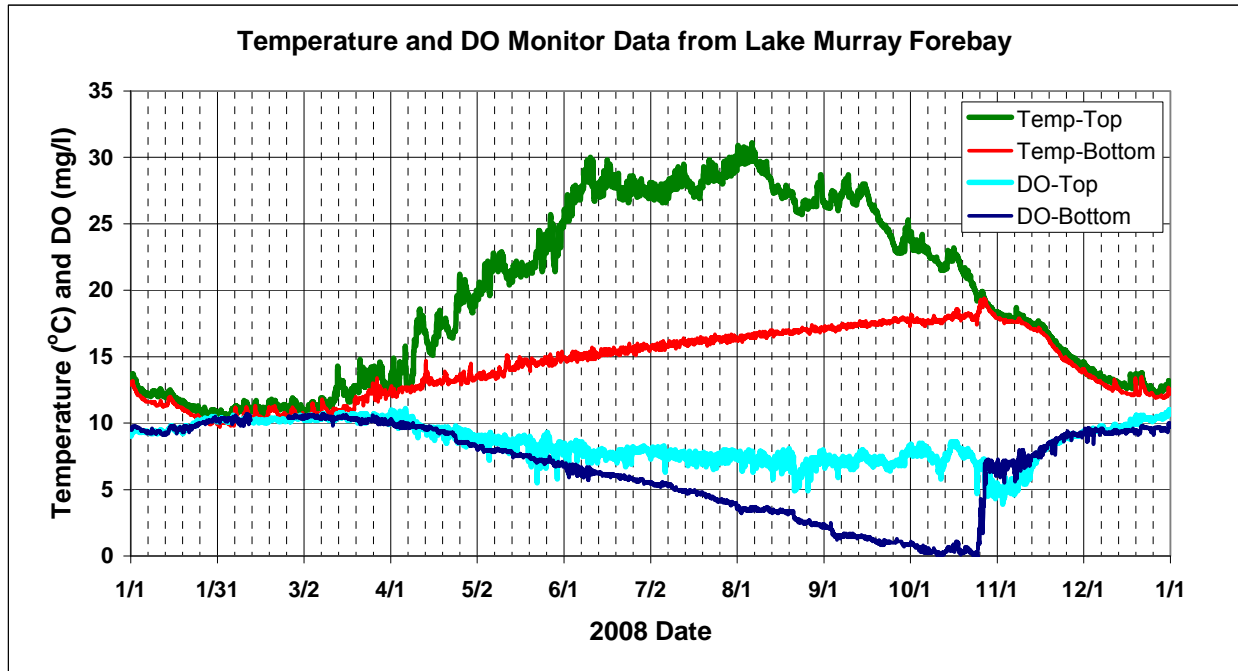


Figure 5: Temperature and DO Monitor Data from Lake Murray Forebay

Figure 6 presents the temperature and DO results of measurements at the USGS monitor immediately downstream from the Saluda Powerhouse. The graph includes the data recorded by the monitor as adjusted by USGS, the pre-calibration measurements of the monitor, and data collected using a separate field monitor by USGS as they performed maintenance on the stationary monitor (i.e., the monitor that was relocated to the center of the river as agreed to in the 2006 annual meeting.) It also includes the flow measurements by the USGS gauge as well as the daily average and the 30-day average DO values.

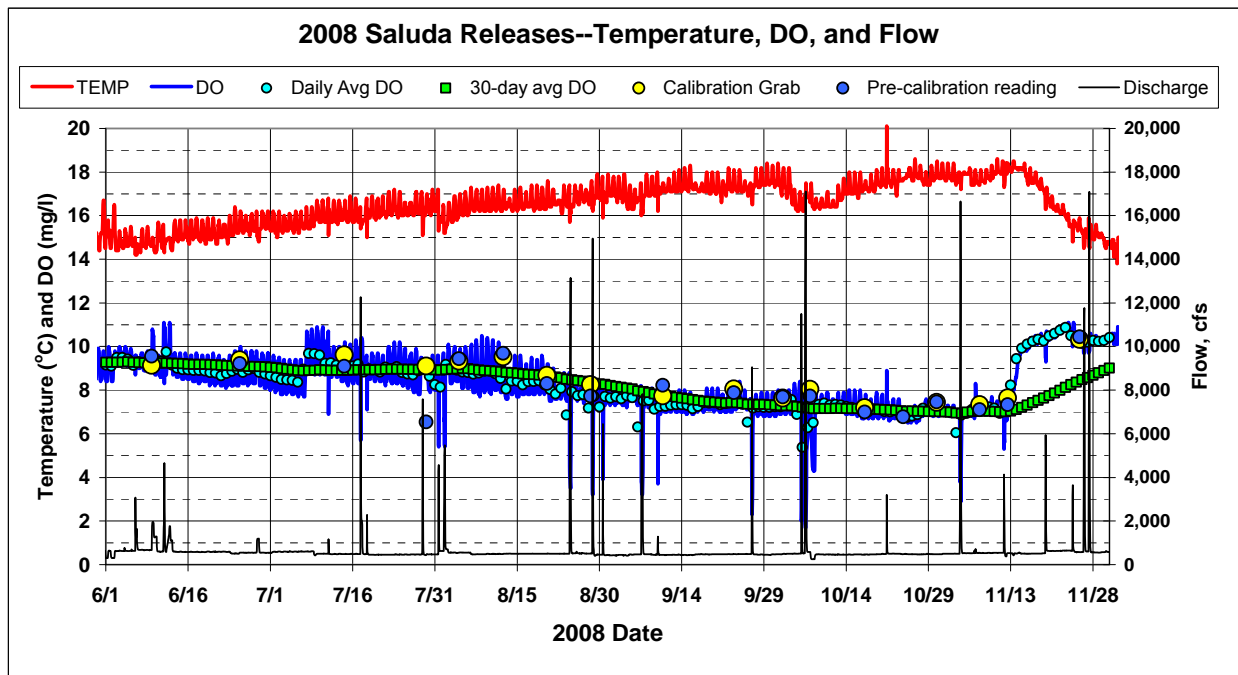


Figure 6: 2008 Saluda Releases – Temperature, DO, and Flow

Figure 7 presents the temperature and DO results of measurements at the USGS monitor (02169000) about eight miles downstream from the Saluda Powerhouse near the confluence of the Saluda and Broad Rivers. The graph includes the data recorded by the monitor as adjusted by USGS. It also includes the flow measurements by the USGS gauge as well as the daily average DO values.

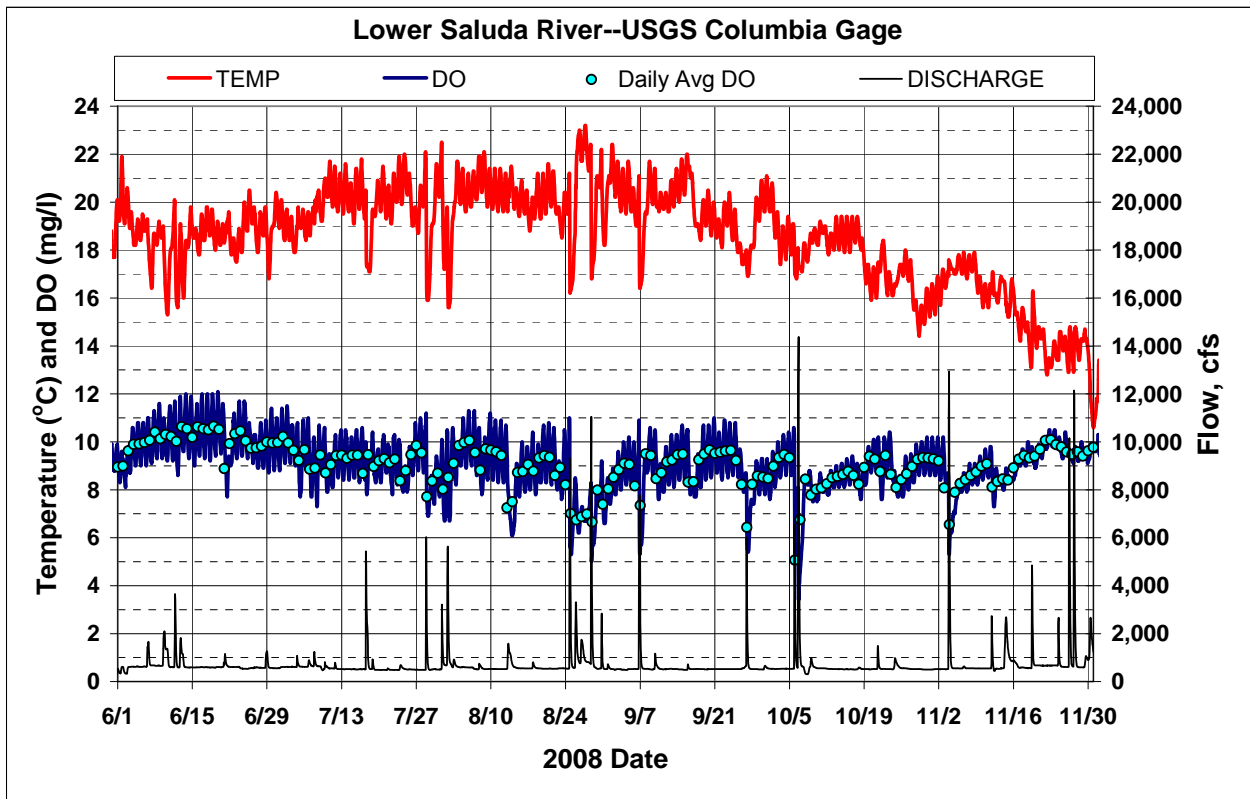


Figure 7: Lower Saluda River – USGS Columbia Gauge

EVALUATION OF 2008 OPERATIONS

In general, the levels of DO in the tailrace were similar to those observed in 2006 and 2007. This continued improvement compared to years prior to 2006 is attributed primarily to the installation of the hub baffles for Units 1 through 4, the reduction of headcover leakage on Units 2 and 3, and the low flows during these years. Excursions of DO less than the SCDHEC site-specific DO standard, as agreed upon in the Settlement Agreement, that were attributable to operations occurred nine times. All of these occasions occurred when the flow through the Saluda Project was greater than flow levels at which available turbine aeration could attain the DO standard. Figure 8 presents an enhanced view of the DO and flow conditions during the time period in which the excursions occurred.

Figure 8 shows that these excursions occurred over the following time periods:

1. August 24, DO less than 4 mg/L for two hours, for system reserve, minimum DO of 3.5 mg/L, average DO of 3.7 mg/L
2. August 28, DO less than 4 mg/L for three hours, for system reserve, minimum DO of 3.2 mg/L, average DO of 3.4 mg/L
3. August 30, DO less than 4 mg/L for one hour, for system reserve, minimum DO of 3.9 mg/L, average DO of 3.9 mg/L
4. September 6, DO less than 4 mg/L for six hours, for system reserve, minimum DO of 3.2 mg/L, average DO of 3.5 mg/L
5. September 9, DO less than 4 mg/L for one hour, for system reserve, minimum DO of 3.7 mg/L, average DO of 3.7 mg/L
6. September 26, DO less than 4 mg/L for three hours, for system reserve, minimum DO of 2.3 mg/L, average DO of 2.7 mg/L
7. October 5, DO less than 4 mg/L for three hours, for system reserve, minimum DO of 2.0 mg/L, average DO of 2.2 mg/L
8. October 6, DO less than 4 mg/L for seven hours, for system reserve, minimum DO of 1.7 mg/L, average DO of 2.1 mg/L
9. November 3, DO less than 4 mg/L for five hours, for system reserve, minimum DO of 2.9 mg/L, average DO of 3.6 mg/L

2008 Saluda Releases--Temperature, DO, and Flow

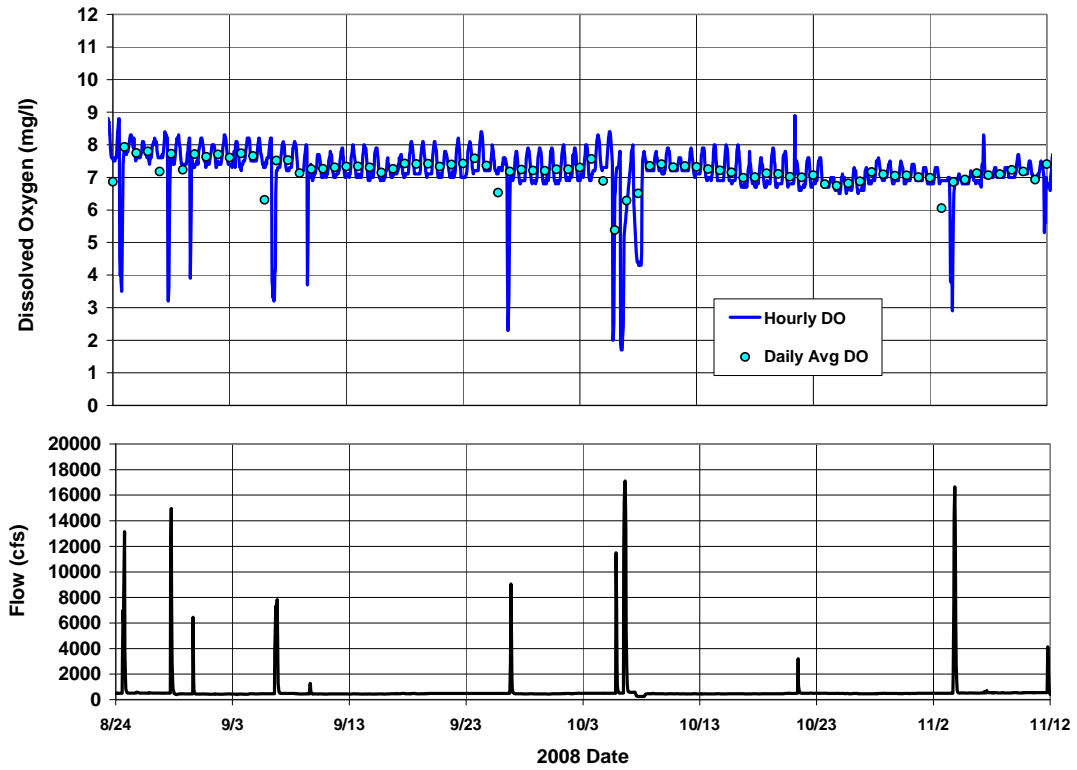


Figure 8: 2008 Saluda Releases – Period when Excursions Occurred.

Summary of all Excursions during the Period of Study:

The summary is presented in Table 1. All excursions of the DO standard were caused by operations to meet reserve obligations under VACAR. There were 31 hourly excursions of the 4 mg/L hourly minimum DO. Excursions were fewer in number in 2008 than in 2007 (34 excursions, 11 hours caused by operations to meet reserve obligations and 23 hours for aeration studies) and 2006 (49 excursions, 20 hours caused by operations to meet reserve obligations and 29 hours for aeration studies). Excursions in 2008 were significantly fewer than those in 2005 which encompassed 224 hours for operations (including pool water management) and 41 hours for special studies (including the monitor location study as well as aeration studies). Dissolved oxygen levels in the LSR, measured below Saluda Hydro, met or exceeded the instantaneous minimum standard of 4.0 mg/l 99.65 % of the time in 2008. There were no excursions of the daily average DO of 5 mg/L or the 30-day average DO of 5.5 mg/L in 2008.

Table 1: Summary of Excursions of DO Less Than the SC Site-Specific DO Standard (Hourly and Daily Standards)

Summary of Excursions for 2008--Causes and Metrics, based on USGS indicated DO monitor readings								
Causes	Dates	Number of Hours < 4 mg/L	% of Time < 4 mg/L	Average DO during Excursions	Minimum DO during Excursions	Number of Days Avg DO < 5 mg/L	% of Time < 5 mg/L Daily Avg	Comments
Operations	Aug 24	2	0.02	3.7	3.5	0		System reserve--5-hr
	Aug 28	3	0.03	3.4	3.2	0		System reserve--3-hr
	Aug 30	1	0.01	3.9	3.9	0		System reserve--1-hr
	Sep 6	6	0.07	3.5	3.2	0		System reserve--6-hr
	Sep 9	1	0.01	3.7	3.7	0		System reserve--2-hr
	Sep 26	3	0.03	2.7	2.3	0		System reserve--3-hr
	Oct 5	3	0.03	2.2	2.0	0		System reserve--3-hr
	Oct 6	7	0.08	2.1	1.7	0		System reserve--7-hr
	Nov 3	5	0.06	3.6	2.9	0		System reserve--6-hr
Totals and Averages		31	0.35			0		

Performance of the Look-Up Tables:

The LUTs developed for 2008 were implemented and reflect the effects of the hub baffles that were added to Units 1-5 and the repairs to the headcover seals for Units 1-4. They appeared to perform well, and they should continue to be used in 2009.

Comments on the current monitoring system:

The increased frequency of the DO monitor maintenance during the months September through November starting in 2006 improved the performance of the DO monitor. However, to evaluate the feasibility of reducing the frequency of maintenance to once every two weeks, the USGS installed on August 28, 2008 an optical DO probe (YSI 600 OMS ROX) that retains calibration for longer periods of time and is less susceptible to biochemical fouling than the previous DO monitors that were used at Saluda Hydro. It was expected that this new monitor would allow for calibration checks to be performed less frequently and still provide reliable DO monitoring.

Figure 9 is a plot of the differences between the continuous monitor downstream from Saluda Hydro and a calibrated field monitor each time the continuous monitor was cleaned and calibrated during the low DO periods in 2006, 2007 and 2008. Negative values indicate that the continuous monitor was under-recording DO when compared to the calibrated field monitor. In 2006 the continuous monitor was cleaned and calibrated two times per week during the low DO period. In 2007 the calibration checks were changed to weekly, and that frequency was continued in 2008. The mean deviations during the low DO periods (9/1 – 11/15) for 2006, 2007 and 2008 were 0.36, 0.60 and 0.22 mg/L, respectively (see Table 2). The difference in the mean deviation between 2006 and 2007 is most likely due to the reduced frequency of monitor cleaning and calibration. However the improvement seen in the mean deviation in 2008 is most likely due to the change to the more reliable optical DO probe (i.e., the optical DO probe with weekly cleaning and calibration was more reliable than the previous monitor was during 2006 when it was being cleaned and calibrated two times every week).

Considering that the frequency of calibration checks varied over the three-year period and the new optical DO probe was installed in 2008, the drift (i.e., fouling) rate was determined for each calibration check over the three years by dividing the monitor deviations by the number of days preceding each of the calibration checks. As shown in Table 2, the mean drift rates for 2006, 2007 and 2008 were 0.07, 0.08 and 0.03 mg/L, respectively. The drift rate of the optical DO probe was almost 60 percent less than the rate for the original DO monitors. These results indicate that checking calibrations every two weeks would likely be sufficient.

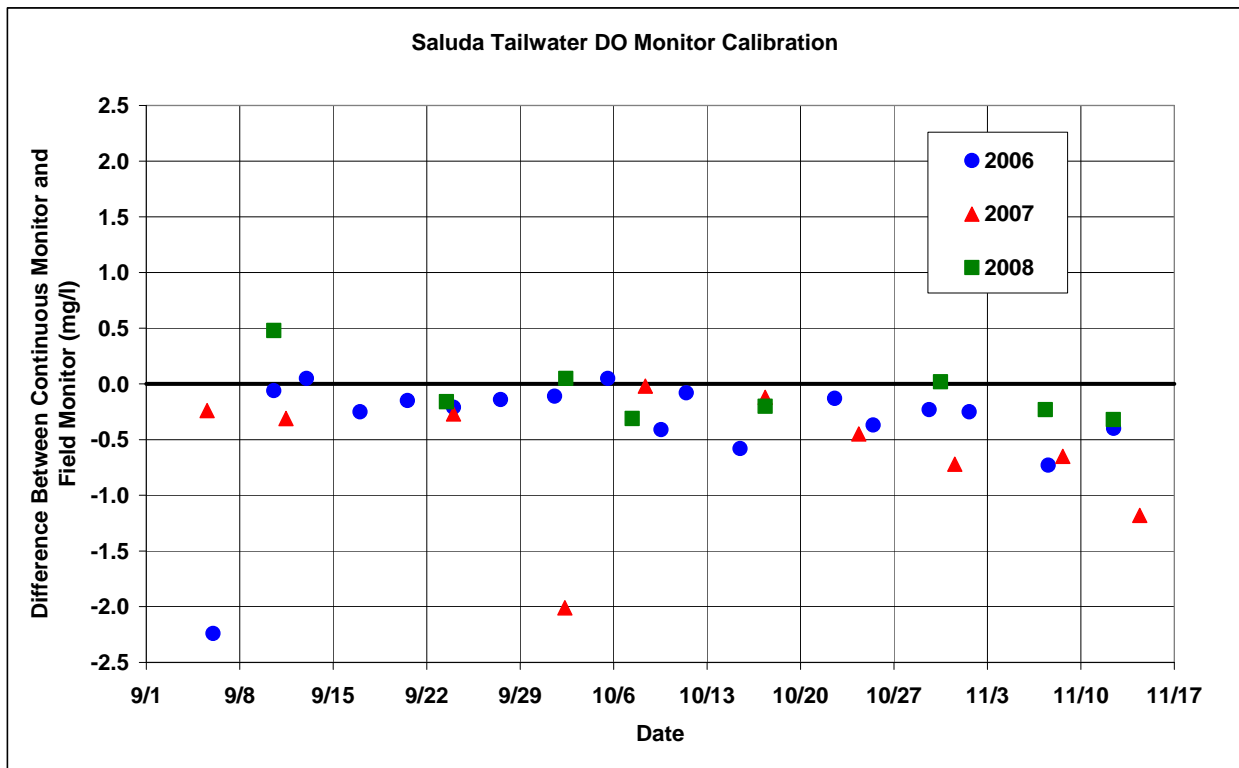


Figure 9: Difference Between the Continuous Monitor and the Calibrated Field Monitor

Table 2: Summary of Continuous Monitor Drift Rates for 2006, 2007, 2008

Year	Means of Absolute Deviations Between the Continuous and Field Monitors, mg/l	Mean of Absolute Drift Rates, mg/l/day
2006	0.36	0.07
2007	0.60	0.08
2008	0.22	0.03

RECOMMENDATIONS FOR 2009

1. With the installation of the new optical DO probe in the tailrace, it is recommended that the USGS return to checking the calibration of the monitor every two weeks instead of on a weekly basis.
2. Implement the LUTS used in 2008.
3. Conduct annual training within SCE&G so that operators are prepared to minimize DO excursions.
4. Review the SCE&G water management procedure to allow sufficient aeration to meet the DO objectives in the tailrace when the pool level is being lowered for normal seasonal operations.
5. SCE&G will notify organizations desiring special releases from the Saluda Project that might adversely affect the level of DO in the tailwater to schedule their activities during periods of the year when low DO is not normally a concern.

MONITORING OF DISSOLVED OXYGEN IN THE TAILRACE

The current USGS water quality monitor in the tailrace has served its purpose well with respect to providing information on temperature and DO conditions. Also, the USGS is now correcting provisional data following calibration checks, although the corrections may not be made on the web site for about one month following data collection. The USGS has also developed and implemented a procedure to rate the accuracy of their monitors. The monitor below Saluda Hydro has in the past been rated as “good” and has an accuracy of $\pm 0.3-0.5$ mg/L. In 2006, SCE&G relocated this USGS gage to the center of the river channel as recommended in the 2005 operating results report in order to reduce fouling of the gage and improve its representation of DO in the releases from the Saluda Project. USGS is now using a new optical DO probe that experiences much less fouling than previous probes.

APPENDIX A

**FINAL GUIDELINES FOR OPERATION OF THE SALUDA
PROJECT
FOR DISSOLVED OXYGEN MANAGEMENT IN 2009**

GUIDELINES FOR OPERATION OF THE SALUDA PROJECT FOR DISSOLVED OXYGEN MANAGEMENT IN 2009

PURPOSE

These Guidelines for Operation of the Saluda Project for Dissolved Oxygen Compliance are prepared pursuant to the *Offer of Settlement On Complaint Regarding Water Quality In Lower Saluda River* (May 19, 2004) (Settlement Agreement). Paragraph 9.3 of the Settlement Agreement provides the following:

To the extent within SCE&G's reasonable control, each Operating Plan will seek to enhance existing water quality in the lower Saluda River and, more specifically, seek to achieve DO concentrations of 4 mg/l minimum, 5 mg/l daily average, and 5.5 mg/l monthly average in the lower Saluda River. In seeking to achieve this goal, each Operating Plan will preserve SCE&G's right or duty to modify operations as necessary to: (A) protect life and property, (B) respond to changed hydrologic or other circumstances not addressed in the Operating Plan, (C) maintain the use of the Project to meet system reserve obligations of 200 MW, and (D) comply with a lawful orders of the [Federal Energy Regulatory] Commission or other authorities. SCE&G will provide notice of such modification to the Conservation Groups, [South Carolina Department of Health and Environmental Control], and Other Agencies in advance of such modification if practicable, and otherwise, as soon as practicable thereafter. The Parties will then use their best efforts to modify the Operating Plan in response thereto.

SCE&G will implement these Guidelines consistent with paragraph 9.3.

LIMITATIONS

Paragraph 9.3 of the Settlement Agreement includes limitations and these limitations are more fully explained here. Operation of the Saluda Project affects dissolved oxygen (DO) levels in the Saluda River downstream of the Saluda Project. Factors affecting achievement and maintenance of the DO standard include: (1) the limited capability for aeration of water released through the turbine units, (2) the requirement that SCE&G manage water levels in Lake Murray for safety and other reasons, (3) the need to use Saluda Hydro for the special operating needs specified under paragraph 9.3 of the Settlement Agreement, and (4) the need to meet SCE&G's reserve

obligations as a member of the Virginia-Carolinas Southeastern Electric Reliability Council sub-region (VACAR).

Generating units occasionally fail, and these generation failures are not generally capable of prediction. These often sudden failures upset the load-generation balance. Because electricity cannot be stored, any such sudden reduction in generation cannot be made up by an inventory, as would be the case in most other kinds of business. Instead, generation losses must be met by reserve generation that can be dispatched instantly, before voltage sags or frequency excursions lead to local or widespread blackouts. VACAR members are bound in a reserve-sharing agreement by which each has agreed to assist any other member in generation emergencies. SCE&G must employ its reserves to meet its own generation emergencies before calling on assistance from other VACAR members, and it must be constantly ready to provide reserve generation to other VACAR members. Generally, the reserves required to be maintained by SCE&G are in the range of 190-200 MW, which matches the capacity of the Saluda Project and its ability to respond quickly to any generation outage on its system.

As done in 2004, 2005, 2006, 2007 and 2008, SCE&G will provide via email, during 2009, a weekly report to the South Carolina Department of Health and Environmental Control, South Carolina Coastal Conservation League (SCCCL) and other stakeholders documenting the previous week's operation of the Saluda Project.

Unless otherwise specified, these guidelines will be implemented by SCE&G.

TURBINE VENTING OPERATIONS

Use Lookup Tables (LUTs) As Guides To Aerate The Turbine Releases From the Saluda

Project. SCE&G will use the LUTs included in the document, “Lookup Tables for Operating the Saluda Project to Enhance Dissolved Oxygen in the Tailrace to the Extent Practicable for 2008,” (Appendix AA). These LUTs reflect the best estimate based on field testing and predictive models of how the units at Saluda Hydro can be operated to enhance downstream dissolved oxygen levels and still obtain target MW outputs, given the inflow DO and temperature conditions. To simplify use of the LUTs a condensed set of LUTs was developed, and these are in Appendix AB. Use of the LUTs in Appendix AB results in higher than normal DO levels in the tailwater for the conditions when DO in the inflow is greater than 1 mg/L since these LUTs are based on the assumption that DO in the inflow is zero mg/L.

Estimate Inflow DO and Temperature for Units 1-4 and Unit 5. Turbine DO and temperature from inflows change during the course of the low DO period. To track DO and temperature conditions in the turbine inflows, SCE&G will obtain DO and temperature profiles in the Saluda Project forebay every other week and use these profiles to predict conditions in the turbine inflows. SCE&G also will use data collected by the United States Geological Survey (USGS) continuous water quality monitor located near the intake of Unit 5 (U5).² These data will also be used to evaluate the presence of conditions that call into operation, constraints to using U5 due to the potential for fish entrainment. If needed, a withdrawal zone model may be used to predict inflow temperature and DO.

Use DO Readings in the Tailrace from the USGS Monitor. During 2009, the USGS monitor (USGS Gage No 02168504) will be used to track DO conditions in the tailrace on a daily basis, supplemented by periodic spot measurements by SCE&G, especially if DO, as measured at the monitor, appears erratic or is lower than expected (*e.g.*, suspected fouling, meter malfunction, *etc.*).

² As with any *in-situ* continuous monitor, anomalous readings occur from time to time, due to equipment fouling or malfunction. If the USGS determines the data are suspect through their Quality Control/Quality Assurance Program, that data may be ignored, appropriately adjusted, or otherwise dealt with according to their final determination. It is acknowledged that the USGS data is reported initially as “provisional.” SCE&G will use it subject to the data error issues discussed here and agreed to during the March 23, 2006 meeting.

Conduct training of operators in System Control. The System Control Manager will conduct a training session in May or June 2009 with System Operators to ensure proper application of the LUTs. Training of staff included review of current practices and procedures in the proper application of the LUTs. This training is normally conducted one month per year. Additional training will be conducted as the need arises.

APPENDIX AA
LOOKUP TABLES

LOOKUP TABLES FOR OPERATING THE SALUDA PROJECT TO ENHANCE DISSOLVED OXYGEN IN THE TAILRACE TO THE EXTENT PRACTICABLE FOR 2008

May 27, 2008

Lookup Tables (LUTs) will be used as a tool for operating the Saluda Project during the low DO period of 2008 so that the DO standard in the Lower Saluda River may be met continuously, subject to the limitations contained in paragraph 9.3 of the Settlement Agreement, and to provide optimal aeration when the standard otherwise cannot be met. The LUTs will be used by SCE&G to select the turbine units that will be operated at various total project flow rates and power production levels, under varying inflow DO concentrations and temperatures. Also, during 2008, the aeration system will be manually operated. It is expected that when a final turbine aeration system is installed at some point in the future, a computer-controlled automated system may be needed to adjust these operations for more optimal aeration.

The overall process used to develop the LUTs involved the following steps:

1. The aeration characteristics of units 1, 2, 3, and 4 were modeled using the discrete bubble model as described in “Saluda DO Standard Project—Lower Saluda River DO Technical Study Report, Appendix C, Prediction of Dissolved Oxygen Concentrations for Turbine Discharges from Saluda Hydro” 2003. The aeration characteristics of unit 5 were estimated based on data collected during turbine aeration testing in 2005 and 2006 (see report “Saluda Hydroelectric Project—2005-2007 Aeration Studies” revised draft May 2008.)
2. The predicted DO in the tailrace for each set of inflow DO and temperature conditions were then plotted over the range of hydro operations.
3. The LUTs were then developed using these graphs. One set of LUTs was developed assuming that the units were operated several hours per day and

the other set of LUTs was developed assuming the units were operated at a constant level over the course of the entire day.

4. LUTs were developed for a range of DO conditions at the intake, but for only one temperature condition that was similar to that expected during the low DO period of 2008. Model predictions were made for other temperature conditions, but the effort was not expended to develop LUTs for all the temperature conditions modeled due to the time required to develop LUTs. The results of aeration studies and the development of aeration models for the Project have shown that temperature has insignificant effect on DO (i.e., less than 0.2 mg/L) within the range of temperature variations in the turbine intakes.
5. The LUTs were developed using mass balance equations that integrated the effects of all the units and predicted DO in the tailrace, assuming full mixing of the releases from all the units.
6. For project operations, SCE&G System Control normally dispatches Saluda Hydro by power production levels rather than water flow rates; therefore, the flow rates initially determined using the turbine aeration model were supplemented by conversion to MW levels using the results of unit tests conducted in 1997 and 1998.

The assumed conditions for the turbine aeration systems are as follows:

1. Units 1-5 have hub baffles, and aeration characteristics for Units 1 and 4 were assumed to be as modeled in 2008 based on data collected on Units 1 and 4 in 2005 and 2006, respectively. Predicted DO levels for Units 2, 3, and 5 were based on data collected during testing in 2005 and 2006.
2. Unit 2 cannot be operated unless 2500 cfs is being released by the other units. Unit 5 would normally be operated on a “last on, first off” basis.

Assumptions used in developing the LUTs:

1. SCE&G plans to operate the Saluda Project at a minimal release of approximately 500 cfs during the summer of 2008. Under this condition, DO in the release from the Saluda Project should be well over the State DO standard for Units 1 and 4. Also, inflow water quality (*i.e.*, DO and temperature) will change slowly over the course of the summer and early autumn. The use of Unit 3 for providing minimum flows during the period of low DO will be avoided unless Units 1 and 4 are not available.
2. Two sets of LUTs were prepared: one set for hourly operations where the DO target is 4 mg/L (see discussion below), and the other set for daily operations where the DO target is 5 mg/L, *i.e.*, the daily operations tables will be applied when Saluda is being operated around the clock under steady state conditions, the hourly operations tables will be applied when one or more units are operated over a period of hours. An analysis of historical conditions (see the report supporting the new site-specific standard for DO for the Lower Saluda River) showed that if 4 mg/L was achieved over a period of several hours during a typical day of operations at the Saluda Project, the other requirements of the DO standard (*i.e.*, the daily average of 5 mg/L and the 30-day moving average of 5.5 mg/L) are achieved under almost all conditions. Considering the current aeration systems, the lack of computerized powerhouse controls, and the DO monitoring system, the use of these two sets of LUTs is considered to be what is practicable.
3. It was assumed that the target minimum DO would be 4 mg/L during the period of maximum release each day. This is because an analysis of historical conditions showed that if 4 mg/L was achieved during the maximum release period, the other requirements of the DO standard (*i.e.*, the daily average of 5 mg/L and the 30-day moving average of 5.5 mg/L) are achieved under almost all conditions.

4. For days when the Saluda Project would be operated through out the day, it was assumed that the target minimum DO would be 5 mg/L. This approach is consistent with the assumption that SCE&G plans to operate the Saluda Project at around 500 cfs during the low DO period of 2008.

Inflow water quality for Unit 5 was assumed to have the same conditions as the inflows for Units 1- 4. This is a conservative assumption in that DO in the inflow to Unit 5 is rarely less than the DO in the inflows to Units 1- 4. This is based upon an extensive review of historical reservoir profile data.

The following LUTs are proposed for the operating guides for achieving aeration objectives during the low DO period of 2008. Figures 1 through 6 show the predicted DO concentrations in the tailrace versus unit releases for various operating conditions (i.e., inflow water quality conditions) at the Saluda Project. These graphs were used in developing the LUTs.

LOOKUP TABLES FOR HOURLY OPERATIONS

(DO TARGET IS GREATER THAN OR EQUAL TO 4 MG/L)

(Note: DO_{min} values in the following tables are the predicted lowest DO levels that would be expected to occur for the range of stated DO and temperature inflow conditions and the project flows. These values are provided only for those operations that might not attain the 4 mg/L DO objective in the tailrace.)

Turbine Inflow Conditions: DO 3 – 3.9 mg/L; Temperature = 15°C (approximately mid-July to August 1)		
MWs desired	Approx. flow (cfs)	For Hourly operations, the following is recommended:
≤ 18	≤ 1500	U1; U3; U4; U5 (last on, first off) U2 (restricted for thermal load),
18-28	1500-2250	U1; U4; U3; U5 (last on, first off); U2 (restricted for thermal load)
28-37	2250-3150	U1; U4; U3; U5 (last on, first off); U2 (restricted for thermal load)
37-75	3150-6300	Any two units ^{***} (except U5) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	Any three units (except U5) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600, limit for 4 mg/L	Any available small units with U5 as needed to supplement the small units;
≥ 150	≥ 12,600	Any units with preference to U1, U4, U2 and U3, then U5. DO _{min} = 3.7

*** unless unit-specific flows are listed, “any 2 units”, “any 3 units”, and “any 4 units” implies splitting flow approximately evenly between the units.

Turbine Inflow Conditions: DO 2 – 2.9 mg/L; Temperature = 16°C (approximately August 1 to mid-August); DO objective in tailrace is 4 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Hourly</u> operations, the following is recommended:
≤ 16	≤ 1400	U1; U4; U3;
16-37	1400-3150	U1; U4; U3 DO _{min} = 3.3; U5 (last on, first off) DO _{min} = 3.0
37-75	3150-6300, limit for 4 mg/L	U1+ any unit (except U5); U4+ any unit (except U5) DO _{min} = 3.4; U3+U2 DO _{min} = 3.2; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	U1+U2+U3+U4 DO _{min} = 3.8; U1+U4+(U2 or U3), DO _{min} = 3.6; U4+U2+U3 DO _{min} = 3.2; U2+U3+U5 DO _{min} = 3.0 with U5 (last on, first off) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	Four original units DO _{min} = 3.3; any available small units with U5 as needed to supplement the small units; DO _{min} = 3.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5, DO _{min} = 3.0; U1+U2+U3+U5@72MW, DO _{min} = 2.7; U4+U2+U3+U5@72MW, DO _{min} = 2.6 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 2.8 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 1 – 1.9 mg/L; Temperature = 16°C (approximately mid-August to September 1); DO objective in tailrace is 4 mg/L

MWs desired	Approximate flow (cfs)	For <u>Hourly</u> operations, the following is recommended:
≤ 14	≤ 1250	U1, U3, U4
14-21	1250-1750	Any original unit;
21-32	1750-2750	U1; U4; U3 DO _{min} = 2.9;
32-37	2750-3150	U1; U3+U4; U4 DO _{min} = 3.5; U3 DO _{min} = 2.4
37-50	3150-4000, limit for 4 mg/L	U1+U4; U1+U3 DO _{min} = 3.6; U4+U3 DO _{min} = 3.4; (U1 or U4)+U5 (last on, first off) DO _{min} = 3.0; U3+U5 (last on, first off) DO _{min} = 2.5
50-75	4000-6300	U1+U4 DO _{min} = 3.5; U1+(U2 or U3) DO _{min} = 3.1; U4+(U2 or U3) DO _{min} = 2.5; U3+(U2 or U5) DO _{min} = 2.2 with U5 (last on, first off) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	Four original units DO _{min} = 3.0; U1+U4+U2 or U3 DO _{min} = 2.7; U1+U2+U3 DO _{min} = 2.5; U4+U2+U3 DO _{min} = 2.3; any two small units with U5 (last on, first off) DO _{min} = 2.1 to 2.7 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	U1+U4+U3+U2 DO _{min} = 2.4; U1+U4+(U3 or U2)+U5 DO _{min} = 2.3; U2+U3+U4+U5 DO _{min} = 2.1; U3+U2+U5@72MW DO _{min} = 1.6 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5, DO _{min} = 2.1; U1 or U4+U2+U3+U5, DO _{min} = 1.7; three small units+U5, DO _{min} = 1.4 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.8 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 0 – 0.9 mg/L; Temperature = 16°C (approximately September 1 to mid-September and stays at 0 until lake mixing); DO objective in tailrace is 4 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Hourly</u> operations, the following is recommended:
≤ 12	≤ 1100	Any unit except U2 or U5
12-19	1100-1600	U1, U3 or U4;
19-29	1600-2400	U1; any two units except U2 or U5; U4 DO _{min} = 3.4; U3 DO _{min} = 2.2;
29-38	2400-3200	U1+U4; U3+U4; U1 DO _{min} = 3.6; U4 DO _{min} = 2.7; U3 DO _{min} = 1.5;
38-57	3200-4800, limit for 4 mg/L	U1+U3+U4; U1+U4 DO _{min} = 3.2; U1+U2 DO _{min} = 2.8; U1+U3 DO _{min} = 2.8; U2+U4 DO _{min} = 2.6; U3+U4 DO _{min} = 2.4; U2+U3 DO _{min} = 2.0;
57-75	4800-6300	U1+U4 DO _{min} = 2.6; U1+U2 or U3 DO _{min} = 2.3; U4+U2 or U3 DO _{min} = 1.8; If only one small unit is operating, consider U5 (last on, first off) as follows: U1+U5 DO _{min} = 2.1; U4+U5 DO _{min} = 1.6; U2 or U3+U5 DO _{min} = 1.2 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	All 4 original units DO _{min} = 2.0; U1+U4+(U2 or U3) DO _{min} = 1.8; U1+U2+U3 DO _{min} = 1.6; U4+U2+U3 DO _{min} = 1.4; any available small units supplemented by U5 as needed DO _{min} = 0.7 ; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	All 4 original units DO _{min} = 1.5; If only three small units are operating, consider U5 (last on, first off) as follows: U1+U2+U3+U5, DO _{min} = 1.3; U4+U2+U3+U5, DO _{min} = 1.1; U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5 DO _{min} = 1.1; U1+U4+(U3 or U2)+U5@72MW, DO _{min} = 1.0; U1+U2+U3+U5@72MW, DO _{min} = 1.0; U4+U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 0 – 0.9 mg/L; Temperature = 20°C (approximately September 1 to mid-September and stays at 0 until lake mixing); DO objective in tailrace is 4 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Hourly</u> operations, the following is recommended:
≤ 10	≤ 1000	Any unit except U2 and U5
10-18	1000-1500	U1, U3 or U4;
18-25	1500-2000	U1; Any two units except U2 and U5; U4 DO _{min} = 3.5; U3 DO _{min} = 2.6;
25-31	2000-2500	Any two small units except U2; U1 DO _{min} = 3.7; U4 DO _{min} = 3.1; U3 DO _{min} = 2.1;
31-36	2500-3000,	Any two small units except U2; U1 DO _{min} = 3.5; U4 DO _{min} = 2.7; U3 DO _{min} = 1.5;
36-44	3000-3600, limit for 4 mg/L	U1+U4; U1+U3 DO _{min} = 3.7; U4+U3 DO _{min} = 3.3; If only one small unit is operating, consider U5 (last on, first off) as follows: U1@ ≤ 33MW + U5@ ≤ 12MW DO _{min} = 3.7; U4@ ≤ 31MW + U5@ ≤ 12MW DO _{min} = 3.4;
44-75	3600-6300	All small units DO _{min} 3.5; U1 full gate + rest split between U3+U4 DO _{min} = 3.3; U1+U4+(U2 or U3) DO _{min} = 2.7; U1+U4 DO _{min} = 2.5; U4+U2+U3 DO _{min} = 2.3; U1+(U2 or U3) DO _{min} = 2.2; If only one small unit is operating, consider U5 (last on, first off) as follows: U1+U5 DO _{min} = 2.0; U4+U5 DO _{min} = 1.5; U2+U3 DO _{min} = 1.4; (U2 or U3)+U5 DO _{min} = 1.1; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	All four original units DO _{min} = 2.0; U1+U4+(U2 or U3) DO _{min} = 1.7; U1+U2+U3 DO _{min} = 1.5; U4+U2+U3 DO _{min} = 1.3; any one-two small units supplemented by U5 as needed DO _{min} = 0.7; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	All 4 original units DO _{min} = 1.4; U1+U4+U5+(U2 or U3) DO _{min} = 1.3; U1+U2+U3+U5, DO _{min} = 1.2; U4+U2+U3+U5, DO _{min} = 1.1; U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5 DO _{min} = 1.1; U1+U4+(U3 or U2)+U5@72MW, DO _{min} = 1.0; U1+U2+U3+U5@72MW, DO _{min} = 1.0; U4+U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Lookup Tables for Daily Operations

(DO Target Is Greater Than or Equal to 5 mg/L)

(Note: DO_{min} values in the following tables are the predicted lowest DO levels that would be expected to occur for the range of stated DO and temperature inflow conditions and the project flows. These values are provided only for those operations that might not attain the 5 mg/L DO objective in the tailrace.)

Turbine Inflow Conditions: DO 4 – 4.9 mg/L; Temperature = 14°C (approximately July 1 to mid-July); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 25	≤ 2000	Any unit except U2 and U5
25-37	2000-3150	Any original unit(s) except U2;
37-75	3150-6300	Any 2 or more original units; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	Any 3 or 4 small units; if only one original unit is available and U5 is operated up to 72MW, DO _{min} = 4.4 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600, limit for 5 mg/L	Any 4 or more units; if U1 and U4 are out and U5 is operated up to 72MW DO _{min} = 4.6 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	All 5 units DO _{min} = 4.9; if U1 or U4 is out DO _{min} 4.5; U1+U4+U5@72MW+U2 or U3 DO _{min} = 4.7 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units DO _{min} = 4.8 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

*See discussion in Appendix A on Page 1 Paragraph 1, and Items 2 and 4 on Pages 8 and 9.

Turbine Inflow Conditions: DO 3 – 3.9 mg/L; Temperature = 15°C (approximately mid-July to August 1); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 15	≤ 1350	Any unit except U2 and U5
15-25	1350-2000	Any original unit;
25-37	2000-3150	U1; U4; Flow split between any 2 units; U3 DO _{min} = 4.3;
37-75	3150-6300, limit for 5 mg/L	U1+U4; any 3 original units; U2+U3 DO _{min} = 4.3; U2+U5 DO _{min} = 4.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	All small units DO _{min} = 4.6; U1+U4+(U2 or U3) DO _{min} = 4.5; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	U1+U4+U2+U3 DO _{min} = 4.2 ; any available small units with U5 as needed to supplement the small units DO _{min} = 3.7 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 150	≥ 12,600	Any units with preference to U1, U4, U2 and U3, then U5. DO _{min} = 3.7 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 2 – 2.9 mg/L; Temperature = 16°C (approximately August 1 to mid-August); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 13	≤ 1200	Any unit except U2 and U5
13-21	1200-1750	Any original unit except U2 and U5;
21-28	1750-2250	U1; U4; Any 2 units except U2 and U5; U3 DO _{min} = 4.0;
28-37	2250-3150	U1; Any 2 original units; U4 DO _{min} = 4.3; U3 DO _{min} = 3.3;
37-75	3150-6300, limit for 5 mg/L	U1+U2+U3+U4; U1+U4+(U2 or U3) DO _{min} = 4.5; U1+U4 DO _{min} = 4.2; U1+(U2 or U3) DO _{min} = 3.8; U4+(U2 or U3) DO _{min} = 3.4; U2+U3 DO _{min} = 3.3; (U2 or U3)+U5 DO _{min} = 3.1 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	U1+U2+U3+U4 DO _{min} = 3.8; U1+U4+(U2 or U3), DO _{min} = 3.6; U4+U2+U3 DO _{min} = 3.2; U2+U3+U5 DO _{min} = 3.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	Four original units DO _{min} = 3.3; any available small units with U5 as needed to supplement the small units DO _{min} = 3.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5, DO _{min} = 3.0; U1+U2+U3+U5 at full gate, DO _{min} = 2.7; U4+U2+U3+U5 at full gate, DO _{min} = 2.6 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 2.8 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 1 – 1.9 mg/L; Temperature = 16°C (approximately mid-August to September 1); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 10	≤ 1000	Any unit except U2 and U5
10-16	1000-1400	U1; U3; U4;
16-25	1400-2000	U1; Any 2 units except U2 and U5; U4 DO _{min} = 4.5; U3 DO _{min} = 3.5;
25-37	2000-3100, limit for 5 mg/L	Any 2 original units except U2 and U5; U1 DO _{min} = 4.4; U4 DO _{min} = 3.6; U3 DO _{min} = 2.5;
37-75	3100-6300	U1+U4 DO _{min} = 3.4; U1+(U2 or U3) DO _{min} = 3.1; U4+(U2 or U3) DO _{min} = 2.6; U3+(U2 or U5) DO _{min} = 2.2 with U5 (last on, first off) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	Four original units DO _{min} = 3.0; U1+U4+U2 or U3 DO _{min} = 2.7; U1+U2+U3 DO _{min} = 2.5; U4+U2+U3 DO _{min} = 2.3; any two small units with U5 (last on, first off) DO _{min} = 2.1 to 2.7 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	U1+U4+U3+U2 DO _{min} = 2.4; U1+U4+(U3 or U2)+U5 DO _{min} = 2.3; U2+U3+U4+U5 DO _{min} = 2.1; U3+U2+U5@72MW DO _{min} = 1.6 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5, DO _{min} = 2.1; U1 or U4+U2+U3+U5, DO _{min} = 1.7; three small units+U5, DO _{min} = 1.4 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.8 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 0 – 0.9 mg/L; Temperature = 16°C (approximately September 1 to mid-September and stays at 0 until lake mixing); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 8	≤ 900	Any unit except U2 and U5
8-21	900-1700	U1; U3+U4; U4 DO _{min} = 4.2; U3 DO _{min} = 3.7;
21-31	1700-2500	U1+(U3 or U4); U1 DO _{min} = 4.0; U4 DO _{min} = 3.3; U3 DO _{min} = 2.0;
31-37	2500-3150, limit for 5 mg/L	U1+U3+U4; U1+ (U3 or U4) DO _{min} = 4.8; U1 DO _{min} = 3.6; U4 DO _{min} = 2.9; U3 DO _{min} = 1.6;
37-75	3150-6300	All 4 small units DO _{min} = 3.7; U1+(U3 or U2)+U4 DO _{min} = 2.9; U1+U4 DO _{min} = 2.6; U1+(U2 or U3) DO _{min} = 2.2; U4+(U2 or U3) DO _{min} = 1.6; U2+U5 DO _{min} = 1.2 with U5 (last on, first off) Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	All 4 original units DO _{min} = 2.0; U1+U4+(U2 or U3) DO _{min} = 1.8; U1+U2+U3 DO _{min} = 1.6; U4+U2+U3 DO _{min} = 1.4; any one-two small units supplemented by U5 as needed DO _{min} = 0.7 ; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	All 4 original units DO _{min} = 1.5; If two-three small units are operating, consider U5 (last on, first off) as follows: U1+U4+(U3 or U2)+U5, DO _{min} = 1.3; U1+U2+U3+U5, DO _{min} = 1.1; U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5 DO _{min} = 1.1; U1+U4+(U3 or U2)+U5@72MW, DO _{min} = 1.0; U1+U2+U3+U5@72MW, DO _{min} = 1.0; U4+U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Turbine Inflow Conditions: DO 0 – 0.9 mg/L; Temperature = 20°C (approximately September 1 to mid-September and stays at 0 until lake mixing); DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following is recommended:
≤ 8	≤ 900	Any unit except U2 and U5
8-18	900-1500	U1; U3+U4; U3 or U4, DO _{min} = 4.0;
18-25	1500-2000	U1+U3 or U4; U1 DO _{min} = 4.0; U4 DO _{min} = 3.5; U3 DO _{min} = 2.6;
25-37	2000-3150, limit for 5 mg/L	U1+U3+U4; U1+(U3 or U4) DO _{min} = 4.5; U3+U4 DO _{min} = 3.9; U1 DO _{min} = 3.4; U4 DO _{min} = 2.6; U3 DO _{min} = 1.5;
37-75	3150-6300	All small units DO _{min} 3.5; U1 full gate + rest split between U3+U4 DO _{min} = 3.3; U1+U4+(U2 or U3) DO _{min} = 2.7; U1+U4 DO _{min} = 2.5; U4+U2+U3 DO _{min} = 2.3; U1+(U2 or U3) DO _{min} = 2.2; If only one small unit is operating, consider U5 (last on, first off) as follows: U1+U5 DO _{min} = 2.0; U4+U5 DO _{min} = 1.5; U2+U3 DO _{min} = 1.4; (U2 or U3)+U5 DO _{min} = 1.1; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	All four original units DO _{min} = 2.0; U1+U4+(U2 or U3) DO _{min} = 1.7; U1+U2+U3 DO _{min} = 1.5; U4+U2+U3 DO _{min} = 1.3; any one-two small units supplemented by U5 as needed DO _{min} = 0.7; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	All 4 original units DO _{min} = 1.4; If two-three small units are operating, consider U5 (last on, first off) as follows: U1+U4+(U3 or U2)+U5, DO _{min} = 1.3; U1+U2+U3+U5, DO _{min} = 1.1; U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	U1+U4+U2+U3+U5 DO _{min} = 1.1; U1+U4+(U3 or U2)+U5@72MW, DO _{min} = 1.0; U1+U2+U3+U5@72MW, DO _{min} = 1.0; U4+U2+U3+U5@72MW, DO _{min} = 0.9 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units, DO _{min} = 1.0 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

FIGURES

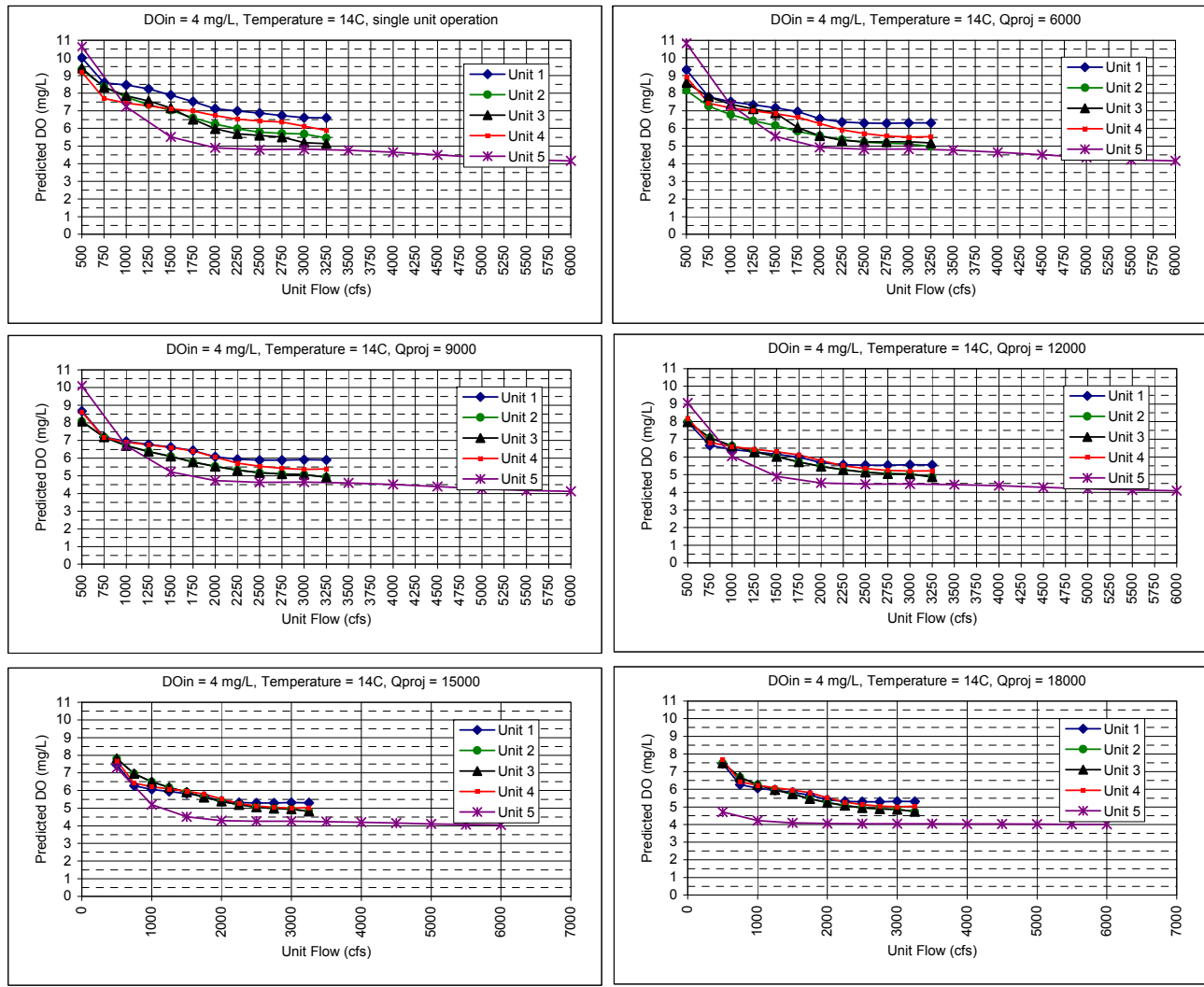


Figure 1: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: $DO_{in} = 4 \text{ mg/L}$ and temperature = 14°C . This plot was used to develop the LUTs.

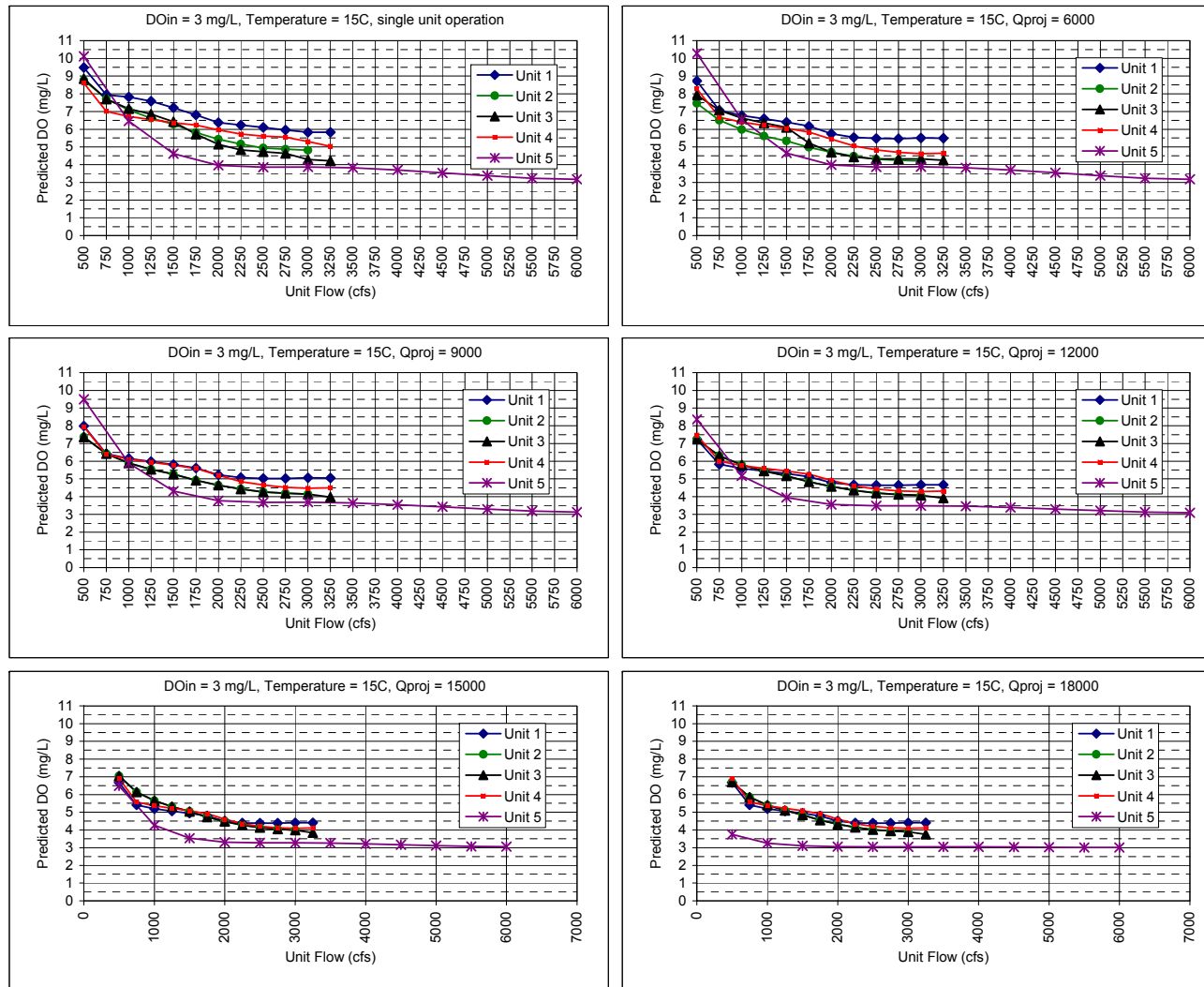


Figure 2: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: $DO_{in} = 3 \text{ mg/L}$ and $\text{temperature} = 15^\circ\text{C}$. This plot was used to develop the LUTs.

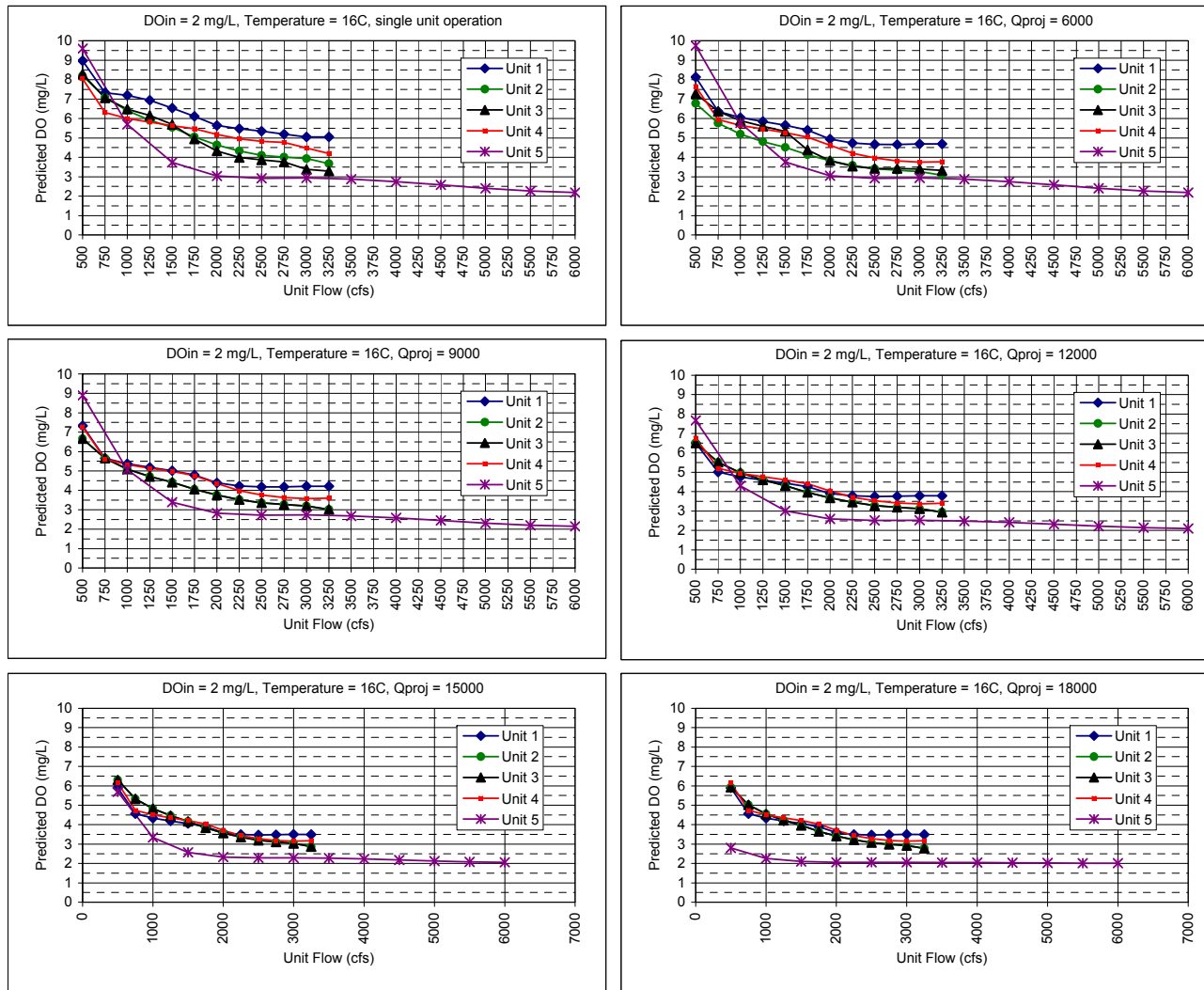


Figure 3: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: DO_{in} = 2 mg/L and temperature = 16 °C. This plot was used to develop the LUTs.

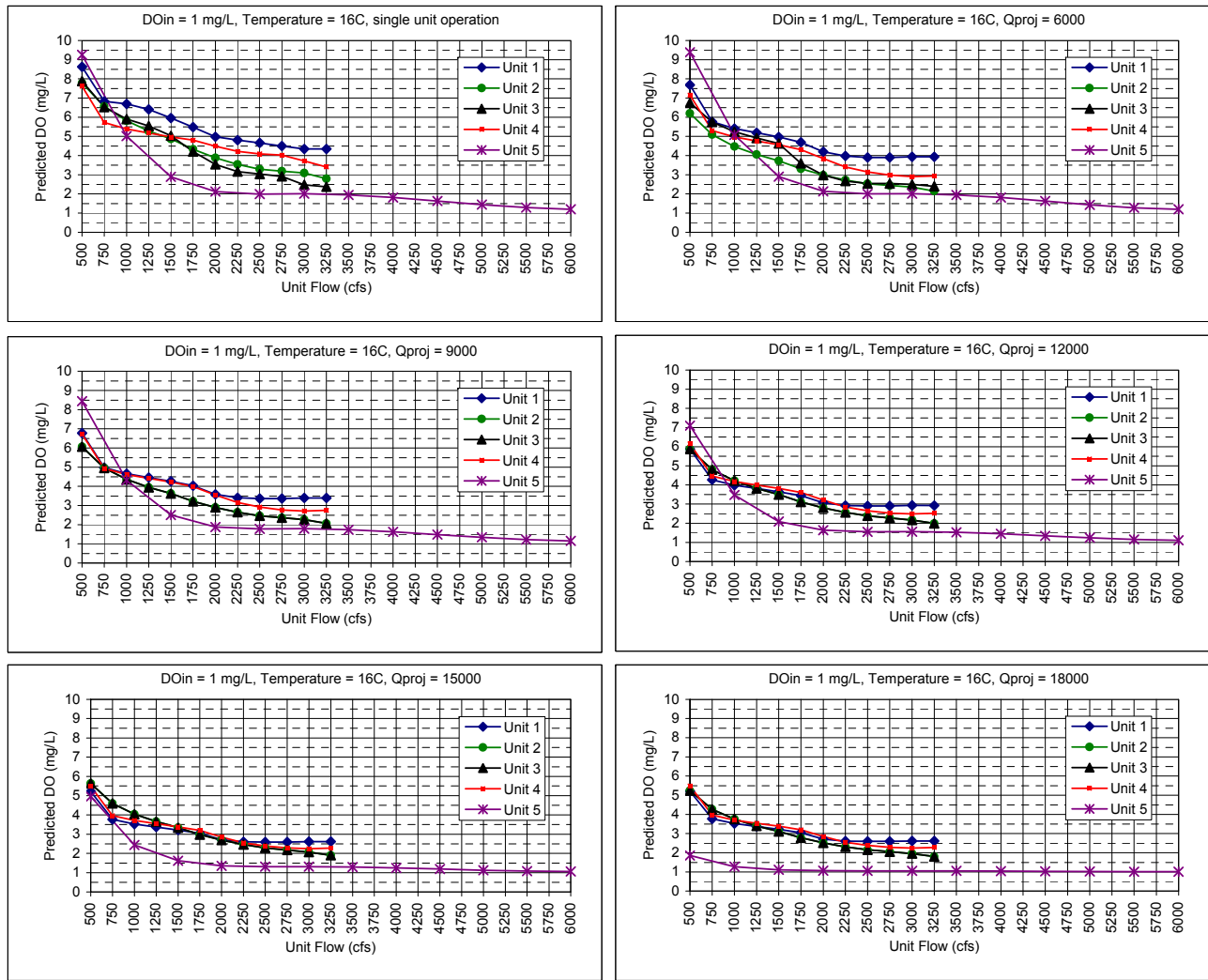


Figure 4: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: DO_{in} = 1 mg/L and temperature = 16 °C. This plot was used to develop the LUTs.

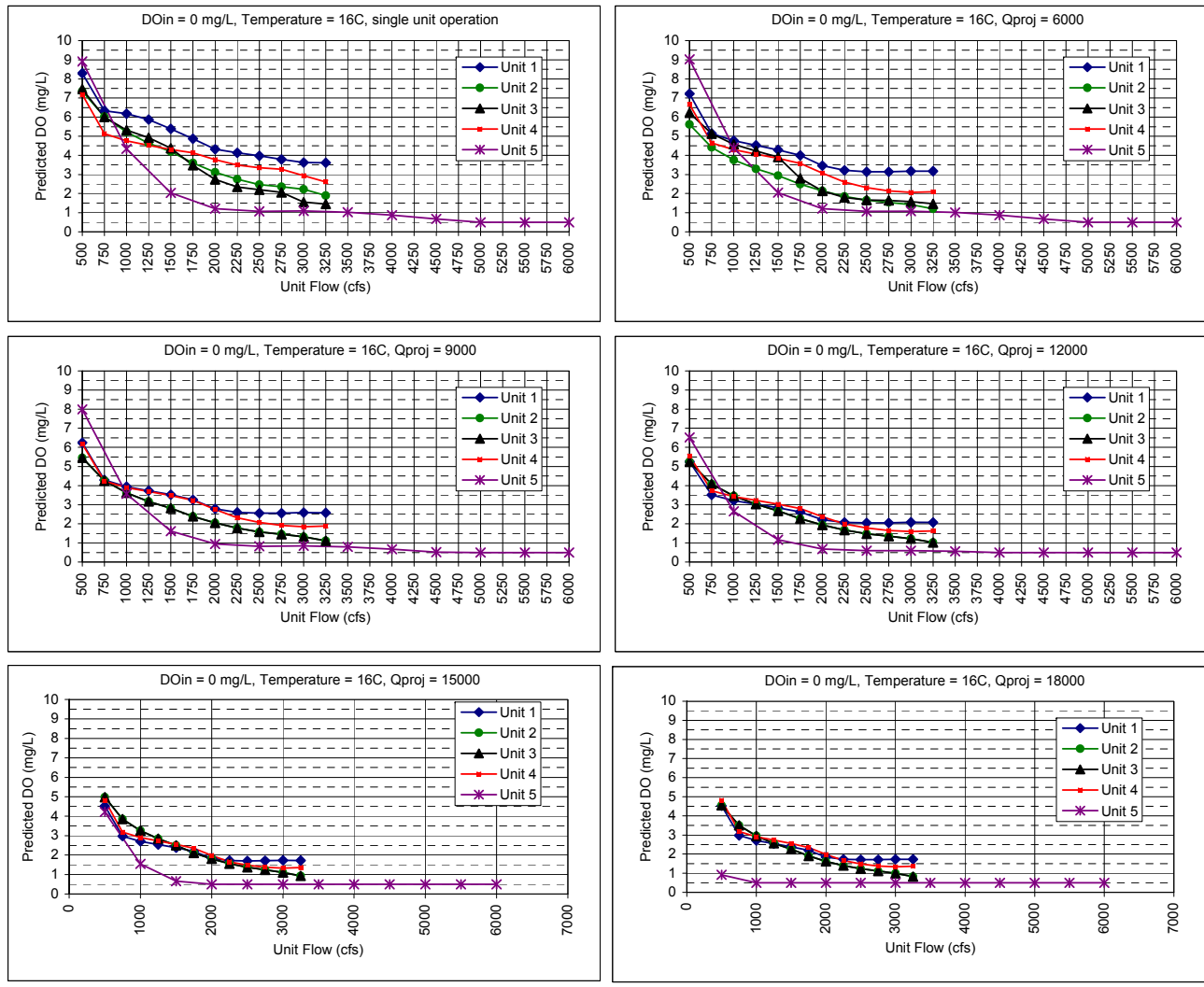


Figure 5: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: $DO_{in} = 0$ mg/L and temperature = 16 °C. This plot was used to develop the LUTs.

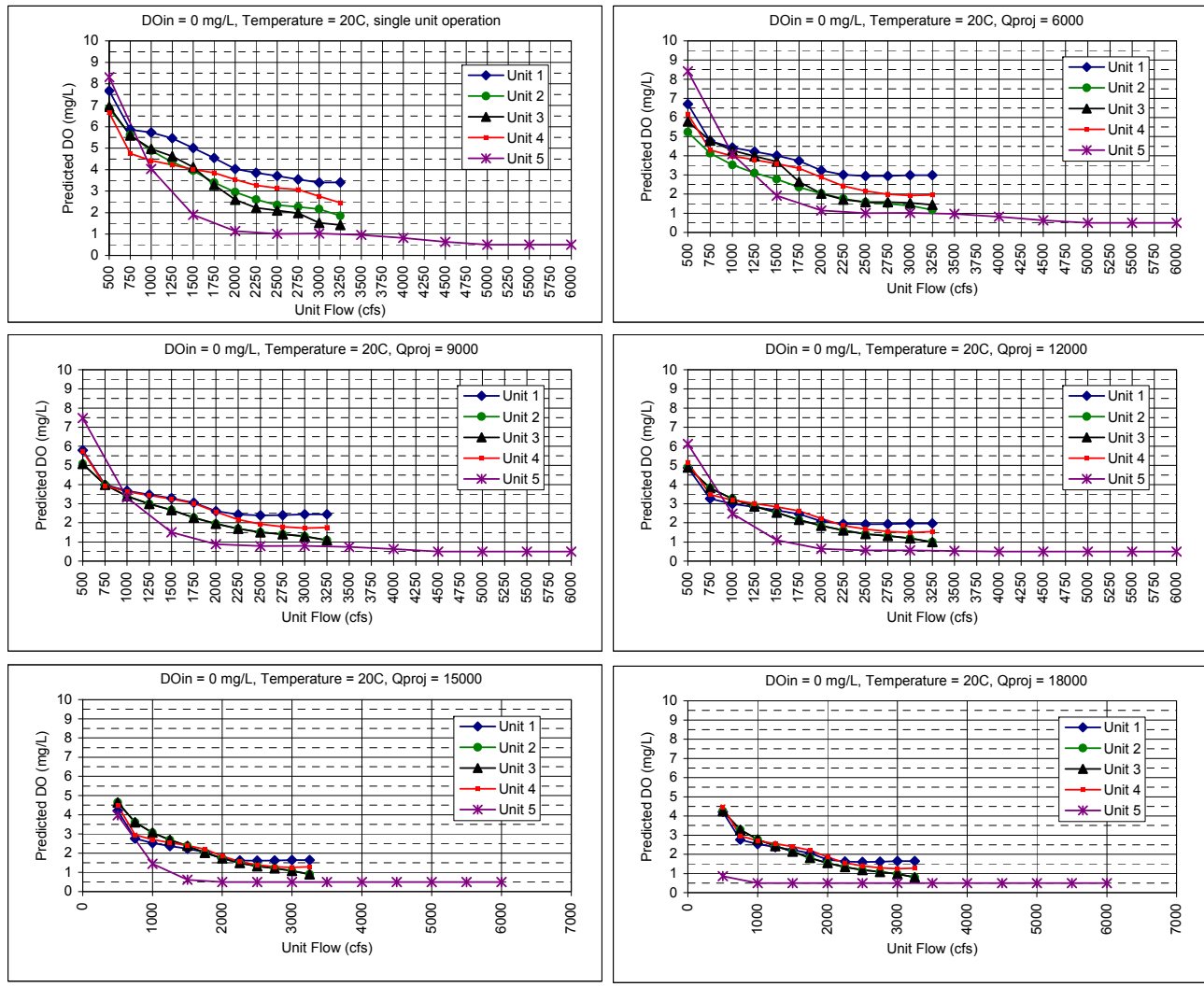


Figure 6: Predicted DO for each unit versus unit flows for the range of total project releases for the following water quality conditions: DO_{in} = 0 mg/L and temperature = 20 °C. This plot was used to develop the LUTs.

APPENDIX AB
CONDENSED LOOKUP TABLES

Condensed Look-up Table for Hourly Operations

Turbine Inflow Conditions: DO = 0 – 3.9 mg/L; DO objective in tailrace is 4 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Hourly</u> operations, the following unit operations are recommended in the order of preference (the bold, blue values should attain 4 mg/L DO):
≤ 10	≤ 1000	1. U1, U3, or U4
10-18	1000-1500	1. U1, U3 or U4; 2. Even split any 2 units (except 2 & 5);
22-25	1500-2000	1. U1; 2. Even split any 2 units (except 2 & 5); 3. U4; 4. U3;
25-31	2000-2500	1. Even split any 2 small units (except 2); 2. U1; 3. U4; 4. U3;
31-36	2500-3000	1. Even split any 2 small units (except 2); 2. U1; 3. U4; 4. U3;
36-44	3000-3600, limit for 4 mg/L	1. U1+U4; 2. U1+U3; 3. U4+U3; 4. for project flow up to 3150 cfs, use in order of preference: U1, U4, U3
44-75	3600-6300	1. U1+U2+U3+U4; 2. U1 full gate + rest split between U3+U4; 3. U1+U4+(U2 or U3); 4. U1+U4; 5. U4+U2+U3; 6. U1+(U2 or U3); 7. U2+U3; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	1. U1+U2+U3+U4; 2. U1+U4+(U2 or U3); 3. U1+U2+U3; 4. U4+U3+U2; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	1. U1+U4+U3+U2 2. any available small units with U5 as needed to supplement the small units; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	1. U1+U4+U2+U3+U5; 2. U1+U4+(U2 or U3)+U5@72MW; 3. U4+U2+U3+U5@72MW Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Note that minimum flows during periods of low DO should be maintained at 450-500 cfs so that venting will draw air into the units

Condensed Look-up Table for Daily Operations

Turbine Inflow Conditions: DO = 0 – 4.9 mg/L; DO objective in tailrace is 5 mg/L		
MWs desired	Approximate flow (cfs)	For <u>Daily</u> operating conditions (i.e., operating ~ 24 hours per day), the following unit operations are recommended in the order of preference (the bold, blue values should attain 5 mg/L DO):
≤ 8	≤ 900	1. Any unit (except 2 & 5)
8-18	900-1500	1. U1; 2. Even split any 2 small units (except 2); 3. U4; 4. U3;
18-25	1500-2000	1. U1+U4; 2. U1+U3; 3. U1; 4. U4; 5. U3;
25-37	2000-3150, limit for 5 mg/L	1. U1+U3+U4; 2. U1+(U3 or U4); 3. U3+U4; 4. U1; 5. U4; 6. U3;
37-75	3150-6300	1. U1+U2+U3+U4; 2. U1+U4+(U3 or U2); 3. U1+U4; 4. U1+(U2 or U3); 5. U4+(U2 or U3); Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
75-113	6300-9500	1. U1+U2+U3+U4; 2. U1+U4+(U2 or U3); 3. U1+U2+U3; 4. U4+U3+U2 Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
113-150	9500-12,600	1. U1+U4+U3+U2 2. any available small units with U5 as needed to supplement the small units; Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
150-178	12,600-15,000	1. U1+U4+U2+U3+U5; 2. U1+U4+(U2 or U3)+U5@72MW; 3. U4+U2+U3+U5@72MW Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run
≥ 178	≥ 15,000	All units Flows from Saluda need to be ≥ 2500 cfs before Unit 2 can be run

Note that minimum flows during periods of low DO should be maintained at 450-500 cfs so that venting will draw air into the units

Alison Guth

From: Alison Guth
Sent: Friday, May 22, 2009 10:19 AM
To: 'Prescott Brownell'
Subject: RE: Saluda Settlement, current draft

Hello Pres,

I am currently putting together a settlement agreement with all of the new edits. That will probably be sent out soon. I have sent out the updated section of Recreation, Safety, and Water Quality individually. Our next meeting is scheduled for Tuesday, May 26th to review the LIP. Thanks! Alison

-----Original Message-----

From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]
Sent: Thursday, May 21, 2009 2:18 PM
To: Alison Guth
Subject: Saluda Settlement, current draft

Hi Alison,
Could you please send me a copy of the current settlement draft when you have a spare moment?
I have so many documents floating around that I'm not sure I have the latest copy...

Also, what is the schedule for the next settlement meetings in May/June?

Have a great day in Columbia, and thank you for your help...

P. Brownell

Alison Guth

From: Alison Guth
Sent: Friday, May 22, 2009 9:23 AM
To: 'Tony Bebber'
Subject: RE: Accepted: Settlement Agreement Meeting

Hello Tony,

There are no new drafts to review. From what I understand it will include discussions on how to proceed with the LIP. Have a good weekend. Alison

-----Original Appointment-----

From: Tony Bebber [<mailto:tbebber@scprt.com>]
Sent: Thursday, May 21, 2009 6:26 PM
To: Alison Guth
Subject: Accepted: Settlement Agreement Meeting
When: Tuesday, May 26, 2009 9:30 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

I plan to attend. Do we have some draft to review?

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Thursday, May 21, 2009 2:18 PM
To: Alison Guth
Subject: Saluda Settlement, current draft



Prescott_Brownell.v
cf (483 B)

Hi Alison,

Could you please send me a copy of the current settlement draft when you have a spare moment?

I have so many documents floating around that I'm not sure I have the latest copy...

Also, what is the schedule for the next settlement meetings in May/June?

Have a great day in Columbia, and thank you for your help...

P. Brownell

Alison Guth

From: Alison Guth
Sent: Friday, May 15, 2009 4:19 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@scetv.org); Wenonah Haire; Jon Quebbeman

Subject: Water Quality Settlement Meeting Notes

Hello All,

Attached are the draft meeting notes from the Water Quality Settlement Agreement Meeting on April 1, 2009. If you have comments on these notes, please provide them back to me by May 29th. Thanks and have a great weekend. Alison



2009-4-1 draft
Meeting Minutes...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, May 13, 2009 3:59 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Regis Parsons (Rparsons12@windstream.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@scetv.org); Wenonah Haire; Jon Quebbeman

Subject: Final notes from 3-18

Hello All,

Attached are the final meeting notes from the 3-18 Recreation Settlement meeting. Thanks for all the edits! Alison



2009-3-18 final
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Settlement Agreement Meeting
Location: Lake Murray Training Center
Start: Tue 5/26/2009 9:30 AM
End: Tue 5/26/2009 4:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Required Attendees: All RCG & TWC Members

Hello All,

In reference to Alan's email sent out May 8th, it has been determined that the date that will best fit the schedules of the majority of the individuals who responded was May 26th. This meeting will be held at the Training Center beginning at 9:30. Just as a re-cap, the purpose of this meeting will be to discuss an approach to signing the Settlement Agreement without full agreement on the LIP trigger. Please let me know if you are planning on attending by May 21st. Thanks!
Alison

Alison Guth

From: Ed Diebold [ediebold@riverbanks.org]
Sent: Friday, May 08, 2009 11:13 AM
To: Alan Stuart
Cc: Alison Guth; DILLMAJW@dhec.sc.gov; Alan Axson; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokekee.com; Van Hoffman; Vivianne Vajdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman
Subject: RE: Meeting to Discuss Procedural Matter with Respect to Signing of the Settlement Agreement

Hello Alan,

I will be unable to make the May 29 meeting. However, I would like to voice my support for implementation of the 2-foot trigger, consistent with feedback provided by the Lower Saluda River Advisory Council (see below). I am a current member of the council.

"We support a 2-foot LIP trigger because it will allow additional stored water (approximately 50,000 acre feet) to be allocated to downstream aquatic habitat enhancements, which will come from the proposed continuous minimum flows levels. A 1-foot trigger will reduce beneficial downstream flows much more often, particularly impacting critical spawning months of April and May, even while the reservoir is at high levels."

Best Wishes,

Ed Diebold

Ed Diebold, Director of Animal Collections & Conservation

Riverbanks Zoo & Garden
P.O. Box 1060
Columbia, SC 29202-1060
803.978.1122
803.253.6381 fax
ediebold@riverbanks.org
www.riverbanks.org

From: Alan Stuart [mailto:Alan.Stuart@KleinschmidtUSA.com]

Sent: Friday, May 08, 2009 10:19 AM

To: Alison Guth; DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Meeting to Discuss Procedural Matter with Respect to Signing of the Settlement Agreement

Dear Stakeholders,

As everyone is aware, we did not reach consensus on the 1 vs. 2 foot trigger in the Low Inflow Protocol (LIP). Many inquired as to how this may affect signing of the Settlement Agreement. Therefore, we would like to schedule a meeting for **May 29, 2009** to propose and discuss an approach to signing of the Settlement Agreement without full agreement on the LIP trigger. Also at the meeting, Ray Ammarell has run some additional analyses based on the SCDNR's presentation at the last Operations Meeting and he would like to share those results with the stakeholders.

I would highly encourage you to attend the meeting as this procedural matter will likely affect all stakeholders interested in the Settlement Agreement. Please let me know if you can attend on May 29, 2009. In the event this date isn't good for the majority of stakeholders, we have selected May 26, 2009 as an alternate date.

The meeting will be held at the Lake Murray Training Center at 9:30. We will be sending out an Outlook reminder once I've gotten sufficient confirmation on attendance. Please let me know of your availability to attend the meeting.

Thank you for all your hard work on the relicensing. Have a great weekend.

Alan

Alan Stuart

Senior Licensing Coordinator

Kleinschmidt Energy and Water Resources

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Office: 803-951-2077

Cell: 803-640-8765

email: Alan.Stuart@kleinschmidtusa.com

Alison Guth

From: Alan Stuart
Sent: Friday, May 08, 2009 10:32 AM
To: Alison Guth; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@scetv.org); Wenonah Haire; Jon Quebbeman

Subject: Stakeholder Signatory List

Good morning,

As we discussed at our last Settlement Agreement Meeting, we need to begin developing the Signatory Page for the Settlement Agreement. I am requesting that each of you provide me the full legal name of your organization/agency and the full name of the person responsible for signing on behalf of your group. I want to point out, providing me the information does not in any manner commit you to signing of the Settlement Agreement. This allows us to a full listing of all Stakeholders and the individual responsible for signing on the Signatory Page, nothing more.

If the individual responsible for signing is not in our Saluda Relicensing email distribution list, please provide us their email address also.

If you have questions, please give me a call.

thanks, Alan

Alan Stuart

Senior Licensing Coordinator
Kleinschmidt Energy and Water Resources

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Office: 803-951-2077

Cell: 803-640-8765

email: Alan.Stuart@kleinschmidtusa.com

Alison Guth

From: Alan Stuart
Sent: Friday, May 08, 2009 10:19 AM
To: Alison Guth; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Burse; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@scetv.org); Wenonah Haire; Jon Quebbeman
Subject: Meeting to Discuss Procedural Matter with Respect to Signing of the Settlement Agreement

Dear Stakeholders,

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I would highly encourage you to attend the meeting as this procedural matter will likely affect all stakeholders interested in the Settlement Agreement. Please let me know if you can attend on May 29, 2009. In the event this date isn't good for the majority of stakeholders, we have selected May 26, 2009 as an alternate date.

The meeting will be held at the Lake Murray Training Center at 9:30. We will be sending out an Outlook reminder once I've gotten sufficient confirmation on attendance. Please let me know of your availability to attend the meeting.

Thank you for all your hard work on the relicensing. Have a great weekend.

Alan

Alan Stuart

Senior Licensing Coordinator

Kleinschmidt Energy and Water Resources

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Office: 803-951-2077

Cell: 803-640-8765

email: Alan.Stuart@kleinschmidtusa.com

Alison Guth

From: Alan Stuart
Sent: Monday, May 04, 2009 2:33 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; Dchristie@coporium.net; Giffinma@dhec.sc.gov
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane'; 'MQuattlebaim@scana.com
Subject: RE: 2008 Operations Report For Saluda Hydro



Final 2008
Operations Report a.

Good Afternoon,

Attached is the revised 2008 Operations Report for Saluda Hydro with the 2009 Operations Plan Appended. The revised report reflects changes discussed at the March 24, 2009 meeting. The 2009 Operations Plan is basically the same plan as 2008 as no changes were made. Please review the attached document and respond with comments by **May 18, 2009**. We will be filing the document with the FERC once finalized.

If you have questions, please let us know.

Thanks, Alan

From: Alan Stuart
Sent: Sun 3/8/2009 7:57 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; Dchristie@coporium.net; Giffinma@dhec.sc.gov
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane'; 'MQuattlebaim@scana.com
Subject: 2008 Operations Report For Saluda Hydro

Good morning all,

Attached to this email is a draft copy of the 2008 Operations report for Saluda Hydro. As has been the case in both 2006 and 2007, dissolved oxygen levels in the lower Saluda River were at or above standards for most of the low DO season during 2008. We are planning to have our annual meeting on **March 24, 2008 at 9:30 am** at the Lake Murray Training Center. Please review the document and be prepared to ask any questions or provide comment at that meeting. Our goal as always will be to discuss the findings from 2008 and begin developing the operating plan for the 2009 low DO season.

As I am technologically challenged, Alison will send out an Outlook reminder for everyone on Monday.

thanks,
Alan

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Thursday, April 30, 2009 9:51 AM
To: Alison Guth
Subject: Re: Saluda Settlement Meeting Schedules



Prescott_Brownell.v
cf (483 B)

Hi Alison,

I was just noticing that We are not listed in the Work Group membership. Could you add us to the Operations, Water Quality, Fish & Wildlife, and Recreation groups? We don't have any new earthshaking comments to add for any of the group recommendations, but should be on your list anyway.

Check with Alan and Bill if you need to, and call me if needed.

Thank you very much

Prescott

Alison Guth wrote:

> Sounds great. Thanks

>

> -----Original Message-----

> From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]

> Sent: Thursday, April 23, 2009 6:14 PM

> To: Alison Guth

> Subject: Re: Saluda Settlement Meeting Schedules

>

>

> Alison, I will attend the Monday April 27 meeting, and the April 30

> Meeting (if you still have that one).

> PB

>

> Alison Guth wrote:

>

>> Hello Prescott, the dates are at the following link:

>> <http://www.saludahydrorelicense.com/calendar.htm>

>>

>> -----Original Message-----

>> From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]

>> Sent: Thursday, April 23, 2009 9:03 AM

>> To: Alison Guth

>> Subject: Saluda Settlement Meeting Schedules

>>

>>

>> Hi Alison,

>> Could you send me a list of "still scheduled" settlement meetings so

>> I can update my calendar and RSVP as needed? I may have missed some

>> of your schedule emails due to email system problems.

>>

>> Thank you very much for your time on this...

>>

>> PB

>>

>>

Alison Guth

From: Shane Boring
Sent: Wednesday, April 29, 2009 2:00 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
Subject: Saluda Hydro Relicense: Final Sturgeon Protection and Adaptive Management Program

Dear Fish and Wildlife RCG members:

Attached for you records is the final Sturgeon Protection and Adaptive Management Program. As discussed at our recent settlement agreement meetings, this and other PM&E programs will be included as appendices to the final settlement agreement and implemented under a new license for Saluda. Thanks to all who contributed to development of the document.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



Saluda Sturgeon
Program FINAL ...

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT *(FERC NO. 516)*

STURGEON PROTECTION AND ADAPTIVE MANAGEMENT PROGRAM

APRIL 2009

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)

STURGEON PROTECTION AND ADAPTIVE MANAGEMENT PROGRAM

APRIL 2009

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

STURGEON PROTECTION AND ADAPTIVE MANAGEMENT PROGRAM

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**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

STURGEON PROTECTION AND ADAPTIVE MANAGEMENT PROGRAM

1.0 INTRODUCTION

The Saluda Hydro Project (Project) is a 202.6 megawatt (MW) hydroelectric facility owned and operated by South Carolina Electric & Gas (SCE&G or Licensee) and located on the Saluda River in Lexington, Newberry, Richland, and Saluda counties of South Carolina ([Figure 1-1](#)). The Project is currently licensed by the Federal Energy Regulatory Commission (FERC No. 516), and the present license is due to expire in the year 2010. SCE&G has been engaged with state and federal agencies, non-governmental organizations (NGO's), and other stakeholders in a cooperative relicensing process for the Project since early 2005. The Final License Application to relicense the Project was filed with the FERC on August 27, 2008.

In comments issued in response to SCE&G's Draft License Application, NOAA Fisheries—National Marine Fisheries Service (NMFS) noted that Saluda and other Santee Basin projects potentially affect important historical spawning and maturation habitat for a number of diadromous fish species, including the federally endangered shortnose sturgeon and Atlantic sturgeon, a candidate for federal listing. NMFS also requested that SCE&G develop “practical and specific measures to mitigate continuing Project impacts” on these species. SCE&G subsequently consulted with NMFS, US Fish and Wildlife Service (USFWS), South Carolina Department of Natural Resources (SCDNR) and other stakeholders to cooperatively develop the Protection and Adaptive Management Program contained herein (See meeting notes, 17 October 2008¹ and 20 January 2009²).

¹ Refers to joint meeting of all Fish and Wildlife Technical Working Committees (TWC's), including: Diadromous Fish; Rare, Threatened and Endangered Species; Instream Flow and Aquatic Habitat; Freshwater Mussels and Benthic Macroinvertebrates; Fish Entrainment TWC's.

² Refers to conference call with NMFS and other resource agency staff.

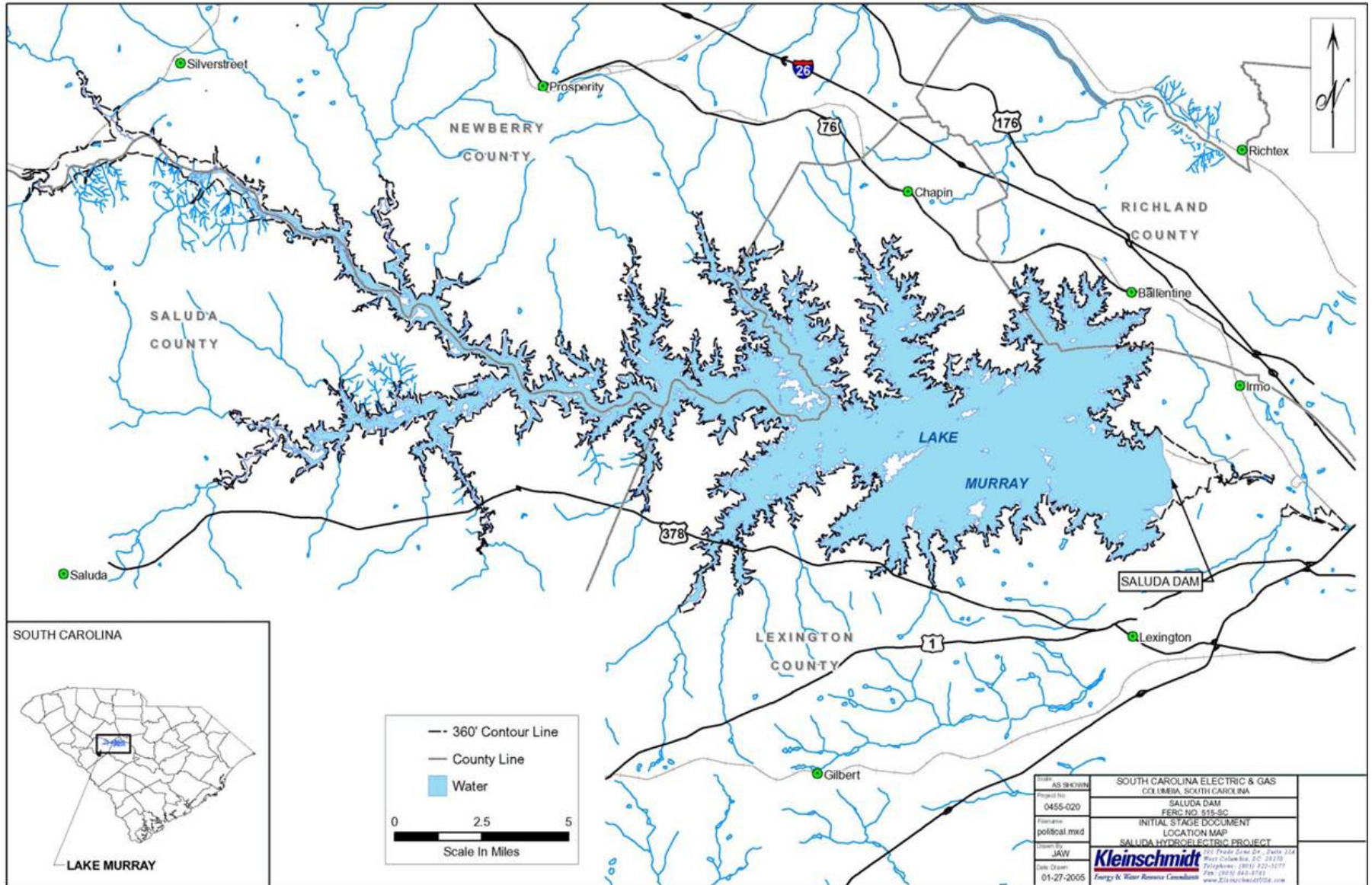


Figure 1-1: Location Map for the Saluda Hydroelectric Project (FERC No. 516)

2.0 **BACKGROUND**

2.1 Shortnose Sturgeon Life History and Status

Much of the Santee Basin, including the portion of the Saluda Basin encompassed by the Project, is thought to be within the historic range of the shortnose sturgeon (Welch, 2000; Newcomb and Fuller; 2001). In the Santee Basin, the shortnose sturgeon is believed to be amphidromous, migrating between freshwater and mesohaline reaches, and ascending to inland riverine reaches on annual spawning runs (NMFS, 1998a; Buckley and Kynard, 1985; Kynard, 1997). In northern rivers, migratory spawning runs of this species usually occur in early February to mid-March when water temperatures approach 9-14°C (Kynard, 1997). In southern rivers, spawning runs may occur as late as mid-April (S. Bolden, NMFS, Personal Communication, 2007). Shortnose sturgeon spawning has been documented in the Congaree River near Columbia over substrates of sand, gravel and rock, at temperatures ranging from 9.7-15.6°C, and dissolved oxygen concentrations of 10.6-12.5 mg/L (Collins et al., 2003). Shortly after spawning, shortnose sturgeon larvae begin movements downstream, and young of the year may remain in freshwater reaches for their first year of life before moving downstream as juveniles to lower river reaches near the saltwater interface (Kynard, 1997).

Population groups of shortnose sturgeon are known from downstream of the Santee-Cooper dams (lakes Marion and Moultrie) in the lower reaches of the Santee-Cooper basin (Collins et al., 2003). An additional dam-locked spawning population of shortnose sturgeon has been documented within and upstream of the Santee-Cooper Lakes, with Lake Marion and its tributaries harboring the most significant population and an upstream spawning site located in the upper Congaree River. Radio-telemetry studies conducted by the SCDNR have documented migration of Lake Marion shortnose sturgeon as far upstream as the Gervais Street Bridge on the Congaree River, which is adjacent to the City of Columbia and just downstream of the confluence of the Broad and Saluda rivers (J. Gibbons, SCDNR, Pers. Comm.). NMFS considers the potential present range of shortnose sturgeon to include all accessible waters below the Saluda, Wateree, and Columbia Dams (P. Brownell, NMFS, Personal communication).

2.2 Atlantic Sturgeon Life History and Status

The Atlantic sturgeon is a large (up to 5.5m), long-lived (up to 60 years) anadromous species native to Atlantic Coast drainages from Labrador to Florida (Marcy et al., 2005). Atlantic sturgeon is currently considered by the USFWS as a candidate for federal listing as threatened or endangered (71 R 61022). Stocks of the species are considered imperiled, primarily due to overharvesting for flesh and eggs (caviar) during the early—to—mid—20th Century, and secondarily, due to habitat degradation and blockage of access to historical spawning grounds (NMFS, 1998b). In the Santee Basin, Atlantic sturgeon was historically present at least as far inland as the fall line (Newcomb and Fuller, 2001).

The Atlantic sturgeon is considered estuarine anadromous, spending most of its life in estuarine and ocean environments and undertaking spawning migrations into riverine systems during late-winter and spring months (NMFS, 1998b; Marcy et al, 2005). In southeastern rivers, female Atlantic sturgeon reach sexual maturity at age 7 to 19 and spawn only once in a 2 to 6 year period (NMFS, 1998b). Males of the species reach maturity between age 8 and 12 years (Marcy et al., 2005). Spawning typically occurs over hard bottoms of clay, rubble, or gravel, with running water and temperatures of 14 - 24°C. After spawning, females typically return to estuarine environments within 4 to 6 weeks, while males may remain in the river through the fall. Juveniles of this species remain in the natal rivers for 3 to 5 years before migrating to the ocean (Marcy et al., 2005).

The status of Atlantic sturgeon upstream from the Santee Cooper Dams is uncertain; however, three adults have been recovered upstream from the dams in recent years (P. Brownell, NMFS, Pers. Comm.). Like shortnose sturgeon, Atlantic sturgeon was historically present at least as far inland as the fall line (Newcomb and Fuller, 2001). Current upstream distribution in the Santee Basin is likely limited by the lack of passage for Atlantic sturgeon at the Santee Cooper Dams (P. Brownell, NMFS, Pers. Comm.). As with shortnose sturgeon, NMFS considers the potential present range of Atlantic sturgeon

to include all accessible waters below the Saluda, Wateree, and Columbia Dams (P. Brownell, NMFS, Personal communication).

2.3 Project Effects on Sturgeon and Other Diadromous Species

Construction and operation of the Saluda Project since its construction in the 1930's has resulted in blockage of access to many river miles of former spawning and maturation habitats above the Lake Murray Dam, permanent loss of riverine habitat by reservoir inundation, and alteration of natural flows, temperature, and dissolved oxygen in the lower Saluda and Congaree Rivers (Columbia Shoals). Hypolimnetic flows from the Lake Murray Dam have depressed seasonal ambient dissolved oxygen levels and temperatures in the lower Saluda River for decades, potentially playing a role in the observed absence of diadromous species including sturgeon, striped bass, American shad, and American eel. In recent years dissolved oxygen levels in the Saluda have been substantially improved through installation of turbine runner hub baffles and changes in hydro operations. Because of the lower ambient temperatures in the lake Murray Dam flow releases, trout were introduced in the 1960's to provide a "put and take" fishery which has become popular and of economic importance to the public and state fishery management objectives for the Saluda River. Active management of the Saluda River as a cold-water fishery for trout provides significant public fishery benefits, and reduces habitat suitability for potential restoration of natural resident aquatic species and migratory diadromous fish.

According to NMFS, development of practical actions for mitigation of continuing project effects on diadromous species is limited by the size and depth of the Lake Murray Dam and reservoir, limited options for effective fish passage, hydropower generation operations, and established management of the lower Saluda River for a cold-water trout fishery.

2.4 Relevant Studies Performed in Support of Relicensing

Sturgeon Survey of Lower Saluda and Upper Congaree Rivers

In response to anadromous fish studies requested by the NMFS and SCDNR during the initial stages of the Saluda Project relicensing, SCE&G developed and implemented a Shortnose Sturgeon Study Plan (Kleinschmidt, 2006). The primary objective of this study was to document whether or not shortnose sturgeon are utilizing areas of the lower Saluda and upper Congaree rivers downstream of the Project. Implemented during the 2007 migratory season, the study included gillnet sampling for adult and juvenile sturgeon, as well as D-net samples for eggs and larvae, at four downstream locations: two in the lower Saluda and two in the upper Congaree (immediately upstream and downstream of the Granby Lock and Dam). Approximately 400 hours of gillnetting during the 2007 season resulted in no captures of adult or juvenile sturgeon; likewise, no eggs or larval sturgeon were captured during the sampling period (Kleinschmidt, 2007).

Lower Saluda and Upper Congaree Rivers Temperature Study

At the request of the USFWS (letter dated August 1, 2005), SCE&G developed and executed a downstream water temperature study during 2006 and 2007 as part of relicensing (Kleinschmidt, 2008). The study objective was to characterize the effects of water releases from the Project Dam on the temperature regime of the LSR and Congaree River, including downstream extent of temperature alteration, timing and duration of temperature alteration, and mixing characteristics. Paired temperature sensors (left and right side of the channel) were deployed at 7 locations along an approximately 55 mile reach of the LSR and Congaree River downstream of Saluda Hydro (extending from the Riverbanks Zoo on the LSR to the Highway 601 Bridge on the Congaree). Project releases were found to result in cross-sectional differences in water temperature in the Congaree River downstream of the confluence, with the LSR side of the channel being significantly cooler than the Broad River side. Study results suggested that Broad and

Saluda waters were not completely mixed (from a temperature perspective) until approximately 16 miles below the confluence.

NMFS has noted that the altered thermal regime in the LSR and upper Congree potentially impacts current and/or historic spawning and maturation habitat for shortnose and Atlantic sturgeon, as well as other diadromous species.

2.5 Santee River Basin Cooperative Diadromous Fish Accord

Along with USFWS, SCDNR, North Carolina Wildlife Resources Commission (NCWRC), and Duke Energy, SCE&G is a signatory and funder of the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (Accord). The purpose of this Accord is to collaboratively address diadromous fish protection, restoration and enhancement in the Santee River Basin through implementation of a 10-year action plan. The Accord will remain in effect through the duration of the new license for the Saluda Hydro Project. As currently proposed, the Accord would fund a number of diadromous fish studies in the basin as part of the 10—year Action Plan, including five years of sturgeon research.

3.0 PROTECTION AND ENHANCEMENT MEASURES

3.1 Downstream Dissolved Oxygen Enhancements

SCE&G proposed in its Final License Application for Saluda Hydro (filed with the FERC on August 27, 2008) to continue turbine aeration measures implemented since 1999 aimed at optimizing DO in Project releases. Specifically, these measures included installation of turbine venting and hub baffles on Project turbines (completed in 1999 and 2005, respectively), as well as implementation of operational modifications (“look-up tables”) developed in recent years to provide guidance regarding unit and gate combinations that provide the greatest DO enhancement under various operating scenarios. These measures have resulted in significant DO improvements in the LSR, with median DO in Project releases increasing from 2.7 mg/L before 1999 to 7.2 mg/L after implementation (1999 to 2007). Likewise, this has resulted in less frequent occurrences of DO levels in the release below 5.0 mg/L, from 88% to about 12% of the time.

SCE&G has also elected to install new turbine runners during the life of the new license for the Project. The proposed turbine runners will be of modern design that offer higher efficiencies, output and DO uptake. While providing for enhanced unit efficiency and maintaining the reliability to generation obligations, the upgrade of the existing unit runners will provide positive benefits for downstream DO levels such that 100% maintenance of the SCDHEC in-stream DO standard may be assured.

3.2 Implementation of Minimum Flows

SCE&G has also proposed to implement minimum flow releases from Saluda Hydro to support target riverine species in the LSR, including sturgeon. In addition to improved DO conditions (through increased shoaling and turbulence), implementation of minimum flows will likely improve sturgeon habitat by ensuring more stable flows and by providing depths and velocities that better match the sturgeon habitat requirements.

Physical Habitat Simulation (PHABSIM) modeling conducted in support of relicensing suggested that the 1000 cfs minimum flow being proposed for the spring months during a normal water year will provide approximately 60% of maximum Weighted Usable Area (an estimate of available habitat) for shortnose sturgeon. Further, PHABSIM modeling suggested that sturgeon habitat would likely be enhanced by even higher flows, suggesting that the targeted striped bass flows that are part of the minimum flow regime would provide additional enhancement for sturgeon.

Table 3-1: Summary or Proposed Minimum Flows for Lower Saluda River

TIME PERIOD	FLOW (cfs)
January 1—March 31	700
April 1—May 10	1,000 plus SCDNR striped bass spawning flows ³
May 11—May 31	1,000
June 1—December 31	700

3.3 Establishment of a Sturgeon Technical Advisory Team

Under a new FERC license for the Saluda Project, SCE&G will establish a Sturgeon Technical Advisory Team (STAT) consisting of the following agencies in addition to the Licensee: US Fish and Wildlife Service (USFWS), South Carolina Department of Natural Resources (SCDNR) and NMFS. The initial purpose of the STAT will be to collaboratively participate in design and implementation of the sturgeon study program outlined below in Section 3.4.

³ The striped bass enhancement flows are intended to improve conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. From April 1st – May 10th annually, striped bass target flows will be implemented as a daily target when the previous day’s daily average flow in the Broad River (measured at Alston gage) is between 2,500 CFS and 8,000 CFS. On such days, Saluda will release a continuous target flow equal to the lesser of (+/- 100 cfs): (1) 45% of the previous day’s daily average flow in the Broad River at the Alston gage or (2) The balance of what is required to create a 9,000 CFS in the Congaree River. Additional detail regarding the striped bass enhancement flows is provided in the Saluda Hydro Relicensing Settlement Agreement.

Following completion of the sturgeon study program outlined in Section 3.4, the STAT will integrate the findings of Studies I-III to identify Saluda Project-specific effects and limiting factors, and other limiting factors affecting sturgeon recovery in the study area. To the extent possible, the STAT will then identify practical beneficial actions that can be undertaken to contribute positively to recovery of sturgeon in the Santee River Basin.

3.4 Implementation of Agency-Recommended Studies

Under a new FERC license for the Saluda Project, SCE&G will recommend to the Santee Basin Accord Board that the Studies I and II outlined below be implemented during the initial 5-years of Accord sturgeon studies. In consultation with the STAT, SCE&G will review the results of the 5-year Accord study period to determine whether the Project-specific objectives of Studies I and II have been met. If it is determined that the Accord studies do not adequately address the Project-specific objectives of Studies I and II, SCE&G will consult directly with the STAT to ensure that the study objectives are met outside of the Accord process.

In the event that Atlantic or shortnose sturgeon are documented in the LSR, SCE&G will also implement Study III as outlined below. Similar to studies I and II, Study III would be implemented through the ACCORD process or independently in consultation with the NMFS, USFWS and SCDNR.

3.4.1 Study I: Sturgeon Behavior and Movements

Purpose: Monitor sturgeon behavior and movements to improve understanding of habitat use patterns in response to river flow regulation, short term and seasonal temperature and dissolved oxygen variations, and availability of suitable habitat in the Saluda, lower Broad, and Congaree Rivers. Improved understanding of factors limiting recovery of sturgeon and other diadromous species is expected to support practical adaptive management actions.

Methods: Conduct a telemetry study to monitor movements of sturgeon in the Congaree, lower Broad, and Saluda Rivers, in concert with other telemetry studies in the Santee River Basin. This objective will be achieved by using a receiver array system already in place and in use (Figure 3-1). Recommendations would be for a 5-year study with annual review of study findings and assessment of factors affecting sturgeon recovery.



Figure 3-1: Receiver Array System Currently in Use

3.4.2 Study II: Temperature and Water Quality Monitoring Study

Purpose: Establish a temperature and water quality monitoring program to help develop a better understanding of physical habitat factors potentially affecting movements, migrations, spawning, and recovery of sturgeon and other diadromous and resident species of special management interest. Study area should include the Saluda River, lower Broad River, and the Congaree River.

Methods: Establish an array of temperature and water chemistry monitoring stations located throughout the study area to allow for automated data collection and analysis. Data analysis should help identify annual and seasonal variations in temperature throughout the study area using GIS spatial analysis tools. An initial 5-year study should be planned with annual review of study findings and assessment of environmental factors actually or potentially affecting sturgeon recovery.

3.4.3 Study III: Habitat Characterization Study

Purpose: If Atlantic or Shortnose sturgeon are found in the LSR during Study I, integrate the findings of Studies I and II with a detailed physical habitat study to identify, characterize and map habitats in the lower Saluda, lower Broad, and Congaree Rivers to provide support for a long term sturgeon recovery program in the Santee River Basin. Identify potential critical habitats and limiting factors.

Approach/Methods: Conduct a field study to characterize, classify, and map important habitat components in the study area including substrate type, depth/velocity characteristics, location of point source discharges, seasonal temperature and dissolved oxygen distribution, etc. Plan for a one-year initial physical habitat characterization study, with provisions to adapt the habitat characterization based on findings of Studies I and II.

4.0 REPORTING

A report detailing study results and conclusions will be prepared and filed with the FERC annually after each study year during the 5-year sturgeon study period conducted as part of the Accord. A draft report will be submitted to the agencies participating in the STAT a minimum of 30 days prior to the report being filed with the FERC. Any additional reporting requirements will be determined based on consultation with the state and federal resource agencies.

5.0 FUNDING

To the extent possible, the sturgeon study program outlined above in Section 3.4 will be funded through the monies already allocated to sturgeon research as part of the Santee Basin Diadromous Fish Accord. Any additional activities or studies deemed necessary in consultation with the STAT to meet the project-specific objectives of the agency-requested studies outlined in Section 3.4 will be funded by SCE&G or other funding sources deemed appropriate in consultation with the resource agencies.

6.0 SCHEDULE

The sturgeon study program outlined in Section 3.4 will be implemented following issuance of a new license for the Saluda Project and in accordance with the Accord schedule. The Sturgeon Technical Advisory Team (STAT) (Section 3.3) will be convened a minimum of six months prior to SCE&G recommending any studies for implementation under the Accord. This will provide the STAT enough time to develop the list of studies they would like to have conducted as part of the Accord.

7.0 LITERATURE CITED

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Alison Guth

From: Shane Boring
Sent: Wednesday, April 29, 2009 2:00 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
Subject: Saluda Hydro Relicense: Final Sturgeon Protection and Adaptive Management Program

Dear Fish and Wildlife RCG members:

Attached for you records is the final Sturgeon Protection and Adaptive Management Program. As discussed at our recent settlement agreement meetings, this and other PM&E programs will be included as appendices to the final settlement agreement and implemented under a new license for Saluda. Thanks to all who contributed to development of the document.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



Saluda Sturgeon
Program FINAL ...

Alison Guth

From: Tyler B. Howe [tylehowe@nc-choke.com]
Sent: Wednesday, April 29, 2009 12:36 PM
To: Alison Guth
Subject: RE: New Proposed Time for Conf call - Cultural Resources Settlement Agreement Meeting

Alison:

Could you please provide some additional background information on the Saluda project? For example, project location, and a short history of the consultation? Just some short essential fact so that I might be better prepared for the upcoming teleconference.

Thanks,

Tyler B. Howe
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians
828-554-6852

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Wednesday, April 22, 2009 1:36 PM
To: ARGENTIERI, WILLIAM R; Bill Green; sandrashasam@gmail.com; Rebekah Dobrasko; SUMMER, MICHAEL C; RMAHAN@scana.com; Tyler B. Howe; Wenonah Haire
Cc: Lisa Beckstrom
Subject: New Proposed Time for Conf call - Cultural Resources Settlement Agreement Meeting

Hello All,

After some discussion on the conference call and date, it appears that Friday, May 1st will work better with attendees schedules. Therefore, I propose that we have a call from 1:30 until 2:30, Friday, May 1st. Bill Argentieri will send out the call-in numbers when he returns from vacation next week. I will also send out a Outlook calendar reminder. Thanks!
Alison

-----Original Message-----

From: ARGENTIERI, WILLIAM R [mailto:BARGENTIERI@scana.com]
Sent: Friday, April 17, 2009 1:57 PM
To: Bill Green; Alison Guth; sandrashasam@gmail.com; Rebekah Dobrasko; SUMMER, MICHAEL C; RMAHAN@scana.com; tylehowe@nc-choke.com; Wenonah Haire
Cc: Lisa Beckstrom
Subject: RE: Cultural Resources Settlement Agreement Meeting
The only other day that week I am available is May 1. I am also available on Monday, May 4.

From: Bill Green [mailto:BGreen@smeinc.com]
Sent: Friday, April 17, 2009 1:51 PM
To: Alison Guth; sandrashasam@gmail.com; Rebekah Dobrasko; ARGENTIERI, WILLIAM R; SUMMER, MICHAEL C; MAHAN, RANDOLPH R; tylehowe@nc-choke.com; Wenonah Haire
Cc: Lisa Beckstrom
Subject: RE: Cultural Resources Settlement Agreement Meeting

Personally, I don't mind if we do it as a conference call, but I was wondering if we could switch days. I had something else come up on the 29th that I had to turn down because of the meeting, but if we could switch it to a different day it would make my life easier. Is there any chance of that Alison? The only other day I can't do it is on the 28th since I would need to travel that day. Thanks.

Bill Green

Principal Archaeologist/
Cultural Resources Dept. Manager

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From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Friday, April 17, 2009 1:36 PM

To: sandrashasam@gmail.com; Rebekah Dobrasko; BARGENTIERI@scana.com; Bill Green; msummer@scana.com; RMAHAN@scana.com; tylehowe@nc-cherokee.com; Wenonah Haire

Subject: Cultural Resources Settlement Agreement Meeting

Hey Folks,

After giving more thought to our upcoming Cultural Resources Settlement Agreement Meeting on April 29th, Bill Argentieri and I were wondering what you guys thought about turning it into a conference call? I know Wenonah and Sandra would have to drive down from Rock Hill and we anticipate this meeting being very short. What we have done in the previous settlement agreement meetings is incorporate language into the Settlement Agreement itself as follows: "*Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project X Plan (Appendix X)*", and then attach the referenced plan or process as an appendix to the Settlement.

If this is acceptable to everyone we could do the same with Cultural Resources to the tune of : "*Upon issuance of the new license, SCE&G will implement the Historic Properties Management Plan (HPMP)(Appendix X)*". We could then attach the HPMP to the Settlement Agreement as an appendix. This keeps the Settlement Agreement from becoming too lengthy and if anyone is interested in what a particular item entails they can look at the attached plan.

If you would still like to have a face-to-face meeting instead of a conference call just let us know. Right now the only individuals that RSVP'ed were SHPO and the Catawba. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, April 24, 2009 3:17 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Draft Safety Settlement Agreement Wording

Hello All,

Attached is the group edited wording for the Safety section of the settlement agreement. You will notice that the Safety settlement agreement section has been changed to reflect the format of the other RCG sections. Wording has also been included regarding the ring-down system and LSR website since they are described in the Safety and Outreach Program but that document is an off license agreement. Our understanding was that the Safety RCG wanted to maintain those two systems as part of the new license and therefore should be included as part of the settlement agreement. If that is not the intention of the Safety RCG, then we can eliminate the last two paragraphs as necessary. Thanks, Alison



Safety Settlement
Agreement Wo...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301
Lexington, SC 29072

Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, April 24, 2009 2:42 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vajdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: 3-30 Meeting Notes

Hello All,

Attached are the draft meeting notes from the 3-30 fish and wildlife meeting. If you attended and have any comments or corrections, please send them to me by May 10th. Thanks! Alison



2009-3-30 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Elymay2@aol.com
Sent: Thursday, April 23, 2009 2:13 PM
To: Alan Stuart; Alison Guth; Randy@lakemurrayvacation.com; DILLMAJW@dhec.sc.gov; cfdwaxson@columbiasc.net; Alan Stuart; Alison Guth; amanda_hill@fws.gov; BENNETAM@dhec.sc.gov; bertfloyd@sc.rr.com; BARGENTIERI@scana.com; yaccove@bellsouth.net; billeast@sc.rr.com; bill_hulslander@nps.gov; marshallb@dnr.sc.gov; bill25@sc.rr.com; perryb@dnr.sc.gov; bseibels@yahoo.com; bstutts@scana.com; Bret Hoffman; network@scpronet.com; btrump@scana.com; badrb@dnr.sc.gov; BakerB@dnr.sc.gov; cheetahrk@yahoo.com; jcharlesfloyd@sc.rr.com; ccompton@lex-co.com; flyhotair@greenwood.net; pagec@dnr.sc.gov; ccantley@scdah.state.sc.us; HIGHTOCW@dhec.sc.gov; tufford@sc.edu; Dave Anderson; dlandis1@sc.rr.com; david.allen@scbar.org; dhancock@scana.com; djones@scprt.com; pricedc@dhec.sc.gov; dsimmons@thefittscompany.com; dchristie@comporium.net; tyle6544@bellsouth.net; DEngFF@aol.com; ediebold@riverbanks.org; eschnepel@sc.rr.com; aregaf@dnr.sc.gov; kayakduke@bellsouth.net; gjobsis@americanrivers.org; kirklagl@dhec.sc.gov; guyjones@sc.rr.com; beardh@dnr.sc.gov; McKellarH@dnr.sc.gov; jhamilton@scana.com; Jayschab@aol.com; jeff_duncan@nps.gov; pricej@biol.sc.edu; jdevereaux@scana.com; GloverJB@dhec.sc.gov; jimruane@comcast.net; jbutler@scana.com; DianLog8@aol.com; jbhuggins@lexhealth.org; seatowlakemurray@seatow.com; johned44@bellsouth.net; jsfrick@mindspring.com; leader@sc.edu; kakustafik@columbiasc.net; kstyler@smeinc.com; Colkenu@aol.com; skfox@sc.rr.com; dvklmass@bellsouth.net; turnerle@dhec.sc.gov; lbarber@sc.rr.com; linda_lester11@yahoo.com; wendy0815@sc.rr.com; malcolml@mailbox.sc.edu; giffinma@dhec.sc.gov; mrice@americanrivers.org; mdmurr@sc.rr.com; mikeduffy@sc.rr.com; Lucky8lady@aol.com; msummer@scana.com; mwaddell@esri.sc.edu; mquattlebaum@scana.com; miriam@lakemurraycountry.com; larana@mindspring.com; norm@sc.rr.com; parkin@parkinhunter.com; PatrickM@scccl.org; lakemurrayloa@earthlink.net; prescott.brownell@noaa.gov; R1Shealy@aol.com; RMAHAN@scana.com; rammarell@scana.com; dobrasko@scdah.state.sc.us; rbull@davisfloyd.com; rbickley@lex-co.com; rkidder1@sc.rr.com; adventurec@mindspring.com; SKEENER@sc.rr.com; rlavisky@alltel.net; ahler@dnr.sc.gov; rscott@lex-co.com; royparker38@earthlink.net; ryanity@scana.com; s.padget@saludacounty.sc.gov; sandrar@www.ccppcrafts.com; snorris@trcsolutions.com; Shane Boring; sarmstrong@lex-co.com; MillsL@dnr.sc.gov; lakewatchman@yahoo.com; ssummer@scana.com; suzrhodes@juno.com; swilliams@lex-co.com; tpowers@newberrycounty.net; theresa_thom@nps.gov; vinsont@dnr.sc.gov; tbowles@scana.com; truple@sc.rr.com; tboozer@scana.com; tbebber@scprt.com; tylehowe@nc-cherokee.com; vhoffman@scana.com; vejdaniv@dnr.sc.gov; wenonahh@www.ccppcrafts.com; Jon Quebbeman
Cc: JLandreth@Scana.com
Subject: Re: SCE&G Analysis of Lake Levels on docks



Lake Murray Survey
results for...

The Lake Murray Association shared the results of two surveys that were taken over the past 15 years with SCE&G and those involved in the re-license process. In the last 15 years we have presented and talked to SCE&G about these surveys without them ever being questioned by the shoreline management staff who attended the meetings.

Attached is a comment from Tom Ruple that was written in 2006 that tells exactly what happened and what we had to say about the survey. We are not sure what the comment "because the Lake Murray Association's informal survey results are being used beyond the original purpose as understood by SCE&G" means.

We have reported it to you exactly as the survey stated it. We have not stated that there was no water under the docks at 353.2. Whether their docks were considered usable at that depth probably could be debated.

Please read carefully Mr. Ruple's comments attached

In a message dated 4/22/2009 7:02:39 P.M. Eastern Daylight Time, Alan.Stuart@KleinschmidtUSA.com writes:

Dear Lake and Land Management RCG Members,

In light of recent public statements made regarding percentage of docks accessible at a lake level of 354 (plant datum), SCE&G believed it necessary to conduct a more quantitative measure of dock usability. Three major concerns led SCE&G Lake Management's decision to expend the time and effort to conduct this objective survey.

Those concerns are: 1) because the Lake Murray Association informal survey results are being used beyond the original purpose as understood by SCE&G, i.e. as support for its argument for as high a minimum lake level goal for the guide curve as possible; 2) because the permitting staff of the Lake Management department have always sought to locate docks, where possible in order to achieve access and usability at water levels down to the 352, and even lower in some cases; and 3) because SCE&G believes the record needs to include as accurate information as possible as the FERC begins its National Environmental Policy Act review.

Attached is SCE&G's dock usability analysis which includes methodology and the compiled results. If after you review the attached information you have questions, please let us know.

Thank you for your continued efforts in the relicensing of the Saluda Hydro Project.

Alan

Alan Stuart

Senior Licensing Coordinator
Kleinschmidt Energy and Water Resources
email: Alan.Stuart@kleinschmidtusa.com

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LAKE MURRAY USER SURVEY

By Tom Ruple

From mid October 2005 to February 2006, the LMA distributed approximately 5500 survey forms in an effort to reach as many lake users as possible and all LMA members. Of this number, approximately 1000 were delivered to our members via US mail and approximately 3600 were distributed by our directors to Lake Murray community neighborhoods in Lexington, Richland, Saluda and Newberry counties. The remaining 900 were placed in 25 Lake Murray related businesses around the Lake. The owners of these businesses distributed them to their customers via mailings, placed them in the bags with merchandise or placed them in a prominent place on their check-out counters.

Twenty one percent of the surveys were completed and returned. This is an excellent response for a survey. Forty eight percent of the returns were LMA members and 52 % were general public users. Approximately fifty percent of the returned surveys were signed or identifiable by respondents name (return address, etc.). In comparing the survey results, the LMA member views and the general public views were amazingly similar – confirming the fact that LMA is “The Voice of Lake Murray”.

Major issues addressed in the survey are minimum year around lake level (elevation), water quality, environmental impacts from development and the amount of free public access. The results of each of these issues will be presented in the future.

The lake level question appears to reflect the tremendous growth on Lake Murray over the last 10 years. In the LMA 1996 survey, approximately 65% of the users that responded indicated that the minimum lake level needed for safe lake use year around at their normal operation site or dock was 354' msl. This survey shows that only 51% of the users can safely operate at 354' msl, 74% can safely operate at 355' msl and a whopping 98% can safely operate at 356' msl. The new figures can probably be explained by more development in the coves rather than on deep water.

Additional survey results will be reported in future Lake Link publications. All information gathered in the survey will be used as we go through the relicensing process in the next few years. Verifiable information like this from you allows LMA to speak with authority as we go through the process of insuring all users of Lake Murray get a fair hearing at the licensing sessions held between SCE&G, FERC and the user public of Lake Murray.

Alison Guth

From: Vivianne Vejdani [VejdaniV@dnr.sc.gov]
Sent: Thursday, April 23, 2009 11:33 AM
To: Shane Boring
Cc: Alan Stuart; Amanda Hill; BARGENTIERI@scana.com; Bob Perry; Brandon Stutts ; Buddy Baker; Chad Altman; dchristie@comporium.net; Jennifer Hand; Jim Glover; mquattlebaum@scana.com; RMAHAN@scana.com; Ron Ahle
Subject: RE: Saluda Relicensing: 2008-2009 Lake Murray Waterfowl Report - Draft for review



LakeMurrayWaterfo
wlSurveys2003...

Shane,

Please find attached our data on waterfowl surveys through 2008. We recommend that this be incorporated into the final report, as Bill suggests.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Monday, April 20, 2009 11:03 AM
To: Vivianne Vejdani; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry; Brandon Stutts ; Buddy Baker; Chad Altman; dchristie@comporium.net; Jennifer Summerlin; Jim Glover; mquattlebaum@scana.com; Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Relicensing: 2008-2009 Lake Murray Waterfowl Report - Draft for review

Dear Terrestrial TWC Members:

Attached for your review is the draft report summarizing the waterfowl surveys performed on Lake Murray during winter 2008-2009. As you may remember, this is the final of three years of surveys that were scheduled as part of relicensing. Please have comments on the draft report back to me by May 20.

DNR folks, please see Bill's comment regarding availability of DNR waterfowl data for 2007 and 2008. We currently have 2003-2006 data included as Appendix 1 for comparison to our data, but it might also be informative to have the most recent data. Please let us know if this data is available.

Thanks
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

<<SREL Draft Waterfowl Report 2008-09 Agency Draft.doc>>

Winter waterfowl survey - SC Midlands Piedmont

	Lake Murray 2003	Lake Murray 2004	Lake Murray 2005	Lake Murray 2006	Lake Murray 2007	Lake Murray 2008	Total
Mallard	26	19	2	44		23	114
Black Duck	4						4
Mot. Duck							0
Gadwall							0
Am. Wigeon							0
G.W.Teal							0
B.W.Teal							0
N.Shoveler	3						3
N.Pintail							0
Wood Duck							0
Total Dabblers	33	19	2	44	0	23	121
							0
Redhead			1				1
Canvasback							0
Scaup	2610	1718	2	4	536	60	4930
Ringneck	200	1353	34				1587
Goldeneye	3						3
Bufflehead	80	40		139	49	50	358
Ruddy Duck	7						7
Total Divers	2900	3111	37	143	585	110	6886
							0
Mergansers			5	4			9
Unidentified		4		4			8
							0
TOTAL DUCKS	2933	3134	44	195	585	133	7024
							0
Snow Goose							0
Can. Goose	394	86	12	56	44	109	701
White-Fronted Goose							0
TOTAL GEESE	394	86	12	56	44	109	701
							0
Tundra Swan							0
Am. Coot	19500	9000	753	125	9		29387
							0
TOTAL WATERFOWL	22827	12220	809	376	638	242	37112

Alison Guth

From: Alison Guth
Sent: Thursday, April 23, 2009 9:29 AM
To: 'Prescott Brownell'
Subject: RE: Saluda Settlement Meeting Schedules

Hello Prescott, the dates are at the following link: <http://www.saludahydrorelicense.com/calendar.htm>

-----Original Message-----

From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]
Sent: Thursday, April 23, 2009 9:03 AM
To: Alison Guth
Subject: Saluda Settlement Meeting Schedules

Hi Alison,
Could you send me a list of "still scheduled" settlement meetings so I can update my calendar and RSVP as needed? I may have missed some of your schedule emails due to email system problems.

Thank you very much for your time on this...

PB

Alison Guth

From: Alan Stuart
Sent: Wednesday, April 22, 2009 7:00 PM
To: Alison Guth; 'Randy@lakemurrayvacation.com'; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: SCE&G Analysis of Lake Levels on docks



Dock survey.doc
(166 KB)

Dear Lake and Land Management RCG Members,

In light of recent public statements made regarding percentage of docks accessible at a lake level of 354 (plant datum), SCE&G believed it necessary to conduct a more quantitative measure of dock usability. Three major concerns led SCE&G Lake Management's decision to expend the time and effort to conduct this objective survey. Those concerns are: 1) because the Lake Murray Association informal survey results are being used beyond the original purpose as understood by SCE&G, i.e. as support for its argument for as high a minimum lake level goal for the guide curve as possible; 2) because the permitting staff of the Lake Management department have always sought to locate docks, where possible in order to achieve access and usability at water levels down to the 352, and even lower in some cases; and 3) because SCE&G believes the record needs to include as accurate information as possible as the FERC begins its National Environmental Policy Act review.

Attached is SCE&G's dock usability analysis which includes methodology and the compiled results. If after you review the attached information you have questions, please let us know.

Thank you for your continued efforts in the relicensing of the Saluda Hydro Project.

Alan

Alan Stuart

Senior Licensing Coordinator

Kleinschmidt Energy and Water Resources

email: Alan.Stuart@kleinschmidtusa.com



April 22, 2009

Subject: 2009 Dock Survey

GOAL: Using high resolution aerial photography, determine the number of docks on Lake Murray, both fixed and floating¹ that would have water under them at or above lake elevation 354 PD.

METHODOLOGY: Relying upon 2004 aerial photography, SCE&G lake management personnel conducted a survey of docks along the shoreline of Lake Murray. The photographs were taken in October of 2004 when the lake was at elevation 353.2 PD. Each dock having water under the section to which boats would normally be tethered (floating or fixed) was counted as being “in the water.”

RESULTS: In total, 8,303 docks were counted. Of the 8,303 docks counted, 7,923 were in the water, and 380 were not. Mathematically, this results in a finding that 95.4% of the docks had water under them at the 353.2 contour.² When the lake is at the 354 contour, almost an additional foot in elevation, many of the 380 docks that were out of the water, would have water beneath them and the 7,923 would have almost an additional foot of depth under those docks.

TOTAL:	Docks Counted:	8,303
	Docks in Water:	7,923
	Docks not in water:	380

¹ Most docks consist of a fixed walkway leading to a floating platform (floating dock). Some do not have a floating section, and so are totally fixed (fixed dock).

Alison Guth

From: Shane Boring
Sent: Wednesday, April 22, 2009 9:07 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
Subject: Saluda Relicensing: Final LSR Macroinvertebrate Monitoring Program

Dear Fish and Wildlife RCG Members:

Attached for your records is the final version of the Saluda Hydro Macroinvertebrate Monitoring Program. As you may remember from our recent fish and wildlife Settlement Agreement meetings, this plan will be included as an appendix to the Settlement Agreement and will be implemented under a new license for Saluda Hydro. Thanks to all who contributed to development of the program.

Please feel free to give me a call with any questions.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



Saluda Hydro
Macroinvert Progr...

Alison Guth

From: Shane Boring
Sent: Wednesday, April 22, 2009 9:07 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill East; Bill Hulslander; Bill Marshall; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Charlene Coleman; Daniel Tufford; Dick Christie (dchristie@comporium.net); Ed Diebold; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jeff Duncan; Jennifer O'Rourke; Jennifer Hand; Jim Glover; Jim Goller; Joe Logan; Joy Downs; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Malcolm Leaphart (mwleapjr@att.net); Mike Sloan; Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Norman Ferris; Patrick Moore ; Prescott Brownell; Randy Mahan; Reed Bull (rbull@davisfloyd.com); Robert Lavisky; Ron Ahle; Scott Harder; Shane Boring; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Tom Bowles (tbowles@scana.com)
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Please feel free to give me a call with any questions.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



Saluda Hydro
Macroinvert Progr...

Alison Guth

From: Elymay2@aol.com
Sent: Tuesday, April 21, 2009 2:58 PM
To: Alison Guth; DILLMAJW@dhec.sc.gov; cfdwaxson@columbiasc.net; Alan Stuart; amanda_hill@fws.gov; BENNETAM@dhec.sc.gov; bertfloyd@sc.rr.com; BARGENTIERI@scana.com; yaccove@bellsouth.net; billeast@sc.rr.com; bill_huislander@nps.gov; marshallb@dnr.sc.gov; bill25@sc.rr.com; perryb@dnr.sc.gov; bseibels@yahoo.com; bstutts@scana.com; Bret Hoffman; network@scpronet.com; btrump@scana.com; badrb@dnr.sc.gov; BakerB@dnr.sc.gov; altmankc@dhec.sc.gov; cheetahrk@yahoo.com; jcharlesfloyd@sc.rr.com; ccompton@lex-co.com; flyhotair@greenwood.net; pagec@dnr.sc.gov; ccantley@scdah.state.sc.us; HIGHTOCW@dhec.sc.gov; tufford@sc.edu; Dave Anderson; dlandis1@sc.rr.com; david.allen@scbar.org; dhancock@scana.com; djones@scprt.com; pricedc@dhec.sc.gov; dsimmons@thefittscompany.com; dchristie@comporium.net; tyle6544@bellsouth.net; DEngFF@aol.com; ediebold@riverbanks.org; eschnepel@sc.rr.com; aregaf@dnr.sc.gov; kayakduke@bellsouth.net; gjobsis@americanrivers.org; kirklagl@dhec.sc.gov; guyjones@sc.rr.com; beardh@dnr.sc.gov; McKellarH@dnr.sc.gov; jhamilton@scana.com; Jayschab@aol.com; jeff_duncan@nps.gov; pricej@biol.sc.edu; jdevereaux@scana.com; GloverJB@dhec.sc.gov; jimruane@comcast.net; jbutler@scana.com; DianLog8@aol.com; jbhuggins@lexhealth.org; seatowlakemurray@seatow.com; johned44@bellsouth.net; jsfrick@mindspring.com; leader@sc.edu; kakustafik@columbiasc.net; kstyer@smeinc.com; Colkenu@aol.com; skfox@sc.rr.com; dvklmass@bellsouth.net; turnerle@dhec.sc.gov; lbarber@sc.rr.com; linda_lester11@yahoo.com; wendy0815@sc.rr.com; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; mrice@americanrivers.org; mdmurr@sc.rr.com; mikeduffy@sc.rr.com; Lucky8lady@aol.com; msummer@scana.com; mwaddell@esri.sc.edu; mquattlebaum@scana.com; miriam@lakemurraycountry.com; larana@mindspring.com; norm@sc.rr.com; parkin@parkinhunter.com; PatrickM@scccl.org; LakeMurrayLOA@windstream.net; prescott.brownell@noaa.gov; R1Shealy@aol.com; RMAHAN@scana.com; rammarell@scana.com; dobrasko@scdah.state.sc.us; rbull@davisfloyd.com; rbickley@lex-co.com; rkidder1@sc.rr.com; adventurec@mindspring.com; SKEENER@sc.rr.com; rlavisky@alltel.net; ahler@dnr.sc.gov; rscott@lex-co.com; royparker38@earthlink.net; ryanity@scana.com; s.padget@saludacounty.sc.gov; sandrar@www.ccppcrafts.com; snorris@trcsolutions.com; Shane Boring; sarmstrong@lex-co.com; MillsL@dnr.sc.gov; lakewatchman@yahoo.com; ssummer@scana.com; suzrhodes@juno.com; swilliams@lex-co.com; tpowers@newberrycounty.net; theresa_thom@nps.gov; vinsont@dnr.sc.gov; tbowles@scana.com; truple@sc.rr.com; tboozer@scana.com; tbeber@scprt.com; tylehowe@nc-cherokee.com; vhoffman@scana.com; vejdaniv@dnr.sc.gov; wenonahh@www.ccppcrafts.com; Jon Quebbeman
Subject: Re: Lake Murray Watch proposal for lake level management

Lake Murray Association is in favor of this proposal being included in the license. Many studies were made on fish on the Lower Saluda. None that we are aware of were done on Lake Murray so we feel it is prudent to consider the opinions and recommendations of the fishermen and guides on Lake Murray.

There opinions are of value as they are out everyday all year long assessing the fishing on Lake Murray.

In a message dated 3/25/2009 8:34:18 A.M. Eastern Daylight Time, Alison.Guth@KleinschmidtUSA.com writes:

Hello All,

I neglected to send out the most recent version of the Lake Murray Watch Fish and Wildlife Focus Group proposal. Please refer to the attachment. Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Tuesday, March 24, 2009 3:13 PM

To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Lake Murray Watch proposal for lake level management

Hello All,

As discussed in our Monday Fish and Wildlife Settlement Meeting, Lake Murray Watch has prepared the attached proposal for lake level management and has requested that it be submitted to the group. Thanks, Alison

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]

Sent: Monday, March 23, 2009 8:43 AM

To: ARGENTIERI, WILLIAM R

Subject: Lake Murray Fish and Wildlife Focus Group

Bill- Attached is our proposal for lake level management.

Steve Bell

Lake Murray Watch

Ph. 803-730-8121

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Alison Guth

From: Dick Christie [dchristie@comporium.net]
Sent: Tuesday, April 21, 2009 3:33 PM
To: Alison Guth; Alan Stuart
Subject: DNR position statements



DNR position on Reservoir Draw...
DNR position on the proposed L...

Hi guys – attached are the two position papers we presented in March.

Thanks.

Drawdowns as a Reservoir Management Tool

Presented to the Fish and Wildlife Resource Conservation Group established for
the Saluda Dam Relicensing

SCDNR

3-19-2009

Reservoir drawdowns are an important management tool to agencies charged with the responsibility of reservoir management and water quality. Periodic drawdowns can provide a relatively inexpensive and effective means to control or to encourage aquatic plant communities, to restructure fish populations to improve fishing, and to improve water quality.

The practice of lowering water levels to expose the lake bottom, which is termed "draw down", can dry out and provide partial control of plants in the dewatered area. Of the three basic aquatic plant control methods (mechanical, biological, and chemical), mechanical control can be the least expensive and most convenient. Winter drawdown exposes weeds to drying and freezing temperatures. This can be an effective weed control technique, especially if done in successive years. Drawdowns are effective mainly on submerged vegetation. Drawdowns should be conducted during the winter when the combination of drying and exposure to cold temperatures will kill many aquatic weeds. Intentional drawdowns during the warmer months are not recommended, as they may stress fish populations and may enhance the spread of marginal species (such as cattails, alligatorweed, rushes, and willows) Clemson Extension HGIC 1714).

Drawdowns can also be used to enhance fish populations. Water level manipulation is considered by some to be potentially the best management technique for reservoir fisheries (p. 282, Fisheries Management). In South Carolina, winter drawdowns have been limited to smaller impoundments controlled by the DNR. The objective of this technique is to crowd predator and prey species by drawing smaller prey species from their shallow water cover. The increased availability of prey results in predator species, such as largemouth bass, to enter the spring in better condition for spawning.

Drawdowns can also be used to simulate the well documented "trophic upsurge" that occurs in a newly built reservoir. Trophic upsurge refers to the 5-10 years of highly productive sport fish production that follows a newly filled reservoir (p. 246, Inland Fisheries Management). The decay of terrestrial vegetation releases nutrients that are utilized by phytoplankton and zooplankton, which comprise the primary production of the food chain. Lowering water levels to allow the growth of terrestrial vegetation for 3-4 years, followed by flooding of substantial areas of vegetation can simulate trophic upsurge, increase productivity, and support strong year classes of certain fishes (Ploskey 1986). Monitoring efforts associated with drawdowns for purposes other than fisheries management have demonstrated "trophic upsurge" on a

number of reservoirs in the State. The infrequent drawdowns that are anticipated in the future as a result of low inflow are expected to demonstrate some level of trophic upsurge. The magnitude of this upsurge will be dependent on the length and seasonality of the drawdown.

Drawdowns can also be utilized to move sediments, which contain organic ooze that has an extremely high oxygen demand. "Water quality modeling conducted in the relicensing process predicted increasing trends in low dissolved oxygen associated with higher minimum pool elevations (i.e. 354 versus 350 feet elevation PD). Based on data for 1980 through 2007 (excluding 2003 and 2004), the winter pool level was down to about $350 \pm 2'$ about half the time (i.e., 13 of 26 years as shown in Table 5-1). It would be best to maintain this frequency of drawing the lake down to this level each year or risk poorer water quality (sediment accumulation, weeds, and increased nutrient cycling from the sediments especially in embayments, and greater potential for TMDL designation by DHEC that could lead to very expensive sediment treatments) compared to current conditions. Also, data from the study indicate that maintaining this frequency of drawing the lake down to this level for an average of every two years should not be difficult based on historical inflows and pool level data as well as taking advantage of using November flows to predict the years when Jan-Apr flows would likely be sufficient" (Sawyer and Ruane, 2007).

In South Carolina, winter drawdowns on Lake Murray have been primarily used to control hydrilla. However, a number of plant species can be controlled by winter drawdowns. State and Federal agencies are currently dealing with the control of exotic aquatic plants in many of the State's reservoirs, and we have no way of predicting what the future might hold. The risk of increased occurrences of exotic plant infestation associated with global warming is particularly disconcerting to the agency.

Based on these reasons, we recommend that drawdowns be recognized as possible management options in the new license and the 401 Water Quality Certification. We recommend that the exact timing, duration and magnitude of any future drawdown should be determined in consultation with the Licensee and other resources agencies.

Literature Cited

Clemson Extension. Aquatic Weed Control Overview. HGIC 1714.

Kohler, C.C. and W. A. Hubert, editors. 1993. Inland fisheries management in North America. American Fisheries Society, Bethesda, Maryland.

Lackey, R.T. and L.A. Nielson. 1980. Fisheries Management. John Wiley & Sons. New York.

Ploskey, G. R. 1986. Effects of water level changes on reservoir ecosystems with implications for fisheries management. Pages 86-97 in Hall and Van Den Avyl (1986).

Sawyer, A.F. and R.J. Ruane. 2007. Applications of the CE-QUAL-W2 model for Lake Murray relicensing issues.

Benefits of the Proposed Guide Curve for Lake Murray on Aquatic Habitat

Presented to the Fish and Wildlife Resource Conservation Group established for the Saluda Dam Relicensing

SCDNR

3-19-2009

The origin of the guide curve proposed to operate Lake Murray during the period of the new license was developed in the Recreational Technical Working Committee. DNR staff participated in the Recreational Technical Working Committee with the development of the proposed guide curve, and we concur with that recommendation for the following reasons:

- 1) The proposed guide curve will increase the amount of time (days per year) that the reservoir is at full pool. Under the new guide curve, the reservoir should be at full pool (358 feet (PD)) from March 1 through September 1, which would maintain the reservoir at full pool for 5 months longer than the current guide curve. The benefits associated with maintaining a reservoir at full pool are discussed in the State Water Plan (P. 29, SC Water Plan). Excepting flood elevations, maintaining a reservoir at full pool will maximize the depth and area which will provide maximum benefits to recreational boaters, fish and wildlife habitat, and water supply; and provide the most efficient hydropower generation and the most consistent shoreline.
- 2) We also recognize that there are valid reasons why reservoirs cannot be maintained at full pool year around. If there is no storage capacity available in a reservoir, the spring inflow associated with normal and high water years will result in increased flooding both in the reservoir and downstream. The proposed guide curve significantly increases water storage and reduces reservoir fluctuations while providing storage capacity in the spring. The new rule curve will increase the amount of time that the reservoir level is above 354 feet (PD), since the target reservoir elevation is currently less than 354 feet 50% of the year, while the new target elevation is never less than 354 feet (PD). We believe that this mode of operation will greatly enhance the benefits to recreational boaters, fish and wildlife habitat including shoreline vegetation, hydropower generation, water supply and to providing a consistent shoreline over the current operations (baseline).
- 3) Specific benefits to recreational boaters and fish and wildlife have been identified. The most significant benefits are associated with the increase in permanent and seasonal surface acres that the new guide curve is expected to provide. Under the current guide curve, lake elevations fluctuate seasonally between 350 and 358 feet (PD). By increasing the minimum target of the proposed guide curve to 354 feet, four feet of fluctuation zone will be changed from a seasonal habitat to habitat

that more closely resembles “permanent” habitat. Since the surface acreage of Lake Murray is about 40,000 acres at the minimum target level of 350 feet (Exhibit B-16, Final License Application), and the surface acreage at the lowest level of the proposed guide curve of 354 feet is 44,000 acres, there will be an increase in permanent surface acreage of about 4,000 acres.

- 4) In addition to the 4,000 acres of permanent habitat, increases in seasonally wetted habitat over what is currently provided will also occur in all months except May. If the reservoir level is on the guide curve on January 1 of each year, and we have a “normal “ or high water year, wetted habitat should increase about 1,000 acres every two weeks from 1 January through 1 March. Wetted habitat should be close to maximum from 1 March through 1 September, and then decrease by about 2,000 acres between 1 September through 1 December, and decrease 2,000 acres between 1 December and 1 January. It is important to note that although this habitat will not be permanently wetted, the new rule curve will significantly reduce the amount and magnitude of the shallow water fluctuation. We believe this will significantly increase the amount of important shallow water habitat available in the spring during the fish spawning period, and increase shallow water habitat in the fall which should enhance waterfowl habitat. Also, since water levels are targeted at or within 1 foot of full pool during most of the growing season (March-October), we believe there will be an increase in permanent shoreline vegetation that will enhance fish and wildlife habitat.

Literature Cited

Badr, A.W., A. Wachob and J.A Gellici. 2004. South Carolina Water Plan. Second Edition. South Carolina Department of Natural Resources. 120 pp.

Alison Guth

From: Kenneth Bell [lakewatchman@yahoo.com]
Sent: Tuesday, April 21, 2009 7:13 AM
To: Alison Guth
Cc: Joy Downs; dlandis1@sc.rr.com
Subject: Re: Settlement Draft Meeting Notes - 3-23-09

Alison- We (lake groups) need a few more days to finish our comments. Please consider allowing for more time.

Thanks

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On **Mon, 4/6/09**, **Alison Guth** <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: Settlement Draft Meeting Notes - 3-23-09
To: DILLMAJW@dhec.sc.gov, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <billleast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, "Bob Perry" <perryb@dnr.sc.gov>, bseibels@yahoo.com, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <bret.hoffman@kleinschmidtusa.com>, "Brett Bursey" <network@scpronet.com>, btrump@scana.com, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Chad Altman" <altmankc@dhec.sc.gov>, "Charlene Coleman" <cheetahtrk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <ccompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, ccantley@scdah.state.sc.us, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <dave.anderson@kleinschmidtusa.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons" <dsimmons@thefittscompany.com>, dchristie@comporium.net, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, aregaf@dnr.sc.gov, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher" <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, pricej@biol.sc.edu, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Ruane" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins "

<jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, johned44@bellsouth.net, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Ken Styer" <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net>, turnerle@dhec.sc.gov, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester" <linda_lester11@yahoo.com>, "Linda Schneider" <wendy0815@sc.rr.com>, mwleapjr@att.net, mdavis@scprt.com, giffinma@dhec.sc.gov, "Matthew Rice" <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, msummer@scana.com, "Mike Waddell" <mwaddell@esri.sc.edu>, mquattlebaum@scana.com, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore" <PatrickM@scccl.org>, LakeMurrayLOA@windstream.net, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rammarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, rbull@davisfloyd.com, "Rhett Bickley" <rbickley@lex-co.com>, rkidder1@sc.rr.com, "Richard Mikell" <adventurec@mindspring.com>, SKEENER@sc.rr.com, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, ryanity@scana.com, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.ccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Sheri Armstrong" <sarmstrong@lex-co.com>, "Skeet Mills" <MillsL@dnr.sc.gov>, lakewatchman@yahoo.com, "Steve Summer" <ssummer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, tbowles@scana.com, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbler" <tbebbler@scprt.com>, tylehowe@nc-chokeee.com, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vejdani" <vejdaniv@dnr.sc.gov>, schneider@scetv.org, "Wenonah Haire" <wenonahh@www.ccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>

Date: Monday, April 6, 2009, 8:32 PM

Hello All,

Attached are the draft meeting notes from the 3/23/09 Fish and Wildlife Settlement Agreement meeting. There were several comments received on the proposal made at the meeting that are included at the end of the meeting notes. Please provide edits to the meeting notes back to me by April 20. Thanks, Alison
<<2009-3-23 draft Meeting Minutes - Settlement Agreement f&w Group.DOC>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, April 20, 2009 3:40 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Operations Group Settlement Meetings

Hello All,

In preparation for our Operations Group Settlement Agreement Meetings next week, I have attached the documents that would be of interest to review before the meetings. We will be discussing the Guide Curve, the High Inflow Protocol, and begin discussions on the LIP on Monday, April 27th at 9:30 (Lake Murray Training Center). On Thursday, April 30th we will continue discussions on the LIP (9:30, Lake Murray Training Center). Individuals from the Recreation Group may be interested in attending the LIP discussions on Thursday, April 30th. The preparation items include the wording for the High Inflow Protocol and the Guide Curve from the Settlement Agreement and the revised MELIP (attached). If you have not already RSVP'ed by accepting the outlook invite into your calendar, please RSVP by Thursday, April 23rd. I will be out for two weeks beginning Close of Business Friday, the 24th and will not receive your email if you RSVP after that date. Thanks, Alison

1.1. High Inflow Periods:

When the rolling 14-day average inflow to Lake Murray exceeds the minimum flow requirements agreed in Section 5.1, SCE&G may at its discretion generate with this "excess" water in an "economically reasonable manner." An economically reasonable manner is one that allows SCE&G to take advantage of excess water opportunities for power generation while endeavoring not to create erratic downstream fluctuations in flow that may adversely affect habitat. This will ensure the Project is operated economically and aids in the protection of life and property, responds to changed hydrologic or other circumstances, meets lake management objectives, and does not interfere with required maintenance.



Guide Curve



Saluda Hydro

ettlement Agreeeme.Project Draft MEL...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Monday, April 20, 2009 11:03 AM
To: Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry ; Brandon Stutts ; Buddy Baker ; Chad Altman; Dick Christie (dchristie@comporium.net); Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mqattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Relicensing: 2008-2009 Lake Murray Waterfowl Report - Draft for review

Dear Terrestrial TWC Members:

Attached for your review is the draft report summarizing the waterfowl surveys performed on Lake Murray during winter 2008-2009. As you may remember, this is the final of three years of surveys that were scheduled as part of relicensing. Please have comments on the draft report back to me by May 20.

DNR folks, please see Bill's comment regarding availability of DNR waterfowl data for 2007 and 2008. We currently have 2003-2006 data included as Appendix 1 for comparison to our data, but it might also be informative to have the most recent data. Please let us know if this data is available.

Thanks
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



SREL Draft
Waterfowl Report 20.

Alison Guth

From: Tyler B. Howe [tylehowe@nc-chokeee.com]
Sent: Monday, April 20, 2009 10:16 AM
To: Alison Guth; sandrashesam@gmail.com; Rebekah Dobrasko; BARGENTIERI@scana.com; Bill Green; msummer@scana.com; RMAHAN@scana.com; Wenonah Haire
Cc: Russell Townsend
Subject: RE: Cultural Resources Settlement Agreement Meeting

Hi Alison:

The Eastern Band of Cherokee Indians Tribal Historic Preservation Office concurs with the idea of a conference call for the upcoming Cultural Resources Settlement meeting. I was hoping that you might suggest this from the start. This would be better given our distance. We accept the invitation to participate as a consulting party, and look forward to a conference call.

Please do not hesitate to contact me should you have any questions or comments.

Sincerely,

Tyler B. Howe
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians
828-554-6852

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Friday, April 17, 2009 1:36 PM
To: sandrashesam@gmail.com; Rebekah Dobrasko; BARGENTIERI@scana.com; Bill Green; msummer@scana.com; RMAHAN@scana.com; Tyler B. Howe; Wenonah Haire
Subject: Cultural Resources Settlement Agreement Meeting

Hey Folks,

After giving more thought to our upcoming Cultural Resources Settlement Agreement Meeting on April 29th, Bill Argentieri and I were wondering what you guys thought about turning it into a conference call? I know Wenonah and Sandra would have to drive down from Rock Hill and we anticipate this meeting being very short.

What we have done in the previous settlement agreement meetings is incorporate language into the Settlement Agreement itself as follows: "*Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Saluda Hydroelectric Project X Plan (Appendix X)*", and then attach the referenced plan or process as an appendix to the Settlement.

If this is acceptable to everyone we could do the same with Cultural Resources to the tune of : "*Upon issuance of the new license, SCE&G will implement the Historic Properties Management Plan (HPMP)(Appendix X)*". We could then attach the HPMP to the Settlement Agreement as an appendix. This keeps the Settlement Agreement from becoming too lengthy and if anyone is interested in what a particular item entails they can look at the attached plan.

If you would still like to have a face-to-face meeting instead of a conference call just let us know. Right now the only individuals that RSVP'ed were SHPO and the Catawba. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Friday, April 17, 2009 11:07 AM
To: Dick Christie
Cc: Alan Stuart; Alison Guth; SUMMER, MICHAEL C; RMAHAN@scana.com; BOOZER, THOMAS C
Subject: RE: Revised wording for the Aquatic Plant management section of the settlement agreement.

Dick,

We have reviewed your proposed revised wording for the Aquatic Plant Management section of the settlement agreement and agree to your changes. I made a few changes as noted below to align it with the rest of the settlement agreement document. By this email I am asking Alison to make this change to the marked up and clean versions that we send out as a follow-up to the settlement agreement meeting.

Bill

From: Dick Christie [mailto:dchristie@comporium.net]
Sent: Wednesday, April 15, 2009 4:38 PM
To: ARGENTIERI, WILLIAM R; Alan Stuart
Subject: Revised wording for the Aquatic Plant management section of the settlement agreement.

Hi guys – I just received comments on my proposed wording for the settlement agreement. Please consider replacing the current text with the following:

Subsequent to the issuance of the new license by the Commission, SCE&G shall work cooperatively with the SCDNR Aquatic Nuisance Species Program and the S.C. Aquatic Plant Management Council (Council) to manage invasive aquatic plants in Project waters for the term of the new license. SCE&G shall assist in the development of, abide by, and share with the funding of annual aquatic plant management plans approved by the Council.

Thanks.

Alison Guth

Subject: Lake and Land Management Settlement Meeting
Location: Lake Murray Training Center

Start: Mon 4/20/2009 9:30 AM
End: Mon 4/20/2009 2:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: All RCG & TWC Members

Hello All,

As mentioned in my email on Monday, we have scheduled a tentative Settlement Agreement meeting for Lake and Land Management for this coming Monday, April 20th. At this meeting we will be discussing the attached deed wording for fringeland sales. If you have any questions please feel free to email me. Thanks, Alison



Seller YY template -
SCEG sale...

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Friday, April 17, 2009 10:45 AM
To: Dick Christie
Cc: RMAHAN@scana.com; SUMMER, MICHAEL C; Alan Stuart; Alison Guth; BOOZER, THOMAS C
Subject: Propsoed Changes to the Lake & Land Management Settlement Agreement Wording



WMA Land Lease
Wording - Settl...

Dick,

After sending you our draft resolution for the designation of a waterfowl habitat area associated with the June 23, 2004 FERC Order, we thought it appropriate to change the wording in the settlement agreement to address the FERC approval of the designation of the waterfowl habitat area and retaining our Forest Management rights on the WMA lands. Please review the proposed changes to the settlement agreement wording on the attached document and let us know if you can agree with them.

William R. Argentieri

South Carolina Electric & Gas Company

111 Research Drive

Columbia, SC 29203

Phone - (803) 217-9162

Fax - (803) 933-7849

Cell - (803) 331-0179

Original Wording in Draft Settlement Agreement:

1.1. Lands included in the SCDNR Wildlife Management Area (WMA) Program:

1.1.1. Inside of the Project Boundary:

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 1,300 acres of Forest Management land, **as identified in Appendix X**, to SCDNR to be placed/maintained in their WMA Program as DNR elects. The purpose of placing these lands in the WMA Program will be to protect and enhance waterfowl and associated habitats. The lease will be co-terminus with the new license issued by the Commission.

SCE&G will continue to offer to lease to SCDNR those Forest Management lands which are within the WMA Program, **as identified in Appendix X**. This includes approximately **XX acres**. The lease will be co-terminus with the new license issued by the Commission.

1.1.2. Outside of the Project Boundary:

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 2,750 acres of non-Project property, **as identified in Appendix X**, to SCDNR to be placed/maintained in their WMA Program as DNR elects. The lease will be co-terminus with the new license issued by the Commission.

Proposed Wording in Draft Settlement Agreement

1.2. Lands included in the SCDNR Wildlife Management Area (WMA) Program:

1.2.1. Inside of the Project Boundary:

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 1,300 acres of Forest Management land, **as identified in Appendix X**, to SCDNR as long as the Commission approves the designation of the lake portion of the upper Saluda River as a waterfowl habitat area in satisfaction of the Commission's directives contained in its Order 107 FERC ¶ 62,273 dated June 23, 2004. These lands are expected to be placed and maintained in the Wildlife Management Area (WMA) Program as SCDNR elects. SCE&G will retain its Forest Management and associated access rights. The objective of allowing these lands to be placed in the WMA Program will be to allow for the protection and enhancement of waterfowl populations and habitats. The lease will be co-terminus with the new license issued by the Commission.

Deleted: to be placed/maintained in their WMA Program as DNR elects. The purpose of placing these lands in the WMA Program will be to protect and enhance waterfowl and associated habitats.

SCE&G will continue to offer to lease to SCDNR those Forest Management lands which are within the WMA Program, **as identified in Appendix X**. This includes approximately **XX acres**. SCE&G will retain its Forest Management and associated access rights. The lease will be co-terminus with the new license issued by the Commission.

1.2.2. Outside of the Project Boundary:

Subsequent to the issuance of the new license by the Commission, SCE&G will offer to lease approximately 2,750 acres of non-Project property, **as identified in Appendix X**, to SCDNR to be placed/maintained in their WMA Program as DNR elects. SCE&G will retain its Forest Management and associated access rights. The lease will be co-terminus with the new license issued by the Commission.

Alison Guth

Subject: Canceled: Settlement Agreement Meeting - Lake and Land
Location: Lake Murray Training Center

Start: Fri 4/17/2009 9:30 AM
End: Fri 4/17/2009 4:00 PM
Show Time As: Free

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: All RCG & TWC Members

Optional Attendees: 'Tim Vinson'; 'Gerrit Jobsis'; 'ARGENTIERI, WILLIAM R'; 'Larry Turner'; 'Patrick Moore'; 'dchristie@comporium.net'; 'Dave Anderson'; 'James Glover'; 'HANCOCK, DAVID E'; 'BOOZER, THOMAS C'; 'BOWLES, THOMAS M'; 'Dobrasko, Rebekah'; 'James %22Will%22 Dillman'; 'QUATTLEBAUM, MILTON'; 'STUTTS, BRANDON G'; 'Mike Waddell'; 'Scott, Ron'; 'Tony Bebber'; 'MAHAN, RANDOLPH R'; 'Vivianne Vejdani'; 'SUMMER, MICHAEL C'; 'Charles Hightower'; 'SUMMER, STEPHEN E'; 'Gina Kirkland'; 'David Price'; 'Amy Bennett'; 'HOFFMAN, VAN B'; 'Mark Davis'; 'Mark Giffin'; 'pricej@biol.sc.edu'; 'AMMARELL, RAYMOND R'

Importance: High

Meeting Canceled:

Hello All,

We will be holding a Settlement Agreement Meeting to discuss Lake and Land Management issues Friday, April 17 beginning at 9:30. Please RSVP for gate access and lunch a week before the meeting date. Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Monday, April 13, 2009 3:08 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: 4/15 and 4/17 Canceled

Hello All,

We were able to work through the Settlement Agreement language and discussion topics for Lake and Land Management during today's meeting. Therefore, the discussion days we had set aside on 4/15 and 4/17 are not needed and have been Canceled. However, a tentative meeting has been scheduled for Monday with more details forthcoming. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, April 13, 2009 8:33 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; James Leslie ; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Public Meeting to Review the SMP and Permitting Handbook

Hello All,

This is just a reminder that there will be a Public Meeting held this Thursday, April 16th at Saluda Shoals Park Auditorium to discuss the SMP and Permitting Handbook. There are two meetings to best accommodate individual schedules, one beginning at 10:00 AM and one beginning at 7:00 PM. You may access the draft SMP and Permitting Handbook through the relicensing website at : <http://www.saludahydrorelicense.com/milestones.htm>. You do not have to RSVP for this meeting. Call or email if you have any questions. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Friday, April 10, 2009 11:34 AM
To: jlesliejr@bellsouth.net
Cc: Alison Guth; Alan Stuart
Subject: Re: When is the next Lake Management Meeting

Jim,

Our next L+LM meetings are scheduled for Monday, April 13, Wednesday, April 15 and Friday, April 17 at 9:30 AM at the LMTC. We will be discussing the settlement agreement at this time. There is a chance we could finish our discussions on Monday at which time the other two meetings will be cancelled.

By this email I am asking Alison to make sure you are on the L+LM RCG distribution list and that you are notified of our future meetings.

Bill

From: James L. Leslie, Jr. <jlesliejr@bellsouth.net>
To: ARGENTIERI, WILLIAM R
Sent: Fri Apr 10 10:57:34 2009
Subject: When is the next Lake Management Meeting

I have attempted to reach Allison to find out when the date and time of the next meeting of our Lake Management Committee.

Please let me know. It appears that I have been omitted from the email list. Please put me back on the list.

Thanks

Jim Leslie

Alison Guth

From: Alison Guth
Sent: Thursday, April 09, 2009 4:01 PM
To: 'Tony Bebber'
Subject: RE: Preparation documents for lake and land

Sorry the tables didn't come through, I simply copied and pasted from the settlement agreement wording that was sent around on Feb 19th, so if you still have a copy you can find it there. Also, the Aquatic Plan attachments are those that were for the AIR, but they are the correct documents to review for the development of a MOU. Alison

-----Original Message-----

From: Tony Bebber [mailto:tbebber@scprt.com]
Sent: Thursday, April 09, 2009 3:52 PM
To: Alison Guth
Subject: RE: Preparation documents for lake and land

Alison,

There appears to be some tables provided but they are very jumbled. Want to try sending it again – maybe in WORD?. Also, looks like you sent a couple of Aquatic Plant Mgmt attachments in lieu of something else.

Thanks,

Tony Bebber, AICP
Planning Manager, Product Services

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, April 09, 2009 3:33 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Burse; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; Mark Davis; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Preparation documents for lake and land

Hello all,

In preparation for the Lake and Land Management Settlement Agreement Meeting next week, attached are the documents we will be discussing in the meetings. Feel free to contact me if you have any questions. Alison

Rebalancing Wording:

1.1. Rebalancing of Project Lands:

Upon issuance of the new license, the Licensee shall implement the Rebalancing of Project Lands as ordered by the Commission in order dated June 23, 2004 (107 FERC ¶ 62,273), depicted on the revised Land Classification maps (Appendix X) and specified in the tables below. The process of land use rebalancing also included consolidating (reducing to five) and renaming the original ten land use classifications as follows: Public Recreation, Natural Areas, Project Operations, Forest Management, and Multi-Purpose. The Multi-purpose classification is subdivided into four sub-classifications: easement, commercial, 75-ft buffer zone, and future development. It will take approximately 18 months to survey the non-project lands that will be brought into the project boundary and classified as Recreation. Revised Exhibit G maps and Exhibit E recreation drawings will be filed with the Commission within two years after license issuance.

SCE&G proposes to implement the following rebalancing plan after issuance of the new license for the Project:

Summary of Project and Non-Project Shoreline Mileages and Acreages Placed in New Classifications Following Re-Balancing

New Classification^a

**Natural Areas Forest Management
Other Public Recreation Leased to SCDNR**

	mi.	acres	miles	acres	miles	acres	Miles	acres
Previously Future Development	23	506	110	3,776	47	953	-	-

Non-Project Lands	-	-	-	-	-	658	-	2,754
LSR	-	-	-	6	541	-	-	
Sub-Totals	23	506	110	3,776	53	2,152	-	2,754

Grand Total

Lands Protected from Development: 185 miles 9189 acres

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

Project Lands Previously Classified as Future Development Lands Reclassified to Other Classifications During Re-Balancing

Classification	Acreage ^a		Shoreline Mileage ^a	
	Before	After	Before	After
Natural Areas	42	506	2	23
Forest Management	3570	3776	100	110
Other Public Recreation	764	953	38	47
Future Development (now <i>under</i> Multi-Purpose Classification)			1818	958
			91	51

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

The lands proposed to be leased to SCDNR are all outside of the Project boundary and will be placed/maintained in their Wildlife Management Area Program as DNR elects. The leases will be co-terminus with the new license issued by the Commission.

Aquatic Plant MOU and Lake Murray Plan:

<<Appendix 38 - Draft 2009 Aquatic Plant MOU Lake Murray Plan.pdf>> <<Appendix 37 - Draft Aquatic Plant MOU MASTER AGREEMENT.pdf>>

Link to Draft SMP and Draft Permitting Handbook:

<http://www.saludahydrorelicense.com/milestones.htm>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
 204 Caughman Farm Lane, Suite 301
 Lexington, SC 29072
 Phone 803-951-2077
 Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, April 09, 2009 3:33 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Preparation documents for lake and land

Hello all,

In preparation for the Lake and Land Management Settlement Agreement Meeting next week, attached are the documents we will be discussing in the meetings. Feel free to contact me if you have any questions. Alison

Rebalancing Wording:

1.1. Rebalancing of Project Lands:

Upon issuance of the new license, the Licensee shall implement the Rebalancing of Project Lands as ordered by the Commission in order dated June 23, 2004 (107 FERC ¶ 62,273), depicted on the revised Land Classification maps (Appendix X) and specified in the tables below. The process of land use rebalancing also included consolidating (reducing to five) and renaming the original ten land use classifications as follows: Public Recreation, Natural Areas, Project Operations, Forest Management, and Multi-Purpose. The Multi-purpose classification is subdivided into four sub-classifications: easement, commercial, 75-ft buffer zone, and future development. It will take approximately 18 months to survey the non-project lands that will be brought into the project boundary and classified as Recreation. Revised Exhibit G maps and Exhibit E recreation drawings will be filed with the Commission within two years after license issuance.

SCE&G proposes to implement the following rebalancing plan after issuance of the new license for the Project:

Summary of Project and Non-Project Shoreline Mileages and Acreages Placed in New Classifications
Following Re-Balancing

	New Classification ^a							
	Natural Areas		Forest Management		Other Public Recreation		Leased to SCDNR	
	mi.	acres	miles	acres	miles	acres	Miles	acres
Previously Future Development	23	506	110	3,776	47	953	-	-
Non-Project Lands	-	-	-	-	-	658	-	2,754
LSR	-	-	-	-	6	541	-	-
Sub-Totals	23	506	110	3,776	53	2,152	-	2,754
Grand Total								
Lands Protected from Development: 185 miles 9189 acres								

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

Project Lands Previously Classified as Future Development Lands Reclassified to Other Classifications During Re-Balancing

Classification	Acreage ^a		Shoreline Mileage ^a	
	Before	After	Before	After
Natural Areas	42	506	2	23
Forest Management	3570	3776	100	110
Other Public Recreation	764	953	38	47
Future Development (now <i>under</i> Multi-Purpose Classification)	1818	958	91	51

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

The lands proposed to be leased to SCDNR are all outside of the Project boundary and will be placed/maintained in their Wildlife Management Area Program as DNR elects. The leases will be co-terminus with the new license issued by the Commission.

Aquatic Plant MOU and Lake Murray Plan:



Appendix 38 - Draft Aquatic Plant MOU
Appendix 37 - Draft Lake Murray Plan

Link to Draft SMP and Draft Permitting Handbook:

<http://www.saludahydrorelicense.com/milestones.htm>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, April 09, 2009 3:23 PM
To: 'Dick Christie'
Subject: RE: 3-25-09 draft meeting notes fish and wildlife

No problem on the edit, and the purple martin was left as an addition to the RT&E brochure and the following section was added to the Settlement Agreement:

1.4. Purple Martin Roosting Area

The Licensee shall manage Lunch Island (Bomb Island) as a protected area for purple martin roosting.

-----Original Message-----

From: Dick Christie [mailto:dchristie@comporium.net]
Sent: Thursday, April 09, 2009 1:11 PM
To: Alison Guth
Subject: RE: 3-25-09 draft meeting notes fish and wildlife

Alison – Please change one word I said in the meeting minutes. Also, can you refresh my memory on how we left the purple martin issue in the Settlement agreement ? Thanks.

Alison Guth

From: Alison Guth
Sent: Thursday, April 09, 2009 3:10 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Draft Meeting notes from 3-27

Hello All,

Attached are the draft meeting notes from the March 27th Fish and Wildlife Settlement Agreement Meeting. If you attended the meeting and have edits to the notes, please provide them to me by April 23. Thanks, Alison



2009-3-27 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Dick Christie [dchristie@comporium.net]
Sent: Thursday, April 09, 2009 1:11 PM
To: Alison Guth
Subject: RE: 3-25-09 draft meeting notes fish and wildlife



2009-3-25 draft
Meeting Minute...

Alison – Please change one word I said in the meeting minutes. Also, can you refresh my memory on how we left the purple martin issue in the Settlement agreement ? Thanks.

Alison Guth

From: Ron Ahle [AhleR@dnr.sc.gov]
Sent: Wednesday, April 08, 2009 3:53 PM
To: Alison Guth
Subject: RE: Settlement Draft Meeting Notes - 3-23-09



2009-3-23 draft
(rev RA) Meeti...

Hi Alison,

Attached are my corrections. Thanks for sending the draft.

Ron

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Monday, April 06, 2009 4:32 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Lee (Skeet) Mills; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbber; tylehowe@nc-chokekee.com; Van Hoffman; Vivianne Vejdani; schneider@sctv.org; Wenonah Haire; Jon Quebbeman
Subject: Settlement Draft Meeting Notes - 3-23-09

Hello All,

Attached are the draft meeting notes from the 3/23/09 Fish and Wildlife Settlement Agreement meeting. There were several comments received on the proposal made at the meeting that are included at the end of the meeting notes. Please provide edits to the meeting notes back to me by April 20. Thanks, Alison

<<2009-3-23 draft Meeting Minutes - Settlement Agreement f&w Group.DOC>>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Ron Ahle [AhleR@dnr.sc.gov]
Sent: Wednesday, April 08, 2009 11:46 AM
To: Alison Guth
Subject: RE: 3-25-09 draft meeting notes fish and wildlife



2009-3-25
raft(rev RA) Meetin.

See attached

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Tuesday, April 07, 2009 3:44 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Lee (Skeet) Mills; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani; schneider@sctv.org; Wenonah Haire; Jon Quebbeman
Subject: 3-25-09 draft meeting notes fish and wildlife

Hello All,

Attached are the draft meeting notes from the Fish and Wildlife Settlement Agreement meeting held on March 25. If you attended the meeting and have edits to the notes, please provide these to me by April 21st. Thanks, Alison

<<2009-3-25 draft Meeting Minutes - Settlement Agreement f&w Group.DOC>>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

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Subject: 3-25-09 draft meeting notes fish and wildlife

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Attached are the draft meeting notes from the Fish and Wildlife Settlement Agreement meeting held on March 25. If you attended the meeting and have edits to the notes, please provide these to me by April 21st. Thanks, Alison



2009-3-25 draft
Meeting Minute...

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Subject: Settlement Draft Meeting Notes - 3-23-09

Hello All,

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2009-3-23 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

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Subject: Water Quality Settlement Agreement Group Changes

Hello All,

The group edited Water Quality section from the Settlement Agreement meetings is attached. Both a track changes and clean copy is included. The reservoir drawdown program is included as Appendix "X" to this section. Also, the CE-QUAL-W2 applications report is referenced as an appendix to the drawdown program and included as an attachment as well. Thanks, Alison



Draft Settlement
Agreement - W...



Draft Settlement
Agreement - W...



Drawdown



Drawdown

Appendix - track changes
Appendix - clean copy



Appendix XX Lake
Murray W2 app...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, April 06, 2009 3:27 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Water Quality Settlement Agreement Group Changes

Hello All,

The group edited Water Quality section from the Settlement Agreement meetings is attached. Both a track changes and clean copy is included. The reservoir drawdown program is included as Appendix "X" to this section. Also, the CE-QUAL-W2 applications report is referenced as an appendix to the drawdown program and included as an attachment as well. Thanks, Alison



Draft Settlement
Agreement - W...



Draft Settlement
Agreement - W...



Drawdown



Drawdown

Appendix - track changes
Appendix - clean copy



Appendix XX Lake
Murray W2 app...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Alison Guth

From: Alison Guth
Sent: Monday, April 06, 2009 2:15 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman
Subject: Settlement Agreement Group Changes

Hello All,

The group edited Recreation section from the Recreation Settlement Agreement Meeting is attached. Both a track changes and clean copy is included. The Recreation Plan, (draft issued March 5) will be included as an appendix to this document. Thanks, Alison



DRAFT Settlement Agreement -Re... DRAFT Settlement Agreement -Re...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, April 06, 2009 12:43 PM
To: 'Dan Tufford'
Subject: RE: Settlement Agreement Meetings - Operations Group

The operations RCG has not met in quite some time, is there something in particular you are looking for?


-----Original Message-----

From: Dan Tufford [<mailto:tufford@sc.edu>]
Sent: Friday, April 03, 2009 3:54 PM
To: Alison Guth
Subject: RE: Settlement Agreement Meetings - Operations Group

Hello Alison,

I just went to the relicensing web site looking for reports or something from the work of the operations RCG. I found meeting minutes and presentations and nothing else. Please send me copies of whatever studies they did or other work they produced.

Regards,
Daniel L. Tufford, Ph.D.
University of South Carolina
Department of Biological Sciences
209A Sumwalt (office)
715 Sumter St, Room 401 (mail)
Columbia, SC 29208
Ph. 803-777-3292, Fx: 803-777-3292
e-mail: tufford@sc.edu
web: <http://www.biol.sc.edu/~tufford>

 Please think before you print.

-----Original Appointment-----

From: Alison Guth [<mailto:Alison.Guth@KleinschmidtUSA.com>]
Sent: Friday, April 03, 2009 3:45 PM
To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman
Subject: Settlement Agreement Meetings - Operations Group

When: Monday, April 27, 2009 9:30 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

Hello All,

In several of our previous meetings we discussed the possibility of having a Settlement Agreement Operations group, under which discussion on the LIP and Guide Curve will take place. We currently have overflow/alternate days on our calendar for April 27th and 30th. Therefore, it has been proposed that these days be allotted for the Operations group. Discussions on the guide curve will likely only take a half day, however, the LIP will probably take substantially longer. Please come prepared to discuss both the guide curve and the LIP on the 27th, and we will continue any discussions on the LIP on the 30th. Please RSVP for these days by April 20th. Thanks, Alison


Alison Guth

From: Dan Tufford [tufford@sc.edu]
Sent: Friday, April 03, 2009 3:54 PM
To: Alison Guth
Subject: RE: Settlement Agreement Meetings - Operations Group

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Regards,
Daniel L. Tufford, Ph.D.
University of South Carolina
Department of Biological Sciences
209A Sumwalt (office)
715 Sumter St, Room 401 (mail)
Columbia, SC 29208
Ph. 803-777-3292, Fx: 803-777-3292
e-mail: tufford@sc.edu
web: <http://www.biol.sc.edu/~tufford>

 Please think before you print.

-----Original Appointment-----

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Friday, April 03, 2009 3:45 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman

Subject: Settlement Agreement Meetings - Operations Group

When: Monday, April 27, 2009 9:30 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

Hello All,

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Alison Guth

From: Alison Guth
Sent: Wednesday, April 01, 2009 5:51 PM
To: 'Roy Parker'
Subject: Jim Ruane's Whitepaper Link

Hello Roy,

Attached is the link to the website where you can find Jim's whitepaper we discussed today. Alison

<http://www.saludahydrorelicense.com/documents/Attachment4b-FinalScheduleBResponse.pdf>

Alison Guth

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Alison Guth

From: Alison Guth
Sent: Wednesday, April 01, 2009 4:28 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: DNR drawdown proposal

Hello All,

The attached proposal was presented at the Water Quality Settlement Agreement meeting today by DNR. The group discussed using this proposal as a strawman for the language in the Settlement Agreement. If you plan on attending Friday's Water Quality meeting, please come prepared to discuss and/or edit this language for inclusion in the Settlement Agreement. Thanks, Alison



DNR Proposal -
Reservoir Drawd...

Alison Guth

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Recommendation to Address Reservoir Drawdowns in the Settlement Agreement

The SCDNR recommends that the settlement agreement include language as follows:

It is the desire of all parties to maintain lake levels in Lake Murray as close to the guide curve as possible. However, the Licensee acknowledges that reservoir drawdowns can be a cost effective management tool to address problems with undesirable aquatic plants, fisheries management, and water quality; and periodic reservoir drawdowns of Lake Murray may be utilized during the new license period as a management tool.

If a management problem arises in Lake Murray that involves aquatic plants or fish populations, a meeting will be convened between the Licensee and the appropriate resource agencies (DNR, FWS, DHEC) to discuss a management approach. Attempts should be made to reach a consensus based management decision. If it is agreed that any management activity is needed, the Licensee, in cooperation with the appropriate natural resource agency, will make a reasonable effort to communicate the nature of the problem and the recommended management approach to interested stakeholders.

The Licensee will maintain the option of conducting periodic winter drawdowns for water quality management. Recommendations for the frequency of drawdowns and a trigger are provided in the CE-QUAL-W2 water quality modeling report. According to that report, failure to maintain the recommended drawdown schedule will increase the risk of poorer water quality (sediment accumulation, weeds, increased nutrient cycling from the sediments especially in embayments, and greater potential TMDL designation by DHEC that could lead to very expensive sediment treatments) compared to current conditions. Periodic winter drawdowns should be conducted to maintain dissolved oxygen required to meet State standards.

Alison Guth

From: Elymay2@aol.com
Sent: Tuesday, March 31, 2009 8:45 PM
To: Dave Anderson; vejdaniv@dnr.sc.gov; BARGENTIERI@scana.com; marshallb@dnr.sc.gov; Dave Anderson; dhancock@scana.com; dchristie@comporium.net; kayakduke@bellsouth.net; Jennifer Hand; lbarber@sc.rr.com; malcolml@mailbox.sc.edu; mdavis@scprt.com; PatrickM@scccl.org; RMAHAN@scana.com; lakewatchman@yahoo.com; vinsont@dnr.sc.gov; tboozer@scana.com; tbeber@scprt.com; vhoffman@scana.com; Alison Guth; Alan Stuart
Subject: Re: Recreation Plan "Track Changes" Version



SaludaProjectRecreationPlan(20...

Dave

My comments are attached this time Joy

In a message dated 3/5/2009 11:24:09 A.M. Eastern Standard Time, Dave.Anderson@KleinschmidtUSA.com writes:

Recreation Management TWC Members:

As you have seen by now, I have distributed the RCG Draft of the Recreation Plan. As was mentioned in our last meeting, I am attaching the "Track Changes" version for your use. As you may notice, there are some "administrative" differences (e.g., spacing, table of contents updates, etc.) between this document and the RCG Draft--not important, but I wanted to point it out in case they caused any confusion.

See you in a couple of weeks.

Dave

<<Saluda Project Recreation Plan (2009-03-04;EDITSFORTWC).doc>>

A Good Credit Score is 700 or Above. [See yours in just 2 easy steps!](#)

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT *(FERC NO. 516)*

RECREATION PLAN FOR THE SALUDA HYRDOELECTRIC PROJECT (FERC NO. 516)

RCG DRAFT

Deleted: FINAL TWC

MARCH 2009

Deleted: DECEMBER 2008

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA
ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)

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RCG DRAFT

Deleted: FINAL TWC

MARCH 2009

Deleted: DECEMBER 2008

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

**RECREATION PLAN FOR THE SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

DRAFT

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Deleted: 5-9
Deleted: 5-12
Inserted: 5-12
Deleted: 5-11

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Deleted: 7-3

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1.0 PROJECT DESCRIPTION

The Saluda Hydroelectric Project (FERC No. 516), which includes Lake Murray and portions of the lower Saluda River, is an existing hydroelectric facility owned and operated by South Carolina Electric & Gas Company (SCE&G). The Project is located in Richland, Lexington, Saluda, and Newberry Counties, SC. The Project impounds the 48,000 acre Lake Murray, a popular recreation area for boating and fishing, having numerous public access sites and supporting several popular recreational sport fisheries.

The lower Saluda River, below the Saluda Dam, supports an active recreational fishery and offers a range of paddling experiences from flat water to whitewater with class II to class V rapids.

Deleted: (LSR)

1.1 Regional Setting

Lake Murray, the lower Saluda River, and the four surrounding counties (Richland, Lexington, Saluda, and Newberry) make up one complete tourism region defined as the Capital City/Lake Murray Country region by the South Carolina Department of Parks, Recreation and Tourism (SCPRT). This region of the state is home to many state, local, and municipal parks which provide a wide range of water and land-based recreation opportunities including hiking, biking, swimming, boating, and angling.

The region surrounding the Saluda Hydro Project includes portions of the Sumter National Forest, Sesquicentennial State Park, Harbison State Forest, and Congaree National Park. Numerous trails, game management sites, and state heritage preserves are also located in close proximity to the Project. In addition, several regional, county, municipal, and local parks are located within close proximity to the Project or provide access to project waters.

1.2 Lake Murray

Lake Murray supports an active recreational fishery and is an important boating resource. The lake is host to numerous national and local fishing

tournaments annually, and is stocked with striped bass each spring by the South Carolina Department of Natural Resources (SCDNR). Surplus bluegill and largemouth bass reared at the SCDNR hatcheries are occasionally stocked as well. The lake supports substantial boating activity, which includes power boats, canoes and kayaks, and sail boats. Lake Murray is the site of 6-8 regattas annually (Mead and Hunt, 2002). In addition, the lake is used as a focal point for holiday and tourist events such as the annual Lake Murray Poker Run and the Independence Day celebrations. There are 14 public access sites on Lake Murray owned by SCE&G. All but two, Dreher Island State Recreation Area and Larry L. Koon Boat Landing, are managed by SCE&G.

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1.3 Lower Saluda River

The lower Saluda River extends 11 miles from the outflow of the Saluda Dam to its confluence with the Broad River to form the Congaree River near downtown Columbia. Approximately 8 miles of the Lower Saluda River is within the project boundary line (PBL). Similar to the Lake, the lower Saluda River also supports an active recreational fishery. The cold waters of the river support a trout and striped bass fishery and offer a range of paddling experiences from flat water to whitewater with class II to V rapids. Approximately 10 miles of the river, from approximately one mile downstream of the Dam to the confluence with the Broad River, is designated by the South Carolina General Assembly (SC Code of Laws Title 49, Chapter 29 South Carolina Scenic Rivers Act) as a State Scenic River (SC Legislature, 1989). Segments of both the lower Saluda River and the Congaree River are also listed on the Nationwide Rivers Inventory (NRI) by the National Park Service (NPS) as possessing “outstandingly remarkable” natural or cultural values. The lower Saluda River from the dam to RM 3 is so designated because it “affords scenic wilderness experience in urban areas; diversified flora and fauna” (NPS, 2007). There are three formal public access sites owned by SCE&G on the lower Saluda River and two, Saluda Shoals Park and James R. Metts Landing, are managed by the Irmo-Chapin Recreation

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Commission (ICRC) and the Lexington County Recreation and Aging Commission (LCRAC), respectively.

2.0 DATA COLLECTION METHODS

As part of the Saluda Hydro Project relicensing process, several studies were undertaken during 2006 and 2007. These studies provide information and support conclusions and recommendations made in this Recreation Plan. A variety of data collection methodologies were employed during the performance of these studies. They included the following: vehicle counts, on-site interviews, literature searches, GIS and spatial analysis, carrying capacity analysis, level logger deployment, and HEC-RAS modeling, among other methods. The following are descriptions of the methodologies employed for each effort.

2.1 2006 Saluda Hydro Project Recreation Assessment

The purpose of the 2006 Saluda Hydro Project Recreation Assessment was to evaluate existing and future recreational use, opportunities, and needs for the Saluda Project (Kleinschmidt, 2007a). Specifically, the goals of this study were to characterize existing recreational use of SCE&G's recreation sites on Lake Murray and the lower Saluda River, and examine future recreational needs relating to public recreation sites. Primary data collection included site inventories and assessments, counts of vehicles at recreation sites, user surveys, and a waterfowl focus group. Secondary data collection included information from the SCPRT, aerial photographs of boating use on the lake, and available relevant literature. Analyses included current recreation use estimates derived from both vehicle counts and people per vehicle information provided in the user surveys, future recreation use estimates calculated using population growth rates as a proxy for future recreation participation rates, and recreation site capacities using parking as the determinate. Recreation needs to accommodate existing and future use were based on site inventories, conditions, capacity assessments, use estimates and projections, user preferences and opinions, and consultation with relicensing stakeholders.

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2.2 2007 Saluda Hydro Project Spring Use Addendum

In comments received on the draft 2006 Saluda Hydro Project Recreation Assessment described above, the SCPRT, SCDNR, and the Saluda River Chapter of Trout Unlimited (SRCTU) requested information concerning recreational use during winter/spring (January – May), particularly concerning specific user groups whom they expected to utilize lower Saluda River sites outside of the sampling frame of the 2006 Saluda Hydro Project Recreation Assessment.

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Therefore, the goals of the 2007 Saluda Hydro Project Spring Use Addendum were to collect additional information concerning spring use on Lake Murray and the lower Saluda River and to identify needs of selected recreational user groups for facilities on the lower Saluda River to support spring use (Kleinschmidt,

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2007b). Primary data collection entailed facilitated meetings and personal interviews of recreationists who use recreation sites on the lower Saluda River.

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Secondary data collection included the 2006 Saluda Hydro Project Recreation Assessment, the Lower Saluda Corridor Plan and Update, and other relevant literature. As with the Recreation Assessment, analysis included calculating current recreation use estimates by applying the percent of total annual use attributable to the months of January and May at Dreher Island State Recreation Area and Saluda Shoals Park to Lake Murray and lower Saluda River recreation site use estimates for Memorial Day through September 30, respectively. Future recreation use estimates were calculated using population growth rates as a proxy for future recreation participation rates. Perceptions of site conditions and needs on the lower Saluda River were obtained from a variety of sources including a literature review, trout angler focus group discussions, and on-site interviews.

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2.3 2007 Saluda Hydro Project Boating Density Assessment

The goals of the 2007 Saluda Hydro Project Boating Density Assessment were to identify the area available for recreational boating on Lake Murray by lake segment, to assess boat densities occurring under normal (weekend) and peak (holiday) use conditions, and to examine whether recreational boating use of Lake

Murray is currently above, below, or at a desirable, or optimal, level (Kleinschmidt, 2007c). The methodology employed for this effort was derived from standard accepted practices published in the Bureau of Outdoor Recreation (1977) *Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity and Management of Aquatic Recreation Resources* by Warren and Rea (1989). The data used for this study included an examination of existing aerial photographs (The Louis Berger Group, 2002) of recreational boating at the Project and information collected from the survey research portion of the 2006 Saluda Hydro Project Recreation Assessment. Combined, the information provided the inputs necessary to assess recreational boating densities on Lake Murray.

2.4 2007 Saluda Hydro Project Downstream Recreation Flow Assessment

The 2007 Saluda Hydro Project Downstream Recreation Flow Assessment examined downstream flows for the lower Saluda River for various types of recreation at different river reaches under different flow conditions (Kleinschmidt, 2008). The goals of the study included characterizing currently available recreation opportunities on the lower Saluda River, understanding the “rate of change” of the instream conditions of the lower Saluda River at various flows along various river reaches, and identifying potential public safety issues associated with lower Saluda River flows. This study undertook a three-phase approach. Phase I involved a literature review and desktop analysis of the recreation opportunities, patterns of use, physical characteristics, and hydrology of the lower Saluda River. Phase II involved a focus group, structured surveys and on-site reconnaissance of an expert panel of experienced recreationists to assess existing opportunities and the feasibility and potential quality of particular flow ranges for on-water activities. Phase III involved the deployment of water level data loggers at various predetermined intervals along the lower Saluda River. A HEC-RAS model was developed utilizing the level logger data for the purposes of determining maximum stages and rates of change (in feet) for scheduled flow events under simulated operating scenarios.

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3.0 SITE DESCRIPTIONS, USE ESTIMATES, BOAT DENSITIES, AND RECREATIONAL FLOW RECOMMENDATIONS

The following is a summary of the results of the studies related to recreation performed in support of this plan. Detailed results can be found in respective reports (Kleinschmidt, 2007a; 2007b, 2007c; 2008).

3.1 Recreation Site Descriptions

As of 2007, within the project boundary, there are approximately 130 public, commercial, and private recreation sites¹ supporting such facilities as boat launches, marinas, boat slips, wet and dry storage, campgrounds, picnic areas, beaches, fishing areas and piers, trails, playgrounds, and other facilities. There are 17 “Existing Recreation Sites” owned by SCE&G that function primarily as lake or river access, providing boat launches, shoreline angling, picnicking, and swimming areas. SCE&G has also set aside 10 additional sites that are designated as “Existing Future Recreation Sites.” One of these “Existing Future Recreation Sites,” Bundrick Island, is currently used by boaters as an informal site; there is no road access to the site. The other nine “Existing Future Recreation Sites” are available to the public, but no facilities or amenities are provided on these sites. Collectively, the “Existing Recreation Sites” provide two designated swimming areas, 19 boat launches or carry-in launches, 19 courtesy or fishing piers, and one campground. Restroom facilities are provided at nine of the 20 sites, and picnic tables are provided at 12 sites (Table 3-1). In addition to these sites, there are two overnight anchoring areas required by FERC Order 107 FERC ¶ 62,273 to be designated as Special Recreation Areas: Two Bird Cove and Hurricane Hole Cove. Also, there are 62 islands on Lake Murray available for public recreation use, including primitive camping. Locations of “Existing Recreation Sites,” “Existing Future Recreation Sites,” private sites, and commercial sites on Lake Murray and the lower Saluda River can be found in Appendix A. The following

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sections concentrate on the 17 “Existing Recreation Sites,” as well as Bundrick Island and two informal access sites on the lower Saluda River that are owned by SCE&G but outside the PBL (Mill Race)².

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¹ For purposes of this Recreation Plan, public recreation sites refer to sites that are open to the public without discrimination, and which are operated by federal, state, and local agencies or SCE&G. A commercial site refers to a site operated by a business for profit. A private site refers to a site open only to specific individuals via membership or residency requirements.

² Although the Mill Race sites are located outside the PBL, they were included in the recreation studies performed during the Saluda Hydro Relicensing Process in order to determine Project effects on recreational use of these sites.

Table 3-1. Existing Recreation Sites and Existing Future Recreation Sites at the Saluda Hydro Project (2007)

Name	Site Number	Type of Facility	Acres	# of Picnic Tables	# of Grills	# of Firepits/Rings	# of Boat Pump Outs	# of Trails	# of Shelters	# of Designated Swimming Areas	# of Stores	# of RV Dumping Stations	# of Potable Water	# of Boat Fuel Pumps	# of Trash Cans	# of Docks	# of Playgrounds	# of Showers	# of Concessions	# of Wet Slips	# of Parking Spaces	# of ADA Spaces	# of Flush Toilets	# of ADA Toilets	# of Portable Toilets	# of RV Sites	# of Cabin Sites	# of Tent Sites	# of Primitive Sites	# of Hard Surfaced Boat Launches	# of Gravel Boat Launches	# of Unimproved Boat Launches	# of Carry-in Launches	Total # of Boat Launch Lanes	# of Courtesy/Fishing Docks	# of ADA Compliant Courtesy/Fishing Docks			
Park Site - Lexington Side	1-01	Picnic Area	17.9	80	45	2	0	Multiple	27	1	0	0	2	0	12	0	0	0	1		343	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Larry L. Koon Boat Landing	1-02	Launch Ramp	1.8	4	2	1	0		1	0	0	0	0	0	1	1	0	0	0		49	2	2	0	0	0	0	0	0	0	0	0	0	0	2	1	1		
Shull Island	1-02A	Future	22.4																																				
Shull Island	1-02B	Launch Ramp	0.4	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0		8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
Murray Shores	1-03	Launch Ramp	1.6	7	3	1	0		1	0	0	0	0	0	1	1	0	0	0		50	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	1	0	
River Bend	1-04	Launch Ramp	11.6	5	1	6	0		1	0	0	0	0	0	2	2	0	0	0		84	0	2	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
Sunset	1-05	Launch Ramp	2.3	1	0	2	0		0	0	0	0	0	0	2	2	0	0	0		28	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	2	0
Simpson's Ferry	1-05A	Future	11.6																																				
Rocky Point	1-06	Launch Ramp	1.7	1	0	0	0		1	0	0	0	0	0	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	
Long Pine	1-06A	Future	31.4																																				
Hilton	1-07	Launch Ramp	4.4	5	2	0	0		2	0	0	0	0	0	3	2	0	0	0		37	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
Hilton	1-07A	Future	27.9																																				
Dam Site - Irmo Side	1-08	Picnic Area/Launch Ramp	6.8	23	13	3	0	Multiple	7	0	0	0	0	0	7	3	0	0	1		181	3	2	2	0	0	0	0	0	0	0	0	0	0	0	3	3	1	
Saluda Shoals Park	1-09	Picnic Area/Launch Ramp	240.0	50	6	0	0	Multiple	4	1	0	0	0	0	17	0	2	0	1		463	18	6	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
James R. Metts Landing	1-10	Launch Ramp	1.0	0	0	0	0		0	0	0	0	0	0	3	0	0	0	0		25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
Dreher Island State Recreation Area	1-11	Campground/Launch Ramp	348.0	219	133	0	2	Multiple	14	0	1	2	1	13	4	3	1	0	30		619	14	22	4	0	97	5	15	5	3	0	0	0	0	0	6	4	4	
Macedonia Church	1-12	Picnic Area	4.8	4	0	0	0		1	0	0	0	0	0	0	0	0	0	0		12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Higgins Bridge	1-13	Launch Ramp	1.1	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0		8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
Kempson Bridge	1-14	Launch Ramp	2.9	0	0	0	0		0	0	0	0	0	0	0	2	0	0	0		16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	
Gardendale	1-15	Launch Ramp	4.7	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0		40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
Water Treatment Plant	1-16	Future	4.3																																				
Stone Mountain	1-17	Future	26.5																																				
Cloud's Creek	1-18	Future	3.0																																				
Big Creek	1-19	Future	22.3																																				
Little Saluda Point	1-20	Future	15.4																																				
Bundrick Island	1-21	Future/Informal Site	87.9	0	0	0	0		0	0	0	0	0	0	2	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lake Murray Estates Park	1-22	Launch Ramp	7.7	2	2	0	0		0	0	0	0	0	0	1	2	0	0	0		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
Two Bird Cove ^a	1-23	Special Recreation Area																																					
Hurricane Hole Cove ^a	1-24	Special Recreation Area																																					
Islands ^b		Informal	100.0																																				

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^a SCE&G is proposing to remove the designation of “Special Recreation Area” from these two sites and remove them from the Recreation Plan.

^b There are 62 SCE&G-owned islands on Lake Murray that are available for public recreation use, including primitive camping. These islands have not been assigned a Site Number as there is no intention of developing the islands into formal recreation sites.

3.1.1 Lake Murray

SCE&G owns 14 “Existing Recreation Sites” on Lake Murray and has set aside 62 SCE&G-owned islands in Lake Murray as undeveloped, natural areas that are available for public recreation. Of the 14 “Existing Recreation Sites,” SCE&G operates 12 of them, and leases the remaining two sites, Dreher Island State Recreation Area and Larry L. Koon Boat Landing, to others for use as public recreation areas. With the exception of Dreher Island State Recreation Area and River Bend, all sites are operated for day-use only.

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3.1.2 Lower Saluda River

There are several formal and informal public access sites on the lower Saluda River, providing a range of water- and land-based recreation opportunities. Boating access for motorized water-craft is limited to the two most upstream access sites, Saluda Shoals Park and James R. Metts Landing, while carry-in access is available at these sites plus Gardendale and Mill Race A (upstream of Riverbanks Zoo and outside of the project boundary) and Mill Race B (downstream of Riverbanks Zoo and outside of the project boundary). Shoreline access for angling and swimming, sunbathing, sightseeing, and/or picnicking is available at all public access sites on the lower Saluda River.

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3.2 Existing and Future Recreation Use Estimates

Estimated and future recreation use estimates are compiled from two sources: the Recreation Assessment Study Report (Kleinschmidt, 2007a) and the Spring Use Addendum Study Report (Kleinschmidt, 2007b).

3.2.1 Existing Recreation Use

The Saluda Hydro Project supported approximately 634,000 recreation days at “Existing Recreation Sites” (plus Bundrick Island but excluding Two Bird Cove, Hurricane Hole Cove, and the islands) within the project boundary during the 2006 peak recreation season, defined as April 1st through September 30th in the 2003 FERC Form 80 Report on Recreational Resources (Table 3-3). Lake

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Murray experienced approximately 463,000 recreation days during this time period (73 percent of total use), while the lower Saluda River (excluding Mill Race) experienced a total of approximately 172,000 recreation days during the peak recreation season (27 percent of total use). Weekday use accounted for 49 percent of total use; 40 percent of total use occurred on weekends; and 11 percent of total use occurs on holidays. June and July account for the majority (40 percent) of total use during this time period. Total use reported in the 2003 FERC Form 80 was 1,250,000 recreation days annually, while the 1997 FERC Form 80 reported 1,200,000 recreation days annually at the Project (SCE&G, 1997; SCE&G, 2003).

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The most used “Existing Recreation Sites” on Lake Murray (including Bundrick Island) were Dreher Island State Recreation Area (116,670 recreation days or 25 percent of total use), and Bundrick Island (94,570 recreation days or 20 percent of total use), Dam Site - Irmo Side (54,460 recreation days or 12 percent of total use), and Larry L. Koon Boat Landing (54,080 recreation days or 12 percent of total use). The sites with the least amount of use, equal to or less than 1 percent of total use, were Rocky Point (330 recreation days), Higgins Bridge (3,090 recreation days), and Kempson Bridge (5,620 recreation days).

Because all of the “Existing Recreation Sites” provide access to Lake Murray, it is not surprising that the majority of activities that individuals participated in at these sites were water-based recreation activities (80 percent). Fishing, from either a boat or the bank, was by far the most participated in activity by users of Lake Murray sites (53 percent of total use). After fishing, motor boating (14 percent of total use), swimming (8 percent of total use), and picnicking (5 percent of total use) were popular activities. These sites also supported limited land-based activities such as walking/hiking, sightseeing, and picnicking.

Table 3-3. Estimate of Recreation Days for Saluda Hydro Project Existing Recreation Sites (plus Bundrick Island) by Month and Day Type, April 1 through September 30, 2006

	Lake Murray Sites	Lower Saluda River Sites	Mill Race Sites ^a	Total
April				
Weekdays	42,830	17,400	5,570	65,800
Weekends	35,230	6,390	2,880	44,500
Holidays	0	0	0	0
Total	78,060	23,790	8,450	110,300
May				
Weekdays	31,100	16,180	3,190	50,470
Weekends	37,410	5,720	4,600	47,730
Holidays	20,220	4,430	1,570	26,220
Total	88,730	26,330	9,360	124,420
June				
Weekdays	52,800	23,850	13,390	90,040
Weekends	43,440	8,760	6,910	59,110
Holidays	0	0	0	0
Total	96,240	32,610	20,300	149,150
July				
Weekdays	34,300	22,780	4,200	61,280
Weekends	29,860	11,390	5,530	46,780
Holidays	20,950	6,500	1,690	29,140
Total	85,110	40,670	11,420	137,200
August				
Weekdays	26,170	8,180	3,360	37,710
Weekends	30,270	13,350	2,790	46,410
Holidays	0	0	0	0
Total	56,440	21,530	6,150	84,120
September				
Weekdays	20,310	16,310	1,790	38,410
Weekends	24,430	5,770	2,580	32,780
Holidays	13,210	4,480	880	18,570
Total	57,950	26,560	5,250	89,760
Total				
Weekdays	207,510	104,700	31,500	343,710
Weekends	200,640	51,380	25,290	277,310
Holidays	54,380	15,410	4,140	73,930
TOTAL	462,530	171,490	60,930	694,950

^a Outside the project boundary.

The lower Saluda River supported an estimated 232,420 recreation days total, 171,490 recreation days within the project boundary and roughly 60,930 recreation days outside the project boundary at the Mill Race sites, from April 1st through September 30th, 2006. The most used sites were Saluda Shoals Park (135,050 recreation days or 58 percent of total use on the lower Saluda River), Mill Race B (37,950 recreation days or 16 percent of total use), James R. Metts Landing (24,520 recreation days or 11 percent of total use) and Mill Race A (22,980 recreation days or 10 percent of total use). The site with the least amount of use was Gardendale (11,930 recreation days or 5 percent of total use).

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Activities participated in by users of the lower Saluda River sites were varied. About half of the activities that individuals participated in at these sites were water-based recreation activities (51 percent). As with the Lake Murray sites, fishing, either wading or from a boat, pier, or the bank, was the most participated in activity at lower Saluda River sites (21 percent of total use). Canoeing and kayaking, both flatwater and whitewater, comprised 20 percent of total use, making paddling the second most popular activity. Sightseeing/wildlife viewing was the third most popular activity on the lower Saluda River (13 percent of total use), followed by hiking/walking (12 percent of total use).

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3.2.2 Future Recreation Use

SCPRT reports that approximately 90 percent of participation in outdoor recreation occurs in an area close to a resident's home for day to day activities (SCPRT, 2002). Activities that require special environments, such as boating and fishing, generally occur within a region of slightly greater proportions around a resident's home, but still nearby to their residence. At the Saluda Hydro Project, a majority of the recreation activity occurring from "Existing Recreation Sites" was attributed to residents of nearby local communities, either shoreline property owners or individuals residing in Columbia, Irmo, Lexington, Gilbert, Newberry, Prosperity and Chapin, and other communities surrounding the lake and the lower Saluda River. A smaller portion of recreational use at the Project was attributed

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to a more regional population from the outskirts of Richland, Lexington, Saluda, and Newberry Counties.

Because of the association of locality with recreation participation, population growth is typically a good indicator of future recreational use. Cordell et al. (2004) reports that “[p]opulation has been, is, and will be the major driver of outdoor recreation participation growth in this country.” In fact, between 1960 and 2000, the population of southern states grew more rapidly than any other region in the United States (Cordell and Tarrant, 2002). The population of the counties around the lake (Richland, Newberry, Saluda, and Lexington) increased by 4.1 percent between 2000 and 2005 and is projected to increase by another 24.0 percent by the year 2030 (SCBCB, 2005). For counties surrounding the lower Saluda River – Richland and Lexington – population is expected to increase by 31.3 percent from 2005 to 2030, with Lexington County having the fastest population growth of the area, at 41.6 percent from 2005 to 2030 (SCBCB, 2005). If participation in recreation increases at a similar rate, one can expect to see significant increased demand for recreation opportunities in the future, including at those sites that were estimated to be reaching capacity and, in a few cases, exceeding capacity under current use levels.

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Estimated recreation use stemming from “Existing Recreation Sites” (including Bundrick Island) at the Saluda Hydro Project could total almost 784,270 recreation days during the recreation season, April 1st through September 30th in the year 2030 -- an increase of approximately 165,000 recreation days (24 percent) over 2006 levels (Table 3-4). Use of Lake Murray public access sites could increase by roughly 110,000 recreation days by the year 2030; use of lower Saluda River access sites (including Mill Race) could increase by approximately 55,000 recreation days in the same time period. Since this estimate of future recreation days was based on population projections, which will likely change over time, a process has been developed to adjust this plan periodically over the life of the license (see Section 6.2). Applying current outdoor recreation trends and existing public recreation facilities, fishing will likely continue to be the dominant activity at the Project in the year 2030.

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Table 3-4. Estimated Future Recreation Days from Existing Recreation Sites (including Bundrick Island) at the Saluda Hydro Project

	Use Estimates (2006)	Estimated Future Participation				
		2010	2015	2020	2025	2030
Population Growth Rates		4.87%	4.62%	4.37%	4.19%	3.68%
Lake Murray Sites	462,530	485,060	507,460	529,640	551,830	572,140
Lower Saluda River Sites	171,490	179,840	188,150	196,370	204,600	212,130
Mill Race Sites	60,930	63,900	66,850	69,770	72,690	75,370
TOTAL	694,950	728,790	762,460	795,780	829,130	859,640

3.2.3 Adequacy of Existing Recreation Sites to Accommodate Existing and Potential Future Recreational Use

During the 2006 recreation season, the capacities of “Existing Recreation Sites” around the lake and on the lower Saluda River were estimated. “Existing Recreation Sites” at the project were generally well used with several sites reportedly being used at their design capacity, particularly on weekends and holidays³. The current capacity at which public access sites are used was estimated for all sites with the exception of Bundrick Island, which does not have a parking area, and is used mainly by boaters.

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Results suggested that Dam Site - Irmo Side, Park Site - Lexington Side, Rocky Point and Dreher Island State Recreation Area on Lake Murray are consistently used within their design capacities, regardless of day type (weekend, weekday or holiday), and could accommodate additional use. Three sites, River Bend, Higgins Bridge, and Kempson Bridge, are currently used at rates

³ For the purposes of this Plan, sites were considered to be utilized within their design capacities if parking areas were less than 75 percent full on weekends. Use is considered to be approaching capacity if parking areas were between 75 and 99 percent full on weekends. Use is considered to be exceeding capacity if parking areas were greater than 99 percent full on weekends.

approaching capacity, though this trend was only observed on holidays for River Bend and Kempson Bridge.

The remaining seven sites were observed to be used at rates that regularly meet or exceed their design capacities on some or all day types. Larry L. Koon Boat Landing and Shull Island are used beyond their capacities, regardless of day type. Lake Murray Estates Park is utilized at rates that exceed its capacity on weekends, and use exceeds capacity on weekends and holidays at Sunset and Hilton. Capacity is exceeded on holidays at Murray Shores but this site is consistently used within its design capacity on weekdays and weekends. Use at Macedonia Church is considered to exceed design capacity on weekdays and weekends.

3.3 Boat Densities on Lake Murray

In addition to the capacity at which “Existing Recreation Sites” along Lake Murray are being used, the boating density study identified the area available for recreational boating on Lake Murray by lake segment (Appendix A), assessed boat densities occurring under normal (weekend) and peak (holiday) use conditions, and determined whether recreational boat use of Lake Murray was currently above, below, or at a desirable, or optimal, level.

Results of the boating density study (Kleinschmidt, 2007c) showed that Lake Murray is currently utilized well below its recreational boating capacity. Weekend percent capacity only exceeds 20 percent in Segment 2. Six segments (1, 6, 7, 8, 10, and 12) had weekend percent capacities between 10 percent and 20 percent, with the remaining five segments (3, 4, 5, 9, and 11) being below 10 percent capacity on weekends. Percent capacity averaged about 12 percent on weekends across the entire reservoir. Holiday use, which is the peak use time for the reservoir, was higher in most segments, leading to higher percent capacities on holidays. Four segments (1, 2, 10, and 12) had percent capacities over 20 percent, with Segment 1 having the highest percent capacity (26 percent). Six segments (3, 5, 6, 7, 8, and 11) had percent capacities between 10 percent and 20 percent. The remaining two segments (4 and 9) were still below 10

percent capacity on holidays. Percent capacity averaged about 16 percent on holidays across the entire reservoir.

3.4 Recreational Flow Recommendations on the Lower Saluda River

As stated previously, about half of the total use at “Existing Recreation Sites” on the lower Saluda River is water-based activities. Based on the results of Kleinschmidt (2008), the range of acceptable flows for water-based activities varies by experience level. Generally, whitewater boating opportunities are available at all water levels ranging from 500 cfs and up and are favorable at flows of between 2,300 cfs (rated “good” to “excellent” during the on-site reconnaissance) up to 18,000 cfs. Flatwater canoeing/kayaking, like whitewater boating, is generally available at all water levels ranging from 500 cfs and up, from Metts Landing/Saluda Shoals Park to Gardendale. Power boating, including fishing from a boat, is generally best at flows between 1,000 cfs and 4,000 cfs.

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Activities requiring lower flows include wade angling, swimming, and rock hopping. Because these activities involve full or partial body contact with the water, they are best suited at flows that provide minimized current, shallower depths, exposed rocks and shoals, and the presence of eddies. According to Kleinschmidt (2008), wade angling, swimming, and rock-hopping are best enjoyed at flows between 500 and 1,100 cfs.

To some degree, any number or all of the most popular on-water activities are available at flows of 4,000 cfs and less. Boating activities are generally available at flows of between 1,000 cfs and 4,000 cfs. Non-boating on-water activities, such as swimming and wade angling, are best suited for flows of 1,000 cfs or less. Daily average flows of less than 1,000 cfs are generally available 38 percent of the time year-round; hourly average flows of less than 1,000 cfs are generally available 60 percent of the time year-round. Flows of less than 4,000 cfs, daily average, are generally available 83 percent of the time year-round and flows of less than 4,000 cfs hourly average are generally available 27 percent of the time year-round. Higher flows, for whitewater activities such as canoeing/kayaking and rafting, of 12,000 cfs or greater are generally only available approximately 2 percent of the time year-round on a daily average and hourly average basis. However, daily average flows represent a range of flows provided

on a daily basis and hourly average flows on an hourly basis. Therefore, peak flows of 12,000 cfs and higher for specific durations are provided much more often than 2 percent of the time year-round.

4.0 CONSULTATION PROCESS AND METHODOLOGY

Beginning in November 2005, SCE&G has undertaken an extensive consultation process associated with the Saluda Hydro Project Relicensing. After issuance of the Initial Consultation Document (ICD), SCE&G formed the Recreation Resource Conservation Group (RCG) to discuss and resolve recreation-related issues submitted in response to the ICD. The first meeting of the Recreation RCG was held on November 18, 2005. At subsequent meetings, smaller Technical Working Committees (TWC) were formed to deal with specific issues raised during the initial RCG meeting. In the Recreation RCG, three TWCs were formed to deal with recreation-related issues: Recreation Management, Downstream Flows, and Lake Levels. In total, the Recreation RCG and its associated TWCs met over 20 times from 2005 to 2008. Membership lists and meeting minutes are available in Appendix B.

After the formation of the TWCs, the Recreation RCG continued to develop a Work Plan, which included a Mission Statement, Identified Issues, RCG Responsibilities, Tasks and Products, Schedule, and Possible Mitigation Measures to be Considered. The Recreation RCG also developed a Recreation Vision Statement for the Saluda Project and agreed on a Standard Process to aid in the development of this Plan. The Standard Process is further described in Section 4.1 and Section 4.2. The final Work Plan, Vision Statement, and Standard Process can be found in the Recreation RCG Working Documents in Appendix C.

The Recreation Management TWC was tasked with dealing with issues associated with future recreational needs at the Saluda Hydro Project, including facility upgrades and policy. This TWC was used to complete three studies: the Recreation Assessment Study Report (Kleinschmidt, 2007a), the Spring Use Addendum Study Report (Kleinschmidt, 2007b), and the Boating Density Report (Kleinschmidt, 2007c). The results of these studies were described in previous sections and provide the necessary background information for recreation planning at the Saluda Hydro Project.

The Downstream Flows TWC was tasked with developing a schedule of recreational releases for the lower Saluda River. This TWC completed one study: the Downstream Recreation Flow Assessment Report (Kleinschmidt, 2008). The results of this study applicable to recreational flows were described in a previous section. Upon completion of this report, the

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Downstream Flows TWC met several times to agree on a recreational flow schedule for the Saluda Hydro Project.

The Lake Levels TWC was tasked with determining an appropriate lake level for recreational activities and examining the effects of various lake levels on recreation. Using results from a previous study (The Lake Murray Association, 2006) and utilizing the Standard Process Questions, the Lake Levels TWC agreed on two lake level scenarios submitted to the Operations RCG.

4.1 Standard Process

In order to remain focused on those issues relevant to the Recreation RCG, the group agreed to use a Standard Process to guide decision making during the consultation process.

4.2 Standard Process Steps and Questions

The four steps of the Standard Process are intended to ensure that all facility improvements and needs identified through the consultation process are consistent with desired future conditions. The first step was to determine desired future condition. This was accomplished through identifying the issues, finalizing the Vision Statement, and completing the first set of questions on the Standard Process Form. The second step was to establish baseline conditions. This was accomplished through the various studies performed during the consultation process. The third step was to determine what actions are needed and when they should occur. This step was accomplished through consultation with the Recreation RCG and was based on results of the various studies performed. Finally, the final step was the consultation associated with various proposals for recreation facility improvements at the Saluda Hydro Project.

4.3 Recreation Solution Principles

Early in the consultation process, the Recreation RCG agreed that it needed a set of “guidelines” to assist with recreation planning to ensure any facility improvements would take into consideration the various issues at the Saluda Hydro Project. The result

was a set of Solution Principles. These Solution Principles can be found in the Recreation RCG Working Documents in Appendix C.

5.0 RECREATION SITE RECOMMENDED IMPROVEMENTS AND DEVELOPMENT

Perceptions of those interviewed at public recreation sites suggest that sites are generally not crowded and in good condition overall. It is desirable to maintain those perceptions and the diversity of the recreation experiences provided while accommodating additional use. However, while many sites accommodate American with Disabilities Act (ADA) compliant parking, few sites are developed to provide a high level of barrier free access. Most sites are not staffed but are frequented regularly by managing personnel and/or law enforcement to check on site and safety conditions. Nonetheless, improved maintenance was recommended for the majority of recreation sites. Specific improvement to “Existing Recreation Sites” and development of “Proposed Recreation Sites” are described in Section 5.1 and 5.2. “Existing Recreation Sites” that do not need improvement, whether because they are not well used or are in satisfactory condition, are described in Section 5.3.

5.1 Proposed Improvements at Existing Recreation Sites

Lake Murray Sites

Larry L. Koon Boat Landing (1-02; 1.8 acres)

Larry L. Koon Boat Landing is a large formally developed boat launch. The site is considered in very good condition by visitors. It ranks 4th in patronage among Lake Murray public access sites, accommodating 12 percent of all use estimated for the peak season. The site is partially ADA compliant. This site is most commonly used for boat fishing. This is a very popular boat launch, and is well used, frequently to capacity. Of all public access sites on the lake, patrons rated this site as being most crowded. SCE&G owns the site but it is leased to the LCRAC. The LCRAC will continue to be responsible for operation and maintenance (O&M) of the site. At this site, in order to relieve the capacity issues, enhance barrier free access, and eliminate an issue related to the entrance/exit, SCE&G will:

- Evaluate alternatives to increase parking capacity (such as overflow parking at Shull Island [1-02A]);
- Identify substitute sites through education (web site, maps, etc.);
- Pave an ADA compliant path from the parking lot to the restroom facilities; and
- Widen the existing driveway to eliminate the “trailer drop” into the drainage ditch.

Shull Island (1-02B; 0.4 acres)

Shull Island is located adjacent to Larry L. Koon Boat Landing. It is relatively undeveloped site with a gravel lot and launch. This site generally serves as overflow for Larry L. Koon Boat Landing. The site is considered by users to be in very good condition. It ranks 6th in patronage among all public access sites at the Lake, accommodating approximately 5 percent of all use. This site is not ADA compliant. Boat fishing and swimming are the primary uses of this site. This site is a popular boat launch, frequently used to its capacity. This site should be managed in concert with Larry L. Koon Boat Landing, to accommodate additional parking. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

Murray Shores (1-03; 1.6 acres)

Murray Shores is predominantly a boat launch site. Boat fishing is the most popular activity at this location. It is well developed, and also supports SCE&G’s Shoreline Stabilization Demonstration Project. Murray Shores is considered by its users to be a little above average in its condition. It ranks 7th in use among all public access sites, accommodating approximately 5 percent of all estimated use at public access sites at Lake Murray. This site is not ADA compliant. The site accommodates current levels of use and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to make the site easier to find, enhance barrier free access, improve safety, and relieve potential future capacity issues, SCE&G will:

- Install additional directional signs to the site (working with Lexington and/or Saluda counties);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Stripe the existing parking lot;
- Install additional lighting; and
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility.

River Bend (1-04; 11.6 acres)

River Bend is a formal day use access site, with facilities to support shoreline fishing, picnicking, and boat launching. It is considered by patrons to be slightly above average in condition. It ranks 5th in usage among the public access sites on the lake, accommodating approximately 7 percent of all estimated use. This site is partially compliant with the ADA. This site is estimated to be used below design capacity (except for holidays) and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve barrier free access, relieve potential future capacity issues, and expand the site for potential future use, SCE&G will:

- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- ~~Pave and stripe the existing overflow parking area; and~~
- Add 5.9 acres for future use (Site 4B).

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Sunset (I-05; 2.3 acres)

Sunset is a day use site used primarily for picnicking, shoreline fishing, and some swimming. The site is considered by users to be in very good condition. It ranks 8th in usage among the lake sites, accounting for approximately 4 percent of total estimated use. This site does not provide barrier free access. Estimated use is at the site's design capacity. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to provide barrier free access, relieve potential future capacity issues, and expand the site for potential future use, SCE&G will:

- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary);
- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Pave and stripe existing parking area;
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Install stabilization material on the sides of the existing boat ramp to eliminate drop-off conditions;
- Construct an additional ADA compliant paved parking lot; and
- Add 29.9 acres for future use.

Hilton (I-07; 4.4 acres)

Hilton is a formal day use site with a boat launch, picnic facilities, and a fishing pier. The site is considered to be in near excellent condition by its users, and ranks 9th in usage among all lake sites. It accommodates approximately 3 percent of all estimated use at the lake stemming from public access sites. Boat fishing is reported as the primary activity at this site. This site does not offer barrier free access. Estimated use is at the site's design capacity. SCE&G owns the site and will continue to be responsible for

O&M of the site. At this site, in order to improve barrier free access and improve safety, SCE&G will:

- Refurbish the existing courtesy dock for ADA compliance (including an ADA compliant path, as necessary);
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Install additional lighting; and
- Construct an ADA compliant fishing pier (including an ADA compliant path, as necessary).

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Dam Site - Irmo Side (1-08; 6.8 acres)

Dam Site - Irmo Side is a well-developed day use recreation area that functions primarily as a boat launch. It is located on the north side of the Saluda Dam. The site is considered well maintained by users. It ranks third in patronage among all public access sites at the Lake, accommodating 12 percent of all estimated use during the peak season. Primary uses of this site are fishing from shore, pier/dock, or boat. It is partially compliant with the ADA. This site is estimated to be used below design capacity and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve barrier free access and relieve potential future capacity issues, SCE&G will:

- Construct an ADA compliant courtesy dock (including an ADA compliant path, as necessary);
- Refurbish the existing fishing pier for ADA compliance (including an ADA compliant path, as necessary); and
- Pave an ADA compliant path to the existing restroom facilities.

Higgins Bridge (1-13; 1.1 acres)

Higgins Bridge is a rural site with a small, single lane boat launch. It provides access to the upper Saluda River. This site is considered by users to be in average condition. There are no support facilities at this location. The site ranks 14th in usage among all 15 public access sites on the lake, accounting for approximately 1 percent of estimated use. This site does not offer barrier free access. Estimated use at this site is approaching design capacity but the site can absorb some additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

Kempson Bridge (1-14; 2.9 acres)

Kempson Bridge is a newly redeveloped site used primarily for boat launching and shoreline fishing. It is considered to be in near excellent condition. It is ranked 13th in usage with about 1 percent of all estimated use for the lake. This site is partially compliant with the ADA. The site is estimated to be used below design capacity (except for holidays) and can absorb additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to improve available amenities, SCE&G will:

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- Install an ADA compliant vault type restroom facility (including an ADA compliant path, as necessary); and
- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary).

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Lake Murray Estates Park (1-22; 7.7 acres)

Lake Murray Estates Park is a formal day use site, with facilities supporting shoreline fishing, boat launching, and picnicking. The site is located in a residential

neighborhood, near a gated community. This site is difficult to find without detailed directions. Users of this site consider it to be in very good condition. It is ranked 10th in usage among all 15 public access sites, accommodating approximately 3 percent of all estimated use. This site does not provide barrier free access. This site is estimated to be approaching design capacity but can absorb some additional use. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, in order to make the site easier to find, improve available amenities, and relieve potential future capacity issues, SCE&G will:

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- Install additional directional signs to the site (working with Saluda County);
- Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary), depending on availability of a sewer connection. If a sewer connection is not available at the scheduled time of construction, SCE&G will install an ADA compliant vault type restroom facility;
- Pave and stripe existing parking area; and
- Pave an ADA compliant path from the parking lot to the existing fishing pier.

Two Bird Cove and Hurricane Hole Cove (1-23 and 1-24)

The designation required by FERC Order 107 FERC ¶ 62,273 for Two Bird Cove and Hurricane Hole Cove will be removed.

Lower Saluda River Sites

James R. Metts Landing (1-10; 1.0 acres)

James R. Metts Landing is predominantly a boat launch site located across the river from Saluda Shoals Park. This site was ranked by its patrons as being in very good condition, the largest percentage of whom use the site for fishing. It ranks 3rd in usage among all the lower Saluda River sites, accommodating approximately 11 percent of estimated use. This site is used at capacity. SCE&G owns the site but it is operated by the LCRAC. The LCRAC will continue to be responsible for O&M of the site. At this site, SCE&G will:

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- Add two ADA compliant picnic tables (including an ADA compliant path, as necessary); and
- Construct a bank fishing area.

Gardendale (1-15; 4.7 acres)

Gardendale is a relatively informal access site, with walk-in access and a carry-in launch. Canoeing/kayaking was the most popular activity at this site. Park patrons rated the condition of this site as good to very good. Gardendale is the least used of all the lower Saluda River sites, ranking 5th, and accounting for approximately 5 percent of all use. This site does not provide barrier free access. The site is estimated to be used at capacity on weekends. SCE&G owns the site and will continue to be responsible for O&M of the site. At this site, SCE&G will:

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- Explore a lease for the property to the ICRC.

5.2 Proposed Future Recreation Sites

In addition to the above proposed improvements at “Existing Recreation Sites,” stakeholders recommended that SCE&G set aside additional project lands for future recreation development. As part of the rebalancing of shoreline classifications conducted in the Lake and Land Management TWC, which included input from the Recreation Management TWC, SCE&G agreed to designate approximately 200 acres and 10 shoreline miles as Recreation (project lands) as well as to include 900 acres of land from outside the project (proposed project lands) in the Recreation classification. These lands have been determined to be topographically suitable for recreational use, free of sensitive resources such as rare, threatened, or endangered (RTE) species, fish spawning beds, wetlands, etc.; and would not be expected to exacerbate current on-water use patterns. These lands include the “Existing Future Recreation Sites” shown in Table 3-1 as well as some additional lands to accommodate future recreational use of the Project. The location of these proposed lands is shown in Appendix D. SCE&G currently owns these properties but may lease the property during the new license term. If the property is

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leased during the new license term, SCE&G will inform FERC as to the change in status of the property. These “Proposed Future Recreation Sites” (pending FERC approval of this plan) are:

Lake Murray

Existing Future Recreation Sites

Shull Island (1-02A; 22.4 acres)

Simpson’s Ferry (1-05A; 11.6 acres)

Long Pine (1-06A; 31.4 existing acres,
additional 20 acres proposed)

Hilton (1-07A; 27.9 acres)

Water Treatment Plant (1-16; 4.3 acres)

Stone Mountain (1-17; 26.5 acres)

Cloud’s Creek (1-18; 3.0 acres)

Big Creek (1-19; 22.3 existing acres,
additional 15 acres proposed)

Little Saluda Point (1-20; 15.4 existing acres,
additional 14.2 acres proposed)

Bundrick Island (1-21; 87.9 acres)

Proposed Future Recreation Sites

Old Corley Bridge Road (1-25; 2.0 acres)

Shealy Point Tract (1-26; 40.1 acres)

Shealy Road Access Area (1-27; 27.6
acres)

Rocky Creek (1-28; 648.0 acres)

Little River/Harmon’s Bridge (1-29; 2.8
acres)

Crayne’s Bridge Public Park (1-30; 47.9
acres)

Lower Saluda River

Existing Future Recreation Sites

Proposed Future Recreation Sites

Twelve-mile Creek (1-31; 52.0 acres)

Candi Lane (1-32; 3.1 acres)

Lower Saluda River (320.2 acres)

5.3 Proposed Development of Future Recreation Sites

Several locations have been identified through review of existing recreation management plans, consultation with the Recreation Management TWC, and results of relicensing recreation studies conducted for the Project. As a result, the following sites will be developed within the first ten years of license issuance to accommodate increased future recreational use of project waters.

Lake Murray Sites

Cloud's Creek (1-18; 3.0 acres)

Cloud's Creek is located on the south side of the reservoir at the Spann Road bridge, near the intersection of Spann Road and US Hwy 378. SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to provide a take-out/put-in on the Cloud's Creek Canoe Trail, SCE&G will:

- Construct a gravel parking lot for approximately 8 to 10 vehicles; and
- Construct a carry-in launch; and
- Install directional signs to the site (working with Saluda County).

Little Saluda Point (1-20; 29.6 acres)

Little Saluda Point is located on the south side of the reservoir at the Hwy. 391 bridge, near the intersection of Highway 391 and US Highway 378, adjacent to an existing commercial site, Little River Marina. The existing gravel parking lot, which contains an estimated 10 spaces for vehicles, will be utilized for parking (with permission of Little River Marina). SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to improve bank fishing access on Lake Murray, SCE&G will:

- Construct two ADA compliant fishing piers (including an ADA compliant path, as necessary); and
- Install shoreline stabilization materials as necessary.

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Old Corley Bridge Road (1-25; 2.0 acres)

Old Corley Bridge Road is located on the west side of Cloud's Creek approximately four miles off of US Highway 378 on Corley Bridge Road. SCE&G owns the site and will be responsible for O&M of the site once completed. At this site, in order to provide a take-out/put-in on the Cloud's Creek Canoe Trail, SCE&G will:

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- Construct a gravel parking lot for approximately 8 to 10 vehicles;
- Construct a carry-in launch; and
- Install directional signs to the site (working with Saluda County).

Lower Saluda River Sites

Twelve-mile Creek (1-31; 52.0 acres)

Twelve-mile Creek is located approximately 3.5 miles below the Saluda Dam and about 2 miles from the boat launches at Saluda Shoals Park and James R. Metts Landing. The site can be accessed via Corley Mill Road from US Highway 378. At this site, SCE&G will:

- Explore a lease for the property to the LCRAC.

Candi Lane (1-32; 3.1 acres)

Candi Lane is located approximately 8.5 miles below the Saluda Dam and about 3.5 miles below the Gardendale site. This site is primarily intended to be a take-out above the Mill Race rapids, approximately 0.5 miles downstream. The site can be accessed via Greystone Blvd from Interstate 126. At this site, SCE&G will:

- Explore a lease for the property to the City of Columbia.

5.4 Existing Recreation Sites Not Needing Improvements at This Time

During the course of development of this Recreation Plan, several sites were identified that may need improvements but which are unfeasible for a given reason. SCE&G will continue to monitor site conditions over time to check on user perceptions of the condition ratings at these sites. This will be done informally by staff. If conditions warrant improvements at these sites, they will be detailed in future addenda (see Section 6.2).

Lake Murray Sites

Park Site - Lexington Side (1-01; 17.9 acres)

Park Site - Lexington Side is a newly renovated seasonal day use site, positioned on the south side of the Saluda Dam. Park Site - Lexington Side is the only site that was rated as being in poor condition by patrons, and then only on weekdays. Patronage was also lower than expected at this site. However, it is likely that these results were due to low water levels, beach closure early in the season at a site that is first and foremost a swimming beach, and heavy road construction on Route 6 in 2006. Internal records of revenue collected at this site show that 2006 use at this site was just two percent of historical use (prior to construction beginning on the back-up Saluda Berm). It ranks 12th in patronage among all public access sites at the Lake, accommodating one percent of all estimated use during the peak season. Primary use of this site is picnicking (although swimming may increase in use as road and site construction are now concluded). This site provides very good compliance with the ADA. This site is estimated to be used below design capacity and can absorb additional use.

No improvements are schedule for Park Site - Lexington Side during the first ten years of the new license. Park Site - Lexington Side was recently renovated (completed in 2007); therefore, Recreation RCG members felt that no improvements were needed.

Site conditions will continue to be monitored informally by SCE&G staff. SCE&G will continue to be responsible for O&M at this site.

Rocky Point (1-06; 1.7 acres)

Rocky Point is a relatively rural day use site. It is small compared to other locations with a boat launch. Rocky Point receives very limited usage, ranking 15th (last) in usage among all the lake sites. It accommodates less than one percent of all estimated use for the public access areas on the lake. This site does not provide barrier free access. This site is estimated to be used below design capacity and can absorb additional use.

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Since Rocky Point receives such little use, Recreation RCG members decided that no improvements were needed at this time. Site conditions will continue to be monitored informally by SCE&G staff. SCE&G will continue to be responsible for O&M at this site.

Dreher Island State Recreation Area (1-11; 348.0 acres)

Dreher Island State Recreation Area is the largest park on the lake in terms of physical area. The Park is formally developed, managed by SCPRT, and provides numerous facilities for day use (boat launches, picnic areas, etc.) and overnight use (campground, villa rentals). The site is considered by its users to be in very good condition. Dreher Island ranks 1st in usage among all lake sites. It accommodates approximately 25 percent of all estimated use at the lake. This site is in compliance with the ADA. This site is estimated to be used below design capacity for day use activities and can absorb additional use.

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Although Dreher Island State Recreation Area accommodates the most use of all sites on Lake Murray, the site was designed to receive this much use and appears to be used below its capacity. SCE&G will continue to informally consult with park staff to determine if future improvements are necessary. SCPRT will continue to be responsible for O&M at this site.

Macedonia Church (1-12; 4.8 acres)

Macedonia Church is a shoreline area used primarily for bank fishing. The site is located adjacent to the church for which it is named. It is considered by users to be in very good condition. It ranks 11th in usage among all of the lake access sites, accommodating 1 percent of estimated use. This site does not provide barrier free access. Estimated use is at the site's design capacity; however, patrons frequently use the church parking area for overflow parking.

Since this site receives little use overall, and is considered to be in satisfactory condition, no improvements to this site have been scheduled at this time. SCE&G will continue to informally monitor site conditions. SCE&G will continue to be responsible for O&M at this site.

Bundrick Island (1-21; 87.9 acres)

Bundrick Island is an undeveloped area on a peninsula that juts into the Lake. It provides a fairly remote, undeveloped wooded setting with natural sand beaches on the shoreline. Vehicular access is prohibited. The site serves primarily as a day use area for boaters. The site is very popular, ranking 2nd in patronage among all public access sites, accommodating approximately 20 percent of all estimated use. This site is not ADA compliant. In addition to boating activities, this site supports primitive camping, picnicking and bicycling.

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Although Bundrick Island could potentially be a large park on the southern side of the reservoir near the town of Lexington, Recreation RCG members felt that the site should continue to be managed in its current state for as long as possible. The site serves a unique population and is obviously well liked by patrons. SCE&G will continue to informally monitor this site to see if perceptions change.

Lower Saluda River Sites

Saluda Shoals Park (1-09; 240.0 acres)

Saluda Shoals is a large community park on the lower Saluda River. It provides two miles of trail along the river, access for wade and bank fishing, boat launch, picnic shelters, and a water spray park. It is the only site with a dog park and bridle trails. Saluda Shoals was rated by respondents as being in nearly excellent condition. The site ranks 1st in usage, accounting for 58 percent of all use estimated for the lower Saluda River public access sites. Much of this site accommodates barrier free access. The site is well used and enjoyed by patrons. It is used below capacity.

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Two Bird Cove and Hurricane Hole Cove (1-23 and 1-24)¶
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Two Bird Cove and Hurricane Hole Cove will continue to be designated as special recreation areas to accommodate overnight anchorage. SCE&G will informally monitor use of these areas. There is no O&M associated with these sites.¶
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Although Saluda Shoals Park is the most used site on the lower Saluda River, it is currently used within designed capacity. The ICRC monitors site conditions and is in frequent contact with SCE&G regarding site needs. SCE&G will continue to be an active member in this partnership. The ICRC will continue to be responsible for O&M at this site.

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Mill Race (MILLA & MILLB; 0.9 acres)

Mill Race A and B are informal shoreline areas on the lower Saluda River, outside the project boundary. They are located at Riverbanks Zoo. Mill Race A is particularly popular with whitewater boaters as it provides access to a short section of whitewater rapids on the lower Saluda River. Mill Race B also provides access to the rapids and may be used as a take-out area. Both sites are used for sunbathing, picnicking, and other leisure activities along the shoreline and on rocky outcroppings in the river. There are no formal facilities at these sites beyond parking associated with the zoo. Mill Race A and B are ranked 4th and 2nd, respectively, in usage among all the public access river sites. Collectively, these sites accommodated approximately 26 percent of the total estimated use at public access sites on the lower Saluda River. These sites do not provide barrier free access.

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SCE&G is not proposing any improvements to these sites as they are located outside the project boundary. The Saluda River Walk, a portion of the Three Rivers Greenway pathway, is being planned by the River Alliance and City of Columbia and will provide significant access in this area. If completed, this phase of the project will provide access to these two sites. While SCE&G is supportive of the River Alliance's plans, it cannot guarantee the Three River's Greenway Project will be constructed. However, SCE&G will continue to work with the River Alliance, City of Columbia, and other groups, with a view toward the ultimate construction of the Three Rivers Greenway pathway.

5.5 Recommended Improvements Not Incorporated at This Time

During the course of development of this Recreation Plan, several improvements were recommended but are not scheduled during the first ten years of the new license. Although members of the Recreation Management TWC made these recommendations, there was not a strong consensus that these improvements were necessary at this time. These improvements are included here for the record and for consideration during future consultation. If conditions warrant these improvements can be made in the future, they will be detailed in future addenda (see Section 6.2).

Comment: I'm not entirely sure about this section and am looking for input. It seems if we put this in here, we really need to explain why these recommendations were not incorporated. Alternately, this same information is located in Appendix C (Questions 7d and 14).

Parksite (1-01)

- Expand the parking area

Larry L. Koon Boat Landing (1-02)

- Provide ADA accessible fishing pier with hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Expand the parking area

Shull Island (1-02B)

- Rehabilitate existing ramp to provide steeper slope and access deeper water

- Provide an ADA accessible floating courtesy dock system to allow use at low lake levels
- Pave and delineate parking area to eliminate the migration of sediments into the lake and to provide organized traffic flow and parking
- Expand the parking area

Murray Shores (1-03)

- Provide ADA accessible fishing pier with hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Improve access drive by paving to eliminate the migration of sediments into the lake and control dust
- Expand the parking area or add additional overflow parking

River Bend (1-04)

- Expand the parking area or add additional overflow parking

Rocky Point (1-06)

- Expand the parking area

Hilton (1-07)

- Provide hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Improve access drive by paving to eliminate the migration of sediments into the lake and control dust
- Expand the parking area or add additional overflow parking

Dam Site (1-08)

- Provide ADA accessible fishing pier to allow deep-water fishing during lake drawdowns to level 345'

Saluda Shoals Park (1-09)

- Provide bank access area to deep water for fishing opportunities up-stream
- Provide ADA accessible fishing pier with a hard surface area
- Extend the trail network into the additional property recently acquired by ICRC
- Expand the parking area

James R. Metts Landing (1-10)

- With the cooperation of the LCRAC, add restroom facilities that meet ADA Standards
- Expand the parking area

Dreher Island State Park (1-11)

- Install additional slips at marina
- Create a sailboat mooring area
- Install fishing piers
- Expand the parking area
- Expand wet storage to accommodate 200 slips

Macedonia Church (1-12)

- Expand the parking area or add additional overflow parking

Higgins Bridge (1-13)

- Pave access drive and existing parking area to eliminate the migration of sediments into the lake and to provide organized parking and traffic flow

- Access drive should allow for two-way traffic flow for safety concerns
- Expand the parking area

Kempson Bridge (I-14)

- Provide hard surfaced walkway from parking area to fishing pier that meets ADA Standards
- Provide additional paved, organized parking for vehicle/trailer use
- Provide proper number of handicap parking spaces for both vehicle/trailers and car only spaces. There are currently none provided
- Expand the parking area or add additional overflow parking

Gardendale (I-15)

- Pave access road
- Add picnic tables
- Add restroom facilities (ADA compliant)
- Increase capacity
- Pave parking lot
- Improve carry-in access (reduce distance from parking area to launch)
- Share cost with ICRC
- Expand the parking area

Little Saluda Point (I-20)

- Expand the parking area

Bundrick Island (I-21)

- Explore lease /development alternatives with the LCRAC and/or SCPRT
- Develop into a formal site

- A small portion should be utilized for parking area and boat launching facilities should be constructed. Walking trails with an occasional picnic area would protect the natural setting. The Sandy Beach area should remain pristine to continue to protect this unique setting.

Lake Murray Estates Park (1-22)

- Rehabilitate the existing floating courtesy dock system to comply with ADA Standards for use at low lake levels
- Expand the parking area or add additional overflow parking

Shealy Point

- Install a gravel parking lot to accommodate approximately 8 to 10 vehicles (no trailers)
- Install fishing piers
- Install picnic shelters
- Create walking trails

Candi Lane

- Install a gravel parking lot to accommodate approximately 20 vehicles (no trailers)
- Install carry in access

6.0 SCHEDULE AND FUTURE CONSULTATION

Improvements at the Existing Recreation Sites and Proposed Future Recreation Sites will occur according to a schedule as outlined below. In order to accommodate the adaptive nature of recreation planning, the schedule is presented in five-year increments. Additional consultation will be required upon approval of this plan to accommodate additional improvements and/or development of the Proposed Future Recreation Sites beyond the ten year schedule presented here. This future consultation is outlined in Section 6.2.

6.1 Implementation Schedule

Many of the improvements at Existing Recreation Sites are scheduled to be completed within the first five years of license issuance (Table 6-1). Collectively, these improvements should alleviate some congestion at Existing Recreation Sites immediately, improve ADA compliance at the majority of Existing Recreation Sites, provide for more shore-based fishing access, and provide for more shore-based activities. Additionally, possible development of Existing and Proposed Future Recreation Sites are identified beyond the initial ten-year period based on perceived needs for these sites. The development of these sites may change based on additional information and/or the consultation process outlined in Section 6.2. Improvements during the first ten-year period, as noted on Table 6-1, are proposed for completion as noted. Recommendations listed during the second ten-year period, as noted on Table 6-1, are not proposed at this time, but will be evaluated during the second 10-year review period as outlined in Section 6.2.

Table 6-1: Schedule of Improvements at Existing Recreation Sites and Development of Proposed Future Recreation Sites

Deleted: , Years One through Ten of the New License in Five Year Increments

Name	Site Number	Type of Facility	Existing Acres	Years 1 – 5	Years 6 – 10	Years 11 – 15	Years 16 – 20
Park Site - Lexington Side	1-01	Picnic Area	17.9				
Larry L. Koon Boat Landing	1-02	Launch Ramp	1.8	Evaluate alternatives to increase parking capacity; Identify substitutes through education; Pave an ADA compliant path from the parking lot to the restroom facilities; Widen the existing driveway			
Shull Island	1-02A	Future	22.4				
Shull Island	1-02B	Launch Ramp	0.4	Add two ADA compliant picnic tables <i>(including an ADA compliant path, as necessary)</i>			
Murray Shores	1-03	Launch Ramp	1.6	Install additional directional signs to the site; Refurbish the existing courtesy dock for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Stripe the existing parking lot; Install additional lighting; Construct ADA compliant restroom facilities <i>(including an ADA compliant path, as necessary)</i>			
River Bend	1-04	Launch Ramp	11.6	Add 5.9 acres; Refurbish the existing fishing pier for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Refurbish the existing courtesy dock for ADA compliance <i>(including an ADA compliant path, as necessary)</i>	Pave and stripe the existing overflow parking area		
Sunset	1-05	Launch Ramp	2.3	Add 29.9 acres; Refurbish the existing fishing pier for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Refurbish the existing courtesy dock for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Pave and stripe the existing parking area; Construct ADA compliant restroom facilities <i>(including an ADA compliant path, as necessary)</i> ; Install stabilization material on the sides of the existing boat ramp	Construct an additional <u>ADA compliant paved</u> parking lot		
Simpson's Ferry	1-05A	Future	11.6				
Rocky Point	1-06	Launch Ramp	1.7				
Long Pine	1-06A	Future	31.4	Add 20 acres		Possible development of site (or Site 1-17) depending on Year 9 consultation	Possible development of site (or Site 1-17) depending on Year 9 consultation
Hilton	1-07	Launch Ramp	4.4	Refurbish the existing courtesy dock for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Construct ADA compliant restroom facilities <i>(including an ADA compliant path, as necessary)</i> ; Install additional lighting	Construct an ADA compliant fishing pier <i>(including an ADA compliant path, as necessary)</i>		
Hilton	1-07A	Future	27.9				
Dam Site - Irmo Side	1-08	Picnic Area/Launch Ramp	6.8	Construct an ADA compliant courtesy dock <i>(including an ADA compliant path, as necessary)</i> ; Refurbish the existing fishing pier for ADA compliance <i>(including an ADA compliant path, as necessary)</i> ; Pave an ADA compliant path to the existing restroom facilities			
Saluda Shoals Park	1-09	Picnic Area/Launch Ramp	240.0				
James R. Metts Landing	1-10	Launch Ramp	1.0	Add two ADA compliant picnic tables <i>(including an ADA compliant path, as necessary)</i>	Construct a bank fishing area		
Dreher Island State Recreation Area	1-11	Campground/Launch Ramp	348.0				
Macedonia Church	1-12	Picnic Area	4.8				
Higgins Bridge	1-13	Launch Ramp	1.1	Add two ADA compliant picnic tables <i>(including an ADA compliant path, as necessary)</i>			
Kempson Bridge	1-14	Launch Ramp	2.9	Add two ADA compliant picnic tables <i>(including an ADA compliant path, as necessary)</i> ; Install an ADA compliant vault type restroom facility <i>(including an ADA compliant path, as necessary)</i>			

Deleted: ; Pave an ADA compliant path to both the fishing pier and courtesy dock

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Name	Site Number	Type of Facility	Existing Acres	Years 1 – 5	Years 6 – 10	Years 11 – 15	Years 16 – 20
Gardendale	1-15	Launch Ramp	4.7	Explore a lease for the property to the ICRC			
Water Treatment Plant	1-16	Future	4.3				
Stone Mountain	1-17	Future	26.5			<u>Possible development of site (or Site 1-06A) depending on Year 9 consultation</u>	<u>Possible development of site (or Site 1-06A) depending on Year 9 consultation</u>
Cloud's Creek	1-18	Future/Proposed Carry-in Launch	3.0	Construct a gravel parking lot; Construct a carry-in launch; <u>Install directional signs to the site</u>			
Big Creek	1-19	Future	22.3	Add 15.0 acres			
Little Saluda Point	1-20	Future/Proposed Angling Access	15.4	Add 14.2 acres	Construct two ADA compliant fishing piers <u>(including an ADA compliant path, as necessary)</u> ; Install shoreline stabilization materials as necessary.		
Bundrick Island	1-21	Future/Informal Site	87.9				
Lake Murray Estates Park	1-22	Launch Ramp	7.7	Install additional directional signs to the site; Construct ADA compliant restroom facilities <u>(including an ADA compliant path, as necessary)</u> ; Pave and stripe existing parking area; Pave an ADA compliant path from the parking lot to the existing fishing pier			
Two Bird Cove	1-23	Special Recreation Area		<u>Remove designation required by FERC Order 107 FERC ¶ 62.273</u>			
Hurricane Hole Cove	1-24	Special Recreation Area		<u>Remove designation required by FERC Order 107 FERC ¶ 62.273</u>			
Old Corley Bridge Road	1-25	Proposed Future/Carry-in Launch	0	Add 2 acres; Construct a gravel parking lot; Construct a carry-in launch; Install directional signs to the site			
Shealy Point Tract	1-26	Proposed Future	0	Add 40.1 acres		<u>Possible development of site (or Site 1-27) depending on Year 9 consultation</u>	<u>Possible development of site (or Site 1-27) depending on Year 9 consultation</u>
Shealy Road Access Area	1-27	Proposed Future	0	Add 27.6 acres		<u>Possible development of site (or Site 1-26) depending on Year 9 consultation</u>	<u>Possible development of site (or Site 1-26) depending on Year 9 consultation</u>
Rocky Creek	1-28	Proposed Future	0	Add 648.0 acres			
Little River/Harmon's Bridge	1-29	Proposed Future	0	Add 2.8 acres			
Crayne's Bridge Public Park	1-30	Proposed Future	0	Add 47.9 acres		<u>Possible development of site depending on Year 9 consultation</u>	
Twelve-mile Creek	1-31	Proposed Future	0	Add 52.0 acres; Explore a lease for the property to the LCRAC			<u>Possible development of site depending on lease exploration and/or Year 9 consultation</u>
Candi Lane	1-32	Proposed Future	0	Add 3.1 acres; Explore a lease for the property to the City of Columbia			
Lower Saluda River Property ^a		Proposed Informal	0	Add 320.2 acres			
Islands ^b		Informal	100.0				

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^a There are 14 tracts of land associated with the Lower Saluda River Property. These properties will be available for passive public recreation and in support of the Lower Saluda Scenic Corridor Plan and the Three Rivers Greenway. These tracts have not been assigned a Site Number as there is no intention of developing the property into formal recreation sites.

^b There are 62 SCE&G-owned islands on Lake Murray that are available for public recreation use, including primitive camping. These islands have not been assigned a Site Number as there is no intention of developing the islands into formal recreation sites.

6.2 Future Consultation Process

A process has been developed to review and develop future addenda to this Plan beyond the initial ten years after license issuance and over the licensing term. Recreation use levels, site capacities, and needs will be reviewed every 10 years using the most recent FERC Form 80 Recreation Report. The Recreation RCG members will review the results of this periodic assessment, in light of the proposed improvements that have been implemented to date, and make appropriate recommendations for the following ten year period to account for changing needs. Such recommendations could include identification of new sites on lands set aside for future recreation development and the continued improvement to existing recreation sites. Recommendations may also include additional studies as determined by the Recreation RCG, understanding that the cost of the study will be considered by SCE&G in developing the following ten year plan.

During Year 9 of the current ten year period (i.e., 9 years after license issuance, 19 years after license issuance, etc.), SCE&G will host a public meeting with interested stakeholders at which time they will review the most recent use and capacity assessment, make recommendations for the following ten years, and receive comments from stakeholders on what improvements need to be considered. Within 30 days of this meeting, SCE&G will provide a draft copy of the ten year plan to meeting participants and ask for written comments. A 30-day comment period will be observed. Upon receipt of these written comments, SCE&G will file a Recreation Plan Addenda with FERC. The final addendum will include any comments or edits provided by the stakeholders, as appropriate, as well as a consultation record and table of responses to stakeholder comments.

**7.0 OTHER ISSUES ADDRESSED WITHIN THE RECREATION RCG
CONSULTATION PROCESS**

Over the course of the consultation process, several issues were identified in the Recreation RCG that did not directly apply to this plan. The Recreation RCG agreed that “Issue Recommendations” would be drafted and finalized as part of the consultation process. These recommendations were then sent to other RCGs in the Saluda Hydro Relicensing Process for their consideration. For example, minimum lake levels were identified as an issue that has an effect on recreational use of the lake from private docks. A recommendation was sent from the Recreation RCG to the Operations RCG requesting that new minimum (summer and winter) lake levels be considered as part of the operations of the Saluda Hydro Project. One exception is the recreational flow releases drafted by the Downstream Flows TWC. These releases are meant to be managed through the Recreation RCG. Further descriptions of the issues and associated recommendations are provided below. Complete issue recommendations can be found in Appendix E.

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7.1 Minimum Lake Levels for Lake Murray

A Lake Level Management TWC was formed to analyze the impacts lake level have on recreation. The Lake Murray Association (LMA), Lake Murray Homeowners Coalition (LMHOC), and Lake Murray Watch (LMW) expressed concerns that elevations less than 356 ft. Plant Datum (PD) at Lake Murray impedes recreational use of the reservoir. The Groups noted that for decades the FERC has approved private development as a means of providing recreational access. It was estimated by Meade Hunt that 2.5 persons per household access the lake from private docks on average 2 times per week. With an estimated 9000 docks, recreations visits from homeowners per year could reach 1.2 million. A recent EA FERC July 18, 2008) which recommended approval of a private docking facility noted that “most of Lake Murray’s recreational use is by private landowners with residences along the shoreline.” According to a 2005 survey of Lake Murray users conducted by LMA, over half (51%) of lake users who responded, responded that 354 ft. PD was the minimum lake level needed for “year around safe lake use” at their “normal site or dock”; 98% of respondents indicated 356 ft. PD.

Deleted: The Saluda Project License sets a minimum reservoir elevation of 345 ft. Plant Datum (PD) and a maximum reservoir elevation of 360 ft. PD. In the past, SCE&G normally has operated the reservoir in the range of 350 ft. PD to 358 ft. PD. Occasionally, the reservoir has been drawn down to near 345 ft. PD for vegetation control and project maintenance work. Referencing a guide curve, SCE&G sets target reservoir elevations for each month of the year to account for historic, expected seasonal inflow variations. Target elevations may vary from year to year, depending on inflow projected and/or available, planned and emergency maintenance activities, unit availability, etc.¶

¶ The lake typically reaches 358 ft. PD at the beginning of June. Beginning in September, water is released, via generation, to achieve 350 ft. PD by December 31. Rising lake levels begin again around January 1 with the objective to continue to allow the rise so as to reach approximately 358 ft. PD by June 1.¶

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Based on this information, the Recreation Lake Level TWC recommended two operating scenarios, 354' – 356' be modeled for the minimum winter level, and 356' be modeled for the minimum summer level. SCE&G eventually developed a guide curve with a summer elevation of 358' and with a winter elevation of 354'. Understanding SCE&G's need to provide adequate freeboard to absorb later winter rain events, the Lake Level TWC supports the proposed guide curve

The Recreation RCG recommended two operating scenarios be modeled within the Operations RCG. Both scenarios entail a target elevation (358 ft. PD) being reached by April 1 of each year and held until the first Monday of September (to coincide with Labor Day). The difference in the two scenarios is the minimum lake level: 354 ft. PD vs. 356 ft. PD.

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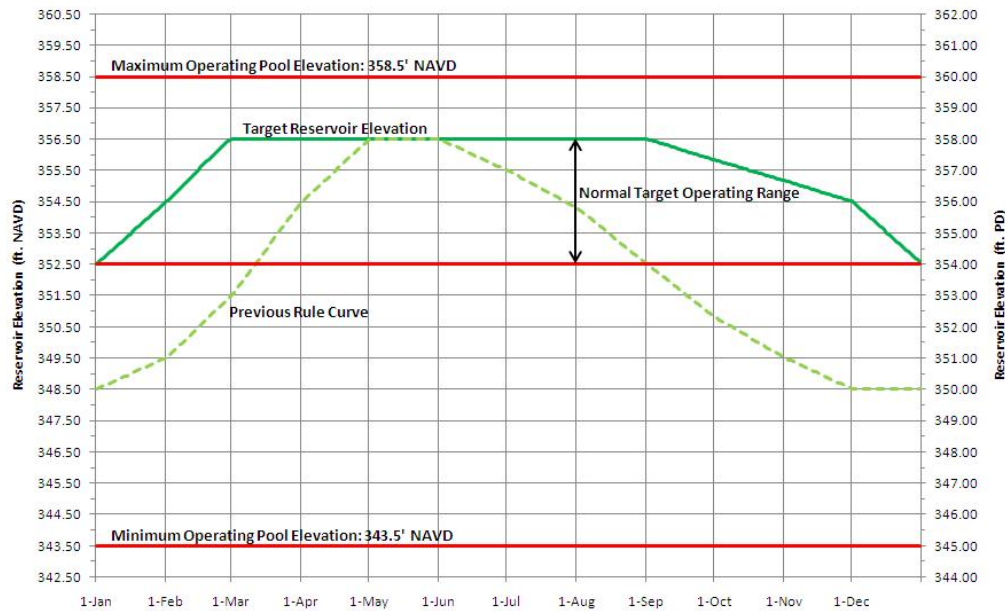
Currently, the lake typically reaches 358 ft. PD at the beginning of June. Beginning in September, water is released, via generation, to achieve 350 ft. PD by December 31. Rising lake levels begin again around January 1 with the objective to continue to allow the rise so as to reach approximately 358 ft. PD by June 1.

Under the proposed guide curve submitted with the Final License Application, a target elevation of 358 ft. PD will be reached by March 1 and will be maintained until September 1. The lake will remain above 356 ft. PD until December 1 and then drop to 354 ft. PD by December 31, when refilling will begin. Figure 7-1 provides the proposed guide curve submitted with the Final License Application.

Figure 7.1. Previous Rule Curve and Proposed Guide Curve for the Saluda Hydroelectric Project

Saluda Hydroelectric Project No. 516

Reservoir Guide Curve



7.2 Protection of Natural/Undeveloped Lands for Public Recreation

The LSSRAC, SCPRT, LMW, and Coastal Conservation League/American Rivers (CCL/AR) expressed concerns regarding the conservation of lands to enhance recreational use around Lake Murray and in the lower Saluda River corridor, protect the scenic integrity of the Project, protect wildlife habitat, and provide informal recreational opportunities.

The Recreation Management TWC drafted a recommendation for the Lake and Land Management TWC (L&LMTWC) that outlined appropriate activities on each classification of Project land. During the drafting of this recommendation, a focus group of stakeholders met outside of the consultation process and drafted recommendations for submission to the L&LMTWC. The Recreation Management TWC agreed to forward these recommendations from the focus group to the L&LMTWC although not all recommendations had the full endorsement of the entire Recreation Management TWC.

Both recommendations are included in Appendix E, along with the memorandum sent to the L&LMTWC.

As a result of the discussions and rebalancing efforts in the L&LMTWC, SCE&G is proposing a new Shoreline Management Plan (SMP) that will include over 9,000 acres in a shoreline classification that allows for recreation. This includes approximately 500 acres in “Natural Areas,” 3,700 acres in “Forest Management,” and 2,150 acres in “Recreation.” In addition, SCE&G is proposing to lease to the SCDNR approximately 2,754 acres outside the PBL for wildlife management. The 2,150 acres proposed for “Recreation” includes 658 acres of non-project lands proposed to be included in the project, as well as the 320 acres along the lower Saluda River outlined in Section 5.2 and Table 6.1.

7.3 Warning System for Rising Water on the Lower Saluda River

The Lower Saluda Scenic River Advisory Council, American Whitewater, Trout Unlimited, SCPRT, and American Rivers have expressed concern over the safety of river users due to the unscheduled flows from the Project, as well as the rates that the river level changes due to the higher flows (> 10,000 cfs).

The Recreation RCG has developed numerous recommendations to improve river user safety on the lower Saluda River. These include continued consultation with river stakeholders to improve the current warning system and the installation of additional warning devices on the lower Saluda River. SCE&G is proposing to install additional warning devices on the lower Saluda River that will expand the warning system to include the entire lower Saluda River from the dam to the confluence with the Broad River. These include sirens installed in 2008 between the Saluda Hydro powerhouse and Saluda Shoals Park (Phase I). Phase II will be installed within one year of license issuance and consist of: sirens at Corley Island, Gardendale, and downstream of the Interstate 26 bridge; and strobe lights at Corley Island and on the upstream and downstream sides of the Interstate 26 bridge. Phase III will be installed within two years of Phase II completion and may (as determined by the coverage of Phase I and Phase II) consist of: sirens at Saluda Shoals Park, downstream of the Interstate 20 Bridge, and two

Deleted: SCE&G manages its lands around Lake Murray according to a Shoreline Management Plan (SMP), which is designed to comply with the terms of the Project License, regulations, and orders of the FERC. Its aim is to provide a balance between shoreline development, recreational use, and environmental protection.¶

¶ SCE&G has identified eight distinct land management classifications for the land within the PBL. The classifications consist of Easement, Forest and Game Management, Public Recreation, Commercial Recreation, Future Development, Conservation Areas, 75-Foot Setback, and Project Operations. Although SCE&G aims to manage their lands according to this classification system, the public has the right to access SCE&G-owned lands regardless of classification, with the exception of lands reserved and used for Project Operations.¶

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¶ The Recreation Management TWC drafted a recommendation for the Lake and Land Management TWC (L&LMTWC) that outlined appropriate activities on each classification of Project land. During the drafting of this recommendation, a focus group of stakeholders met outside of the consultation process and drafted recommendations for submission to the L&LMTWC. The Recreation Management TWC agreed to forward these recommendations from the f... [1]

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Deleted: SCE&G also manages an electronic ring-down call system (operational on April 14, 2008) that is activated by the SCE&G System Dispatchers upon initiation of significant generation at Saluda. Upon activation, a message is sent to registered individuals via e-mail and telephone, alerting them to the initiation of generation. Regis... [3]

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additional sirens downstream of the Interstate 26 bridge; and a strobe light upstream of the Interstate 20 bridge.

Additionally, SCE&G is proposing to continue managing an electronic ring-down call system (operational on April 14, 2008) that is activated by the SCE&G System Dispatchers upon initiation of significant generation at Saluda. Upon activation, a message is sent to registered individuals via e-mail and telephone, alerting them to the initiation of generation. Registration for this ring-down service can be made at SCE&G's website (<http://www.sceg.com/en/my-community/lower-saluda-river/>). This system was developed in response to Safety RCG member requests for notification of initiation of Saluda Hydro generation. Information about current and planned operations is also provided on a website maintained by SCE&G.

7.4 Recreational Flow Releases on the Lower Saluda River

The LSSRAC, SCPRT, SCDNR, AW, SRCTU, and CCL/AR have requested instream flows for the lower Saluda River to support recreational uses such as small boat navigation, swimming, wade and boat fishing, and other downstream uses.

AW, CCL/AR, and the City of Columbia Parks and Recreation Department have also requested scheduled recreational releases for whitewater boating, wade fishing, and special events.

As a result of consultation with the aforementioned groups, SCE&G is proposing to schedule recreational releases that will be administered through compliance with this Recreation Plan. The recommendation includes the flexibility to change the recreational flow schedule yearly in consultation with affected groups and provides for those times when inflow to the reservoir has triggered the Low Inflow Protocol.

The recreational releases will be scheduled as follows:

1. SCE&G will release approximately 45,000 acre feet of water for recreational flows in the lower Saluda River. These flows will occur on no more than 51 days. The Saluda Hydro

Deleted: SCE&G currently operates the Saluda Hydro Project in order to provide reserve capacity for the company's utility obligations, a mode of operation that the company proposes to continue under the new license. Project generators are typically offline, i.e., not operating, but can be started and synchronized to the electrical grid and can increase output immediately in response to a generator or transmission outage on SCE&G's system or in response to a call for reserve power from neighboring utilities, with which the company has reserve agreements and obligations. As a result, flows from Saluda Hydro to the LSR are generally unscheduled.¶

¶ Although currently there is no minimum flow requirement for the Project, SCE&G has an informal agreement with the South Carolina Department of Health and Environmental Control (SCDHEC) to provide a minimum of 180 cfs at the Project to maintain downstream water quality of the LSR. SCE&G typically releases a minimum flow of approximately 500 cfs to enhance water quality during the low dissolved oxygen (DO) season (July – November). The average annual flow from the Saluda Dam to the LSR is 2,595 cfs with a minimum average daily flow of 285 cfs.¶

¶ The LSSRAC, SCPRT, SCDNR, AW, SRCTU, and CCL/AR have requested instream flows for the LSR to support recreational uses such as small boat navigation, swimming, wade and boat fishing, and other downstream uses.¶

¶ AW, CCL/AR, and the City of Columbia Parks and Recreation Department have also requested scheduled recreational releases for whitewater boating, wade fishing, and special events.¶

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Project will be removed from reserve status during the recreational flow hours on those 51 days:

2. SCE&G will host an annual meeting during October of each year to review the previous year's flows, set the specific dates for the following year's flows (with the understanding that the volume of water and number of days will remain consistent from year to year, even if the schedule varies), and discuss any outstanding issues with appropriate stakeholders;
3. SCE&G will host triennial meetings for comprehensive reviews of the recreation flow schedule for the purpose of reviewing recreation trends, trout reproduction and holdover, etc.; and
4. SCE&G will meet with the Recreation Flow Technical Working Committee to determine a schedule for the reduction and elimination of recreational flows based on criteria from the final Low Inflow Protocol. This issue has not been resolved at this time.
5. Flows will be measured at the USGS gage below the Saluda Dam (02168504). Actual flows may vary \pm 10%. Make-up days will be allowed; no more than 5 recreational days per year can be lost to operational or maintenance emergencies before make up days will be required to be scheduled; make-up days must occur within three months of the scheduled flow. The annual flow release schedule will be posted on the SCE&G website.

The initial schedule of release is:

	Event Name	Rec. Flows					
		Days Allocated	Hours/Day	Start Time	End Time	CFS	Ac-Ft*
January	Iceman Race	1	6	8:00	14:00	4,000	1,636
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	MLK Day	1	5	7:00	12:00	700	0
February	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0

	Event Name	Rec. Flows					
		Days Allocated	Hours/Day	Start Time	End Time	CFS	Ac-Ft*
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	President's Day	1	5	7:00	12:00	700	0
March	WW Festival	1	6	8:00	14:00	8,650	3,941
	WW Festival	1	3	10:00	13:00	3,300	644
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
April	General Recreation (Sat.)	1	5	12:00	17:00	1,000	0
	General Recreation (Sun.)	1	5	7:00	12:00	1,000	0
May	CFK	1	9	7:30	16:30	10,000	6,470
	Wade Fishing	1	9	8:00	17:00	700	0
	Memorial Day/ General Recreation	1	9	8:00	17:00	1,000	0
June	Rescue Rodeo	2	9	7:00	16:00	2,111	2,099
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0

July	WW Rodeo	2	8	9:00	17:00	3,300	3,437
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
	Ind. Day/ General Recreation	1	9	8:00	17:00	1,000	223
August	USTWWR Prac.	2	8	8:00	16:00	10,000	12,295
	Wade Fishing (Sat.)	1	9	8:00	17:00	700	0
	Wade Fishing (Sun.)	1	9	8:00	17:00	700	0
September	High Boating (Sat. and Sun.)	2	6	10:00	16:00	4,500	3,768
	Labor Day/ General Recreation	1	9	8:00	17:00	1,000	223
October	CFK	1	7	9:30	16:30	2,400	983
	High Boating (Sat. and Sun.)	2	6	10:00	16:00	4,500	3,768
November	Low Boating (Sat.)	1	6	10:00	16:00	2,400	843
	High Boating (Sun.)	1	6	10:00	16:00	4,500	1,884
December	Low Boating (Sat.)	1	6	10:00	16:00	2,400	843
	High Boating (Sun.)	1	6	10:00	16:00	4,500	1,884
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Wade Fishing (Sat.)	1	5	12:00	17:00	700	0
	Wade Fishing (Sun.)	1	5	7:00	12:00	700	0
	Totals>>>>	51					44,940

*Increment Above Minimum Flow

In addition to the recreational releases outlined above, SCE&G will provide the City of Columbia Fire Department (CFD) with flow releases to allow them to train for swift water rescue on the lower Saluda River. These flows will be as follows.

Deleted: in Appendix E

Deleted: has agreed to

- During a “normal” flow year, SCE&G will provide 6 days (8 hours per day) of flows ranging from 12,000 cfs to 15,000 cfs in March. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.

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Deleted: for

- During a “normal” flow year, SCE&G will provide 5 days (8 hours per day) of flows ranging from 8,000 cfs to 10,000 cfs in the September to December months. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.

Deleted: remain available for

- Reduced flows will be made available to the CFD based on the Low Inflow Protocol (LIP). The flows will range from 12,000 cfs to 15,000 cfs in March, but will be reduced to 3 days (10 hours per day). The September to December flows will range from 8,000 cfs to 10,000 cfs but will be reduced to 3 days (10 hours per day). SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times. The triggers for implementing these reduced flows and the elimination of the swift water rescue training flows during low inflow periods will be determined once the LIP is finalized. This issue has not been resolved at this time.

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As with the recreation flow releases, flows will be measured at the USGS gage below the Saluda Dam (02168504). Actual flows may vary \pm 10%.

7.5 Placement and Maintenance of Shoal Markers

Lake Murray is a large reservoir and, like many other reservoirs, has hazards that present a danger to boaters and other recreationists. The LMW and the LMA have raised

the issue of the responsibility for marking these hazards to make Lake Murray safer for the boating public. SCE&G has historically depended on the SCDNR to bear responsibility for the marking of hazards. Stakeholders contend that the SCDNR system is not as effective as it could be because of the yearly fluctuations in water level, unmarked hazards, and missing/damaged shoal markers.

The Recreation RCG is recommending SCE&G continue to cooperate with the SCDNR in the marking of hazards in Lake Murray. This includes support for public communication regarding locations of unmarked hazards and a system whereby the SCDNR can be made aware of these areas. As a result of these discussions, SCE&G is hosting a Navigational Aids Marking Form on it's website to make it easier for the public to report unmarked hazards and/or damaged or missing markers. The form is available at: <http://www.sceg.com/en/my-community/lake-murray/lake-management/>.

7.6 Protection of the Trout Fishery in the Lower Saluda River

The lower Saluda River is successfully managed (and classified by the SCDHEC) as a put, grow, and take trout fishery by the SCDNR. Currently, annual stockings of brown and rainbow trout species are necessary to support the trout fishery in the lower Saluda River.

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Trout stockings vary in number depending primarily on availability of fish from the SCDNR Walhalla Fish Hatchery. Stocking records suggest that typically the SCDNR stocks approximately 30,000 to 34,000 trout annually in the lower Saluda River, with approximately 60% being rainbow trout. The length of the fish at the time of stocking is typically 6-8" for brown trout and 9-10" for rainbow trout.

Deleted: LSR

Trout are typically stocked from November – March throughout the lower Saluda River after the dissolved oxygen (DO) levels in the releases of water from Lake Murray have improved to safer levels for fish. The initial stocking event is typically done by the use of helicopter to facilitate distribution of both species along the lower Saluda River. Subsequent stockings are conducted by truck with stocking limited to three locations along the lower Saluda River. Intense fishing pressure, predation, potential late-summer and fall low DO concentrations, and thermal regimes affect both carryover and incidental

Deleted: LSR

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Deleted: LSR

reproductive success of adult trout in the lower Saluda River, Recent turbine improvements have increased DO concentrations. However, while continued stocking efforts by the SCDNR will be required to support the trout fishery, changes in project operations (i.e., minimum flows) should facilitate increased carryover of stocked trout. Increased adult carryover could provide increased opportunities for natural reproduction of trout, further enhancing the lower Saluda River trout fishery.

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The Recreation RCG recommended a number of measures to support the trout fishery in the lower Saluda River. These include providing sufficient access points, maintaining state water quality standards, and continuing relationships with appropriate agencies to support the health and survival of the trout in the lower Saluda River. During the relicensing process, several of these recommendations have been incorporated into various management plans, including the additional access areas outlined in the Plan on the lower Saluda River, the additional warning devices on the lower Saluda River, scheduled flows for wade fishing, and development of a trout management program.

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8.0 AS BUILT AND CONCEPT DESIGN DRAWINGS

SCE&G is providing as built drawings and/or concept design drawings of all recreation sites referenced in this plan in Appendix F. These drawings are provided to show detail regarding site amenities (i.e., location of boat ramps, docks, etc.) and the relation of the site to the existing project boundary. Pending FERC approval of this plan, these drawings will be updated as sites are modified and/or the project boundary is approved. For those sites where no updates are scheduled and no property is being added (i.e., the project boundary is not being changed), the drawings reflect best available information regarding site amenities. SCE&G will update these drawings as necessary during the 10 year review process incorporated in Section 6.2.

9.0 REFERENCES

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APPENDIX A

MAPS OF EXISTING RECREATION SITES, EXISTING FUTURE RECREATION SITES,
AND SEGMENTS OF LAKE MURRAY USED FOR THE BOATING DENSITY ANALYSIS

APPENDIX B
MEETING NOTES

APPENDIX C

RECREATION RESOURCE CONSERVATION GROUP WORKING DOCUMENTS

APPENDIX D

MAPS OF PROPOSED FUTURE RECREATION SITES

APPENDIX E

RECREATION RESOURCE CONSERVATION GROUP ISSUE RECOMMENDATIONS

APPENDIX F

AS BUILT AND CONCEPT DESIGN DRAWINGS

The Lower Saluda Scenic River Advisory Council (LSSRAC), SCPRT, LMW, and Coastal Conservation League/American Rivers (CCL/AR) have expressed concerns regarding the conservation of lands to enhance recreational use around Lake Murray and in the LSR corridor, protect the scenic integrity of the Project, protect wildlife habitat, and provide informal recreational opportunities.

The Recreation Management TWC drafted a recommendation for the Lake and Land Management TWC (L&LMTWC) that outlined appropriate activities on each classification of Project land. During the drafting of this recommendation, a focus group of stakeholders met outside of the consultation process and drafted recommendations for submission to the L&LMTWC. The Recreation Management TWC agreed to forward these recommendations from the focus group although not all recommendations had the full endorsement of the entire Recreation Management TWC. Both recommendations are included in Appendix E, along with the memorandum sent to the L&LMTWC.

SCE&G currently has a warning system in place that covers the area from the Riverbanks Zoo to the confluence with the Broad River, as well as the area from the Saluda Hydro powerhouse to James R. Metts Landing/Saluda Shoals Park. In 2008, SCE&G installed additional sirens and strobe lights between the Saluda Hydro powerhouse and Saluda Shoals Park. Sirens and strobe lights are located at the U.S. Geological Survey (USGS) gauge platform below the Saluda Hydro powerhouse, between the USGS gauge platform and James R. Metts Landing, at James R. Metts Landing, upstream of Riverbanks Zoo, and two locations downstream of the Zoo (Shandon Rapids and confluence with the Broad River). Along with stand alone strobe lights at the spillway discharge and Saluda Shoals Park, the sirens located at the USGS gauge platform, between the USGS platform and James R. Metts Landing, and at James R. Metts Landing are activated automatically by the plant Distributed Control System (DCS) equipment when Saluda Hydro starts to generate 5 MW or 800 cfs. The sirens sound for

three minutes once activated. Subsequent siren activation is made automatically after a six minute delay from the initial activation. All strobe lights activate and remain on for 16 minutes concurrently with the initial siren activation. These sirens can be activated manually from a push button inside the Saluda powerhouse. At the Zoo location, the siren activates with a 1 inch rate of rise (ROR). The sirens sound for three minutes once activated. There is a hold-off period of 60 minutes at the Zoo location sirens and an override if the water level rises three inches during that 60-minute hold-off period; the sirens will activate again and then reset for the next 60-minute hold-off period. A strobe light activates and remains on for 16 minutes concurrently with the siren activation. Sirens are active 24 hours per day, and were tested in 2004 to calibrate the volume to cover an area 1500 feet upstream and downstream of the Zoo siren, and 500 feet upstream and downstream of the Metts Landing siren. Since 2004 two additional sirens and strobe lights were installed downstream of the Zoo. The Zoo location float switch activates these new sirens on a three-minute delay. Prominent warning signs posted near the strobe lights and sirens warn people that the activation of the sirens and/or the light signals potentially dangerous conditions caused by a rising water level. These two new sirens were tested for volume level and coverage area as part of their installation.

SCE&G also manages an electronic ring-down call system (operational on April 14, 2008) that is activated by the SCE&G System Dispatchers upon initiation of significant generation at Saluda. Upon activation, a message is sent to registered individuals via e-mail and telephone, alerting them to the initiation of generation. Registration for this ring-down service can be made at SCE&G's website (<http://www.sceg.com/en/my-community/lower-saluda-river/>). This system was developed in response to Safety RCG member requests for notification of initiation of Saluda Hydro generation. Information about current and planned operations is also provided on a website maintained by SCE&G.

Alison Guth

From: Matt Rice [MRice@americanrivers.org]
Sent: Tuesday, March 31, 2009 5:19 PM
To: Alison Guth
Subject: Recreation Comments



Comments on
Saluda Recreation ..

<<Comments on Saluda Recreation Plan.doc>>

Hi Alison,

Here are some comments on the Recreation Plan. See you bright and early tomorrow!

Matt

Matthew Rice

Associate Director Southeast Conservation

American Rivers

2231 Devine Street, Suite 202, Columbia, SC 29205

Phone: 803-771-7206

Cell: 803-422-5244

Fax: 803-771-7580

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Stand up for Healthy Rivers; Join the eRiver Community to download music, wallpapers, and more.

www.americanrivers.org/eriver

March 31, 2009

American Rivers and Coastal Conservation League Comments on the Saluda Recreation Plan

General Comments

- In general, SCE&G's Draft Recreation Plan is consistent with the plans developed by the downstream flow Technical Working Committee.
- AR/CCL concur with SCDNR that SCE&G should provide the public with information about all recreation sites on Lake Murray and the Lower Saluda River. This information should include a complete listing of the Saluda project's public recreation sites with descriptions of site facilities, location information, and proposed improvement schedule. This information can be posted on SCE&G's website.
- SCE&G repeatedly refers to "normal flow year" in regards to downstream recreation flows and safety training flows. This should be changed to "normal flow period" and define a "normal flow period" as any period not in a low inflow protocol (LIP). Reference to "normal flow period" should be omitted from these sections deferring to the reduction in recreation and safety flows defined in the final LIP agreement.

Safety Training Flows

Upon determination of the safety training flow schedule, SCE&G should post training flow schedule their on their website to provide additional whitewater boating opportunities and to allow additional organizations to conduct whitewater and swift water safety training courses.

Recreation Site Improvement

- Regarding proposed future recreation sites on the Lower Saluda River (Twelve Mile Creek and Candi Lane), SCE&G needs to be more specific than simply stating they will "explore a lease for property to the LCRAC" or "explore a lease for the property to the City of Columbia" SCE&G should include a specific compliance timeframe and initial improvements such as construct gravel access road and parking lot and construct carry-in boating launch.
- Millrace Rapids is a significant whitewater feature on the Lower Saluda River and it requires a degree of expertise to run at any water level. The proposed landing at Candi Lane is located less than half a mile upstream of Millrace, and provides an exit point on the river before descending Millrace. SCE&G should prioritize the development of the access site at Candi Lane and install a sign upstream of the site warning of the upcoming rapid and directing boaters to safe exit at Candi Lane. The sign could read "WARNING dangerous rapids ahead. Safe exit 100 yards on river left." In the interim, SCE&G should allow informal access at Candi Lane to allow people to safely exit the river before Millrace.

Alison Guth

From: Alison Guth
Sent: Tuesday, March 31, 2009 4:06 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctev.org); Wenonah Haire; Jon Quebbeman

Subject: Settlement Agreement - Introductory Section

Hello All,

We received edits/comments to the introductory section of the Settlement Agreement by DNR and Coastal Conservation League. These edits have been merged with the edits made during the 3/11/09 meeting into the attached document. Track changes does not seem to be identifying authors, therefore, I denoted who made the changes within the document. Merged documents are typically more difficult to navigate through, so if you would like individual copies of each set of requested changes, please let me know. We will be having several more meetings (TBA) to work out the details of the introductory sections. Thanks! Alison



DRAFT Settlement
Agreement mer...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Dick Christie [dchristie@comporium.net]
Sent: Tuesday, March 31, 2009 4:09 PM
To: Alison Guth
Cc: Bill Marshall
Subject: Comments on Recreation Plan



DNR Comments on
the March 2009...

Hi Alison – DNR comments on the recreation plan are attached. Thanks.

Comments on the March 2009 draft Recreation Plan, Saluda Hydro Project

General comment/question --

How will SCE&G improve its public information about the recreation sites of the Saluda project? If not already being done, I recommend the plan include a provision that SCEG will provide on the Internet a complete listing of the Saluda project's public recreational sites with descriptions of site facilities and site location information.

Table 3.1

Page 3-3 – Suggestion: separate the list of sites into two groups, by lake and river. (Also, consider same lake/river sorting with Table 6.1)

Corrections to Table 3.1 numbers:

- Saluda Shoals Park has 1, not 0, carry-in launches
- James Metts Landing has only 1, not 2, boat launch lanes. The carry-in launch is a former trailer launch and no longer provides a lane for trailers.
- Gardendale's number of parking spaces is less than 40. The unmarked, gravel lot could hold 30 cars if all park orderly; but 25 spaces is more realistic in current, unmarked condition.

Section 3.4

Page 3-12 – It may be more accurate to title the section, "Recreation Flow Preferences on the Lower Saluda" (Preferences rather than Recommendations).

Section 5.2

Page 5-9 and Appendix D – We may, for legal reasons, need more detailed property information for the Proposed Future Recreation Sites. A map of parcels would be best, but list of parcel numbers and individual acreages may suffice.

Section 5.2

Somewhere in this section it would be appropriate to communicate the information presented in the footnote of Table 6.1, that is:

"There are 14 tracts of land associated with the Lower Saluda River Property. These properties will be available for passive public recreation and in support of the Lower Saluda Scenic Corridor Plan and the Three Rivers Greenway. These tracts have not been assigned a Site Number as there is no intention of developing the property into formal recreation sites."

Section 5.3

Page 5-11 – Under heading, "Lower Saluda River Sites" I recommend adding language as follows:

Development of Future Recreation Sites on the lower Saluda River will be implemented in consultation with the SCDNR and other agencies and in consideration of the Lower Saluda River Corridor Plan and Plan Update.

Section 5.5

“Recommended improvements not incorporated at this time” -- More items could be added to the lists presented here but not sure what criteria are used to include items here.

Page 5-19 -- under Gardendale, I suggest adding trail extensions to list of improvements as this was mentioned often in meetings and trails are a key feature of LSR Corridor Plan Update. Add item:

- Extend the greenway trail network along the river to connect Gardendale with Saluda Shoals Park and proposed Saluda sections of the Three Rivers Greenway.

Similar to above, on Page 5-18 -- under Saluda Shoals Park, we could add item:

- Extension of trail system upstream to Sandy Beach and other fishing areas below the dam

Also, we could add another site, Twelve-mile Creek, and list initial desired improvements such as:

- construct gravel access road and parking lot,
- construct carry-in boating launch

Section 7.3

Page 7-4 – revise second paragraph description of the phase II and phase III plans for the warning system based on recent decisions of the Safety RCG to go with only strobes in phase II...

Section 7.4

Page 7-5 – Specify the annual time frame for recreational releases: 45,000 acre-feet of water per year.

Still need to define LIP reductions for recreational flows in item 5.

Page 7-7 – Need to clarify “normal” flow year as used here. Better yet, simply avoid reference to the term and say, “Each year, SCEG will provide...” and allow following paragraph about LIP to describe how flows will be reduced or cancelled.

Page 7-8 -- Still need to finalize LIP reductions for the safety training flows

Alison Guth

From: Dick Christie [dchristie@comporium.net]
Sent: Tuesday, March 31, 2009 4:06 PM
To: Alison Guth



Settlement
greement Introduc.

Hi Alison – here are our comments for the first section of the settlement agreement.

Thanks.

Saluda Hydroelectric Project (FERC Project No. 516) Relicensing Comprehensive Settlement Agreement

1. Introduction

South Carolina Electric & Gas Company (SCE&G), as the holder of the current license for the Saluda Hydroelectric Project (Project)(FERC No. 516), hereby files the following Offer of Settlement (“Settlement”) pursuant to Rule 602 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission”) 18 C.F.R. § 385.602 (2008). This Settlement has been entered into among SCE&G and Saluda Hydro Relicensing Stakeholders. Moreover, the parties to the Settlement request that the Commission incorporate the obligations and agreements as illustrated in Appendix A without material modification into the terms and conditions of the New License.

2. Background

The Project is an existing licensed hydroelectric project located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000 acre reservoir (at elevation 356.5¹), a gated emergency spillway, a combination rock-fill and RCC back-up Dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005. The total rated generator capacity for the station is 207.3 MW.² Further, at optimum gate openings, the hydraulic capacity of each of the Units 1 to 4 is 3,000 CFS, and for Unit No. 5 is 6,000 CFS, yielding a total station hydraulic capacity of 18,000 CFS.

The original fifty (50) year project license was issued by the Federal Power Commission in 1927, effective from August 4, 1927 to August 5, 1977. The currently effective license was issued by the Federal Energy Regulatory Commission (“FERC” or “Commission”) on June 1, 1984 retroactive to 1977, and was set to expire on August 31, 2007. SCE&G requested an extension of the term of the license by letter dated October 3, 2002 and the Commission issued an Order on November 18, 2003 extending the term of the license until August 31, 2010.

¹ Unless otherwise noted, all elevation references in this Settlement and associated appendices are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies and often erroneously referred to as msl) requires the addition of 1.50 feet.

² The currently effective license gives the station capacity as 202.6 MW. This value was based on a power factor of 0.8 for the original four generators. When Unit 3 generator was rewound, its power factor changed to 0.9, and this change was not taken into account in the application for the current license.

SCE&G officially began the formal relicensing process on April 29, 2005 by the timely filing of the Notice of Intent to the Commission and with the transmittal of its Initial Consultation Document (ICD) to resource agencies and other interested stakeholders for review and comment. Since that date, SCE&G has worked cooperatively with agencies and stakeholders through numerous resource group meetings to do the following: establish the scope of studies needed to address issues raised at the Project and develop study reports, conduct agreed upon studies, provide draft copies of study reports to agencies and stakeholders for review and comment, revise study reports to reflect agency/stakeholder comments, and complete follow-up studies deemed necessary to accomplish study goals. Resource group meetings have also served to provide a forum for discussion of Project related concerns among stakeholders. Discussions have continued to take place subsequent to the submittal of the License Application for the Project on August 27, 2008. These discussions among resource groups have been necessary to facilitate development of this Settlement and have culminated in the proposals set forth below. The Commission issued the Notice of Application Tendered for filing and solicited additional study requests on September 10, 2008.

3. Purpose of Settlement

The purpose of this Settlement is to define the consensus based resolutions formulated among the signatories of this Settlement to those issues that have been raised during the relicensing process for the Project. These resolutions set forth herein are respectfully proposed as terms for the New License and have been structured in accordance with the Federal Power Act Section 10(a)(1) for the balance of both developmental and non-developmental resources.

4. Terms and Implementation

a. Terms

i. General

This Settlement is in no way intended to conflict with the legal responsibilities of the Settlement signatories, nor shall it be in conflict with any lawful statutory or regulatory responsibility of or authority held by said signatories. Furthermore, signatories to this Settlement are representing their belief that the issue resolutions developed through good faith efforts do not conflict with these responsibilities.

ii. For the New License

The signatories to this Settlement recognize that the Commission will incorporate into the New License those articles pursuant to 18 C.F.R. 2.9 ("L-Forms"), as well as such articles as the Commission needs to carry out its responsibilities for administering and enforcing the New License. With these considerations, the signatories respectfully request that the Commission incorporate

the terms set forth in this Settlement Agreement into the terms of the New License without material modification. Given that the terms of this Settlement Agreement are incorporated into the New License without material modification, the signatories agree that an appropriate term for the New License should be 50 years, and respectfully request that the Commission approve this term.

Comment – our recommendation for the term of the license will be made after the completion of the settlement agreement.

iii. Fish Passage

A prescription for a fish passage facility pursuant to Section 18 of the Federal Power Act (FPA), 16 U.S.C. § 811, is not included in this Settlement. The reservation of authority of the Secretary of the Interior for the New License has been established by mutual agreement under the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (Accord) (attached as Appendix X). The Accord was entered into among SCE&G, Duke Energy Carolinas, LLC, South Carolina Department of Natural Resources (SCDNR), North Carolina Wildlife Resources Commission (NCWRC), and United States Fish & Wildlife Service (USFWS). According to this agreement, the USFWS will file with the FERC its reservation of authority for any fishway prescriptions for the Project for the term of the new license. Although not a signatory to the Accord because of its position that it may not bind itself in any way that might infringe upon its statutory authority and obligations, the National Marine Fisheries Service (NMFS) and South Carolina Department of Health and Environmental Control (SCDHEC) were integral members of the team that developed the Accord, and will participate in its natural resource protection role as it determines appropriate.

iv. Endangered Species Act:

Through cooperation, the signatories to this Settlement have developed a Rare, Threatened and Endangered Species (RT&E) Species Plan for the Project, which includes measures for the management of RT&E species in the Project Area. By the signing of this agreement, the USFWS agrees that they will not impose any conditions inconsistent with this Settlement through their Biological Opinion (BO). This Settlement is in no way intended to compromise the authority of the USFWS and their determination of conditions for compliance with the Endangered Species Act (ESA), 7 U.S.C. §136; 16 U.S.C. §1531 et seq., or preclude any standard conditions pursuant to applicable law. In the event that a BO is issued that is inconsistent with this Settlement, with the exception of the above stated conditions, any signatory to this Settlement may withdraw from this Settlement after potential resolution discussions among signatories have taken place.

b. Implementation

i. Commitments of Parties

By the signing of this Settlement Agreement, signatories are expressing their support for the components herein (in some cases, as resolutions that may be less than they desire, but nevertheless representing compromise positions that they “can live with”), and the incorporation of these components into the new license issued by the Commission. Signatories are also encouraged to express their support of this Settlement through exchanges, whether written or verbal, with the Commission. Likewise, participants were told that their signing of the Settlement Agreement would in no way constrain them from filing comments setting forth their preferred positions to the extent they believe the extensive record of these proceedings as filed with the Commission do not contain adequate expositions of their preferred positions. In such case that a license is issued that is not consistent with one or more of the components to this Settlement, the signatories may collectively or individually file a request for rehearing, only after a meeting among signatories has been held. Comment: If this meeting is not scheduled within 14 days of the issuance of the license, signatories may file for a rehearing. Furthermore, if the commission issues a license that is inconsistent with this Settlement, signatories may also hold negotiations to amend this Settlement to be consistent with the new license by mutual agreement.

As a signatory to this Settlement, an individual or entity is not precluded from exercising their regulatory or statutory authority under applicable law. However, by the signing of this Settlement, individuals and parties are expressing that they believe that their regulatory or statutory authorities are consistent with this Settlement.

ii. Commission Review of the Settlement

If the Commission has any questions or concerns with regards to the Settlement in the process of drafting the New License, it is requested that the Commission contact the signatories to arrange for the convening of a meeting to discuss these questions or concerns prior to the new license issuance.

iii. License Amendment

As discussed above, this Settlement is not intended to preclude a signatory from exercising regulatory or statutory authority legally available to them. This includes the petitioning of the Commission to exercise its reserved authority to amend the New License after

notice and opportunity for a hearing on an issue, including those issues addressed in this Settlement.

iv. Modification of Settlement

Modification of this Settlement can only occur by the mutual agreement of all signatories through negotiation meetings and written consent. Situations which may necessitate the modification of the Settlement may include the issuance of a New License inconsistent with this Settlement. **With the mutual agreement of all parties, the signatories of the settlement agreement may modify this document before it is submitted to the Commission.**

v. Legal Authorization of Signatories

By the signing of this Settlement each signatory is representing that they have the authorization by the party or parties they represent legally to bind that party or those parties to this Settlement. Moreover, upon signature, parties represented by the signing person(s) are legally bound to the terms expressed herein.

vi. Confidentiality Statement

All documents related to the negotiation of this Settlement shall remain confidential pursuant to 18 C.F.R § 385.606. Therefore, by the signing of this Settlement, signatories are acknowledging their understanding that all negotiations, discussions, and documentation relating to the development of this Settlement are and shall remain confidential under applicable law, notwithstanding a termination of this Settlement as described below. **Comment: we are researching this issue.**

vii. Termination of Settlement

Termination of this Settlement may occur under the following circumstances: (a) **the withdrawal of the Licensee from this Settlement; We don't think the Licensee should be able to withdraw from the settlement agreement**(b) expiration of the New License term; (c) **the transfer of ownership of the Saluda Hydroelectric Project to a new owner unaffiliated with SCE&G or its parent company SCANA, and the subsequent transfer of the license to the new owner; (Comment: The settlement agreement should transfer with the license if the project is sold to another company)**and (d) the termination or surrendering of the New License by SCE&G pursuant to the requirements of the FPA.

viii. Effective Date of Settlement Agreement:

This Settlement becomes effective as of the date of execution by the last signature as reflected on the signatory page. With

regards to the proposed terms for the license articles, as set forth in Appendix A, these terms only become effective upon their inclusion into the New License as issued by the Commission for the Project and are enforceable to the extent permissible by law.

ix. Submittal of Settlement Offer to the Commission:

This Offer of Settlement shall be submitted to the Commission within 30 days of the signing of the Settlement by all involved parties.

x. Structure of Settlement Agreement:

The preceding sections serve to establish the responsibilities of the signatories to this Settlement, the terms of which are defined in Appendix A. The signatories respectfully request that the terms of Appendix A be incorporated into the terms of the new license without material modification.

Other:

The settlement agreement encompasses lands both inside and outside the project boundary and the project area.

Appendix A

Proposed Content of License Conditions

The following conditions outlined in this appendix serve to set forth the terms and conditions developed for the protection, mitigation, and enhancement of natural resources affected by the Project.

DEFINITIONS:

The definitions set forth in the following sections are applicable to this Settlement Agreement and associated appendices and are fundamental to the understanding and interpretation of the material herein. When appropriate, these definitions may be adopted by the Commission into the articles of the New License.

- Benthic macroinvertebrates - Animals without backbones, which are visible to the eye and which live on, under, and around rocks and sediment on the bottoms of lakes, rivers, and streams.
- Cubic feet per second (CFS) - A measurement of water flow representing one cubic foot of water moving past a given point in one second. One CFS is equal to 0.0283 cubic meters per second and 0.646 mgd.
- Cultural resources - Includes items, structures, etc. of historical, archaeological, or architectural significance.
- Dissolved oxygen (DO) - Perhaps the most commonly employed measure of water quality, DO is the amount of gaseous oxygen in a liquid. Low DO levels can adversely affect fish and other aquatic life. The total absence of DO leads to the development of an anaerobic condition with the eventual development of odor and aesthetic issues.
- Drawdown - The distance the water surface of a reservoir is lowered from a benchmark elevation as the result of releasing water.
- Elevation - references in this Settlement are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies for the license application and frequently referred to as msl) requires the addition of 1.50 feet.
- Eutrophic - Categorization of water quality relative to concentrations of nutrients such that a high level of primary production is expected. Eutrophication is the process of nutrient addition and/or concentration that drives water quality towards a higher eutrophic condition.
- Exotic species - Species not native to a particular area.

- Flow - The volume of water passing a given point per unit of time.
- Flow duration curve - A graphical representation of the percentage of time in the historical record that a flow of any given magnitude has been equaled or exceeded.
- Gross storage - The total amount of water contained in a reservoir at its maximum normal operating elevation.
- Guide Curve – A series of target daily elevations for Lake Murray over the course of a year, having the potential to change with the occurrence of abnormal meteorological or operational circumstances. A guide curve is not the equivalent of a rule curve.
- Head - The distance that water falls in passing through a hydraulic structure or device such as a hydroelectric plant. Gross head is the difference between the headwater and tailwater levels; net head is the gross head minus hydraulic losses such as friction incurred as water passes through the structure; and rated head is the head at which the full-gate discharge of a turbine will produce the rated capacity of the connected generator.
- Headwater - The waters immediately upstream of a dam. For hydroelectric dams, also referred to as the water in the impoundment which supplies the turbines.
- Hydraulic - Relating to water in motion.
- Hypolimnetic – Related to the deeper cooler portions of a reservoir or lake that result from thermal stratification.
- Initial Consultation Document (ICD) - A document containing detailed information on a hydroelectric project; the document is used to describe the project and its resources and to start the applicant's consultation process with resource agencies and the public. It is in fact a collection of documents, taken together.
- Instantaneous Minimum Flow – flow, measured in CFS, that occurs during a specified period of time
- Lacustrine - Related to standing water, (e.g., a lake).
- Lake Elevation – The elevation of Lake Murray as measured in Plant Datum by USGS gage number 02168500 located at the intake towers.
- Littoral - Associated with shallow (shoreline area) water (e.g., the littoral zone of an impoundment).
- Lotic - Flowing or actively moving water including rivers and streams.

- Non-Governmental Organization (NGO) – A organization that has been created by an individual or group of individuals containing no membership or participation by any governmental entity.
- Phytoplankton - Algae floating in the water column. These are mostly microscopic single-celled and colonial forms.
- Pool - Refers to the reservoir (impounded body of water).
- Probable maximum flood (PMF) – The result of a statistical formula used to calculate a hypothetical flood event that could occur within a particular river basin over a particular duration. This is derived from the probable maximum precipitation over time. The method for determining a PMF is prescribed by the FERC.
- Project - One or more hydroelectric plants collectively included in a single license issued by the FERC. Projects typically consist of a dam or dams, reservoir, powerhouse and appurtenant facilities. As used in this document, the capitalized term “Project” refers specifically to the Saluda Hydroelectric Project (P-516).
- Project area - lands and waters owned by or under some level of control by SCE&G within the project boundary.
- Project boundary - A demarcation line established by the FERC within which some level of interest in or control over all lands, waters and structures are deemed needed to operate a licensed hydroelectric project.
- Project Discharge – the flow, measured in CFS, that is released from the Project turbines or through the spillway.
- Recreation area – A land and associated water surface area which people use for leisure activities, whether formally designated or used informally.
- Reserve capacity - The capability above system demand available to SCE&G within 15 minutes following a supply contingency, required to provide for system regulation and local area protection and to correct for or stabilize the system in the event of contingencies, load forecasting errors and forced outages to SCE&G generating units or to meet SCE&G’s VACAR reserve obligations.
- Resource agency - Federal, state, or interstate agency with responsibilities for flood control, navigation, irrigation, recreation, fish or wildlife, water resource management, or cultural or other relevant resources of the state(s) in which a project is or will be located.
- Rule curve – Defined elevations for a project reservoir that guide operation of the project throughout a calendar year.
- Spillway - The section of a dam that is designed to pass water over or through it during periods of excess flow through the project.

- Stakeholder - Any individual or organization (government or non-governmental) with an interest in the management and/or operation of a hydroelectric project.
- Stratification - A physical and chemical process that results in the formation of distinct layers of water within a lake or reservoir (i.e., epilimnion, metalimnion, and hypolimnion).
- Streamflow - The rate at which water passes a given point in a stream, usually expressed in cubic feet per second (CFS).
- Submerged aquatic vegetation - Plants with rigid stems and/or leaves rooted in substrate and generally covered by deep water (greater than 6.6 ft depth), with all of the plant parts covered by water.
- Tailrace - The tailrace is an area of stream downstream of a dam where the impounded water re-enters the river after passing through the turbines.

1.

DRAFT

Alison Guth

From: Dan Tufford [tufford@sc.edu]
Sent: Tuesday, March 31, 2009 9:30 AM
To: Alison Guth
Subject: RE: Settlement Agreements - Water Quality

When and where is the meeting Wednesday? I missed the announcement of it.

Daniel L. Tufford, Ph.D.

University of South Carolina

Department of Biological Sciences

209A Sumwalt (office)

715 Sumter St, Room 401 (mail)

Columbia, SC 29208

Ph. 803-777-3292, Fx: 803-777-3292

e-mail: tufford@sc.edu

web: <http://www.biol.sc.edu/~tufford>

P Please think before you print.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Monday, March 30, 2009 4:45 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mwleapjr@att.net; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@windstream.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard

Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; schneider@scetv.org; Wenonah Haire; Jon Quebbeman; Jennifer O'Rourke; Keith Ganz-Sarto; Roger Hall; Tom Stonecypher

Subject: Settlement Agreements - Water Quality

Hello All,

In light of our Water Quality Settlement Agreement/Water Quality RCG meetings Wednesday and Friday of this week, I have attached the Settlement Agreement language that we will be reviewing below, as well as links to the applicable reports. The tentative schedule for those days will be as follows:

Wednesday:

Jim Ruane will provide a presentation on the significance of a drawdown to the health of Lake Murray
Jim Ruane will be presenting on the W2 modeling and Unit 5 operation
Shane will be reviewing the results of the Temperature study
Review of reports by RCG

Friday:

Develop Settlement Agreement language for Water Quality section

If you have not RSVP'ed for these meetings please do so ASAP. Thanks, Alison

The Upgrade of Unit Runners:

During the period of the new license by the Commission, SCE&G plans to install new runners of modern design that offer higher efficiencies, output, and dissolved oxygen (DO) uptake, and to rewind the generators according to the schedule discussed below.

While providing for enhanced unit efficiency and maintaining the reliability necessary to meet generation obligations, upgrading the existing unit runners will provide positive benefits for downstream DO levels such that 100% support of the SCDHEC in-stream DO standard may be assured.

The complete schedule for runner upgrades will be determined based on an adaptive program. The adaptive program is intended to allow for a full evaluation of the levels to which downstream water quality goals are achieved as a result of improvements resulting from each unit upgrade. At the point at which the DO standard is consistently maintained through all operating scenarios, whether it occurs after the first unit upgrade, the second one, or the third one, the remaining unit upgrades (if any remain to be done) will be implemented in a purely economics-driven manner. This could extend the upgrade period to as long as 25 years after the issuance of the license. However, so long as environmental objectives are being achieved, an economics driven schedule for the remaining units is entirely justified.

The upgrade of Unit 5 will be completed within three years from issuance of the license. The upgrade of that unit is expected to take as long as three years to account for the need to accommodate the extensive design and testing necessary to assure the new runner meets the performance objectives. Subsequent to the Unit 5 upgrade, downstream water quality will be assessed, employing the adaptive management process. Subsequent unit upgrades may proceed thereafter as follows:

- Should it be necessary to upgrade another unit to assure support of the SCDHEC in-stream DO standard, SCE&G will perform the upgrades on the following schedule:
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 - o This process will be repeated with the sequential upgrades of Units 4, 1, and 2, each being achieved within two years after the completion of the previous unit upgrade should the effects of that prior upgrade not support the water quality goals. The sequence of unit upgrades as noted may change. SCE&G will determine the next unit for upgrades at the completion of the previous upgrade.
- Should the SCDHEC in-stream DO standard be fully supported with installation of Unit 5 the SCE&G will perform the upgrades on the following schedule. Should reliability or other issues require the upgrade of one or more of the units sooner than proposed, the schedule will be accelerated to meet the identified need.
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SCE&G proposes to use other hydro/pumped storage facilities, gas turbines, and/or other options available to the Applicant at the time of the upgrade as alternatives to meet our reserve obligations during the time each unit is out of service for the upgrade modification.

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Report Links:

<http://www.saludahydrorelicense.com/documents/fla/documents/FINALDOSummaryReport.pdf>
<http://www.saludahydrorelicense.com/documents/fla/documents/DraftSaludaTempReport2008.pdf>
<http://www.saludahydrorelicense.com/documents/fla/documents/LakeMurrayW2applicationsReport-Final.pdf>
<http://www.saludahydrorelicense.com/documents/fla/documents/LakeMurrayW2Report-12-06Final.pdf>
<http://www.saludahydrorelicense.com/documents/fla/documents/LakeMurrayWaterQualityReport.pdf>

Alison Guth**Licensing Coordinator****Kleinschmidt Associates**

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, March 30, 2009 4:45 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wendy Schneider (schneider@sctv.org); Wenonah Haire; Jon Quebbeman; Jennifer O'Rourke; Keith Ganz-Sarto; Roger Hall; Tom Stonecypher
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<http://www.saludahydrorelicense.com/documents/fla/documents/LakeMurrayW2Report-12-06Final.pdf>
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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Maropeter@aol.com
Sent: Sunday, March 29, 2009 7:14 PM
To: siv@scsenate.org; ballentine@schouse.org; haleyn@schouse.org; cromerr@scsenate.org; ch@schouse.org; mbf@schouse.org
Cc: jlandraeth@scana.com; lmhoc@yahoo.com; frampton@dnr.scgov; Alison Guth
Subject: (no subject)

My neighbors and I are Lake Murray homeowners and residents who appreciate, respect and enjoy our natural resources and our privilege of private lake access. We are also tax payers who are concerned about potential negative impact to our property values.

As part of SCE&G's relicensing process, SC DNR is requesting certain downstream releases to enhance striped bass habitat in the lower Saluda River and the Congaree River. During below average rainfall conditions, the proposed releases could cause the lake to drop significantly by early July. Thousands of homeowners could lose use of their docks. In addition, low levels in the spring and summer can dry up shorelines affecting spawning activity and the health of the fishery. Loss of recreation availability also negatively impacts lake businesses and tax revenues.

I support the Lake Murray Homeowners proposal to reduce the flows to a minimum of 400cfs when the lake drops 6 feet from the guide curve. (Ref: LMHOC letter dated March 4, 2009) I believe this approach will best serve all of us with a vested interest in Lake Murray.

I ask for your support in opposing DNR's plan which seems to give little thought to the Lake in favor of providing "desirable" conditions for the striped bass in the rivers below the dam.

Please let DNR Director John Frampton know you and your constituents object to DNR's proposal and the compromise positions as stated above.

Sincerely,

Mary Ann Ropeter
112 Stoney Point Lane
Chapin, SC 29036
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Alison Guth

From: Amanda_Hill@fws.gov
Sent: Thursday, March 26, 2009 6:28 PM
To: Shane Boring
Cc: Alan Stuart; BARGENTIERI@scana.com; QUATTLEBAUM, MILTON
Subject: Re: FW: Updated Mussel Program

BRAVO SHANE!!! GREAT JOB! You have adequately described each of the recommended studies. There are many details to be worked out, but many can be up to the Tech Working Group. However, you have captured the intent! We need to share this with Dick Christie (he requested to be apprised), if SCE&G is comfortable could you go ahead and email this draft tonight or in the morning before the meeting. Otherwise we can discuss it at the meeting, I just don't want them to feel left out.

Thank you for your efforts. I think we are real close now. See you tomorrow.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Shane Boring" <Shane.Boring@KleinschmidtUSA.com>

03/26/2009 03:48 PM To

"FWS Amanda Hill" <Amanda_Hill@fws.gov>

cc

<BARGENTIERI@scana.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>, "QUATTLEBAUM, MILTON" <MQUATTLEBAUM@scana.com>

Subject

FW: Updated Mussel Program

Amanda:

Here's an updated version of the Saluda mussel program. I'm certain that it is not perfect since I went through it rather quickly today, but I think it captures your intent for the most part. Keep in mind that this is my best effort to capture your request and has not been reviewed by SCE&G, and as such, does not represent a proposal or commitment in its current

state. It is meant as a working document to guide our discussions tomorrow.

Thanks,
Shane

<<LSR Freshwater Mussel Program (03262009).doc>> [attachment "LSR Freshwater Mussel Program (03262009).doc" deleted by Amanda Hill/R4/FWS/DOI]

Alison Guth

From: Shane Boring
Sent: Thursday, March 26, 2009 3:49 PM
To: 'FWS Amanda Hill'
Cc: BARGENTIERI@scana.com; Alan Stuart; 'QUATTLEBAUM, MILTON'
Subject: FW: Updated Mussel Program

Amanda:

Here's an updated version of the Saluda mussel program. I'm certain that it is not perfect since I went through it rather quickly today, but I think it captures your intent for the most part. Keep in mind that this is my best effort to capture your request and has not been reviewed by SCE&G, and as such, does not represent a proposal or commitment in its current state. It is meant as a working document to guide our discussions tomorrow.

Thanks,
Shane



LSR Freshwater
Mussel Program ...

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT

(FERC NO. 516)

LOWER SALUDA RIVER FRESHWATER MUSSEL ADAPTIVE MONITORING PROGRAM

APRIL 2009

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA

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COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

**LOWER SALUDA RIVER FRESHWATER MUSSEL ADAPTIVE MONITORING
PROGRAM**

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[5.0 FUNDING](#) . 5-4¶
[6.0 IMPLEMENTATION
SCHEDULE](#) . 6-4¶
[7.0 LITERATURE CITED](#) . 7-1¶

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Comment: Need to insert citation for new Table 2-1

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DRAFT

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
COLUMBIA, SOUTH CAROLINA**

**SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)**

LOWER SALUDA RIVER FRESHWATER MUSSEL MONITORING PROGRAM

1.0 INTRODUCTION

The Saluda Hydro Project (Project) is a 202.6 megawatt (MW) licensed hydroelectric facility located on the Saluda River in Lexington, Newberry, Richland, and Saluda counties of South Carolina (Figure 1-1) that is owned and operated by South Carolina Electric & Gas Company (SCE&G or Licensee).

The Project is currently licensed by the Federal Energy Regulatory Commission (FERC No. 516), and the present license is due to expire in the year 2010. To initiate relicensing of the project, SCE&G prepared and issued the Initial Consultation Document (ICD) on April 29, 2005. In response to the ICD, the United States Fish and Wildlife Service (USFWS), South Carolina Department of Natural Resources (SCDNR), and several Non-governmental Organizations (NGO's) requested that SCE&G conduct studies characterizing the mussel fauna occurring in the Project vicinity and identify potential Project impacts to these species. SCE&G subsequently formed a Freshwater Mussels and Macroinvertebrate Technical Working Committee (TWC) to address relicensing requests related to these organisms.

With oversight from this TWC, SCE&G subsequently contracted with a regional expert (John M. Alderman) to conduct mussel surveys of the lower Saluda River (LSR) and upper Congaree River downstream of the Project dam, as well as the Project reservoir (Lake Murray) and its major tributaries. The surveys, conducted during the summer of 2006, documented 15 native freshwater mussel species as occurring in Lake Murray, its tributaries, and the upper Congaree River (Alderman, 2006).

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No mussels were documented directly downstream of the Project in the LSR. Further, the study found mussel assemblages to be more diverse and have greater abundance on the Broad River side of the Congaree River than on the LSR side. These findings prompted USFWS, SCDNR and other stakeholders to request mitigation for the lack of mussel fauna in their comments on the Saluda Draft License Application and in subsequent consultation. Resource agencies and stakeholders cited years of low dissolved oxygen levels and cold water releases as likely having had an adverse impact on mussel assemblages in the LSR. The program contained herein was prepared pursuant to this request.

DRAFT

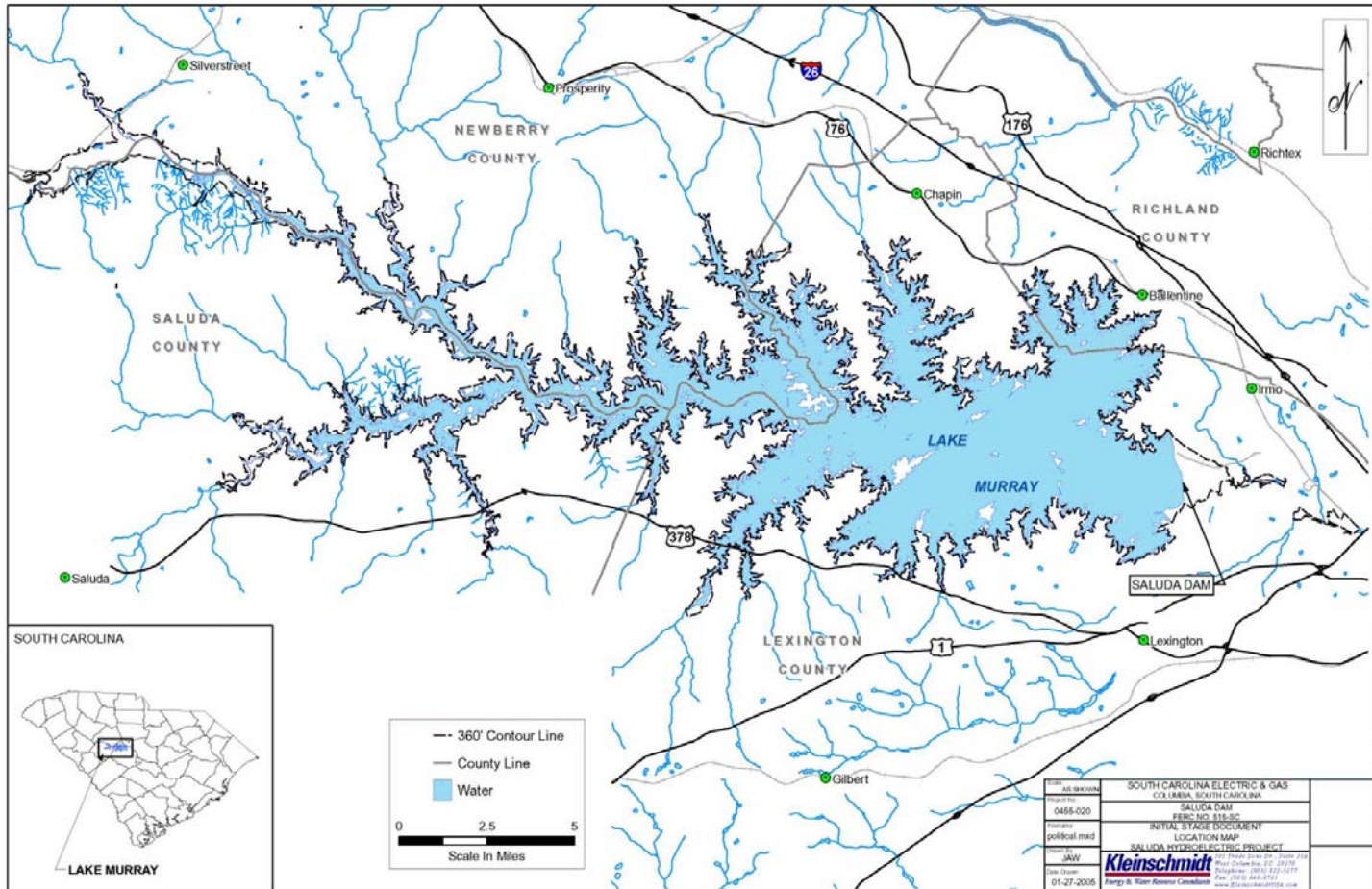


Figure 1-1: Location Map for the Saluda Hydroelectric Project (FERC No. 516)

2.0 BACKGROUND

The southeastern United States is considered the “epicenter” of North American freshwater mussel biodiversity, with approximately 90% of the 300 species known from the U.S. occurring in the region (USGS, 2000). However, the freshwater mussel fauna of most southeastern river systems has declined dramatically in the past 30 years. In the past, one of the largest impacts to mussels was the construction of large dams which converted large amounts of riverine habitat into impoundments. Subsequently, mussel populations that remained in unimpounded streams were impacted by habitat degradation caused by dredging, mining, point and non-point source pollution, and siltation. Presently, most remaining mussel populations are highly fragmented, occupying small reaches of their historic range where habitats have remained relatively unimpacted. It is estimated that 70% of our freshwater mussels are extinct, endangered, or in need of special protection (Williams, et. al. 1993).

Twenty-four species of native freshwater mussel are known to occur or are thought to have occurred historically in the Santee River Basin in South Carolina (Alderman and Bogan, 2004). However, prior to the current relicensing, little information was available regarding their distribution in Lake Murray, its tributaries, or the LSR. As previously noted, surveys conducted in support of relicensing found 15 native freshwater mussel species as occurring in Lake Murray, its tributaries, and the upper Congaree River below the confluence of the LSR and Broad River (Alderman, 2006). No mussels were documented in the LSR downstream of the Project dam to the confluence with the Broad River. While none of the species encountered are federally or state listed as threatened or endangered, a number are consider federal species of concern ([Table 2-2](#)).

Alderman (2006) also noted a greater abundance of mussels on the Broad River side of the confluence area and the upper Congaree River than on the Saluda River side, suggesting that hypolimnetic (coldwater) releases may be a limiting factor in mussel distribution. Similarly, preliminary data from the University of South Carolina suggest temporal differences in timing of mussel gravidity between areas in the Broad River upstream of the Broad/LSR confluence and areas downstream of the confluence in the upper Congaree (J. Price, Univ. of SC, Unpublished Data). Dr. Price’s data suggest that downstream females are gravid one to several months later

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than mussels in the Broad River. Additionally, Dr. Price’s data documented higher rates of gravidity in Broad River females as compared to mussels in the upper Congaree downstream of the confluence. A downstream temperature study conducted in 2006 and 2007 by SCE&G in support of relicensing found that hypolimnetic influences from Project releases (reduced water temperatures on the Saluda side of the Congaree River) extend as far downstream as 16 miles below the confluence before mixing is complete (Kleinschmidt, 2008).

SCE&G has also proposed to implement minimum flow releases from Saluda Hydro to support target riverine species in the LSR (Table 2-1). The proposed flows are significantly higher than the current 180 cfs minimum flow in the LSR and will likely represent a significant habitat enhancement for many aquatic species. Conversely, implementation of the flows will also result in increased volumes of cool water being released to the areas of the Upper Congaree that harbor freshwater mussel species. As such, the USFWS has requested the monitoring of mussel aggregations in the Congaree River to evaluate potential effects of these new flows (USFWS letter dated January 28, 2009).

Table 2-1: Summary of Proposed Minimum Flows for Lower Saluda River

TIME PERIOD	FLOW (cfs)
January 1 – March 31	700
April 1 – May 10	1,000 plus SCDNR striped bass spawning flows ¹
May 11 – May 31	1,000
June 1 – December 31	700

¹ [Further detail regarding striped bass flows will be provided as negotiations are complete.](#)

DRAFT

Table 2-2: Native Freshwater Mussels of the Santee River Basin in South Carolina
 (Source: Alderman and Bogan, 2004, except where otherwise noted)

COMMON NAME	SPECIES	G RANK ¹	FEDERAL STATUS ²	STATE STATUS ³	OCCURRENCE IN BASIN ⁴
Roanoke Slabshell	<i>Elliptio roanokensis</i>	G2G3	SOC		X
yellow lampmussel	<i>Lampsilis cariosa</i>	G3G4	SOC	SOC	X
Carolina slabshell	<i>Elliptio congaraea</i>	G4	SOC	SOC	X
Carolina Lance	<i>Elliptio angustata</i>	G4	SOC		X
Common Elliptio	<i>Elliptio complanata</i>	G5			X
Variable Spike	<i>Elliptio icterina</i>	G4			X
Atlantic Spike	<i>Elliptio producta</i>	G4			X
Savannah Lilliput	<i>Toxolasma pullus</i>	G3	SOC	SOC	X
Eastern floater	<i>Pyganodon cataracta</i>	G5		SOC	X
paper pondshell	<i>Utterbackia imbecillis</i>	G5		SOC	X
Rayed Pink Fatmucket	<i>Lampsilis splendida</i>	G3	SOC	SOC	X
Eastern Creekshell	<i>Villosa delumbis</i>	G4		SOC	X
Creeper	<i>Strophitus undulatus</i>	G5			X
Florida pondhorn	<i>Uniomerus carolinianus</i>	G4			X
northern lance	<i>Elliptio fisheriana</i>	G4			X
barrel floater	<i>Anodonta couperiana</i>	G4		SOC	H?
brook floater	<i>Alasmidonta varicosa</i>	G3		SOC	H,N
Triangle floater	<i>Alasmidonta undulata</i>	G4			H
Carolina heelsplitter	<i>Lasmigona decorata</i>	G1	E	E	X
Pod lance	<i>Elliptio folliculata</i>	G2G3Q			X
Eastern pondmussel	<i>Ligumia nasuta</i>	G4			X
Southern rainbow	<i>Villosa vibex</i>	G5Q		SOC	H
Notched rainbow	<i>Villosa constricta</i>	G3		SOC	N
Carolina creekshell	<i>Villosa vaughaniana</i>	G2			X
Eastern lampmussel	<i>Lampsilis radiata</i>	G5			X

¹ G1 = Critically Imperiled; G2 = Imperiled; G3 = Vulnerable; G4 = Apparently Secure; G5 = Secure

² Endangered; SOC = Species of Concern

³ E = Endangered; SOC = Species of Concern (Source: SCDNR, 2008)

⁴ X = extant; H = historical; N = just into N. Carolina

Table 2-2: Occurrence and Status of Freshwater Mussel Species Documented in the Vicinity of the Saluda Hydroelectric Project, including the Lower Saluda and Upper Congaree Rivers and Lake Murray and Selected Tributaries (Source: Alderman, 2006)

COMMON NAME	SPECIES	G RANK	FEDERAL STATUS	OCCURANCE ²
Roanoke Slabshell	<i>Elliptio roanokensis</i>	G2G3	SOC	BR, CO
yellow lampmussel	<i>Lampsilis cariosa</i>	G3G4	SOC	BR, CO
Carolina slabshell	<i>Elliptio congaraea</i>	G4	SOC	CO
Carolina Lance	<i>Elliptio angustata</i>	G4	SOC	LM, LMT, BR, CO
Common Elliptio	<i>Elliptio complanata</i>	G5		LM, LMT, BR, CO, S*
Variable Spike	<i>Elliptio icterina</i>	G4		LMT, CO
Atlantic Spike	<i>Elliptio producta</i>	G4		LM, LMT
Savannah Lilliput	<i>Toxolasma pullus</i>	G3	SOC	LM, LMT
Eastern floater	<i>Pyganodon cataracta</i>	G5		LM, LMT
paper pondshell	<i>Utterbackia imbecillis</i>	G5		LM, LMT
Rayed Pink Fatmucket	<i>Lampsilis splendida</i>	G3	SOC	LM, CO
Eastern Creekshell	<i>Villosa delumbis</i>	G4		LM, LMT, BR, CO, S*
Creeper	<i>Strophitus undulatus</i>	G5		S*, CO
Florida pondhorn	<i>Uniomerus carolinianus</i>	G4		LM, LMT
northern lance	<i>Elliptio fisheriana</i>	G4		LM

¹ G1 - Critically Imperiled; G2 - Imperiled; G3 - Vulnerable; G4 - Apparently Secure; G5 - Secure

² BR = Broad; CO = Congaree; S = Saluda; LM = Lake Murray; LMT = Lake Murray Tributaries

* Refers to Saluda River side of confluence area.

3.0 MONITORING PROGRAM

The mechanism governing mussel distributions in the Saluda Project vicinity remain unclear at this time, particularly for those areas in the LSR downstream of the Project dam that do not currently support mussel fauna. Potential factors influencing downstream mussel distributions likely include biotic factors, such as presence and abundance of suitable host fish, and abiotic environmental factors such as water temperature and dissolved oxygen. Due to these uncertainties, SCE&G proposes to employ an adaptive strategy for mussel monitoring efforts in the LSR, Lake Murray and the Congaree River downstream of the confluence of the Broad and Saluda rivers. Specifically, SCE&G proposes implementation of the following after issuance of a new FERC license for the Saluda Project:

Deleted: management

Deleted: An initial experimental phase involving translocation of adult mussels to suitable habitat in the LSR is proposed as a means of determining feasibility of a large-scale monitoring effort.

3.1 LSR Freshwater Mussel Working Group

SCE&G will coordinate formation of a LSR Freshwater Mussel Working group to provide technical expertise and guidance for mussel monitoring efforts on the LSR. Potential participants will likely include SCE&G staff, representatives from state and federal resource agencies, such as USFWS and SCDNR, as well as academic and other regional mussel experts. The Working Group will meet at least annually to review relevant data, evaluate effectiveness of monitoring efforts to date, and to establish goals and objectives for the coming year. Minutes will be prepared for all meetings and filed with the FERC as part of the annual report ([See Section 4.0](#)).

3.2 Determination of Savannah Lilliput Distribution in Upper Lake Murray

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An in-depth survey for Savannah lilliput (*Toxolasma pullus*) will be conducted in upper Lake Murray to further document distribution, abundance, and reproductive status of this species. This survey will focus on Lake Murray and its tributaries, beginning in the vicinity of the Buffalo Creek area of Lake Murray (near the easternmost junction of Saluda and Newberry counties) and extending upstream into the reservoir headwaters. Survey methodology will be consistent with the 2006 reconnaissance survey of the area (Alderman, 2006), and will consist of timed, qualitative searches utilizing tactile methods

(probing into substrate) and visual methods (snorkeling and/or bathoscope inspections in shallow water and visual shoreline searches).

Specific sites within the survey area will be selected and prioritized based on appearance of best available habitat, with shallow shoreline areas preferred by this species given initial priority. As many sites as possible will be surveyed during a two week survey period (10 field days). The survey team will consist of at least three trained biologists. All sites surveyed will be documented with a Global Positioning System (GPS). Approximately 1-2 person hours will be expended at each site to determine presence/absence and to maximize the number of sites examined. If presence of Savannah lilliput is confirmed at a site on occurrence of live or dead specimens, an additional 6 – 12 person hours, or possibly more if needed, will be expended at each site in order to adequately document the population. Specifically, the following parameters will be collected at each site where *T. pullus* is found.

- Abundance and Catch-Per-Unit-Effort, based on total number of live and dead individuals collected.
- Length measurements (mm) for all live and fresh-dead specimens to allow development of size-class estimates and aid in determining if reproduction is taking place.
- Determination of gravidity based on examination of a sub-set of female mussels from the site.
- Estimated age of live specimens based on growth ring patterns.
- General habitat conditions, including dominant substrate, approximate slope of bank, extent of shoreline vegetative cover, depth range of population.

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Microhabitat water quality data will be collected in each tributary arm surveyed and will include:

- Dissolved Oxygen (DO)
- Water Temperature

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- pH
- Conductivity
- Water Hardness

3.3 Baseline Characterization of Congaree River Freshwater Mussel Fauna

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Under direction of the LSR Freshwater Mussel Working Group, SCE&G will gather baseline data to characterize mussel assemblages in the Congaree River from the LSR/Broad confluence downstream through the area of cold water influence. The purpose of this data will be to determine the status of freshwater mussels in the reach prior to implementation of the new instream flow regime being proposed for the LSR.

Mussel fauna of the Congaree River will be characterized through compilation of existing data from a number of researcher projects conducted in the reach in recent years on the upper Congaree, with additional targeted field surveys as deemed necessary in consultation with the LSR Freshwater Mussel Working Group to fill data gaps. Because this data is intended to characterize baseline conditions prior to implementation of the new instream flow regime, this phase will be completed prior to issuance of a new FERC license for the Saluda Project.

Comment: This inserted as a placeholder to conform to Amanda's memo.

We need to determine the EXACT purpose of this. If we only want to identify 3-4 locations that have aggregation that can be monitored after the flow is implemented, we could consult with the expert to ID several locations, then just survey those locations only.

3.4 Evaluation of Impacts of Instream Flow Implementation on Congaree River Mussels

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In consultation with the Working Group, four monitoring locations will be established in the Congaree River downstream of the Saluda/Broad confluence, within the temperature mixing zone discussed previously in Section 2.0, for purposes of evaluating impacts of the instream flows being proposed for the LSR. A minimum of one monitoring station will also be established above the confluence in the Broad River to serve as a reference (i.e., not influenced by LSR minimum flows).

Comment: I put in four as a placeholder.

Note to reader: Much more detail is needed here. Additional items to be determined in consultation with the TWC include:

- Exact monitoring locations
- Monitoring methods and metrics
- Duration of Monitoring

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3.5 Determination of Coolwater Impacts in the Lower Saluda and Congaree Rivers

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Under direction of the Under direction of the LSR Freshwater Mussel Working Group, SCE&G will conduct and/or fund caged-mussel experiments to elucidate the impacts of coolwater releases from Saluda Hydro on freshwater mussel survivorship and reproductive potential in downstream areas. The phase will involve placement of caged mussels from wild source populations (most likely from the Broad and/or Congaree rivers) to selected locations in suitable habitat in the LSR and the upper Congaree River within the temperature impact zone, and the lower Broad River upstream of the confluence. The location in the Broad will be used as a control, while the LSR site is intended to demonstrate the impacts that have been occurring in the LSR from the cold water releases. Cages on either side of the Congaree, located close to the confluence and downstream where there is more mixing, will aid in determining threshold temperature where impacts are reduced.

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Specific stocking locations will be determined based on availability of suitable habitat and will be identified in consultation with the Working Group. While these sites have not yet been identified, Alderman (2006) identified the gravel shoals at the downstream toe of the Ocean Boulevard/ Oh Brother reach of the LSR as being a potential location for experimental translocation. Cage experiments prevent displacement of individuals lost to mortality and provide a more accurate estimate of survivorship.

Deleted: The objective of this initial phase will be to determine survivorship and reproductive potential of translocated mussels for purposes of determining feasibility of larger scale reintroduction efforts in the LSR.¶

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Deleted: Caged Broad River mussels will also be placed at a minimum of one location in suitable habitat in the Broad River to serve as a reference and allow for comparison with those in the LSR.

All stocked mussels will be tagged either externally with a unique alphanumeric tag or with Passive Integrated Transponder (PIT) tags. While more costly, PIT tags allow for easier recovery of stocked mussels when they are burrowed into the substrate. All mussel collections/introductions will be closely coordinated with SCDNR and the University of South Carolina to insure compatibility with their research being conducted in the confluence area and downstream in the Congaree River. Although the exact

number and species of mussels to be stocked will be ultimately determined in consultation with the Working Group, potential species identified in consultation with regional experts are outlined in Table 3-1.

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Table 3-1: Native Freshwater Mussel Species Identified for Potential Use in Caged Experiments Downstream of the Saluda Hydro Project (based on consultation with J. Price and J.M. Alderman)

COMMON NAME	SPECIES	RATIONALE FOR CONSIDERATION
Roanoke Slabshell	<i>Elliptio roanokensis</i>	Abundant; hardy; recent work suggests host fish not limited to anadromous species
Common Elliptio	<i>Elliptio complanata</i>	Abundant; non-anadromous host
Eastern Creekshell	<i>Villosa delumbis</i>	Abundant in basin
Florida pondhorn	<i>Uniomerus carolinianus</i>	Hardy

Reintroduced native mussels will be monitored quarterly following stocking. In addition to documenting survivorship, the condition of each mussel will be noted and each individual measured to document growth rates. Mussels surviving until the following reproductive season will be assessed for reproduction condition. Appropriate habitat and environmental factors, such as temperature and dissolved oxygen, will also be documented at each stocking site as deemed necessary by the Working Group.

Comment: I put in four as a placeholder.

Deleted: <#>Evaluation of Impacts of Instream Flow Implementation on Congaree River Mussels¶

¶ In consultation with the Working Group, four monitoring locations will be established in the Congaree River downstream of the Saluda/Broad confluence, within the temperature mixing zone discussed previously in Section 2.0, for purposes of evaluating impacts of the instream flows being proposed for the LSR. A minimum of one monitoring station will also be established above the confluence in the Broad River to serve as a reference (i.e., not influenced by LSR minimum flows). Monitoring stations ¶

¶ Note to reader: Much more detail is needed here. Additional items to be determined in consultation with the TWC include:¶

<#>Exact monitoring locations¶
 <#>Monitoring methods and metrics¶
 <#>Duration of Monitoring¶

4.0 REPORTING

SCE&G will file an annual report detailing the status of freshwater mussel monitoring efforts conducted during the previous year. A draft report will be distributed to the Working Committee by the end of February of each year for review and comment. The final report will be filed with the FERC and distributed to the above noted parties by April 30 of each year. The final report will contain recommendations from the TWC on any changes to the monitoring program.

5.0 FUNDING

To be developed after specifics worked out within the TWC.

6.0 IMPLEMENTATION SCHEDULE

Implementation of the Freshwater Mussel Monitoring Program will commence within two years after issuance of the new license.

Comment: The one exception being the Baseline that USFWS wants done before the license is issued. How do we deal with this?

7.0 *LITERATURE CITED*

- Alderman, J.M. 2006. Reconnaissance Survey of the Freshwater Mussel Fauna of the Lower Saluda and Congaree Rivers, Lake Murray, And Selected Tributaries. Prepared for Kleinschmidt Associates. October 31, 2006. 166 pp.
- Alderman, J.M. and A.E. Bogan. 2004. Workbook and Key to the Freshwater Bivalves of South Carolina.
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- Williams J.D., M.L. Warren, K.S. Cummings, J.L. Harris, and R.J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. Fisheries 18:6- 22.

Alison Guth

From: Vivianne Vejdani [VejdaniV@dnr.sc.gov]
Sent: Thursday, March 26, 2009 10:44 AM
To: Shane Boring; Prescott Brownell; QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Cc: Cheryl Balitz; Dick Christie; Bill Marshall
Subject: RE: Saluda Relicensing: Meeting Notes from Conference Call with NMFS RE Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Thanks Shane,

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Sent: Thursday, March 26, 2009 10:19 AM
To: Shane Boring; Prescott Brownell; QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Cc: Cheryl Balitz
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Phone: (803)951-2077
Fax: (803)951-2124

Cheryl: Please post these under Fish and Wildlife. Thanks

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Sent: Thursday, February 05, 2009 1:36 PM

To: 'Prescott Brownell'; 'QUATTLEBAUM, MILTON'; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'SUMMER, STEPHEN E'; RMAHAN@scana.com; Jennifer Hand; Alison Guth

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Sent: Thursday, March 26, 2009 10:44 AM
To: Shane Boring; Prescott Brownell; QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
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Conference Cal...

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Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

3-17-2007 a ~6ft Atlantic sturgeon was seen passing via the St. Stephens fish lift into Lake Moultrie.

Documented on video....file too big to send.

I think Prescott was referring to the Atlantics seen during the fish kills.

Bill Post
S.C. Department of Natural Resources
Diadromous Fishes Coordinator
P.O. Box 12559
Charleston, SC 29422-2559
Office: (843)953-9821
Fax: (843)953-9820



image001.jpg (4
KB)

cid:imag 002.jpg@01C8BBEB.29CCB790

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Thursday, March 26, 2009 10:07 AM
To: Bill Post
Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Bill:

Thanks for reminding me about the missing citations. I knew about them, but to be honest had forgotten.

In regards to Atlantics, Prescott mentioned in some prior edits that Atlantics had been documented

above the Santee Cooper dams on a few occasions in recent years (see Atlantic background info in the document). Bill Argenteri was interested in getting some additional info on exactly where they have been documented, so any info you might have would be great.

Thanks

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Bill Post [mailto:PostB@dnr.sc.gov]

Sent: Thursday, March 26, 2009 10:02 AM

To: Shane Boring

Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Shane,

Wasn't going to prolong the call, but I noticed a couple of citations missing from 6.0 (Kynard, Collins, Cooke, etc...)

Also, not sure if you want to mention the Atlantic sturgeon that was captured in the fish lift a couple of years ago (2-2)...if so, let me know and I can provide more info.

Other than that, great job on the document and have a good day.

Bill

Bill Post
S.C. Department of Natural Resources
Diadromous Fishes Coordinator
P.O. Box 12559
Charleston, SC 29422-2559
Office: (843)953-9821
Fax: (843)953-9820

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]

Sent: Thursday, March 19, 2009 12:16 PM

To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; Bill Post; Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; mqattlebaum@scana.com; Steve Summer; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

All:

After further consultation with NMFS, Prescott has indicated that the conference call approach will be fine for our meeting on Thursday March 26. **There will be no face-to-face component to this meeting as indicated in my previous e-mail (my apologies for any confusion).**

We are planning to meet via conference line from 9:30 - 11:30 am. The call in number is as follows:

76565 – SCE&G internal

(803) 217-6565 – local access (Columbia)

1-888-500-7717 – long distance access

Conference ID – 7549

A copy of the latest version of the Sturgeon Plan is attached below. This is the same version previously sent on 3/10/2009.

<<Saluda Sturgeon Program DRAFT 02-18-09 - CLEAN.doc>>

Thanks to all for your continued dedication to the Saluda Relicensing process. Please don't hesitate to call with questions.

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

-----Original Message-----

From: Shane Boring

Sent: Tuesday, March 17, 2009 5:18 PM

To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum

(mquattlebaum@scana.com)'; 'Steve Summer'; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Good day all,

I have spoken with a number of you over the past week regarding availability for the conference call proposed below for March 26. At our kick-off meeting last week for the Saluda Settlement Agreement, Prescott indicated that he would prefer to meet face-to-face. As such, we are planning to have a meeting room available for those who wish to attend in person, with an option to join via conference line. Please let me know by Thursday of this week whether you plan to attend the conference call or attend in person. I will send along a call in number and meeting room info as soon as I confirm the number of attendees. So far the following folks have confirmed:

Vivianne Vejdani
Bill Post
Pres Brownell
Bill Argentieri
Milton Quattlebaum

Thanks,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Shane Boring

Sent: Tuesday, March 10, 2009 10:37 AM

To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Hello folks,

Attached is an updated draft of the Sturgeon Protection and Adaptive Management Program, which was developed based on our discussions with you all over the past couple of months. Many thanks to Prescott Brownell and Bill Post for developing the framework document that served as the foundation for the proposed Program document.

We would like to convene a conference call to review the Program. We have tentatively identified **Thursday, March 26** (preferably in the AM). Please let us know of your availability on this date. An alternate date is **Tuesday, March 31**. Once we get a consensus on the date for the call, I will send out a final meeting invitation with the call-in number.

Thanks and please don't hesitate to call with questions,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

<< File: Saluda Sturgeon Program DRAFT 02-18-09 - CLEAN.doc >>

Alison Guth

From: Malcolm Leaphart [mwleapjr@att.net]
Sent: Wednesday, March 25, 2009 4:15 PM
To: Alison Guth
Cc: Alan Stuart; dchristie@comporium.net; BARGENTIERI@scana.com; beardh@dnr.sc.gov; ahler@dnr.sc.gov; mwaddell@esri.sc.edu; mrice@americanrivers.org; gjobsis@americanrivers.org; amanda_hill@fws.gov; bulakj@dnr.sc.gov
Subject: Re: Lake Murray Watch proposal for lake level management

Dick Christie explained at the March 23, 2009 meeting that the decrease in size from an 8' band to a 4' band in the new rule curve eliminated the need for a scientifically conducted fisheries study for Lake Murray. The 'study' that Steve Bell has submitted was not conducted scientifically or peer reviewed and should NOT be considered anything more than anecdotal or fisherman observations. While of some interest, the observations have no place in the formulation of relicensing plans; especially when only a 4 foot band of water is proposed for the new rule curve which leaves no appreciable room for lake level management as Dick clearly explained for SC DNR. The 4' band also means that there is no case to be made for 'sharing the pain' equally between the lake fisheries and the river fisheries as there will be so little impact on the lake fisheries in that tight of a lake level fluctuation range - unlike the lower Saluda River which has been de-watered for years at many times, and for which the IFIM scientifically establishes a protective flow regime for the fisheries along with higher dissolved oxygen levels that meet state standards 24/7. We encourage the F&W RCG to move on...

--- On **Wed, 3/25/09**, Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: Lake Murray Watch proposal for lake level management
To: "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, DILLMAJW@dhec.sc.gov, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>, "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <billeast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, "Bob Perry" <perryb@dnr.sc.gov>, bseibels@yahoo.com, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <Bret.Hoffman@KleinschmidtUSA.com>, "Brett Bursey" <network@scpronet.com>, btrump@scana.com, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Chad Altman" <altmankc@dhec.sc.gov>, "Charlene Coleman" <cheetahrk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <ccompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, ccantley@scdah.state.sc.us, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <Dave.Anderson@KleinschmidtUSA.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons" <dsimmons@thefittscompany.com>, dchristie@comporium.net, "Don Tyler" <tyl6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, aregaf@dnr.sc.gov, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>,

"Hank McKellar" <McKellarH@dnr.sc.gov>, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher" <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, pricej@biol.sc.edu, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Ruane" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins" <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, johned44@bellsouth.net, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Ken Styer" <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net>, turnerle@dhec.sc.gov, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester" <linda_lester11@yahoo.com>, "Linda Schneider" <wendy0815@sc.rr.com>, mwleapjr@att.net, mdavis@scprt.com, giffinma@dhec.sc.gov, "Matthew Rice" <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, msummer@scana.com, "Mike Waddell" <mwaddell@esri.sc.edu>, mquattlebaum@scana.com, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore" <PatrickM@scccl.org>, LakeMurrayLOA@windstream.net, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rammarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, rbull@davisfloyd.com, "Rhett Bickley" <rbickley@lex-co.com>, rkidder1@sc.rr.com, "Richard Mikell" <adventurec@mindspring.com>, SKEENER@sc.rr.com, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, ryanity@scana.com, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.ccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <Shane.Boring@KleinschmidtUSA.com>, "Sheri Armstrong" <sarmstrong@lex-co.com>, "Skeet Mills" <MillsL@dnr.sc.gov>, lakewatchman@yahoo.com, "Steve Summer" <ssummer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, tbowles@scana.com, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbber" <tbebbber@scprt.com>, tylehowe@nc-chokeee.com, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vejdani" <vejdani@dnr.sc.gov>, "Wenonah Haire" <wenonahh@www.ccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>
Date: Wednesday, March 25, 2009, 8:33 AM

Hello All,

I neglected to send out the most recent version of the Lake Murray Watch Fish and Wildlife Focus Group proposal. Please refer to the attachment. Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Tuesday, March 24, 2009 3:13 PM

To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Burse; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis;

David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Lake Murray Watch proposal for lake level management

Hello All,

As discussed in our Monday Fish and Wildlife Settlement Meeting, Lake Murray Watch has prepared the attached proposal for lake level management and has requested that it be submitted to the group. Thanks, Alison

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Monday, March 23, 2009 8:43 AM
To: ARGENTIERI, WILLIAM R
Subject: Lake Murray Fish and Wildlife Focus Group

Bill- Attached is our proposal for lake level management.

Steve Bell

Lake Murray Watch

Ph. 803-730-8121

Alison Guth

From: Alison Guth
Sent: Wednesday, March 25, 2009 8:34 AM
To: Alison Guth; 'Will Dillman (DILLMAJW@dhec.sc.gov)'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Perry'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Chad Altman'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart (mwleapjr@att.net)'; 'Mark Davis (mdavis@scprt.com)'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore'; 'Phil Hamby (LakeMurrayLOA@windstream.net)'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder (rkidder1@sc.rr.com)'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'Tyler Howe (tylehowe@nc-choke.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wenonah Haire'; Jon Quebbeman
Subject: Lake Murray Watch proposal for lake level management



Lake Murray Watch
- Lake Murra...

Hello All,

I neglected to send out the most recent version of the Lake Murray Watch Fish and Wildlife Focus Group proposal. Please refer to the attachment. Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Tuesday, March 24, 2009 3:13 PM

To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer

; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Lake Murray Watch proposal for lake level management

Hello All,

As discussed in our Monday Fish and Wildlife Settlement Meeting, Lake Murray Watch has prepared the attached proposal for lake level management and has requested that it be submitted to the group. Thanks, Alison

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]

Sent: Monday, March 23, 2009 8:43 AM

To: ARGENTIERI, WILLIAM R

Subject: Lake Murray Fish and Wildlife Focus Group

Bill- Attached is our proposal for lake level management.

Steve Bell

Lake Murray Watch

Ph. 803-730-8121

Lake Murray Fish and Wildlife Focus Group Lake Level Management Proposal

To:

Bill Argentieri
SCE&G
Saluda Hydro Relicensing

A Lake Murray Fish and Wildlife Focus Group was formed (1) to evaluate how various lake level stages impact littoral habitat, and (2) to develop a lake level proposal which will protect and enhance these areas. Members participating were Rick Kellemeier- 30 years professional tournament fishing, Doug Lown- fishing guide with 30 years on Lake Murray, Brad Taylor- fishing guide with 20 years experience on Lake Murray, David Whetstone- tournament crappie fishing with 20 years experience and Steve Bell representing Lake Murray Watch.

Shoreline Habitat

The Group discussed the various types of vegetation that make up the shoreline and agreed that habitat consist primarily of bushes, willows, and river birch. The group agreed there is a scattering of floating vegetation, in most cases primrose, that generally thrives in certain near shore areas during the summer months. The Group agreed there is very little submerged aquatic habitat.

Littoral Zone

Surveys were conducted in Hawleek Creek and Spring Creek when the lake was at or near normal full pool of 358'. The group noted that 100% of the littoral zone was inundated. Surveys were done in the same areas when the lake was at 356'. The Group estimated that at least 90% of the vegetated zone was de-watered. The group concurred that the survey area was representative of a typical Lake Murray shoreline including coves, points and shorelines in between.

Lake Level Management Proposal

Jan. 1 – 354'

March 15 – September 1 - 358'

March 15 - June 1 Minimum of 357'

Littoral Zones are crucial component of a healthy ecosystem

- Food web interactions (It's just not fish)
- Refuge for small invertebrates against fish predations
- Habitat, food cover and nesting materials for birds
- Habitat for attached algae (phytoplankton)
- Spawning habitat for fish
- Habitat for piscivorous fish
- Refuges for small fish from predators
- Provides shade
- Contributes to better water quality

Water level management changes at Lake Greenwood

The group reviewed a DNR report (Hayes and Penny 1997) on Lake Greenwood and noted that changes in lake level management improved conditions for crappie at that lake. Duke Power agreed to raise the water levels 1 foot during the spawning period resulting in the flooding of shoreline habitat which normally would have been exposed. The CPUE increased from 1.55 crappie/trap net night before the change to 9.14 crappie trap net night after the change.

Conclusion

The group believes that fishing on Lake Murray has been in decline since the early 1990's and steps should be taken to improved conditions as part of the relicensing process. Managing water levels to enhance and protect habitat may be our only tool to reverse what appears to be a downward spiral.

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Tuesday, March 24, 2009 9:08 PM
To: Shane Boring
Cc: Alan Stuart; BARGENTIERI@scana.com; mquattlebaum@scana.com; RMAHAN@scana.com
Subject: Re: Emailing: LSR Freshwater Mussel Program(03232009)



Memo to Shane.doc
(36 KB)

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Shane Boring" <Shane.Boring@KleinschmidtUSA.com>

03/23/2009 04:48 PM To

"Amanda Hill" <amanda_hill@fws.gov>

cc

"Bill Argentieri" <bargentieri@scana.com>, <mquattlebaum@scana.com>, "Randy Mahan" <rmahan@scana.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>

Subject

Emailing: LSR Freshwater Mussel Program(03232009)

Amanda :

Here's the latest on the Saluda Freshwater Mussel Plan. It's not yet complete, but should be enough to get you started. Thanks for giving it a preliminary look.

Shane

The message is ready to be sent with the following file or link attachments:

LSR Freshwater Mussel Program(03232009)

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

<<LSR Freshwater Mussel Program(03232009).doc>>

[attachment "LSR Freshwater Mussel Program(03232009).doc" deleted by Amanda Hill/R4/FWS/DOI]

MEMORANDUM

March 24, 2009

SUBJECT: Explanation of FWS Recommendations for Freshwater Mussel Program for the Saluda Hydroelectric Project, FERC No. 516

FROM: Amanda Hill, USFWS

TO: Shane Boring, Kleinschmidt Associates

The FWS appreciates your efforts to revise the Freshwater Mussel Monitoring Program for the LSR and Congaree River. Unfortunately, there has been miscommunication regarding what the FWS is recommending for the Saluda Hydro Project. Rather than track change the document you provided, I will attempt to specify and explain what we obviously didn't convey in our January letter. We apologize for the confusion.

I. Mitigation

- The FWS is seeking mitigation for freshwater mussels at the Saluda Hydro Project. Relicensing surveys found **no** mussels in the LSR. We seek mitigation for the continuing impacts the project will have on the LSR with the new license. Based on expert malacologist opinions, the absence of mussels in the LSR is most probably due to the cold water releases from the dam and the low dissolved oxygen conditions that occurred prior to the recent modifications to the turbines to increase D.O. concentrations.
- Secondly, surveys in Lake Murray identified 15 native mussel species with three federal Species of Concern within the lake and two within downstream waters in the Congaree River. It is the responsibility of the FWS to make recommendations to protect rare species in an attempt to avoid listing under the ESA and/or protect species that may be listed under the ESA in the foreseeable future.
- For the above described reasons, the FWS is providing recommendations for mitigation and protection of rare species at the Saluda Hydro Project. The following recommendations are **NOT** intended to be used to provide additional, revised, or alternative instream flow recommendations.

II. Existing Conditions

- Because the temperature of Saluda Hydro discharges will remain at the current temperatures into the next license, FWS has determined that reintroduction of mussels in the LSR will most probably be unsuccessful. Rather than spend time, energy, and money on a futile project, the FWS has decided on an alternative, adaptive approach that will benefit the species.

- One relicensing study the FWS requested in the ICD was to monitor the temperatures downstream of the project in the Congaree River to determine the extent of the influence of the cold water releases and identify the mixing zone.
- Based on preliminary data by Dr. J. Price, it appears mussel aggregations are reduced on the Saluda side of the Congaree compared with the Broad. This supports the theory that the cold water releases inhibit and/or impact reproduction and survivability.
- We recommend a scientific approach that will provide information to better understand why mussels are absent in the LSR, reduced in the Congaree on the Saluda side of the river, and what activities could be pursued by the agencies in the future to manage the species.

III. FWS Recommendations:

1. We would like to include the *Toxolasma pullus* surveys as previously described in the Mussel Adaptive Management Plan submitted by Kleinschmidt as part of the Mussel Plan.

2. Congaree River Baseline Surveys

- Conduct mussel surveys in the Congaree from the LSR/Broad confluence downstream through the area of cold water impact in the Congaree River prior to the implementation of the new license flow regime. This is necessary to determine the existing status of mussels before new flows are implemented.
- Monitor specific identified aggregations in the Congaree after implementation of the new flows, documenting reproduction or lack of, and mortalities. This monitoring is recommended for approximately 5 years.

3. Caged Mussel Studies

- These studies are intended to be implemented as a scientific study. The objective is to attempt to gain more information regarding the effect of the cold water releases on mussels. These studies will be implemented for a couple to five years (to be determined).
- Methods: Mussels are to be taken from healthy populations, probably from the Broad River. These cages are to be placed in, 1) the Broad River above the confluence with the LSR, 2) in the lower LSR, 3) in the Congaree on the Saluda side and the Broad side of the River.
- The cages in the Broad are to be used as controls. The cages in the LSR are intended to demonstrate the impacts that have been occurring in the LSR from the

cold water releases. Cages on either side of the Congaree, located close to the confluence and downstream where there is more mixing, is to determine the threshold temperature where impacts are reduced.

- Outcomes: We are trying to determine how far down the Congaree River impacts from the project negatively affect mussel reproduction and/or survivability. This data will provide the information necessary to the FWS and SCDNR to implement protection and restoration programs. Results will reveal if efforts to restore mussels in the Congaree and Broad are realistic and/or where in the river these efforts would be successful.
- The intention of our recommendations is for SCE&G to conduct surveys to identify the magnitude of the Saluda Hydro's operations on mussel survival and reproduction in the area of influence of the project. We are not asking SCE&G to fund mussel restoration in the basin. The FWS and SCDNR are working to develop hatchery operations and stocking within the Congaree/Broad basins. The FWS believes these recommendations are appropriate requests for mitigation and protection of rare and threatened species at the Saluda Hydroelectric Project.

The FWS hopes this explanation and description of our recommendations for a Freshwater Mussel Adaptive Management Plan is helpful and will initiate fruitful discussions and development of an amenable plan. Please contact me if you have any questions prior to our meeting on Friday. Please realize that details of each study are to be developed by the investigators and the Freshwater Mussel Technical Group, and this outline is provided to clarify our recommendations.

Amanda Hill
FERC Coordinator
U.S. Fish and Wildlife Service
843-727-4707 ext. 303

Alison Guth

From: Alison Guth
Sent: Tuesday, March 24, 2009 5:22 PM
To: Alison Guth; BARGENTIERI@scana.com; 'Ray Ammarell'; RMAHAN@scana.com; Alan Stuart; 'msummer@scana.com'; 'tbowles@scana.com'; 'mquattlebaum@scana.com'; 'Vivianne Vejdani'; 'giffinma@dhec.sc.gov'; 'Gerrit Jobsis'; 'Jim Ruane'; 'cdwood@usgs.gov'
Subject: 3-24 draft DO meeting notes

Hello all,

Attached are the draft meeting notes from today's Annual DO Settlement Meeting. Please provide any comments or corrections by April 7th. Thanks, Alison



2009-3-24 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, March 24, 2009 4:02 PM
To: 'Gerrit Jobsis'
Subject: RE: Second Update: Settlement Agreement Dates

Hey Gerrit,

As of right now those dates are still up in the air. We had May 5, 6, and 7 set aside as optional meeting dates, but none yet in June. I will send out calendar notices though when they are determined. Alison

-----Original Message-----

From: Gerrit Jobsis [mailto:gjobsis@americanrivers.org]
Sent: Tuesday, March 24, 2009 3:58 PM
To: Alison Guth
Subject: RE: Second Update: Settlement Agreement Dates

Alison,

Can you let me know the dates we have set aside in May and June for settlement meetings and signing ceremony. My calendar is messed up.

Thanks

Gerrit

Gerrit Jöbsis, American Rivers
Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, S.C. 29205
803.771.7114 (t) 803.771.7580 (f)
gjobsis@americanrivers.org

Become a fan of American Rivers on Facebook at www.AmericanRivers.org/Facebook.

American Rivers protects and restores healthy natural rivers for the benefit of people, wildlife, and nature.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, January 29, 2009 1:36 PM

To: Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton

Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johnd44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; LakeMurrayLOA@earthlink.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbber; tylehowe@nc-choke.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th

Thursday the 12th

Wednesday the 18th
Thursday the 19th
Friday, the 20th

Monday, the 23rd
Wednesday the 25th
Friday the 27th

Monday, the 30th

April '09:

Wednesday the 1st
Friday the 3rd

Monday the 13th
Wednesday the 15th
Friday the 17th

Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, March 24, 2009 3:36 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-chokekee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: FYI- FERC Site Visit and Scoping Meetings

Hello All,

As many of you may already be aware, the FERC will be holding their Site Visit and Scoping Meetings for the Saluda Hydroelectric Project relicensing on April 7 and April 8 respectively. This email is being provided for your information purposes, however these meetings are facilitated entirely by the FERC as part of the relicensing process and not by SCE&G or Kleinschmidt. The FERC provides the following information on the meetings and site visit in the Scoping Document 1 issued 3/12/2009:

"Daytime Scoping Meeting

Date and Time: Wednesday, April 8, 2009, 9:00 a.m. (EST)
Location: Saluda Shoals Park, 5605 Bush River Road, Columbia, SC
29212

Evening Scoping Meeting

Date and Time: Wednesday, April 8, 2009, 6:30 p.m. (EST)
Location: Saluda Shoals Park, 5605 Bush River Road, Columbia, SC
29212

Site Visit

Date and Time: Tuesday, April 7, 2009, 9:00 a.m. (EST)

Location: Saluda Powerhouse, 6248 Bush River Road, Columbia, SC
29212

South Carolina Company and Commission staff will visit the Saluda Project on Tuesday, April 7, 2009. All participants interested in seeing the project should meet at the Saluda powerhouse at 9:00 a.m. to tour the dam and powerhouse, as well as Lake Murray.

Anyone with questions about the site visit (or needing directions) should contact Bill Argentieri at (803) 217-9162, or by email at bargentieri@scana.com. Those individuals wishing to participate in the site visit should notify Bill Argentieri of their intent and provide their name, address, and social security number no later than Tuesday, March 31, 2009. The participants should be prepared to provide their own transportation and lunch."

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, March 24, 2009 3:13 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Chad Altman; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart (mwleapjr@att.net); Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@windstream.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Lake Murray Watch proposal for lake level management



Lake Murray Watch
- Lake Murra...

Hello All,

As discussed in our Monday Fish and Wildlife Settlement Meeting, Lake Murray Watch has prepared the attached proposal for lake level management and has requested that it be submitted to the group. Thanks, Alison

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Monday, March 23, 2009 8:43 AM
To: ARGENTIERI, WILLIAM R
Subject: Lake Murray Fish and Wildlife Focus Group

Bill- Attached is our proposal for lake level management.

Steve Bell

Lake Murray Watch

Ph. 803-730-8121

Alison Guth

From: Shane Boring
Sent: Monday, March 23, 2009 4:48 PM
To: Amanda Hill
Cc: Bill Argentieri; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Alan Stuart
Subject: Emailing: LSR Freshwater Mussel Program(03232009)



LSR Freshwater
Mussel Program(...

Amanda:

Here's the latest on the Saluda Freshwater Mussel Plan. It's not yet complete, but should be enough to get you started. Thanks for giving it a preliminary look.

Shane

The message is ready to be sent with the following file or link attachments:

LSR Freshwater Mussel Program(03232009)

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Alison Guth

From: Alison Guth
Sent: Friday, March 20, 2009 4:49 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Draft notes from 3-18 Recreation Meeting

Hello All,

Attached are the draft meeting notes from the Recreation Settlement Agreement meeting on 3-18. Please have any comments to me by April 3rd. Thanks, Alison



2009-3-18 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, March 20, 2009 4:29 PM
To: 'Patrick Moore'
Cc: Alan Stuart
Subject: FW: Settlement Agreement Revisions - Safety Introduction & Definitions



DRAFT Settlement
Agreement 2-...

[Hello Patrick,](#)

[Attached are the changes made during the meeting on 3/11. Just shoot me an email if there are any additional comments you would like to add that were not captured in your email today or at the meeting.](#)

[Alison](#)

Saluda Hydroelectric Project (FERC Project No. 516) Relicensing Comprehensive Settlement Agreement

1. Introduction

South Carolina Electric & Gas Company (SCE&G), as the holder of the current license for the Saluda Hydroelectric Project (Project)(FERC No. 516), hereby files the following Offer of Settlement (“Settlement”) pursuant to Rule 602 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission”) 18 C.F.R. § 385.602 (2008). This Settlement has been entered into among SCE&G and Saluda Hydro Relicensing Stakeholders. Moreover, the parties to the Settlement request that the Commission incorporate the obligations and agreements as illustrated in Appendix A without material modification into the terms and conditions of the New License.

2. Background

The Project is an existing licensed hydroelectric project located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000 acre reservoir (at elevation 356.5'¹), a gated emergency spillway, a combination rock-fill and RCC back-up Dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005. The total rated generator capacity for the station is 207.3 MW.² Further, at optimum gate openings, the hydraulic capacity of each of the Units 1 to 4 is 3,000 CFS, and for Unit No. 5 is 6,000 CFS, yielding a total station hydraulic capacity of 18,000 CFS.

The original fifty (50) year project license was issued by the Federal Power Commission in 1927, effective from August 4, 1927 to August 5, 1977. The currently effective license was issued by the Federal Energy Regulatory Commission (“FERC” or “Commission”) on June 1, 1984 retroactive to 1977, and was set to expire on August 31, 2007. SCE&G requested an extension of the term of the license by letter dated October 3, 2002 and the Commission issued an Order on November 18, 2003 extending the term of the license until August 31, 2010.

¹ Unless otherwise noted, all elevation references in this Settlement and associated appendices are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies and often erroneously referred to as msl) requires the addition of 1.50 feet.

² The currently effective license gives the station capacity as 202.6 MW. This value was based on a power factor of 0.8 for the original four generators. When Unit 3 generator was rewound, its power factor changed to 0.9, and this change was not taken into account in the application for the current license.

SCE&G officially began the formal relicensing process on April 29, 2005 by the timely filing of the Notice of Intent to the Commission and with the transmittal of its Initial Consultation Document (ICD) to resource agencies and other interested stakeholders for review and comment. Since that date, SCE&G has worked cooperatively with agencies and stakeholders through numerous resource group meetings to do the following: establish the scope of studies needed to address issues raised at the Project and develop study reports, conduct agreed upon studies, provide draft copies of study reports to agencies and stakeholders for review and comment, revise study reports to reflect agency/stakeholder comments, and complete follow-up studies deemed necessary to accomplish study goals. Resource group meetings have also served to provide a forum for discussion of Project related concerns among stakeholders. Discussions have continued to take place subsequent to the submittal of the License Application for the Project on August 27, 2008. These discussions among resource groups have been necessary to facilitate development of this Settlement and have culminated in the proposals set forth below. The Commission issued the Notice of Application Tendered for filing and solicited additional study requests on September 10, 2008.

3. Purpose of Settlement

The purpose of this Settlement is to define the consensus based resolutions formulated among the signatories of this Settlement to those issues that have been raised during the relicensing process for the Project. These resolutions set forth herein are respectfully proposed as terms for the New License and have been structured in accordance with the Federal Power Act Section 10(a)(1) for the balance of both developmental and non-developmental resources.

4. Terms and Implementation

a. Terms

i. General

This Settlement is in no way intended to conflict with the legal responsibilities of the Settlement signatories, nor shall it be in conflict with any lawful statutory or regulatory responsibility of or authority held by said signatories. Furthermore, signatories to this Settlement are representing their belief that the issue resolutions developed through good faith efforts do not conflict with these responsibilities.

ii. For the New License

The signatories to this Settlement recognize that the Commission will incorporate into the New License those articles pursuant to 18 C.F.R. 2.9 ("L-Forms"), as well as such articles as the Commission needs to carry out its responsibilities for administering and enforcing the New License. With these considerations, the signatories respectfully request that the Commission incorporate

the terms set forth in this Settlement Agreement into the terms of the New License without material modification.

iii. Fish Passage

A prescription for a fish passage facility pursuant to Section 18 of the Federal Power Act (FPA), 16 U.S.C. § 811, is not included in this Settlement. The reservation of authority of the Secretary of the Interior for the New License has been established by mutual agreement under the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (Accord) (attached as Appendix X). The Accord was entered into among SCE&G, Duke Energy Carolinas, LLC, South Carolina Department of Natural Resources (SCDNR), North Carolina Wildlife Resources Commission (NCWRC), and United States Fish & Wildlife Service (USFWS). According to this agreement, the USFWS will file with the FERC its reservation of authority for any fishway prescriptions for the Project for the term of the new license. Although not a signatory to the Accord because of its position that it may not bind itself in any way that might infringe upon its statutory authority and obligations, the National Marine Fisheries Service (NMFS) and South Carolina Department of Health and Environmental Control (SCDHEC) were integral members of the team that developed the Accord, and will participate in its natural resource protection role as it determines appropriate.

Comment: Alan commented that license term will be decided by the Commission, SCE&G is on record requesting a 50 year license and the settlement will have little bearing on this regulatory decision so it should be left out of the settlement or denoted with an X as TBD.

Deleted: Given that the terms of this Settlement Agreement are incorporated into the New License without material modification, the signatories agree that an appropriate term for the New License should be 50 years, and respectfully request that the Commission approve this term.

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iv. Endangered Species Act:

Through cooperation, the signatories to this Settlement have developed a Rare, Threatened and Endangered Species (RT&E) Species Plan for the Project, which includes measures for the management of RT&E species in the Project Area. By the signing of this agreement, the USFWS represents that it believes the measures required by the settlement agreement will protect RT&E species and that it intends to issue a BO consistent with such measures. Should also include NMFS This Settlement is in no way intended to compromise the authority of the USFWS and their determination of conditions for compliance with the Endangered Species Act (ESA), 7 U.S.C. §136; 16 U.S.C. §1531 et seq., or preclude any standard conditions pursuant to applicable law. In the event that a BO is issued that is inconsistent with this Settlement, with the exception of the above stated conditions, any signatory to this Settlement may withdraw from this Settlement after potential resolution discussions among signatories have taken place.

Comment: This sentence (specifically the word "will") appears to commit FWS improperly to settlement in advance of environmental analysis and ESA consultation. Shouldn't it say something like,

Deleted: By the signing of this agreement, the USFWS agrees that they will not impose any conditions inconsistent with this Settlement through their Biological Opinion (BO).

Comment: Provisions for dispute resolution procedures needed.

b. Implementation

i. Commitments of Parties

By the signing of this Settlement Agreement, signatories are expressing their support for the components herein (in some cases, as resolutions that may be less than they desire, but nevertheless representing compromise positions that they “can live with”), and the incorporation of these components into the new license issued by the Commission. Signatories are also encouraged to express their support of this Settlement through exchanges, whether written or verbal, with the Commission. Likewise, participants were told that their signing of the Settlement Agreement would in no way constrain them from filing comments setting forth their preferred positions to the extent they believe the extensive record of these proceedings as filed with the Commission do not contain adequate expositions of their preferred positions. During the settlement process the signatory parties are free to provide FERC with their opinions and preferred outcome. After signing the settlement, correspondence between signatories and FERC will support the settlement. In such case that a license is issued that is not consistent with one or more of the components to this Settlement, the signatories may collectively or individually file a request for rehearing, only after a meeting among signatories has been held. Furthermore, if the Commission issues a license that is inconsistent with this Settlement, signatories may also hold negotiations to amend this Settlement to be consistent with the new license by mutual agreement.

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Comment: This was deleted and changed to language representing the idea that signatories should support the settlement.

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As a signatory to this Settlement, an individual or entity is not precluded from exercising their regulatory or statutory authority under applicable law. However, by the signing of this Settlement, individuals and parties are expressing that they believe that their regulatory or statutory authorities are consistent with this Settlement.

ii. Commission Review of the Settlement

If the Commission has any questions or concerns with regards to the Settlement in the process of drafting the New License, it is requested that the Commission contact the signatories to arrange for the convening of a technical conference to discuss these questions or concerns prior to the new license issuance.

Deleted: meeting

Comment: Should there be an obligation to notify and/or consult settling parties prior to requesting license amendment inconsistent with terms of settlement?

iii. Amending License, Agency, Regulatory and Statutory Authority,

Comment: Is this intended to apply just to agencies or to stakeholders too.

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As discussed above, this Settlement is not intended to preclude a signatory from exercising regulatory or statutory authority. This includes, but is not limited to, the petitioning of the Commission to exercise its reserved authority to amend the New License after notice and opportunity for a hearing on an issue, including those issues addressed in this Settlement.

Deleted: Amendment

Deleted: legally available to them

iv. Modification of Settlement

Modification of this Settlement can only occur by the mutual agreement of all signatories through negotiation meetings and written consent. Situations which may necessitate the modification of the Settlement may include the issuance of a New License inconsistent with this Settlement. “By the signing of this agreement, the USFWS represents that it believes the measures required by the settlement agreement will protect RT&E species and that it intends to issue a BO consistent with such measures.”

Comment: What about a procedure for consultation among settling parties in the event environmental analysis or other pre-license investigation yields material new information which may warrant changes to the settlement agreement? For example, what happens if a new RTE species is suddenly discovered in the tailwater? Rather than parties taking action independently, SCE&G (under its own initiative or at the request of another party) would convene a meeting for the settling parties to discuss whether and how to modify the settlement agreement to address the material new information.

v. Legal Authorization of Signatories

By the signing of this Settlement each signatory is representing that they have the authorization by the party or parties they represent legally to bind that party or those parties to this Settlement. Moreover, upon signature, parties represented by the signing person(s) are legally bound to the terms expressed herein.

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Comment: Please consider asking each party to identify the person within their organization that has the authority to sign the settlement and timeframe for signing decision

vi. Confidentiality Statement

All documents related to the negotiation of this Settlement shall remain confidential pursuant to 18 C.F.R § 385.606. Therefore, by the signing of this Settlement, signatories are acknowledging their understanding that all negotiations, discussions, and documentation relating to the development of this Settlement are and shall remain confidential under applicable law, notwithstanding a termination of this Settlement as described below.

Comment: Confidentiality should run from Date of first settlement meeting in March 2009 to make it clear that we are talking about the settlement process and not the whole relicensing process.

vii. Termination of Settlement

Termination of this Settlement may occur under the following circumstances: (a) the withdrawal of the Licensee from this Settlement; (b) expiration of the New License term; (c) the transfer of ownership of the Saluda Hydroelectric Project to a new owner unaffiliated with SCE&G or its parent company SCANA, and the subsequent transfer of the license to the new owner; and (d) the termination or surrendering of the New License by SCE&G pursuant to the requirements of the FPA.

Comment: Need criteria for this withdrawal “pursuant to a license issuance containing terms inconsistent with this settlement or material new information.” We need a separate section on withdrawal because the licensees withdrawal would terminate the settlement and another parties may not.

viii. Effective Date of Settlement Agreement:

This Settlement becomes effective as of the date of execution by the last signature as reflected on the signatory page. With regards to the proposed terms for the license articles, as set forth in Appendix A, these terms only become effective upon their inclusion into the New License as issued by the Commission for the Project and are enforceable to the extent permissible by law.

Comment: Settlement be binding on new owner to the extent possible
Comment: What about procedures for withdrawal? There don't appear to be any obligations to consult prior to withdrawing.

ix. Submittal of Settlement Offer to the Commission:

This Offer of Settlement shall be submitted to the Commission within 30 days of the signing of the Settlement by all involved parties.

x. Structure of Settlement Agreement:

The preceding sections serve to establish the responsibilities of the signatories to this Settlement, the terms of which are defined in Appendix A. The signatories respectfully request that the terms of Appendix A be incorporated into the terms of the new license without material modification.

Appendix A

Proposed Content of License Conditions

The following conditions outlined in this appendix serve to set forth the terms and conditions developed for the protection, mitigation, and enhancement of natural resources affected by the Project.

DEFINITIONS:

The definitions set forth in the following sections are applicable to this Settlement Agreement and associated appendices and are fundamental to the understanding and interpretation of the material herein. When appropriate, these definitions may be adopted by the Commission into the articles of the New License.

- Benthic macroinvertebrates - Animals without backbones, which are visible to the eye and which live on, under, and around rocks and sediment on the bottoms of lakes, rivers, and streams.
- Cubic feet per second (CFS) - A measurement of water flow representing one cubic foot of water moving past a given point in one second. One CFS is equal to 0.0283 cubic meters per second and 0.646 mgd.
- Cultural resources - Includes items, structures, etc. of historical, archaeological, or architectural significance.
- Dissolved oxygen (DO) - Perhaps the most commonly employed measure of water quality, DO is the amount of gaseous oxygen in a liquid. Low DO levels can adversely affect fish and other aquatic life. The total absence of DO leads to the development of an anaerobic condition with the eventual development of odor and aesthetic issues.
- Drawdown - The distance the water surface of a reservoir is lowered from a benchmark elevation as the result of releasing water.
- Economically Reasonable Manner- define as described in license application. ← - - - -
- Elevation - references in this Settlement are given in North American Vertical Datum 1988 (NAVD 88); conversion to traditional plant datum (PD, used in numerous supporting studies for the license application and frequently referred to as msl) requires the addition of 1.50 feet.
- Eutrophic - Categorization of water quality relative to concentrations of nutrients such that a high level of primary production is expected. Eutrophication is the process of nutrient addition and/or concentration that drives water quality towards a higher eutrophic condition.

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- Exotic species - Species not native to a particular area.
- Flow - The volume of water passing a given point per unit of time.
- Flow duration curve - A graphical representation of the percentage of time in the historical record that a flow of any given magnitude has been equaled or exceeded.
- Gross storage - The total amount of water contained in a reservoir at its maximum normal operating elevation.
- Guide Curve – A series of target daily elevations for Lake Murray over the course of a year, having the potential to change with the occurrence of abnormal meteorological or operational circumstances. A guide curve is not the equivalent of a rule curve.
- Head - The distance that water falls in passing through a hydraulic structure or device such as a hydroelectric plant. Gross head is the difference between the headwater and tailwater levels; net head is the gross head minus hydraulic losses such as friction incurred as water passes through the structure; and rated head is the head at which the full-gate discharge of a turbine will produce the rated capacity of the connected generator.
- Headwater - The waters immediately upstream of a dam. For hydroelectric dams, also referred to as the water in the impoundment which supplies the turbines.

▪ High Inflow Protocol

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- Hydraulic - Relating to water in motion.
- Hypolimnetic – Related to the deeper cooler portions of a reservoir or lake that result from thermal stratification.
- Initial Consultation Document (ICD) - A document containing detailed information on a hydroelectric project; the document is used to describe the project and its resources and to start the applicant's consultation process with resource agencies and the public. It is in fact a collection of documents, taken together.
- Instantaneous Minimum Flow – flow, measured in CFS, that occurs during a specified period of time
- Lacustrine - Related to standing water, (e.g., a lake).
- Lake Elevation – The elevation of Lake Murray as measured in Plant Datum by USGS gage number 02168500 located at the intake towers.

▪ Low Inflow Protocol

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- Littoral - Associated with shallow (shoreline area) water (e.g., the littoral zone of an impoundment).
- Lotic - Flowing or actively moving water including rivers and streams.
- Non-Governmental Organization (NGO) – A organization that has been created by an individual or group of individuals containing no membership or participation by any governmental entity.
- Non-reserve capacity- Periods of generation when SCE&G is generating for purposes other than reserve. These include planned generation, recreation flows, Safety training flows, striped bass flows, and lake level management. --- Formatted: Bullets and Numbering
- Normal Flow Period- Any time when the Low or High Inflow Protocol is not in effect. --- Formatted: Bullets and Numbering
- Phytoplankton - Algae floating in the water column. These are mostly microscopic single-celled and colonial forms.
- Pool - Refers to the reservoir (impounded body of water).
- Probable maximum flood (PMF) – The result of a statistical formula used to calculate a hypothetical flood event that could occur within a particular river basin over a particular duration. This is derived from the probable maximum precipitation over time. The method for determining a PMF is prescribed by the FERC.
- Project - One or more hydroelectric plants collectively included in a single license issued by the FERC. Projects typically consist of a dam or dams, reservoir, powerhouse and appurtenant facilities. As used in this document, the capitalized term “Project” refers specifically to the Saluda Hydroelectric Project (P-516).
- Project area - lands and waters owned by or under some level of control by SCE&G within the project boundary.
- Project boundary - A demarcation line established by the FERC within which some level of interest in or control over all lands, waters and structures are deemed needed to operate a licensed hydroelectric project.
- Project Discharge – the flow, measured in CFS, that is released from the Project turbines or through the spillway.
- Recreation area – A land and associated water surface area which people use for leisure activities, whether formally designated or used informally.
- Reserve capacity- The capability above system demand available to SCE&G within 15 minutes following a supply contingency, required to provide for system regulation and local area protection and to correct for or stabilize the system in the event of contingencies, load forecasting errors and forced Deleted:

outages to SCE&G generating units or to meet SCE&G's VACAR reserve obligations.

- Resource agency - Federal, state, or interstate agency with responsibilities for flood control, navigation, irrigation, recreation, fish or wildlife, water resource management, or cultural or other relevant resources of the state(s) in which a project is or will be located.
- Rule curve – Defined elevations for a project reservoir that guide operation of the project throughout a calendar year.
- Spillway - The section of a dam that is designed to pass water over or through it during periods of excess flow through the project.
- Stakeholder - Any individual or organization (government or non-governmental) with an interest in the management and/or operation of a hydroelectric project.
- Stratification - A physical and chemical process that results in the formation of distinct layers of water within a lake or reservoir (i.e., epilimnion, metalimnion, and hypolimnion).
- Streamflow - The rate at which water passes a given point in a stream, usually expressed in cubic feet per second (CFS).
- Submerged aquatic vegetation - Plants with rigid stems and/or leaves rooted in substrate and generally covered by deep water (greater than 6.6 ft depth), with all of the plant parts covered by water.
- Tailrace - The tailrace is an area of stream downstream of a dam where the impounded water re-enters the river after passing through the turbines.

1. SAFETY

1.1. Lower Saluda River Warning Siren Installation:

Subsequent to the issuance of the new license, the Licensee shall continue with the installation of warning sirens along the LSR in accordance with the following schedule:



Phase 1 - new sirens #1 and #2, new strobe lights A and B, and upgrade of existing sign at Saluda Shoals Park – Complete – Installed and Operational as of 2008

Phase 2 - new sirens #4, #5, and #7, and new strobe lights C, E and F – To be installed within one year after issuance of the new license.

Phase 3 - new sirens #3, #6, #8, and #9, and new strobe light D – To be installed within two years after installation of Phase 2 is complete.

If it is determined that a siren or strobe light is not needed due to the coverage of the other siren or strobe light equipment, or if other issues arise that make the installation not feasible, then that siren or strobe light will not be installed. Adequacy of coverage will be determined through field volume level testing.

1.2. Annual Safety Meeting:

Upon issuance of the new license, SCE&G will initiate and host annual meetings to provide for the discussion of safety related issues within the Project area among interested stakeholders. These meetings should support increased awareness of agency duties, the development and subsequent review of a formal Safety Program, the identification of current and future safety issues, and the determination of appropriate avenues of issue resolution. These meetings will occur at SCE&G facilities, or other facilities secured by SCE&G, on or around September or October of each year. SCE&G may terminate the annual safety meetings should meaningful stakeholder participation in annual safety meetings cease. Before any such termination, however, participating parties will be notified and given the opportunity to comment and/or suggest alternatives.

1.3. Downstream Safety Training Flows:

In addition to the recreational releases discussed in Section 2.2, SCE&G will provide the City of Columbia Fire Department (CFD) with swift water rescue training flow releases upon issuance of the new license by the Commission. These flows will be as follows.

- During a “normal” flow year, SCE&G will provide 6 consecutive days (8 hours per day) of flows ranging from 12,000 cfs to 15,000 cfs in March. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.
- During a “normal” flow year, SCE&G will provide 5 consecutive days (8 hours per day) of flows ranging from 8,000 cfs to 10,000 cfs in the September to December months. SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status during these times.

Comment: This appears to occur during the low DO season. Is there any concern it will contribute to low DO in advance of the runner upgrades?

Scheduled spring and fall safety training flows for the Columbia Fire Department (CFD) Swift Water Rescue Team will be provided in full if the following criteria are met:

- Spring: Reservoir level at least 354.5' (356.0' PD) on February 1 for early March safety training.
- Fall: Reservoir level at least 354.5' (356.0' PD) on November 1 for early December safety training.

Reduced flows will be made available to the CFD during implementation of the LIP where the reservoir level has fallen below 354.5' (356.0' PD) on February 1 for early March safety training or on November 1 for early December safety training. The flows will range from 12,000 cfs to 15,000 cfs in March, but will be reduced to 3 days (10 hours per day). The September to December flows will range from 8,000 cfs to 10,000 cfs but will be reduced to 3 days (10 hours per day). SCE&G will coordinate with the CFD at least 30 days prior to implementation of the flows as to the exact dates the flows will be available. The Saluda Hydro Project will be removed from reserve operations status

during these times. If the lake elevation is below 352.5' (354.0' PD) on February 1 for early March safety training or on November 1 for early December safety training these safety training flows will be eliminated for that year.

2. RECREATION

2.1. Recreation Improvements:

Subsequent to the issuance of the new license by the Commission, SCE&G will implement the Recreation Plan (Appendix X) and subsequently make the following recreational improvements according to the specified schedule:

Site Name (Number)	Years 1 – 5 of the New License	Years 6 – 10 of the New License
Larry L. Koon Boat Landing (1-02)	Evaluate alternatives to increase parking capacity; Identify substitute sites through education; Pave an ADA compliant path from the parking lot to the restroom facilities; Widen the existing driveway	
Shull Island (1-02B)	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary)	
Murray Shores (1-03)	Install additional directional signs to the site; Refurbish the existing courtesy dock for ADA compliance; Stripe the existing parking lot; Install additional lighting; Construct ADA compliant restroom facilities (including ADA compliant paths to courtesy dock and restrooms, as necessary)	
River Bend (1-04)	Refurbish the existing fishing pier for ADA compliance; Refurbish the existing courtesy dock for ADA compliance; (including an ADA compliant path to both the fishing pier and courtesy dock); Add 5.9 acres	Pave and stripe the existing overflow parking area
Sunset (1-05)	Refurbish the existing fishing pier for ADA compliance; Refurbish the existing courtesy dock for ADA compliance; Pave and stripe the existing parking area; Construct ADA compliant restroom facilities (including ADA compliant paths to fishing pier, courtesy dock and restrooms, as necessary); Install stabilization material on the sides of the existing boat ramp; Add 29.9 acres	Construct an additional parking lot

Site Name (Number)	Years 1 – 5 of the New License	Years 6 – 10 of the New License
Hilton (1-07)	Refurbish the existing courtesy dock for ADA compliance; Construct ADA compliant restroom facilities; (including ADA compliant paths to the courtesy dock and restrooms); Install additional lighting	Construct an ADA compliant fishing pier, (including an ADA compliant path as necessary)
Dam Site - Irmo Side (1-08)	Construct an ADA compliant courtesy dock; Refurbish the existing fishing pier for ADA compliance (including ADA compliant paths to fishing pier and courtesy dock, as necessary); Pave an ADA compliant path to the existing restroom facilities	
James R. Metts Landing (1-10)	Add two ADA compliant picnic tables (including an ADA compliant path, as necessary)	Construct a bank fishing area
Higgins Bridge (1-13)	Add two ADA compliant picnic tables (including ADA compliant paths, as necessary)	
Kempson Bridge (1-14)	Add two ADA compliant picnic tables; Install an ADA compliant vault type restroom facility, (including ADA compliant paths to the picnic tables and restroom)	
Gardendale (1-15)	Explore a lease for the property to the ICRC	
Cloud's Creek (1-18)	Construct a gravel parking lot; Construct a carry-in launch; and install directional signs to the site	
Little Saluda Point (1-20)		Construct two ADA compliant fishing piers (including an ADA compliant path, as necessary); Install shoreline stabilization materials as necessary;
Lake Murray Estates Park (1-22)	Install additional directional signs to the site; Construct ADA compliant restroom facilities (including an ADA compliant path, as necessary); Pave and stripe existing parking area; Pave an ADA compliant path from the parking lot to the existing fishing pier	
Old Corley Bridge Road (1-25)	Construct a gravel parking lot; Construct a carry-in launch; Install directional signs to the site	
Twelve-mile Creek (1-31)	Explore a lease for the property to the LCRAC	
Candi Lane (1-32)	Explore a lease for the property to the City of Columbia	

2.2. Downstream Recreational Flows:

Upon issuance of the new license, SCE&G will provide a downstream recreational flow allocation of up to 45,000 acre/ft, partitioned to meet specific recreation needs as

Comment: Will this meet future demand too? If not, should there be triggers for increases in recreational flows?

determined during a Downstream Flows meeting held on, or around, October of each year. During scheduled recreational flows, the Saluda Hydro Project will not be available for reserve operations. Recreational flows allotted for the first recreation season after issuance of the new license are identified in Appendix E of the Recreation Plan (Appendix X) and the schedule may be adjusted on a year to year basis at the annual Downstream Flow Meetings. Recreational flows will be posted on the SCE&G website within 30 days after the annual Downstream Flow meeting each year.

Comment: Does recreation plan describe protocols for meetings? Who's invited? Do participants get to decide how flows allocated? If so, is decision rule consensus based? If not, how will SCE&G address any comments made during meetings in making its determination? Does DHEC have to approve?

Comment: How is recreation season defined?

3. FISH AND WILDLIFE

3.1. Lower Saluda River Aquatic Protection and Enhancement:

Licensee shall implement the following enhancement plans for aquatic species in the LSR, developed in consultation with resource agencies, as part of this Settlement.

(a) **Macroinvertebrate Surveys:**

Within X years subsequent to the issuance of the new license, the Licensee shall employ macroinvertebrate sampling according to the program developed in conjunction with the Fish and Wildlife TWC and filed as Appendix X to this Settlement. The purpose of the monitoring program will be to examine the status of the LSR aquatic community and detect any changes resulting from the implementation of instream flow enhancements.

Comment: Any obligation to modify operations/structures based on results of monitoring?

(b) **Freshwater Mussel Research and Restoration:**

Within X years after the issuance of the new license, the licensee shall implement the adaptive freshwater mussel restoration program developed in conjunction with fishery agencies and filed as Appendix X of this Settlement Agreement. This program includes such items as:

Comment: Does this include DHEC? If not, should it?

- Translocation of tagged, native mussel species from adjacent basins to suitable habitat in the LSR
- The determination of survivorship and reproductive potential of translocated individuals
- Coordination with SCDNR's mussel restoration and research efforts in the Broad and Congaree Rivers

(c) **Involvement in the Santee Basin Accord for Diadromous Fish Protection:**

The Licensee shall continue to participate in and fund the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement (attached as Appendix X) in accordance with its obligations as set forth in the Accord. The purpose of this Accord is to collaboratively

address diadromous fish protection, restoration and enhancement in the Santee River Basin through implementation of a 10-year action plan. If not already terminated per the provisions of the Accord, the Accord shall terminate for SCE&G at the end of the term of the new license for the Saluda Hydro Project, including any applicable annual license extensions issued by the FERC.

(d) Sturgeon Management Programs:

Within X years after issuance of the new license, the Licensee shall implement the Sturgeon Monitoring Program as developed in consultation with NMFS and attached as Appendix X of this Settlement Agreement. The purpose of this program is to implement a long-term management strategy for the shortnose and Atlantic sturgeon. The Licensee shall also provide to the public information on shortnose sturgeon as part of the RT&E species public awareness brochure.

(e) Trout Adaptive Management Program:

Within X years after the issuance of the new license, the Licensee shall implement the Trout Adaptive Management Program as described below and attached in Appendix X.

The purpose of this management program is to provide a periodic re-evaluation of habitat conditions in the LSR so as to determine condition improvements due to DO enhancements and the implementation of minimum flows. Improved macrohabitat conditions may result in a more suitable environment for a self-reproducing trout management strategy.

(f) Rare, Threatened and Endangered Species Management Program:

Within X years of the issuance of this license, the Licensee shall implement the Rare, Threatened and Endangered Species Management Program attached as Appendix X. This program contains components for the management, awareness, and enhancement of three species of conservation concern that have been documented within or in close proximity to the Project: rocky shoals spider lily (*Hymenocallis coronaria*), bald eagle (*Haliaeetus leucocephalus*), and wood stork (*Mycteria americana*).

3.2. RT&E Educational Brochure:

Within X years after the issuance of the new license, the Licensee shall issue the Rare, Threatened and Endangered Species Educational Brochure. This brochure was developed as part of this Settlement to inform and educate the public regarding RT&E species that utilize the Project Area (attached as Appendix X).

More specifically, the purpose of this educational brochure is to provide the public with details of the life cycle, history, conservation status, and habitat needs of species known to occur in the project area, such as bald eagle, rocky shoals spider lily, the federally endangered wood stork, and shortnose sturgeon. Furthermore, for species that are

rarely seen at the Project, such as the wood stork, and species that occur in the Project vicinity, but have not been detected in the immediate Project area, such as the federally endangered shortnose sturgeon, the brochure will include information to assist the public in reporting sightings of these species.

3.3. Fish Mitigation Program:

Upon the issuance of the new license, the Licensee shall make official the fish mitigation program outlined below:

- In the event of a large, turbine induced fish kill (more than X fish), SCE&G will compensate the SCDNR for the lost fish and SCDNR staff time accrued during investigations, if SCE&G is found responsible for the fish kill.
- In the event of a small scale turbine induced fish kill (fewer than X fish) during a generation event, SCE&G shall only reimburse SCDNR for staff time accrued during investigations, if SCE&G is found responsible for the fish kill.

Furthermore, SCE&G will employ the hydroacoustic equipment located near the intake tower number 5 in order to monitor fish movements and reduce the potential for fish entrainment and mortality during non-reserve call events. This equipment will be operational during the low DO months of July through October when it is more likely that large numbers of fish will be congregated in front of Unit 5,

4. WATER QUALITY

4.1. The Upgrade of Unit Runners:

During the period of the new license by the Commission, SCE&G plans to install new runners of modern design that offer higher efficiencies, output, and dissolved oxygen (DO) uptake, and to rewind the generators according to the schedule discussed below.

While providing for enhanced unit efficiency and maintaining the reliability necessary to meet generation obligations, upgrading the existing unit runners will provide positive benefits for downstream DO levels such that 100% support of the SCDHEC in-stream DO standard may be assured.

The complete schedule for runner upgrades will be determined based on an adaptive program. The adaptive program is intended to allow for a full evaluation of the levels to which downstream water quality goals are achieved as a result of improvements resulting from each unit upgrade. At the point at which the DO standard is consistently maintained through all operating scenarios, whether it occurs after the first unit upgrade, the second one, or the third one, the remaining unit upgrades (if any remain to be done) will be implemented in a purely economics-driven manner. This could extend the upgrade period to as long as 25 years after the issuance of the license. However, so long as environmental objectives are being achieved, an economics driven schedule for the remaining units is entirely justified.

The upgrade of Unit 5 will be completed within three years from issuance of the license. The upgrade of that unit is expected to take as long as three years to account for the need to accommodate the extensive design and testing necessary to assure the new runner meets the performance objectives. Subsequent to the Unit 5 upgrade, downstream water quality will be assessed, employing the adaptive management process. Subsequent unit upgrades may proceed thereafter as follows:

- Should it be necessary to upgrade another unit to assure support of the SCDHEC in-stream DO standard, SCE&G will perform the upgrades on the following schedule:
 - Upgrade one of the smaller units (preferably Unit 3) within two years after the completion of the upgrade to Unit 5.
 - This process will be repeated with the sequential upgrades of Units 4, 1, and 2, each being achieved within two years after the completion of the previous unit upgrade should the effects of that prior upgrade not support the water quality goals. The sequence of unit upgrades as noted may change. SCE&G will determine the next unit for upgrades at the completion of the previous upgrade.
- Should the SCDHEC in-stream DO standard be fully supported with installation of Unit 5 the SCE&G will perform the upgrades on the following schedule. Should reliability or other issues require the upgrade of one or more of the units sooner than proposed, the schedule will be accelerated to meet the identified need.
 - Unit 3 will be upgraded within five years after license issuance;
 - Two units (preferably Units 4 and 1) will be upgraded within 15 years of license issuance; and
 - The last unit (preferably Unit 2) will be upgraded within 25 years after license issuance.

SCE&G proposes to use other hydro/pumped storage facilities, gas turbines, and/or other options available to the Applicant at the time of the upgrade as alternatives to meet our reserve obligations during the time each unit is out of service for the upgrade modification.

4.2. Lake Level Management:

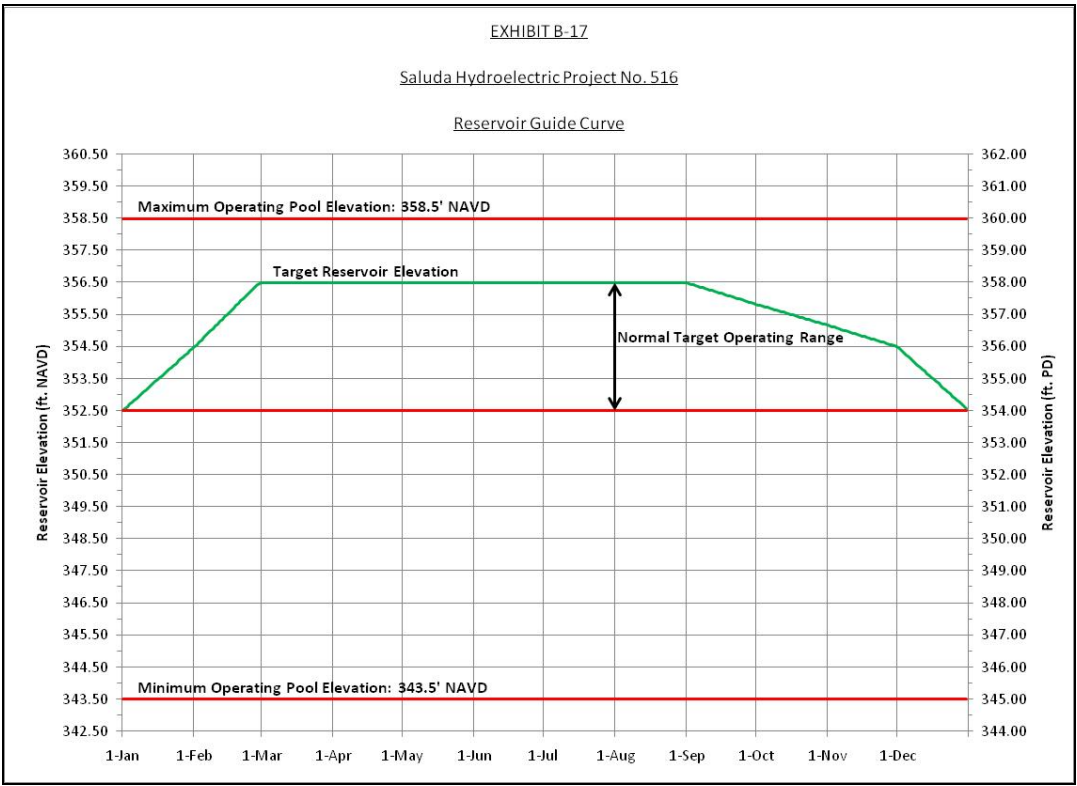
Subsequent to the issuance of the new license, SCE&G will employ the lake level management protocol discussed below and in the MELIP (Appendix X). This includes the implementation of the guide curve, developed in part with the objective of protecting the environmental, cultural and recreation resources associated with and dependent upon the reservoir.

SCE&G agrees to operate Saluda Hydro to moderate lake level fluctuations, to address safety issues, improve recreation opportunities, and to support downstream flow targets,

including striped bass flows. SCE&G agrees to make all reasonable efforts to operate during normal inflow years within a range of four feet, from a normal maximum operating lake level of 358' Plant Datum (PD) between March 1 and August 31, and a lower operating limit of 354' PD as illustrated in the lake level guide curve below. In order to maintain lake levels and minimize fluctuations, SCE&G will operate in an economically reasonable manner to maintain lake levels to approximate the guide curve.

The SCE&G shall, to the best of its ability and subject to the operational constraints discussed herein, operate the Saluda Hydroelectric Project in a manner that follows the guide curve outlined below:

Comment: Are the operational constraints clear? For example, does this include VACAR or other obligations?



Reservoir Guide Curve Table – Elevations in Feet NAVD

	January	February	March	April	May	June	July	August	September	October	November	December
1	352.50	354.50	356.50	356.50	356.50	356.50	356.50	356.50	356.50	355.83	355.17	354.50
2	352.56	354.57	356.50	356.50	356.50	356.50	356.50	356.50	356.48	355.81	355.15	354.44
3	352.63	354.64	356.50	356.50	356.50	356.50	356.50	356.50	356.46	355.79	355.13	354.37
4	352.69	354.71	356.50	356.50	356.50	356.50	356.50	356.50	356.43	355.77	355.10	354.31
5	352.76	354.79	356.50	356.50	356.50	356.50	356.50	356.50	356.41	355.74	355.08	354.24
6	352.82	354.86	356.50	356.50	356.50	356.50	356.50	356.50	356.39	355.72	355.06	354.18
7	352.89	354.93	356.50	356.50	356.50	356.50	356.50	356.50	356.37	355.70	355.04	354.11
8	352.95	355.00	356.50	356.50	356.50	356.50	356.50	356.50	356.34	355.68	355.01	354.05
9	353.02	355.07	356.50	356.50	356.50	356.50	356.50	356.50	356.32	355.66	354.99	353.98
10	353.08	355.14	356.50	356.50	356.50	356.50	356.50	356.50	356.30	355.64	354.97	353.92
11	353.15	355.21	356.50	356.50	356.50	356.50	356.50	356.50	356.28	355.62	354.95	353.85
12	353.21	355.29	356.50	356.50	356.50	356.50	356.50	356.50	356.25	355.60	354.92	353.79
13	353.27	355.36	356.50	356.50	356.50	356.50	356.50	356.50	356.23	355.57	354.90	353.73
14	353.34	355.43	356.50	356.50	356.50	356.50	356.50	356.50	356.21	355.55	354.88	353.66
15	353.40	355.50	356.50	356.50	356.50	356.50	356.50	356.50	356.19	355.53	354.86	353.60
16	353.47	355.57	356.50	356.50	356.50	356.50	356.50	356.50	356.17	355.51	354.84	353.53
17	353.53	355.64	356.50	356.50	356.50	356.50	356.50	356.50	356.14	355.49	354.81	353.47
18	353.60	355.71	356.50	356.50	356.50	356.50	356.50	356.50	356.12	355.47	354.79	353.40
19	353.66	355.79	356.50	356.50	356.50	356.50	356.50	356.50	356.10	355.45	354.77	353.34
20	353.73	355.86	356.50	356.50	356.50	356.50	356.50	356.50	356.08	355.43	354.75	353.27
21	353.79	355.93	356.50	356.50	356.50	356.50	356.50	356.50	356.05	355.40	354.72	353.21
22	353.85	356.00	356.50	356.50	356.50	356.50	356.50	356.50	356.03	355.38	354.70	353.15
23	353.92	356.07	356.50	356.50	356.50	356.50	356.50	356.50	356.01	355.36	354.68	353.08
24	353.98	356.14	356.50	356.50	356.50	356.50	356.50	356.50	355.99	355.34	354.66	353.02
25	354.05	356.21	356.50	356.50	356.50	356.50	356.50	356.50	355.96	355.32	354.63	352.95
26	354.11	356.29	356.50	356.50	356.50	356.50	356.50	356.50	355.94	355.30	354.61	352.89
27	354.18	356.36	356.50	356.50	356.50	356.50	356.50	356.50	355.92	355.28	354.59	352.82
28	354.24	356.43	356.50	356.50	356.50	356.50	356.50	356.50	355.90	355.26	354.57	352.76
29	354.31	356.43	356.50	356.50	356.50	356.50	356.50	356.50	355.87	355.23	354.54	352.69
30	354.37		356.50	356.50	356.50	356.50	356.50	356.50	355.85	355.21	354.52	352.63
31	354.44		356.50		356.50		356.50	356.50		355.19		352.56

Reservoir Guide Curve Table – Elevations in Feet Plant Datum (PD)

	January	February	March	April	May	June	July	August	September	October	November	December
1	354.00	356.00	358.00	358.00	358.00	358.00	358.00	358.00	358.00	357.33	356.67	356.00
2	354.06	356.07	358.00	358.00	358.00	358.00	358.00	358.00	357.98	357.31	356.65	356.94
3	354.13	356.14	358.00	358.00	358.00	358.00	358.00	358.00	357.96	357.29	356.63	356.87
4	354.19	356.21	358.00	358.00	358.00	358.00	358.00	358.00	357.93	357.27	356.60	356.81
5	354.26	356.29	358.00	358.00	358.00	358.00	358.00	358.00	357.91	357.24	356.58	356.74
6	354.32	356.36	358.00	358.00	358.00	358.00	358.00	358.00	357.89	357.22	356.56	356.68
7	354.39	356.43	358.00	358.00	358.00	358.00	358.00	358.00	357.87	357.20	356.54	356.61
8	354.45	356.50	358.00	358.00	358.00	358.00	358.00	358.00	357.84	357.18	356.51	356.55
9	354.52	356.57	358.00	358.00	358.00	358.00	358.00	358.00	357.82	357.16	356.49	356.48
10	354.58	356.64	358.00	358.00	358.00	358.00	358.00	358.00	357.80	357.14	356.47	356.42
11	354.65	356.71	358.00	358.00	358.00	358.00	358.00	358.00	357.78	357.12	356.45	356.35
12	354.71	356.79	358.00	358.00	358.00	358.00	358.00	358.00	357.75	357.10	356.42	356.29
13	354.77	356.86	358.00	358.00	358.00	358.00	358.00	358.00	357.73	357.07	356.40	356.23
14	354.84	356.93	358.00	358.00	358.00	358.00	358.00	358.00	357.71	357.05	356.38	356.16
15	354.90	357.00	358.00	358.00	358.00	358.00	358.00	358.00	357.69	357.03	356.36	356.10
16	354.97	357.07	358.00	358.00	358.00	358.00	358.00	358.00	357.67	357.01	356.34	356.03
17	355.03	357.14	358.00	358.00	358.00	358.00	358.00	358.00	357.64	356.99	356.31	356.97
18	355.10	357.21	358.00	358.00	358.00	358.00	358.00	358.00	357.62	356.97	356.29	356.90
19	355.16	357.29	358.00	358.00	358.00	358.00	358.00	358.00	357.60	356.95	356.27	356.84
20	355.23	357.36	358.00	358.00	358.00	358.00	358.00	358.00	357.58	356.93	356.25	356.77
21	355.29	357.43	358.00	358.00	358.00	358.00	358.00	358.00	357.55	356.90	356.22	356.71
22	355.35	357.50	358.00	358.00	358.00	358.00	358.00	358.00	357.53	356.88	356.20	356.65
23	355.42	357.57	358.00	358.00	358.00	358.00	358.00	358.00	357.51	356.86	356.18	356.58
24	355.48	357.64	358.00	358.00	358.00	358.00	358.00	358.00	357.49	356.84	356.16	356.52
25	355.55	357.71	358.00	358.00	358.00	358.00	358.00	358.00	357.46	356.82	356.13	356.45
26	355.61	357.79	358.00	358.00	358.00	358.00	358.00	358.00	357.44	356.80	356.11	356.39
27	355.68	357.86	358.00	358.00	358.00	358.00	358.00	358.00	357.42	356.78	356.09	356.32
28	355.74	357.93	358.00	358.00	358.00	358.00	358.00	358.00	357.40	356.76	356.07	356.26
29	355.81	357.93	358.00	358.00	358.00	358.00	358.00	358.00	357.37	356.73	356.04	356.19
30	355.87		358.00	358.00	358.00	358.00	358.00	358.00	357.35	356.71	356.02	356.13
31	355.94		358.00		358.00		358.00	358.00		356.69		356.06

In situations during which the SCE&G is not able to achieve operations in conformance with and/or follow the guide curve due to low inflow levels to the reservoir, the LIP shall be implemented as described in Section 5.4.

5. OPERATIONS

5.1. Minimum Flow Releases to the LSR:

As a result of Instream Flow Studies performed on the LSR during relicensing, a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios at attaining and maintaining habitat protection thresholds. After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves 80-100% of overall maximum WUA
April 1 – May 10	Striped Bass	Enhances spawning and adult trout habitat

Enhancement
Flow Regime
(See below for
details.)

May 11 – May 31	1,000	Enhances adult trout habitat
June 1 – Dec. 31	700	Achieves 80-100% of overall maximum WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1st through May 10th period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,900 and 7,700 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.

The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage. The STB target flow for a given day will be released to the extent possible as a continuous flow, but the STB target flow will not be considered a minimum flow for the purpose of license compliance. The minimum flow for compliance during April 1st – May 31st will be 1,000 CFS. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. When the previous day's average

flow in the Broad River at Alston is less than 2,900 CFS or greater than 7,700 CFS, STB target flows will not be in effect and a continuous minimum flow of 1,000 CFS will be released.

During a normal inflow year, these flows generally provide seasonally varying flows that mimic the pattern of a natural hydrograph, and provide close to 100% of maximum WUA for most target species/lifestages, thereby exceeding the minimum target threshold of 80% maximum WUA.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Low Inflow Protocol (LIP) outlined in section 5.4.

5.2. Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for “striped bass flows” in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. The AMT will meet annually, in February, to evaluate the results of the previous year’s striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC members, the Instream Flow TWC will meet within one year after a new license is issued. Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, and develop study plans prior to implementation of the striped bass flow regime.
- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. All monitoring will be performed by State or federal agencies. Funding may be provided by sources other than State and federal agencies. If monitoring is not performed during any year, the Licensee will not be obligated to provide the striped bass flows during subsequent years. The minimum flow will revert to 1,000 CFS or associated low inflow protocol flows during the striped bass flow period from April 1 through May 31.

- **Decision Thresholds:** After the 5th and 10th years following the Saluda Hydroelectric Project new license issuance, monitoring results will be assessed to determine if changes to the striped bass flows released from Saluda Dam are needed. If the striped bass flow scheme fails to meet goals identified by the AMT an alternative operational or monitoring approach may be recommended. Any increase in flows from those specified above as the STB flows, must have unanimous agreement from all participants of the AMT before being implemented.

Striped bass flows agreed upon by the AMT shall be implemented within one year after the AMT has developed a monitoring plan approved by the Commission.

5.3. Unit 5 Operation Subsequent to Unit Upgrades:

Upon completion of Unit 5 upgrades, approximated to be 3 years after the issuance of the new license, the Licensee shall operate Unit 5 in a “first on, last off” scenario during generation events in order to aid in preservation of a coolwater refuge habitat for the benefit of the reservoir fisheries. Minimum flows will be accomplished mainly with the bottom oriented units (Units 1 through 4). The operation scenario shall be as follows:

For generation flows (flows in excess of minimum flows):

- Unit 5 shall be operated preferentially as “first on, last off” from November 1 through July 31 of each year.
- The bottom-oriented units (Units 1 through 4) shall be operated preferentially as “first on, last off” during the months of August through October.

5.4. Low Inflow Protocol and Operations during Maintenance Activities and Emergency Situations:

The Licensee shall implement the Maintenance, Emergency, and Low Inflow protocol (MELIP) as developed with stakeholder input and filed as part of this Settlement (attached as Appendix X) after the issuance of the new license.

The purpose of the MELIP is to provide operational guidance for abnormal operating situations caused by maintenance activities, emergency situations (including high inflow or flood events), and periods of sustained low inflow or drought conditions. Furthermore, during sustained low inflow or drought conditions, the MELIP allows for the incremental adjustment of minimum flows and recreation flows in the LSR in order to protect critical needs served by the reservoir (reserve electric generation, municipal water supply) where possible, while continuing to provide a reasonable, biologically protective level of downstream flows.

Implementation of the Low Inflow Protocol (LIP) is determined by calculating gauged inflow to the reservoir on a daily basis. This is accomplished by computing the sum of three scaled USGS gauge values for the Saluda River, Little River and Bush River, less the estimated municipal usage from the reservoir. A 14-day average of these daily values is thus determined.

During sustained low inflow or drought conditions, if the 14-day average of gauged inflow, computed as discussed above, falls below the scheduled minimum flow, normal scheduled minimum flows will continue to be provided until the reservoir level falls to more than 1.0 ft. below the current target reservoir elevation. Once the reservoir level has receded to more than 1.0 ft. below the current target reservoir elevation, the following minimum flow adjustments will take place:

14 Day Average Net Inflow	Minimum Flow(except April 1 - May 10)
< 1,000 CFS	700 CFS minimum flow
< 700 CFS	500 CFS target flow with 400 CFS minimum flow

During the period from April 1 through May 10, when the scheduled striped bass flows is in effect, if the 14-day average net inflow should fall below the scheduled minimum flow **and** the reservoir falls to more than 1.0 ft. below the current target elevation the minimum flow would be as follows:

14 Day Average Net Inflow	Target Flow Provided April 1 – May 10
< striped bass flow request	1,000 CFS minimum flow
< 1,000 CFS	700 CFS minimum flow
< 700 CFS	500 CFS target flow with 400 CFS minimum flow

During the period from December 16 through January 17, when the target reservoir elevation is within 1.0 ft above elevation 352.5' (354.0' PD), the minimum flow will be reduced if the 14-day average net inflow should fall below the scheduled minimum flow, regardless of whether or not the reservoir has dropped 1.0 ft below the target elevation for that period.

Furthermore, at any time the 14 day average net inflow is less than the scheduled minimum flow **and** the reservoir level falls below elevation 352.5' (354.0' PD), the minimum flow will be reduced to a target flow of 500 cfs³ (400 cfs minimum). Minimum flows will remain at this level until such a time as the reservoir has risen above elevation 352.5' (354.0' PD), regardless of an increase in inflows.

During periods of time when a LIP is in place, scheduled recreational flows will be reduced in stages in consultation with the Recreational Flows Working Group (To Be Determined). Furthermore, if the reservoir level falls below elevation 352.5' (354.0' PD),

³ The Project turbines are not designed to release precise flows, therefore, a target flow has been established to allow for variances to ensure that least 400 cfs minimum flow is provided at all times.

all scheduled recreational flows will be suspended until the reservoir level rises to elevation 352.5' (354.0' PD).

During periods of time where a LIP is in place, scheduled safety training flows will be reduced as described in Section 1.3.

Due to the adaptive nature of the LIP, these criteria may be modified in a given year, in consultation with agencies and interested stakeholders, if circumstances warrant or permit.

During extended periods of low inflow, when depletion of the reservoir below el. 348.5' (350.0' PD) is imminent, the Licensee will consult with the SCDNR, the SCDHEC, and other applicable resource agencies to determine if further reductions in minimum flow below 400 CFS should be considered. At that time, the Licensee will also coordinate a joint meeting with consulting agencies and the managers of the municipal water systems which withdraw water from Lake Murray, to determine a drought management plan that could include voluntary or mandatory water conservation measures, as determined by the agencies.

5.5. High Inflow Periods:

When the rolling 14-day average inflow to Lake Murray exceeds the minimum flow requirements agreed in Section 5.1, SCE&G may at its discretion generate with this "excess" water in an "economically reasonable manner." An economically reasonable manner is one that allows SCE&G to take advantage of excess water opportunities for power generation while endeavoring not to create erratic downstream fluctuations in flow that may adversely affect habitat. This will ensure the Project is operated economically and aids in the protection of life and property, responds to changed hydrologic or other circumstances, meets lake management objectives, and does not interfere with required maintenance.

6. LAKE AND LAND MANAGEMENT

6.1. Implementation of Shoreline Management Plan and Permitting Guidelines:

Upon issuance of the new license, SCE&G will implement the Shoreline Management Plan (SMP) (Appendix X) as developed in consultation with the Lake and Land Management Technical Working Committee. The SMP will be reviewed on a 10 year basis. In addition to the 10 year review of the SMP, annual stakeholder meetings will be held to review the implementation of the Permitting Guidelines (Appendix X) and make recommendations for adjustments to these Guidelines as deemed necessary.

6.2. Rebalancing of Project Lands:

Upon issuance of the new license, the Licensee shall implement the Rebalancing of Project Lands as ordered by the Commission in order dated June 23, 2004 (107 FERC ¶ 62,273), depicted on the revised Land Classification maps (Appendix X) and specified in the tables below. The process of land use rebalancing also included consolidating

(reducing to five) and renaming the original ten land use classifications as follows: Public Recreation, Natural Areas, Project Operations, Forest Management, and Multi-Purpose. The Multi-purpose classification is subdivided into four sub-classifications: easement, commercial, 75-ft buffer zone, and future development. It will take approximately 18 months to survey the non-project lands that will be brought into the project boundary and classified as Recreation. Revised Exhibit G maps and Exhibit E recreation drawings will be filed with the Commission within two years after license issuance.

SCE&G proposes to implement the following rebalancing plan after issuance of the new license for the Project:

Summary of Project and Non-Project Shoreline Mileages and Acreages Placed in New Classifications Following Re-Balancing

	New Classification ^a							
	Natural Areas		Forest Management		Other Public Recreation		Leased to SCDNR	
	mi.	acres	miles	acres	miles	acres	Miles	acres
Previously Future Development	23	506	110	3,776	47	953	-	-
Non-Project Lands	-	-	-	-	-	658	-	2,754
LSR	-	-	-	-	6	541	-	-
Sub-Totals	23	506	110	3,776	53	2,152	-	2,754
Grand Total								
Lands Protected from								
Development: 185 miles 9189 acres								

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

Project Lands Previously Classified as Future Development Lands Reclassified to Other Classifications During Re-Balancing

Classification	Acreage ^a		Shoreline Mileage ^a	
	Before	After	Before	After
Natural Areas	42	506	2	23
Forest Management	3570	3776	100	110
Other Public Recreation	764	953	38	47
Future Development (now <i>under</i> Multi-Purpose Classification)	1818	958	91	51

^a Values are approximate and are rounded to whole numbers. Mileage values are for shoreline mileage, measured at the 360' PD contour.

The lands proposed to be leased to SCDNR are all outside of the Project boundary and will be placed/maintained in their Wildlife Management Area Program as DNR elects. The leases will be co-terminus with the new license issued by the Commission.

6.3. Aquatic Plant Management Memorandum of Understanding:

The Licensee shall employ the Aquatic Plant Management Memorandum of Understanding and the associated annual Lake Murray Aquatic Plant Management Plan as attached in Appendix X. The primary purpose of the Memorandum of Understanding is to foster consultation by SCE&G with the South Carolina Aquatic Plant Management Counsel, the entity responsible for the control of invasive plant species within the waterways of South Carolina including Lake Murray.

7. CULTURAL RESOURCES

7.1. Historic Properties Management Plan

Upon issuance of the new license, SCE&G will implement the cultural resource management and monitoring program as outlined in the Historic Properties Management Plan (HPMP). Activities associated with the HPMP include training of field inspection personnel in the first year after license issuance and every five years thereafter, visual monitoring of 20 sites on a bi-annual basis, visual monitoring or conducting a Stage II investigation of two sites located on submerged islands, and issuance of a public information brochure.

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Friday, March 20, 2009 4:24 PM
To: Alan Stuart; Alison Guth
Subject: Comments from March 11



SCEG Settlement
Agreement 3-2...

Alison and Alan,

I think most of this was captured and inserted at the meeting. Do you have a revised draft of the first section we reviewed?

Attached are some track change comments on section 1.

Thanks,

Patrick

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.557 / Virus Database: 270.11.16 - Release Date: 3/16/2009 12:00 AM

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Friday, March 20, 2009 3:35 PM
To: BARGENTIERI@scana.com
Cc: Alan Stuart; Alison Guth; SUMMER, MICHAEL C; RMAHAN@scana.com; Shane Boring; Tim Hall; Lora_Zimmerman@fws.gov
Subject: RE: Tentative Agenda for Fish and Wildlife Meetings

Hello Bill,

Thank you for your timely response and summary of the development of the Mussel Program to date. As you stated, there have been modifications to our recommendations regarding freshwater mussels at the Saluda Project since our Initial Consultation Document comments. As this relicensing process has progressed, new information from relicensing studies have been made available which has modified and refined our recommendations. I assure you our recommendations for a Mussel Program are in the best interest of the resource with careful consideration of the required operations of the Saluda Project. It does appear, however, there has been some miscommunication regarding our objectives. The FWS is currently working on a detailed explanation and outline to clarify our specific recommendations.

We plan to have this completed by the beginning of next week, so that SCEG can review our comments prior to the meeting on Friday. FWS hopes with this clarification we can come to an agreement on the Mussel Program that is reasonable and acceptable to all parties. I do plan on attending the Fish and Wildlife TWC/Settlement Meetings on Mon, Wed., and Friday. However, in scheduling additional meetings in the near future, Tuesdays and Thursdays work best for me.

Thanks, see you Monday.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
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"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>

03/20/2009 12:45 PM To

<Amanda_Hill@fws.gov>

<alan.stuart@kleinschmidtUSA.com>, "MAHAN, RANDOLPH R" <RMAHAN@scana.com>, <Shane.Boring@KleinschmidtUSA.com>, "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Tim Hall" <tim_hall@fws.gov>, "SUMMER, MICHAEL C" <MSUMMER@scana.com>

cc

Subject

RE: Tentative Agenda for Fish and Wildlife Meetings

Hi Amanda,

Thank you for your e-mail concerning your schedule and your communication of the Service's position regarding the Mussel Program being suggested for the Saluda Project.

With regards to the scheduling of meetings for the various TWCs, RCGs and settlement agreement in which you have been so kind as to participate, and have expressed a desire to continue participating in, we acknowledge your prior notice to us of your general unavailability Mondays, Wednesdays, and Fridays because of your graduate school class schedules. We shall continue to do our best to adjust not only to your schedule conflicts, but all the others we hear about from time to time from other important and interested participants. As I suppose you can appreciate, it is not always possible to avoid every conflict. This is becoming especially true as we are fast approaching the "finish line" in regards to reaching and documenting a host of agreements on all the issues we all have been working so diligently on over the past four years. We have less and less flexibility to move meeting around inasmuch as we have fewer and fewer days available to meet and work through all the important issues. Nevertheless, in recognition of the importance of FWS's participation we shall continue to make earnest efforts to avoid scheduling meetings on issues of special interest to FWS as declared by you. To help us make sure we understand clearly your availability, I ask that you provide me with a list of the dates that you expect to be available between now and the end of May. With that information, and understanding that we also must deal with issues of meeting place availability as a factor in the scheduling process, I feel sure we can minimize the incidents of irreconcilable schedule conflicts.

In regards to the Mussel Program, we are in the process of revising this program to reflect most of the recommendations listed in your letter dated January 28, 2009. Shane Boring just yesterday provided SCE&G with an internal draft copy for our review and comment. As you will note when our review is complete and we have provided our revised program for consideration, we wish to constrain the scope of the program to that which is more directly related to the operations of Saluda Hydroelectric Project and more closely bound to the limits of our project.

Please allow me to provide some background information to explain how the Mussel Program was developed up to this point. On August 28, 2008 Shane issued a draft Mussel Program (attached) to the Freshwater Mussel TWC. This draft program included the following sentence from Page 3-1 "The initial phase of the restoration program on the LSR will involve translocation of mussels from wild source populations (most likely from the Broad and/or Congaree rivers) to suitable habitat in the LSR." It was our honest and entirely reasonable belief derived from our initial discussions with you, that this was the direction that the FWS and other interested stakeholders wanted us to pursue in the restoration of mussels. Following this, at the Freshwater Mussel TWC meeting on October 17, 2008 (minutes attached), without benefit of any discussion whatsoever of the existing draft Mussel Program you declared that the FWS would like to pursue a strategy for freshwater mussels **upstream** of the Project dam. The October 17, 2008 Freshwater Mussels TWC meeting minutes (final meeting minutes, derived from initial minutes circulated to all participants, and amended to reflect comments received) reflect the following: "Amanda Hill noted that she had discussed the temperature issue with Lora Zimmerman, the USFWS mussel expert in their office, and that Lora had serious concerns about whether reintroduction of mussels in the LSR would be successful due to low water temperatures, shear forces associated with project generation, and other issues. Following a brief discussion of the temperature regime in the LSR, the group agreed that reintroduction of mussels to the LSR would likely meet with little success and suggested scrapping the current plan. Amanda suggested that focusing efforts on upstream areas (above Lake Murray) might be more fruitful. After some additional discussion, it was agreed that a small technical working group should be formed to develop a strategy for freshwater mussels upstream of the Project dam, specifically in Lake Murray and its tributaries." After that meeting is when SCE&G developed the Mussel Program dated December 18, 2008 (attached) and distributed it to the Freshwater Mussel TWC the same day. In the December 18, 2008 Mussel Program, SCE&G addressed a two phased approach to restore Savannah Lilliput in the upper reaches

of Lake Murray. I trust you can understand why, at this point, we believed the December 18 Mussel Program proposals we put forth would be received somewhat more appreciably than it later was. This brings us to the meeting held on March 3, 2009. At this meeting you requested that SCE&G reform the Mussel Program to address what was identified in a FWS letter dated January 28, 2009. The January 28th letter recommended several actions on the rivers **downstream** of the Project in addition to implementation of the proposed restoration measures for the Savannah Lilliput as described in the December 28, 2008 Mussel Program. We hope this provides you with an understanding of why we have issued multiple versions of a Mussel Program and why there is still confusion on our end as to what really we are being asked to, and ought to do to develop a program that addresses the FWS concerns identified in your comments to the Initial Stage Consultation Document. Our efforts do not reflect any attempt to avoid addressing the concerns, but rather reflect a disconcerting lack of clarity and consistency in what we believe had been communicated to us to date about the program issues of concern to FWS and how we were being asked to address them. Perhaps the failure is entirely a result of our failure to understand. But you may be assured, it has not been intentional. Regardless, we very much crave the clear understanding that thus far has eluded us.

This leads me to accept your offer of providing additional explanatory details of your recommendations from the FWS January letter. As you consider what to include in your explanations, you should consider two items that we believe bring the program back to a place close to the original starting point. If we can get back to that place, then perhaps the explanations can stand out more clearly and we won't be confused by what we thought we heard later, but apparently you disagree was said.

- The first item is that SCE&G will not include the mussel restoration program in Lake Murray in the next revision of the Mussel Program document.
 - The Lake Murray restoration portion of the program would not have been proposed if you didn't request it as mitigation in lieu of a monitoring program in the lower Saluda River (LSR).
 - Since the FWS January letter has made clear your desire to monitor and translocate mussels to the LSR and this is how our Mussel Program was originally crafted, we are revising the latest Mussel Program to focus efforts in the rivers (LSR and Broad) below the Project powerhouse.
- The second item that I would like to have clarified has to do with caged mussels placed in the LSR.
 - As noted in the FWS January letter you are requesting that the program include caged mussels taken from the Broad and Congaree rivers, to be placed in the lower Saluda and Broad rivers to determine potential impacts of altered temperatures on timing and frequency of mussel reproduction.
 - Rest assured we plan for the next revision of the Mussel Program to address placing caged mussels in the LSR. However, since it was mentioned in the October 17, 2008 meeting that the FWS had serious concerns about whether reintroduction of mussels in the LSR would be successful due to low water temperatures, shear forces associated with project generation, and other issues, we want to be absolutely sure that you wish for us to place caged mussels in the LSR to determine potential impacts on reproduction rather than assessing the potential for reintroduction of mussels in the LSR. And you are not interested in assessing the potential impacts of the caged mussels in the Congaree River. We understand that neither the issue of reintroduction of mussels in the LSR or potential impacts in the Congaree River were addressed in the FWS letter, however, they were discussed at one time during this process. We wish to be sure that the program we propose will address your needs. We have no desire to take the program in a direction different from what we believe you wish. Hence, we must be sure what it is you wish. It is merely a point of clarification prior to submitting the next revision of the draft Mussel Program for your review and comment. If you are satisfied with placing caged mussels in the LSR that is what we will propose in the program. If this is not what you wish, then we must have a clear understanding of what other thing(s) you wish, which obviously we presently do not have. Your request to review and comment on the next draft

Mussel Program is absolutely appropriate, and completely understood. We shall provide this document to you as soon as possible.

We very much value the good and productive working relationship we have had with you and FWS in general throughout the relicensing process to date, and wish to do nothing to jeopardize this relationship at this late stage of the process. But we must acknowledge a strong discomfort over recent misunderstandings in regards to the nature and scope of the elements of the mussel program for the Saluda project. Misunderstandings are to be expected from time to time, no matter how diligent the efforts to avoid them. However, when honest disagreements or misunderstandings are publicly characterized as intentional misrepresentations or professional slights, the communications necessary for the achievement of agreement are made difficult. On behalf of SCE&G please allow me to assure you that we shall do all we can to prevent such circumstances as we move towards a successful end to all our good efforts. Also, we do not want to waste your time nor our money in developing programs that are completely counter to your requests.

Bill

From: Amanda_Hill@fws.gov [mailto:Amanda_Hill@fws.gov]
Sent: Thursday, March 19, 2009 12:26 PM
To: Alison Guth
Cc: alan.stuart@kleinschmidtUSA.com; ARGENTIERI, WILLIAM R; MAHAN, RANDOLPH R; Shane.Boring@KleinschmidtUSA.com
Subject: Re: Tentative Agenda for Fish and Wildlife Meetings

Hello Alison,

Thank you for the update on the scheduling of the Fish and Wildlife TWC meetings. I can not confirm at this time that I will be available on Mon, Wed. or Fri. of next week. I have repeatedly informed Kleinschmidt and SCE&G that the FWS is not available on the scheduled dates of the Fish and Wildlife TWC Settlement meetings and have yet to receive a response about rescheduling. I would appreciate a response from SCE&G regarding the meeting scheduling. In addition, is SCE&G revising the Mussel Plan to incorporate the recommendations of the FWS, or does the FWS need to provide additional explanatory details of our recommendations to SCE&G prior to their revisions?? If SCE&G has revised the Mussel Plan, the FWS requests an opportunity to review and comment prior to settlement discussions.

Please keep me apprised of SCE&G's intentions. Thanks.

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"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

03/19/2009 08:57 AM

To

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cc

Subject

Tentative Agenda for Fish and Wildlife Meetings

Hello Everyone,

In preparation for the Fish and Wildlife Settlement Agreement meetings to be held next week, a discussion schedule has been developed and included below. As discussions have been progressing faster than anticipated within the other groups, Wednesday and Friday of next week has been allotted to finalize the RT&E brochure, Macroinvertebrate and Mussel Plans with the TWC. It has also been requested by Steve Bell of Lake Watch that the Fish and Wildlife RCG discuss the effects of the proposed guide curve on fish and wildlife resources. Therefore, the Fish and Wildlife RCG will be meeting to discuss

this first on Monday. I suspect there may be quite a bit of carry over between Fish and Wildlife RCG members and those planning on attending the Fish and Wildlife Settlement Agreement meetings, however let me know if you do not plan on attending the entire day on Monday so that I may plan for lunch accordingly. With this said a tentative agenda for next week is as follows:

Monday, March 23rd:

Lake Levels Discussion with the Fish and Wildlife RCG

Discussion on the Settlement Agreement wording for Instream Flows, and wording for other issues under the Fish and Wildlife section of the Settlement

Wednesday, March 25th:

Fish and Wildlife TWC discussion on RT&E Brochure

Fish and Wildlife TWC discussion on Macroinvertebrates

Friday, March 27th:

Fish and Wildlife TWC discussion on Mussel Plan

Also, it was requested that we issue the draft plans for review prior to the meetings. Therefore, the Instream Flow proposal has been included below for Monday's discussions. Shane is still in the process of revising the other plans, so those will be forthcoming. Thanks, Alison

1.1. Minimum Flow Releases to the LSR:

As a result of Instream Flow Studies performed on the LSR during relicensing, a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios at attaining and maintaining habitat protection thresholds. After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves 80-100% of overall maximum WUA
April 1 – May 10	Striped Bass Enhancement Flow Regime (See below for details.) Enhances spawning and adult trout habitat	
May 11 – May 31	1,000	Enhances adult trout habitat
June 1 – Dec. 31	700	Achieves 80-100% of overall maximum WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1st through May 10th period. Favorable conditions are also thought to have occurred when the

Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,900 and 7,700 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day’s daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day’s daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day’s daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.

The STB target flows will be determined on a daily basis using the previous day’s average flow in the Broad River measured at the Alston gage. The STB target flow for a given day will be released to the extent possible as a continuous flow, but the STB target flow will not be considered a minimum flow for the purpose of license compliance. The minimum flow for compliance during April 1st – May 31st will be 1,000 CFS. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. When the previous day’s average flow in the Broad River at Alston is less than 2,900 CFS or greater than 7,700 CFS, STB target flows will not be in effect and a continuous minimum flow of 1,000 CFS will be released.

During a normal inflow year, these flows generally provide seasonally varying flows that mimic the pattern of a natural hydrograph, and provide close to 100% of maximum WUA for most target species/lifestages, thereby exceeding the minimum target threshold of 80% maximum WUA.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Low Inflow Protocol (LIP) outlined in section 5.4.

1.1. Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for “striped bass flows” in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. The AMT will meet annually, in February, to evaluate the results of the previous year’s striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC

members, the Instream Flow TWC will meet within one year after a new license is issued. Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, and develop study plans prior to implementation of the striped bass flow regime.
- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. All monitoring will be performed by State or federal agencies. Funding may be provided by sources other than State and federal agencies. If monitoring is not performed during any year, the Licensee will not be obligated to provide the striped bass flows during subsequent years. The minimum flow will revert to 1,000 CFS or associated low inflow protocol flows during the striped bass flow period from April 1 through May 31.
- **Decision Thresholds:** After the 5th and 10th years following the Saluda Hydroelectric Project new license issuance, monitoring results will be assessed to determine if changes to the striped bass flows released from Saluda Dam are needed. If the striped bass flow scheme fails to meet goals identified by the AMT an alternative operational or monitoring approach may be recommended. Any increase in flows from those specified above as the STB flows, must have unanimous agreement from all participants of the AMT before being implemented.

Striped bass flows agreed upon by the AMT shall be implemented within one year after the AMT has developed a monitoring plan approved by the Commission.

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124 [attachment "LSR Freshwater Mussel Program(08-20-2008;csb).doc.doc" deleted by Amanda Hill/R4/FWS/DOI] [attachment "Freshwater Mussel Program UPDATED 12-18-08.doc" deleted by Amanda Hill/R4/FWS/DOI] [attachment "Oct 17 2008 FW Meeting Notes _final;csb;12082008_.pdf" deleted by Amanda Hill/R4/FWS/DOI]

Alison Guth

From: Shane Boring
Sent: Friday, March 20, 2009 3:02 PM
To: Shane Boring; 'Matthew Rice '; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Seibels (bseibels@yahoo.com); Chad Altman; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Relicensing: Management Programs for Rare, Threatened and Endangered Species

Hello folks,

I apologize for all the e-mails today. I forgot to include one document that will be relevant to our discussions next week. Specifically, attached is the final TWC draft of the Rare, Threatened and Endangered species program proposed for implementation under a new license for Saluda.

This document was previously distributed as a "final TWC draft" on 12/15/2008 and has not been altered. We wanted to pass along an additional copy to make sure everyone has it for next week's meeting.

One minor edit is likely needed, which we will need to discuss next week. Under the management regime for wood storks, we mention that any wood stork document during upcoming waterfowl surveys will be documented. Since the waterfowl survey are now complete, we will need to edit the document to avoid any misunderstanding regarding this item.

Thanks and have a great weekend,
Shane

C. Shane Boring
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2008-06 Saluda
RTE Management ...

Alison Guth

From: Shane Boring
Sent: Friday, March 20, 2009 2:17 PM
To: Matthew Rice ; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Seibels (bseibels@yahoo.com); Chad Altman; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Relicensing: Updated Draft Text for Rare, Threatened and Endangered Species Brochure

Dear RTE TWC Members:

In preparation for our meetings next week, attached is the updated draft text for the Rare, Threatened and Endangered Species brochure. Changes are minimal and reflect our discussions at the March 3 meeting, including:

- 1) addition of purple martin to the brochure
- 2) removal of the cover photo showing the dam and intake towers.

Thanks and have a great weekend,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)



RTE Brochure with
edits- 3-19-...

204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
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Alison Guth

From: Shane Boring
Sent: Friday, March 20, 2009 2:11 PM
To: Matthew Rice ; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; David Eargle; Gerrit Jobsis (American Rivers); Jennifer Price (pricej@biol.sc.edu); Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer
Subject: Saluda Relicensing: Updated Lower Saluda benthic Macroinvertebrate Monitoring Plan

Dear TWC Member:

In preparation for our meetings next week, attached is the updated draft of the Benthic Macroinvertebrate Monitoring Plan. Changes are very minimal from the last version and primarily consist of those edits identified during our March 3 meeting, including:

- 1) Alteration of the implementation schedule to reflect a two year monitoring period following upgrade of each of the Project turbines, as recommended in the meeting.
- 2) Replacement of the Tailrace sampling site with a site at the Toenail Rapids - intended to facilitate more effective sampling with better macro habitat, but still in close proximity to the dam.

Thanks and looking forward to seeing you all next week,
Shane

C. Shane Boring
Environmental Scientist
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Saluda Hydro
Macroinvert Progr...

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Friday, March 20, 2009 12:46 PM
To: Amanda_Hill@fws.gov
Cc: Alan Stuart; RMAHAN@scana.com; Shane Boring; Alison Guth; Tim Hall; SUMMER, MICHAEL C
Subject: RE: Tentative Agenda for Fish and Wildlife Meetings



LSR Freshwater Mussel Program(...
Freshwater Mussel Program UPDA...
Oct 17 2008 FW Meeting Notes _...

Hi Amanda,

Thank you for your e-mail concerning your schedule and your communication of the Service's position regarding the Mussel Program being suggested for the Saluda Project.

With regards to the scheduling of meetings for the various TWCs, RCGs and settlement agreement in which you have been so kind as to participate, and have expressed a desire to continue participating in, we acknowledge your prior notice to us of your general unavailability Mondays, Wednesdays, and Fridays because of your graduate school class schedules. We shall continue to do our best to adjust not only to your schedule conflicts, but all the others we hear about from time to time from other important and interested participants. As I suppose you can appreciate, it is not always possible to avoid every conflict. This is becoming especially true as we are fast approaching the "finish line" in regards to reaching and documenting a host of agreements on all the issues we all have been working so diligently on over the past four years. We have less and less flexibility to move meeting around inasmuch as we have fewer and fewer days available to meet and work through all the important issues. Nevertheless, in recognition of the importance of FWS's participation we shall continue to make earnest efforts to avoid scheduling meetings on issues of special interest to FWS as declared by you. To help us make sure we understand clearly your availability, I ask that you provide me with a list of the dates that you expect to be available between now and the end of May. With that information, and understanding that we also must deal with issues of meeting place availability as a factor in the scheduling process, I feel sure we can minimize the incidents of irreconcilable schedule conflicts.

In regards to the Mussel Program, we are in the process of revising this program to reflect most of the recommendations listed in your letter dated January 28, 2009. Shane Boring just yesterday provided SCE&G with an internal draft copy for our review and comment. As you will note when our review is complete and we have provided our revised program for consideration, we wish to constrain the scope of the program to that which is more directly related to the operations of Saluda Hydroelectric Project and more closely bound to the limits of our project.

Please allow me to provide some background information to explain how the Mussel Program was developed up to this point. On August 28, 2008 Shane issued a draft Mussel Program (attached) to

the Freshwater Mussel TWC. This draft program included the following sentence from Page 3-1 “The initial phase of the restoration program on the LSR will involve translocation of mussels from wild source populations (most likely from the Broad and/or Congaree rivers) to suitable habitat in the LSR.” It was our honest and entirely reasonable belief derived from our initial discussions with you, that this was the direction that the FWS and other interested stakeholders wanted us to pursue in the restoration of mussels. Following this, at the Freshwater Mussel TWC meeting on October 17, 2008 (minutes attached), without benefit of any discussion whatsoever of the existing draft Mussel Program you declared that the FWS would like to pursue a strategy for freshwater mussels **upstream** of the Project dam. The October 17, 2008 Freshwater Mussels TWC meeting minutes (final meeting minutes, derived from initial minutes circulated to all participants, and amended to reflect comments received) reflect the following: “Amanda Hill noted that she had discussed the temperature issue with Lora Zimmerman, the USFWS mussel expert in their office, and that Lora had serious concerns about whether reintroduction of mussels in the LSR would be successful due to low water temperatures, shear forces associated with project generation, and other issues. Following a brief discussion of the temperature regime in the LSR, the group agreed that reintroduction of mussels to the LSR would likely meet with little success and suggested scrapping the current plan. Amanda suggested that focusing efforts on upstream areas (above Lake Murray) might be more fruitful. After some additional discussion, it was agreed that a small technical working group should be formed to develop a strategy for freshwater mussels upstream of the Project dam, specifically in Lake Murray and its tributaries.” After that meeting is when SCE&G developed the Mussel Program dated December 18, 2008 (attached) and distributed it to the Freshwater Mussel TWC the same day. In the December 18, 2008 Mussel Program, SCE&G addressed a two phased approach to restore Savannah Lilliput in the upper reaches of Lake Murray. I trust you can understand why, at this point, we believed the December 18 Mussel Program proposals we put forth would be received somewhat more appreciably than it later was. This brings us to the meeting held on March 3, 2009. At this meeting you requested that SCE&G reform the Mussel Program to address what was identified in a FWS letter dated January 28, 2009. The January 28th letter recommended several actions on the rivers **downstream** of the Project in addition to implementation of the proposed restoration measures for the Savannah Lilliput as described in the December 28, 2008 Mussel Program. We hope this provides you with an understanding of why we have issued multiple versions of a Mussel Program and why there is still confusion on our end as to what really we are being asked to, and ought to do to develop a program that addresses the FWS concerns identified in your comments to the Initial Stage Consultation Document. Our efforts do not reflect any attempt to avoid addressing the concerns, but rather reflect a disconcerting lack of clarity and consistency in what we believe had been communicated to us to date about the program issues of concern to FWS and how we were being asked to address them. Perhaps the failure is entirely a result of our failure to understand. But you may be assured, it has not been intentional. Regardless, we very much crave the clear understanding that thus far has eluded us.

This leads me to accept your offer of providing additional explanatory details of your recommendations from the FWS January letter. As you consider what to include in your explanations, you should consider two items that we believe bring the program back to a place close to the original starting point. If we can get back to that place, then perhaps the explanations can stand out more clearly and we won't be confused by what we thought we heard later, but apparently you disagree was said.

- The first item is that SCE&G will not include the mussel restoration program in Lake Murray in the next revision of the Mussel Program document.
 - The Lake Murray restoration portion of the program would not have been proposed if you didn't

- request it as mitigation in lieu of a monitoring program in the lower Saluda River (LSR).
- Since the FWS January letter has made clear your desire to monitor and translocate mussels to the LSR and this is how our Mussel Program was originally crafted, we are revising the latest Mussel Program to focus efforts in the rivers (LSR and Broad) below the Project powerhouse.
 - The second item that I would like to have clarified has to do with caged mussels placed in the LSR.
 - As noted in the FWS January letter you are requesting that the program include caged mussels taken from the Broad and Congaree rivers, to be placed in the lower Saluda and Broad rivers to determine potential impacts of altered temperatures on timing and frequency of mussel reproduction.
 - Rest assured we plan for the next revision of the Mussel Program to address placing caged mussels in the LSR. However, since it was mentioned in the October 17, 2008 meeting that the FWS had serious concerns about whether reintroduction of mussels in the LSR would be successful due to low water temperatures, shear forces associated with project generation, and other issues, we want to be absolutely sure that you wish for us to place caged mussels in the LSR to determine potential impacts on reproduction rather than assessing the potential for reintroduction of mussels in the LSR. And you are not interested in assessing the potential impacts of the caged mussels in the Congaree River. We understand that neither the issue of reintroduction of mussels in the LSR or potential impacts in the Congaree River were addressed in the FWS letter, however, they were discussed at one time during this process. We wish to be sure that the program we propose will address your needs. We have no desire to take the program in a direction different from what we believe you wish. Hence, we must be sure what it is you wish. It is merely a point of clarification prior to submitting the next revision of the draft Mussel Program for your review and comment. If you are satisfied with placing caged mussels in the LSR that is what we will propose in the program. If this is not what you wish, then we must have a clear understanding of what other thing(s) you wish, which obviously we presently do not have. Your request to review and comment on the next draft Mussel Program is absolutely appropriate, and completely understood. We shall provide this document to you as soon as possible.

We very much value the good and productive working relationship we have had with you and FWS in general throughout the relicensing process to date, and wish to do nothing to jeopardize this relationship at this late stage of the process. But we must acknowledge a strong discomfort over recent misunderstandings in regards to the nature and scope of the elements of the mussel program for the Saluda project. Misunderstandings are to be expected from time to time, no matter how diligent the efforts to avoid them. However, when honest disagreements or misunderstandings are publicly characterized as intentional misrepresentations or professional slights, the communications necessary for the achievement of agreement are made difficult. On behalf of SCE&G please allow me to assure you that we shall do all we can to prevent such circumstances as we move towards a successful end to all our good efforts. Also, we do not want to waste your time nor our money in developing programs that are completely counter to your requests.

Bill

From: Amanda_Hill@fws.gov [mailto:Amanda_Hill@fws.gov]
Sent: Thursday, March 19, 2009 12:26 PM
To: Alison Guth
Cc: alan.stuart@kleinschmidtUSA.com; ARGENTIERI, WILLIAM R; MAHAN, RANDOLPH R; Shane.Boring@KleinschmidtUSA.com
Subject: Re: Tentative Agenda for Fish and Wildlife Meetings

Hello Alison,

Thank you for the update on the scheduling of the Fish and Wildlife TWC meetings. I can not confirm at this time that I will be available on Mon, Wed. or Fri. of next week. I have repeatedly informed Kleinschmidt and SCE&G that the FWS is not available on the scheduled dates of the Fish and Wildlife TWC Settlement meetings and have yet to receive a response about rescheduling. I would appreciate a response from SCE&G regarding the meeting scheduling. In addition, is SCE&G revising the Mussel Plan to incorporate the recommendations of the FWS, or does the FWS need to provide additional explanatory details of our recommendations to SCE&G prior to their revisions?? If SCE&G has revised the Mussel Plan, the FWS requests an opportunity to review and comment prior to settlement discussions.

Please keep me apprised of SCE&G's intentions. Thanks.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

03/19/2009 08:57 AM

To

<DILLMAJW@dhec.sc.gov>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart"
<alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda

Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <billeast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, "Bob Perry" <perryb@dnr.sc.gov>, <bseibels@yahoo.com>, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <bret.hoffman@kleinschmidtusa.com>, "Brett Burse" <network@scpronet.com>, <btrump@scana.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Charlene Coleman" <cheetahtk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <ccompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, <ccantley@scdah.state.sc.us>, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <dave.anderson@kleinschmidtusa.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org >, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons" <dsimmons@thefittscompany.com>, <dchristie@comporium.net>, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, <aregaf@dnr.sc.gov>, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis \ (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher" <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, <pricej@biol.sc.edu>, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Ruane" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins" <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, <johnd44@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Ken Styer" <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net >, <turnerle@dhec.sc.gov>, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester" <linda_lester11@yahoo.com>, "Linda Schneider" <wendy0815@sc.rr.com>, "Malcolm Leaphart" <malcolml@mailbox.sc.edu>, <mdavis@scprt.com>, <giffinma@dhec.sc.gov>, "Matthew Rice" <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, <msummer@scana.com>, "Mike Waddell" <mwaddell@esri.sc.edu>, <mquattlebaum@scana.com>, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore" <PatrickM@scccl.org>, <lakemurrayloa@earthlink.net>, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rammarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, <rbull@davisfloyd.com>, "Rhett Bickley" <rbickley@lex-co.com>, <rkidder1@sc.rr.com>, "Richard Mikell" <adventurec@mindspring.com>, <SKEENER@sc.rr.com>, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, <ryanity@scana.com>, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.ccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Sheri Armstrong" <sarmstrong@lex-co.com>, "Skeet Mills" <MillsL@dnr.sc.gov>, <lakewatchman@yahoo.com>, "Steve Summer" <summer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, <tbowles@scana.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbler" <tbebbler@scprt.com>, <tylehowe@nc-cherokee.com>, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vejdani" <vejdani@dnr.sc.gov>, "Wenonah Haire" <wenonahh@www.ccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>,

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cc

Subject

Tentative Agenda for Fish and Wildlife Meetings

Hello Everyone,

In preparation for the Fish and Wildlife Settlement Agreement meetings to be held next week, a discussion schedule has been developed and included below. As discussions have been progressing faster than anticipated within the other groups, Wednesday and Friday of next week has been allotted to finalize the RT&E brochure, Macroinvertebrate and Mussel Plans with the TWC. It has also been requested by Steve Bell of Lake Watch that the Fish and Wildlife RCG discuss the effects of the proposed guide curve on fish and wildlife resources. Therefore, the Fish and Wildlife RCG will be meeting to discuss this first on Monday. I suspect there may be quite a bit of carry over between Fish and Wildlife RCG members and those planning on attending the Fish and Wildlife Settlement Agreement meetings, however let me know if you do not plan on attending the entire day on Monday so that I may plan for lunch accordingly. With this said a tentative agenda for next week is as follows:

Monday, March 23rd:

Lake Levels Discussion with the Fish and Wildlife RCG
Discussion on the Settlement Agreement wording for Instream Flows, and wording for other issues under the Fish and Wildlife section of the Settlement

Wednesday, March 25th:

Fish and Wildlife TWC discussion on RT&E Brochure
Fish and Wildlife TWC discussion on Macroinvertebrates

Friday, March 27th:

Fish and Wildlife TWC discussion on Mussel Plan

Also, it was requested that we issue the draft plans for review prior to the meetings. Therefore, the Instream Flow proposal has been included below for Monday's discussions. Shane is still in the process of revising the other plans, so those will be forthcoming. Thanks, Alison

1.1. Minimum Flow Releases to the LSR:

As a result of Instream Flow Studies performed on the LSR during relicensing, a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios at attaining and maintaining habitat protection thresholds. After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves 80-100% of overall maximum WUA
April 1 – May 10	Striped Bass Enhancement Flow Regime (See below for details.) Enhances spawning and adult trout habitat	
May 11 – May 31	1,000	Enhances adult trout habitat
June 1 – Dec. 31	700	Achieves 80-100% of overall maximum WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1st through May 10th period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,900 and 7,700 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.

The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage. The STB target flow for a given day will be released to the extent possible as a continuous flow, but the STB target flow will not be considered a minimum flow

for the purpose of license compliance. The minimum flow for compliance during April 1st – May 31st will be 1,000 CFS. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. When the previous day's average flow in the Broad River at Alston is less than 2,900 CFS or greater than 7,700 CFS, STB target flows will not be in effect and a continuous minimum flow of 1,000 CFS will be released.

During a normal inflow year, these flows generally provide seasonally varying flows that mimic the pattern of a natural hydrograph, and provide close to 100% of maximum WUA for most target species/lifestages, thereby exceeding the minimum target threshold of 80% maximum WUA.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Low Inflow Protocol (LIP) outlined in section 5.4.

1.1. Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for “striped bass flows” in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. The AMT will meet annually, in February, to evaluate the results of the previous year's striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC members, the Instream Flow TWC will meet within one year after a new license is issued. Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, and develop study plans prior to implementation of the striped bass flow regime.

- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. All monitoring will be performed by State or federal agencies. Funding may be provided by sources other than State and federal agencies. If monitoring is not performed during any year, the Licensee will not be obligated to provide the striped bass flows during subsequent years. The minimum flow will revert to 1,000 CFS or associated low inflow protocol flows during the striped bass flow period from April 1 through May 31.

- **Decision Thresholds:** After the 5th and 10th years following the Saluda Hydroelectric Project new license issuance, monitoring results will be assessed to determine if changes to the striped bass flows released from Saluda Dam are needed. If the striped bass flow scheme fails to meet goals identified by the AMT an alternative operational or monitoring approach may be recommended. Any increase in flows from those specified above as the STB flows, must have unanimous agreement

from all participants of the AMT before being implemented.

Striped bass flows agreed upon by the AMT shall be implemented within one year after the AMT has developed a monitoring plan approved by the Commission.

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
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Lexington, SC 29072
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Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Thursday, March 19, 2009 5:08 PM
To: Shane Boring
Cc: Alan Stuart; Alison Guth; BARGENTIERI@scana.com; lee.emery@ferc.gov; amanda_hill@fws.gov; dchristie@dnr.sc.gov; Hal Beard; Jim Bulak; ahler@dnr.sc.gov; Mike Waddell; Gerrit Jobsis; Matt Rice; Patrick Moore ; Suzanne Rhodes; Vivianne Vejdani ; Bill Marshall; Tony Bebbber; Bob Perry; danr@dnr.sc.gov; bettingerj@dnr.sc.gov
Subject: RE: White Paper TU Scope & Comments

Shane, Here are the additional comments from TU regarding the Trout Adaptive Management Program to add to those sent March 17, 2009:

n The title is appropriate as long as the word 'Adaptive' is retained as that is what we all agreed to as the appropriate way to monitor how successful improved dissolved oxygen levels and increased low flows are to trout survival and reproduction as age classes are built over multi years. The adaptive plan for trout from the relicensing should be easily identified from any future Trout Management Plans developed by the state resource management agency, SC DNR.

n Self sustaining needs to be further clarified as *the ability of a fish population to maintain adequate numbers over periods of years to support continued reproduction and also a sport fishery*. Reaching those numbers is not likely in the lower Saluda as in many rivers in our country due to heavy angling pressure, habitat degradation due point and non-point pollution, plus normal mortality, especially of hatchery reared trout, and predation from birds, mammals, and other fish. Angling pressure is the easiest to control and that is why there is a prevalence of 'catch & release' coldwater fisheries and closed seasons. But, fishing regulations are not the responsibility of the power company, nor are many of the factors in their control beyond the amount and quality of the releases and the physical effects of high releases to the lower Saluda River.

n Also, it should be noted that hatchery trout are genetically not well suited to survival in the wild as they are raised from brood stock that has adapted to the artificial, controlled hatchery environment, including feeding by humans. But hatchery trout can adapt if given time, requiring several years to build a genetic pool of fish that thrive in a natural environment. Randy Geddings, long time fisheries biologist for SC DNR, maintained that 15% was the average annual survival rate of hatchery trout, with or without angling, as many will not adapt to the wild. Understanding the difference in hatchery and wild trout is critical as it points out the need for a stable environment for trout suitable for the wild to develop; and, that planting of hatchery trout is not a suitable replacement for wild trout that have been killed. The hatchery trout are only 'seedlings' that will require several years of survival to build up the age classes and genetic pool of those that can adapt to survival in the wild, as those they are replacing had.

n The comments sent last week that were requested to be added back to the White Paper as an appendix as originally filed on the relicensing website, should also be filed with the Adaptive Management Plan if the White Paper and appendix are not included with it throughout the review process with FERC. The comments outlined important physical habitat criteria and possible future

improvements, possible for even large tailraces with high flows as has been proven on the White River in Arkansas below Bull Shoals Dam. Those comments are reproduced below.

In addition to the points made by Mike Waddell in the marked up WORD doc sent March 17, below are several more with references to the pertinent sections noted. Of particular concern as Mike notes is the use of an Low Inflow Protocol with a 'trigger' so low that it would result in the lower 'drought' release levels to the lower Saluda more often than not, especially when lake levels are above 354' which the average citizen would not perceive as a critical water shortage situation. Fish populations should be given priority over lake or even river recreation...

Section 2.2 – Fishery Resources / 5.1.6 - Trout Growth Study

The trout growth study in 2003 did not include the fall months when levels of dissolved oxygen have traditionally been very low and lethal. The critical question and the goal of any future studies should to not only measure growth or movement, but year round survival.

Section 2.2 - Limited spawning and nursery potential

No definitive studies were done to support the conclusions that the lower Saluda has limited spawning habitat. This is an assumption made only from observations during the IFIM field work, and does not factor in the scouring effects of high hydro releases nor reflects the conclusions of recognized studies of resource agencies like the US Forest Service and also Arkansas Fisheries staff. Both have determined that trout will often utilize whatever habitat is available in a resilient way, often obtaining significant reproduction from limited sites. Reference Monte Seehorn, Retired USFS (southern Appalachian streams) and Larry Rider, Arkansas Aquatic Habitats Manager (White River).

Section 2.3.1 Dissolved Oxygen Maintenance

The references to 3.0 mg/l of dissolved oxygen in this section and also in the oxygen study report should in no way imply that levels of dissolved oxygen less than the SC state standard of 4.0 mg/l are acceptable at any time, under any circumstance. License requirements for operations should include enhancements to ensure that the current state standards are met 24/7/365 (ie, 100% of the time) for the entire term of the new license. Such enhancements should include installation of a liquid oxygen injection system if any generations **are** to be made during the fall months when dissolved oxygen levels at the intakes are less than state standards and will result in river levels of less than 4.0 mg/l.

Any failure to meet state standards that kills fish must recognize that year classes of trout cannot be immediately replaced with hatchery trout, so that re-stocking hatchery trout, regardless of size, is not the only remedy. Dollar penalties to be used for habitat enhancements or further studies, especially by SC DNR, should be specified in the license.

Section 2.3.2 - Temperature

Coldwater fisheries temperatures needs for survival and spawning are critical factors as past studies by SC DNR Fisheries have determined, especially on southern Appalachian streams (reference Dan Rankin). The location of the lower Saluda in the Piedmont region of South Carolina

makes the temperature factor especially critical if a viable year round population of rainbow or brown trout is to be developed. Maintenance of released water temperatures suitable for coldwater species is a crucial element that should be specifically incorporated in the new license.

Finally, the plan should specify remedies if the maintenance of dissolved oxygen to state standard levels and absolute minimum flows as agreed to by SC DNR suitable for a healthy trout population to develop. These remedies should include not only improvements to the dissolved oxygen and flow regimes, but also physical habitat enhancement for both benthic and trout fisheries – either in the form of finances or materials and equipment use to make improvements as approved by SC DNR after review by the Advisory Committee as specified.

From: LEAPHART, JR., MALCOLML [mailto:MALCOLML@mailbox.sc.edu]

Sent: Friday, October 26, 2007 5:30 PM

To: Shane Boring; Theresa Thom; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Hal Beard; Jennifer Summerlin; Jim Glover; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Steve Summer; Brandon Kulik; Alan Stuart; ahler@dnr.sc.gov; selfr@dnr.sc.gov; marshallb@dnr.sc.gov; tbebber@scprt.com; Amanda_Hill@fws.gov

Cc: rankind@dnr.sc.gov

Subject: RE: Saluda Hydro Relicense: Trout White Paper

Shane and others:

Thanks to SC DNR for suggesting, and to Kleinschmidt for preparing the white paper. The time and effort to scientifically measure, describe, and assess the lower Saluda River (LSR) is appreciative as such a study is the proper starting point for decision making, as long as the focus is accurate...

The first comment from Trout Unlimited (TU) however concerns the focus and scope of the white paper... **I agreed at a past IFIM meeting and documented in writing that TU's main concern was for conditions needed for trout reproduction, not a 'self sustaining' trout fishery which is determined by too many factors outside of the utility company's operations.** As I documented in my email to you for filing with the TWC minutes, I used the term 'self sustaining' synonymously with 'reproducing' in the TU ICD letter as is often done in the 'literature' and by fishery biologists all over the country. Clarifying that usage is important as it changes the scope of the white paper completely, certainly making the conclusions meaningless. If the 'self sustaining' response was necessary because of the TU ICD letter,, fine; but, a further evaluation of reproduction potential as agreed on needs to be done also.

Even with the unwanted 'self sustaining' focus, much of the report however has value in that it establishes the needs of rainbow and brown trout and attempts to evaluate how the LSR fares in meeting those needs (ie, recruitment potential). Specific comments regarding the white paper follow.

-- We are not surprised that the temperature regime is satisfactory for trout reproduction and survival as that is consistent with the conclusions from the 1985 USGS study that TU funded for \$5,250 for SC DNR. The note that the temperature range during brown trout spawning is marginal is somewhat surprising, but does provide a target for an important habitat improvement that should be closely evaluated for remedies.

-- According to Monte Seehorn, retired USFS Southeast Fisheries Biologist, experience has shown that pool to riffle ratios are not absolutes and that many trout streams with much less than ideal ratios have significant reproduction, often from relatively small areas suitable for spawning. The point is that many other factors come to bear besides the ratio, or the size of the spawning area, and trout are quite resilient. Much of the documented brown trout spawn in the White River in Arkansas for example has been found to occur in stretches relatively short for the length of the river. And their resiliency has been shown there too as they adapted to huge fluctuations in release levels, including for spawning site selection.

-- The implication that the LSR only has a 100' x 300' suitable for trout spawning is misleading. Most of the entire stretch of river on both sides of the islands below I26 where the 'Oh Brother Rapids' and 'Ocean Boulevard Rapids' are has the potential for trout spawning. Since the islands extend for nearly half a mile, that would mean over a mile of potential spawning sites alone exists there, counting both sides. Plus, the riffles at the spillway channel juncture, the rapids above Hopes Ferry Landing, the rapids at Corley Islands, and those below the islands below I26 extending all the way to the to the confluence would all have some potential. The .8 mile of riffle habitat is certainly a conservative estimate, and to infer that trout spawning would not occur anywhere else is questionable. That's not even consistent with the cited Raleigh conclusions that trout can spawn in up to 8.2 feet of water with suitable velocity and substrate which could certainly fall out of the observed riffle areas. Again, an empirical study apparently beyond the scope of the white paper is needed to be more definite here.

-- There appears to be a lack of comparison with many southern trout rivers that have more in common with the LSR than many in Maine. Tailrace trout fisheries in Arkansas for example were previously pointed out as examples that were very analogous and whose management could be looked at for guidance giving the hundreds of miles of those rivers and their longer history of research and management by both that state and the Corps of Engineers that built most of the dams. What other state has an 'Aquatic Habitats Manager' as Arkansas has in Larry Rider? But, apparently Mr. Ryder was not consulted after I shared his expertise and contact information with you as to trout habitat for this white paper? The success of their revetments to deepen channels (while providing handicap and other angler access), of gravel beds developed from anchored tree tops, and from root wads installed to provide holding areas (as we have done on the Eastatooe and other upstate SC streams) are all examples of tailrace habitat improvements for trout that should be considered as the LSR potential is evaluated for trout.

In "The Future of Trout in South Carolina" (A Plan for the Management of South Carolina's Trout Resources" (SCDNR, Geddings, 1998), "Put, grow, and take" trout fisheries are described as having "various habitat deficiencies" that "do not permit successful reproduction" by trout. The LSR is essentially described as 'deficient habitat' in the white paper, though without any empirical studies or peer reviewed research to support that categorization, only observations and assumptions. However, it's difficult to question that description as the Lake Murray dam transformed a warm water piedmont river into a cold water fishery in the late 1920's. That the aquatic habitat that once was a 'self sustaining' warm water fishery is out of sync with the coldwater fishery created is not a surprise to no one. Indeed, that transformation is the crux of the 'habitat deficiency' problem for trout in the LSR and should be acknowledged, with remedies to get the two better in sync as part of the new license.

In summary: TU does not expect the utility company to develop a 'self sustaining' trout fishery as the white paper describes. TU does expect the utility to document steps in their plan to foster trout reproduction through habitat improvements, such as through annual projects developed in concert with TU, US Fish & Wildlife, and SC DNR. Those undertaken in upstate South Carolina in the SC DNR "Partners for Trout" program with the NRCS, and those in Arkansas as mentioned above would both be good starting points. While not totally replacing the need for trout stockings as the white paper indicates, the goal would be to improve the now coldwater habitat to the point where reproduction could at least occur, even if not in significant numbers to reduce stocking needs given the current fishing regulations. To not do that while the dissolved oxygen and flow problems are being remedied would be short-sighted to say the least for a state 'wild and scenic' river that is the heart of the extensive river greenways of the Columbia area.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]

Sent: Mon 10/15/2007 9:05 AM

To: Theresa Thom; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Hal Beard; Jennifer Summerlin; Jim Glover; LEAPHART, JR., MALCOLML; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Brandon Kulik; Alan Stuart

Subject: Saluda Hydro Relicense: Trout White Paper

Dear Instream Flow/Aquatic Habitat TWC Members:

Attached for your review is the updated draft of the white paper examining the potential for a self-sustaining trout fishery on the Lower Saluda River. Many thanks to those who provided comments on the previous draft. Please provide us with your comments on the updated draft by Tuesday, October 31, 2007. Also, the paper will be an agenda item at our October 30th meeting of the Fish and Wildlife Technical Working Committees. Thanks again for your continued participation in the Saluda relicensing process.

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

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From: LEAPHART, JR., MALCOLML

Sent: Tuesday, March 17, 2009 5:57 PM

To: Alan Stuart; Bill Argentieri; Shane Boring; 'Alison Guth'

Cc: dchristie@comporium.net; Hal Beard; Ron Ahle; 'Jim Bulak'; 'selfr@dnr.sc.gov'; Mike Waddell

Subject: FW: Trout Plan

Here are comments on the Trout 'Monitoring' Plan from Mike Waddell in a attached marked up WORD doc. I will have additional comments as soon as I can this week, but in a simpler submission with section references.

From: Mike Waddell [mailto:mwaddell@esri.sc.edu]

Sent: Tuesday, March 10, 2009 12:54 PM

To: LEAPHART, JR., MALCOLML

Subject: RE: Trout Plan

Malcolm: Here are my comments and edits on the plan.

Mike

Alison Guth

From: Alison Guth
Sent: Thursday, March 19, 2009 2:53 PM
To: Alison Guth; 'Vivianne Vejdani '; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; Dave Anderson; 'David Price'; 'Dick Christie (dchristie@comporium.net)'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'J. Hamilton Hagood'; 'Jay Schabacher '; 'Jennifer O'Rourke'; 'Jim Devereaux'; 'Joel Huggins '; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Matthew Rice '; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore '; 'Randy Mahan'; 'Richard Miner '; 'Roger Hovis '; 'Skeet Mills '; 'Stan Jones (sjones@imichotels.net)'; 'Stephan Curry'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Suzanne Rhodes'; 'Tommy Boozer'
Subject: 1-27-09 final notes

Hello all,

Attached are the final meeting notes from the Safety RCG meeting on January 27th. Thank you for all of your comments, Alison



2009-1-27 final
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, March 19, 2009 2:52 PM
To: Alison Guth; 'Charlene Coleman'; 'Mike Waddell'; Vivianne Vejdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Hand; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Patrick Moore ; Randy Mahan; Steve Bell (lakewatchman@yahoo.com); Tim Vinson; Tommy Boozer; Tony Bebber; Van Hoffman; Alan Stuart
Subject: 1-28-09 final notes

Hello Recreation Management TWC,

Attached are the final meeting notes from the 1-28-09 meeting. Thanks for all of your comments, Alison



2009-1-28 final
Meeting Minute...

Alison Guth
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Lexington, SC 29072
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Fax 803-951-2124

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Thursday, March 19, 2009 1:36 PM
To: Dave Anderson; Vivianne Vejdani ; BARGENTIERI@scana.com; Bill Marshall; David Hancock; dchristie@comporium.net; George Duke; Jennifer Hand; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis; Patrick Moore ; RMAHAN@scana.com; lakewatchman@yahoo.com; Tim Vinson; Tommy Boozer; Van Hoffman; Alison Guth; Alan Stuart
Subject: RE: Recreation Plan "Track Changes" Version



Response to draft
Recreation P...

David,

Attached are my comments to the 3/2009 Draft Recreation Plan for the Saluda Hydroelectric Project (track changes version). I have not had time to compare it to the version you had yesterday and hope it is not different.

Thanks,

Tony Bebber, AICP
Planning Manager, Product Services

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
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tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Thursday, March 05, 2009 11:23 AM
To: Vivianne Vejdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; dchristie@comporium.net; George Duke; Jennifer Summerlin; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis; Patrick Moore ; Randy Mahan; lakewatchman@yahoo.com; Tim Vinson; Tommy Boozer; Tony Bebber; Van Hoffman; Alison Guth; Alan Stuart
Subject: Recreation Plan "Track Changes" Version

Recreation Management TWC Members:

As you have seen by now, I have distributed the RCG Draft of the Recreation Plan. As was mentioned in our last meeting, I am attaching the "Track Changes" version for your use. As you may notice, there are some "administrative" differences (e.g., spacing, table of contents updates, etc.) between this document and the RCG Draft--not important, but I wanted to point it out in case they caused any confusion.

See you in a couple of weeks.

Dave

<<Saluda Project Recreation Plan (2009-03-04;EDITSFORTWC).doc>>

SCPRT Response to draft Recreation Plan for the Saluda Hydroelectric Project
-March 2009 draft

2.1 Recreation Assessment: Note that no general population surveys were done; only current users at existing sites and targeted focus groups were surveyed. SCPRT data was to be considered in the process which identified recreational participation and preference for walking and other activities (see attached). The group was advised that funds saved in lieu of additional studies would be applied to on-the-ground projects.

Table 3.1 Existing Recreation: add more specific information about trails. You should list the number and mileage of trails. "Multiple" is not descriptive of the situation. I am not aware of trails at Park Site and Dam Site unless you are including the walking trail provided by SC Dept. of Transportation on Hwy 6/60.

Table 3.1 Existing Recreation: separate the river sites from the lake sites for clarity (should do so on Table 6.1 as well).

3.2 Existing Use Estimates: Note that the use of SCPRT data provided (attached) demonstrates the need for more walking trails, etc. to accommodate a variety of recreation opportunities around the lake. Only limited surveys of existing sites were used in this analysis.

5.1 Two Bird Cove and Hurricane Hole Cove: This section needs significant justification to explain the recommendation to remove the designation. Indicate that the shoreline classifications on XX amount shoreline at each location have changed from XX to XX to protect as much of the shoreline as possible, the primary goal of the group that originally requested the designation. Nearby landowners and others in the process have requested the designation to be removed in order to reduce the "attractive nuisance" possibilities by drawing undue attention to these open water areas.

5.4 Dreher Island State Recreation Area: as we have noted before, this area does need some upgrading, including upgrading electrical service in the campground, shoreline stabilization, marina improvements, and fishing piers.

5.5 Dreher Island State Recreation Area: see above

5.5 Rocky Creek Park: this "future recreation" area was excluded from the list and should be added. Recommendations for Rocky Creek have included the following that have not been incorporated into the plan:

Stakeholder/community planning process to determine proper improvements to be phased in
Lake access for the non-boating public

Walking/biking trails, perhaps connecting all portions of the park.

Fishing piers/bank fishing

Restrooms

Parking and access roads

Tent camping

Group camping

Picnic shelters/tables

Onsite management

Wildlife management area/hunting (at least on an interim basis)

Table 6.1 Scheduled Improvements:

- separate the river sites from the lake sites for clarity

- Rocky Creek – we suggest a planning process to begin in year 9 in conjunction with the decennial consultation process with implementation phased in over the following 10 year period. This site provides opportunities to serve the larger public (not just boat ramp users) in a variety of lake access recreational activities that are limited or not available on the south side of the lake, such as walking, bicycling, bank/pier fishing, tent camping, primitive camping, and picnicking. The population on the south side of the lake has grown tremendously in recent years and is expected to continue. Also, this site could remain in the Wildlife Management Area program in the initial 10 year period.

- we suggest providing details for recreation improvements in years 11 through 30 (or 50).

6.2 Future Consultation Process: the short time frames listed in this section suggest limited intentions for recreational improvements in the 10 to 50 year potential license period. There would be a public meeting and a 30 to 60 day window to comment or provide additional input, seek opportunities for partnerships, do additional studies to determine needs, or make any significant changes to draft plans. Currently, no investment is proposed beyond the first 10 years, yet a 50 year license is proposed. We suggest adding more details for the recreation investment to be provided in years 11 through 30 (or beyond if a 50 year license is realistic) and establishing a stakeholder planning process in all “year 9s” that would allow some modification of that investment as needs change. It does make tremendous sense to set aside lands now for “future recreation” as has been done in this recreation plan and shoreline rebalancing effort. However, there are a number of “future recreation” sites that the project has held since the 1960s (according to recent discussions) that have yet to be developed for public use and there is concern that this may continue through the next license period.

7.3 Warning System: SC Wildlife Federation was another group that expressed concern regarding river safety. Also, edit this section with new Safety RCG language from the last meeting.

8.0 Concept Drawings: these have not been provided.

TABLE 4
STATEWIDE RECREATION PARTICIPATION 2005, 1999, 1994 AND 1990
AGE 12 AND OLDER

	2005 Percentage <u>Participating</u>	1999 Percentage <u>Participating</u>	1994 Percentage <u>Participating</u>	1990 Percentage <u>Participating</u>
1. Walking for pleasure or exercise	83.2	82.8	80.2	80.5
2. Attending outdoor sporting events.....	63.4	62.1	60.6	64.2
3. Beach swimming/sunbathing.....	62.5	63.1	59.5	59.3
4. Driving for pleasure	58.2	61.9	59.6	63.9
5. Weights or exercise machines	57.1	52.5	48.9	43.2
6. Picnicking	53.4	55.7	57.7	60.5
7. Pool swimming	53.2	56.4	53.6	57.5
8. Visiting historical sites	52.1	51.4	48.7	46.8
9. Bicycling	42.8	38.8	40.1	43.3
10. Visiting a museum	38.4	40.2	36.7	37.7
11. Fresh water fishing	37.2	38.0	40.0	38.6
12. Visiting an unusual natural feature	34.7	28.5	28.4	31.1
13. Playing basketball	34.5	36.5	39.4	38.9
14. Visiting a zoo	34.1	38.3	39.4	36.1
15. Motorboating.....	34.1	33.0	32.8	29.8
16. Jogging/running	33.9	25.2	30.8	31.5
17. Watching wildlife	33.4	36.5	---	---
18. Lake/river swimming.....	28.0	30.5	30.9	29.2
19. Playing football or soccer	26.1 ¹	22.8 ¹	16.9	26.9
20. Off-road vehicle riding	23.5	19.1	13.5	18.5
21. Playing baseball or softball.....	23.4 ¹	26.9 ¹	33.5	33.5
22. Camping	23.1	24.7	20.6	21.2
23. Golf	21.1	19.3	17.3	15.9
24. Guided nature trail/study.....	20.3	24.5	19.2	20.1
25. Bird watching	20.2	35.2	16.5	18.0
26. Salt water fishing	19.0 ¹	18.1 ¹	17.1	17.2
27. Hiking	18.2	18.9	16.8	13.5
28. Playing volleyball	17.2	22.1	27.9	32.7
29. Playing tennis	14.3	14.6	18.8	24.3
30. Hunting	13.6	14.4	14.4	16.0
31. Other shooting sports	12.0	10.4	12.1	12.0
32. Jetskiing	11.8	11.1	6.1	3.9
33. Attending an auto race	11.1	17.9	13.7	---
34. Driving a motorcycle for pleasure	11.1	---	---	---
35. Canoeing, kayaking, rafting	10.7	8.1	7.5	6.9

TABLE 4

- cont. -

36. Skateboarding, in-line skating, roller skating ..	10.0	13.1	13.0	---
37. Horseback riding	9.1	8.0	10.0	9.6
38. Waterskiing	6.1	8.4	14.1	14.5
39. Rock climbing, rappelling	6.1	3.9	3.9	---
40. Sailing	2.7	3.4	7.6	5.3
41. Geocaching or orienteering	2.5	---	---	---
42. Hunting dog field trials	2.2	2.5	1.5	2.1
43. In-line hockey	1.2	0.9	---	---

¹In these surveys separate questions were asked for baseball, softball, football, soccer, salt water fishing, and shrimping or shellfishing. For comparability with previous surveys, baseball and softball, football and soccer, and salt water fishing and shrimping or shellfishing were combined in this table. The percentage of respondents who reported participating in these specific activities in the past twelve months were as follows: football, 22.4% (2005), 18.4% (1999); salt water fishing, 16.2% (2005), 14.4% (1999); baseball, 15.9% (2005), 16.6% (1999); softball, 13.5% (2005), 16.9% (1999); soccer, 7.6% (2005), 8.2% (1999); and shellfishing or shrimping, 7.1% (2005), 8.7% (1999). Percentages for these specific activities are used in tables presented later in this report.

TABLE 14
PREFERRED OUTDOOR ACTIVITIES – 2005

	Spring or Summer		Fall or Winter	
	<u>%</u>	<u>Rank</u>	<u>%</u>	<u>Rank</u>
Playing Ball (Softball, Baseball, Basketball, Volleyball, Football, or Soccer)	21.0	1	20.7	2
Walking for Pleasure	14.6	2	23.3	1
Swimming	11.1	3	1.2	13
Fishing	10.0	4	4.5	6
Golf	5.7	5	5.3	4
Camping	4.3	6	3.7	7
Motorboating	3.8	7	0.8	17
Gardening	2.9	8	1.4	12
Bicycling	2.8	9	3.5	8
Hiking	2.3	10	4.9	5
Tennis	2.3	11	1.7	11
Jogging /Running.....	1.6	12	2.3	9
Hunting	1.3	13	6.8	3
Picnicking	1.3	14	0.5	20
Visiting a Park	1.8	15	0.9	15
Motorcycling	1.2	16	0.2	22
Horseback Riding	0.8	17	1.1	14
Water Sports	0.8	18	0.0	23
Waterskiing/Jetskiing	0.6	19	0.0	24
Kayaking	0.6	20	0.3	21
Going to the Mountains	0.1	21	0.9	16
Exercising	0.1	22	0.8	18
Snow Skiing	0.0	23	2.1	10
Ice Skating	0.0	24	0.7	19
Others *	9.0		12.6	

*Total of all other activities mentioned, none of which was named by more than 0.5% of those interviewed as either their preferred spring or summer, or fall or winter, preferred outdoor recreational activity.

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Thursday, March 19, 2009 12:26 PM
To: Alison Guth
Cc: Alan Stuart; BARGENTIERI@scana.com; RMAHAN@scana.com; Shane Boring
Subject: Re: Tentative Agenda for Fish and Wildlife Meetings

Hello Alison,

Thank you for the update on the scheduling of the Fish and Wildlife TWC meetings. I can not confirm at this time that I will be available on Mon, Wed. or Fri. of next week. I have repeatedly informed Kleinschmidt and SCE&G that the FWS is not available on the scheduled dates of the Fish and Wildlife TWC Settlement meetings and have yet to receive a response about rescheduling. I would appreciate a response from SCE&G regarding the meeting scheduling. In addition, is SCE&G revising the Mussel Plan to incorporate the recommendations of the FWS, or does the FWS need to provide additional explanatory details of our recommendations to SCE&G prior to their revisions?? If SCE&G has revised the Mussel Plan, the FWS requests an opportunity to review and comment prior to settlement discussions.

Please keep me apprised of SCE&G's intentions. Thanks.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

03/19/2009 08:57 AM To

<DILLMAJW@dhec.sc.gov>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <billleast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, "Bob Perry" <perryb@dnr.sc.gov>, <bseibels@yahoo.com>, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <bret.hoffman@kleinschmidtusa.com>, "Brett Bursey" <network@scpronet.com>, <btrump@scana.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Charlene Coleman" <cheetahrk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <cocompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, <ccantley@scdah.state.sc.us>, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <dave.anderson@kleinschmidtusa.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons" <dsimmons@thefittscompany.com>, <dchristie@comporium.net>, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, <aregaf@dnr.sc.gov>, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher" <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, <pricej@biol.sc.edu>, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Ruane" <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins" <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, <johned44@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Ken Styer" <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net>, <turnerle@dhec.sc.gov>, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester" <linda_lester11@yahoo.com>,

"Linda Schneider " <wendy0815@sc.rr.com>, "Malcolm Leaphart" <malcolml@mailbox.sc.edu>, <mdavis@scprt.com>, <giffinma@dhec.sc.gov>, "Matthew Rice " <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, <msummer@scana.com>, "Mike Waddell" <mwaddell@esri.sc.edu>, <mquattlebaum@scana.com>, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore " <PatrickM@scccl.org>, <lakemurrayloa@earthlink.net>, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rmmarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, <r1bull@davisfloyd.com>, "Rhett Bickley" <rbickley@lex-co.com>, <rkidder1@sc.rr.com>, "Richard Mikell" <adventurec@mindspring.com>, <SKEENER@sc.rr.com>, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, <ryanity@scana.com>, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.cccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Sheri Armstrong " <sarmstrong@lex-co.com>, "Skeet Mills " <MillsL@dnr.sc.gov>, <lakewatchman@yahoo.com>, "Steve Summer" <summer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, <tbowles@scana.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebber" <tbebber@scprt.com>, <tylehowe@nc-chokeee.com>, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vajdani " <vejdaniv@dnr.sc.gov>, "Wenonah Haire" <wenonahh@www.cccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>, "Chad Altman" <altmankc@dhec.sc.gov>, "Jennifer Summerlin" <Jennifer.Hand@KleinschmidtUSA.com>, "Scott Harder" <HarderS@dnr.sc.gov>, "Brandon Kulik" <Brandon.Kulik@KleinschmidtUSA.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>, "David Eargle" <eargleda@dhec.sc.gov>, "Jennifer O'Rourke" <jenno@scwf.org>, "Jim Goller" <wildlife@sc.rr.com >, <laura.mccary@gmail.com>

cc
Subject

Tentative Agenda for Fish and Wildlife Meetings

Hello Everyone,

In preparation for the Fish and Wildlife Settlement Agreement meetings to be held next week, a discussion schedule has been developed and included below. As discussions have been progressing faster than anticipated within the other groups, Wednesday and Friday of next week has been allotted to finalize the RT&E brochure, Macroinvertebrate and Mussel Plans with the TWC. It has also been requested by Steve Bell of Lake Watch that the Fish and Wildlife RCG discuss the effects of the proposed guide curve on fish and wildlife resources. Therefore, the Fish and Wildlife RCG will be meeting to discuss this first on Monday. I suspect there may be quite a bit of carry over between Fish and Wildlife RCG members and those planning on attending the Fish and Wildlife Settlement Agreement meetings, however let me know if you do not plan on attending the entire day on Monday so that I may plan for lunch accordingly. With this said a tentative agenda for next week is as follows:

Monday, March 23rd:

Lake Levels Discussion with the Fish and Wildlife RCG
Discussion on the Settlement Agreement wording for Instream Flows, and wording for other issues under the Fish and Wildlife section of the Settlement

Wednesday, March 25th:

Fish and Wildlife TWC discussion on RT&E Brochure
Fish and Wildlife TWC discussion on Macroinvertebrates

Friday, March 27th:

Fish and Wildlife TWC discussion on Mussel Plan

Also, it was requested that we issue the draft plans for review prior to the meetings. Therefore, the Instream Flow proposal has been included below for Monday's discussions. Shane is still in the process of revising the other plans, so those will be forthcoming. Thanks, Alison

1.1. Minimum Flow Releases to the LSR:

As a result of Instream Flow Studies performed on the LSR during relicensing, a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios at attaining and maintaining habitat protection thresholds. After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves 80-100% of overall maximum WUA
April 1 – May 10	Striped Bass Enhancement Flow Regime (See below for details.) Enhances spawning and adult trout habitat	
May 11 – May 31	1,000	Enhances adult trout habitat
June 1 – Dec. 31	700	Achieves 80-100% of overall maximum WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1st through May 10th period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,900 and 7,700 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.

The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage. The STB target flow for a given day will be released to the

extent possible as a continuous flow, but the STB target flow will not be considered a minimum flow for the purpose of license compliance. The minimum flow for compliance during April 1st – May 31st will be 1,000 CFS. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when additional generation is no longer required on a given day, the STB target flow for the given day will be resumed. When the previous day's average flow in the Broad River at Alston is less than 2,900 CFS or greater than 7,700 CFS, STB target flows will not be in effect and a continuous minimum flow of 1,000 CFS will be released.

During a normal inflow year, these flows generally provide seasonally varying flows that mimic the pattern of a natural hydrograph, and provide close to 100% of maximum WUA for most target species/lifestages, thereby exceeding the minimum target threshold of 80% maximum WUA.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Low Inflow Protocol (LIP) outlined in section 5.4.

1.1. Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for “striped bass flows” in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. The AMT will meet annually, in February, to evaluate the results of the previous year's striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC members, the Instream Flow TWC will meet within one year after a new license is issued. Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, and develop study plans prior to implementation of the striped bass flow regime.
- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. All monitoring will be performed by State or federal agencies. Funding may be provided by sources other than State and federal agencies. If monitoring is not performed during any year, the Licensee will not be obligated to provide the striped bass flows during subsequent years. The minimum flow will revert to 1,000 CFS or associated low inflow protocol flows during the striped bass flow period from April 1 through May 31.
- **Decision Thresholds:** After the 5th and 10th years following the Saluda Hydroelectric Project new license issuance, monitoring results will be assessed to determine if changes to the striped bass flows released from Saluda Dam are needed. If the striped bass flow scheme fails to meet goals identified by the AMT an alternative operational or monitoring approach may be

recommended. Any increase in flows from those specified above as the STB flows, must have unanimous agreement from all participants of the AMT before being implemented.

Striped bass flows agreed upon by the AMT shall be implemented within one year after the AMT has developed a monitoring plan approved by the Commission.

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Conference Call to Discuss Shortnose Sturgeon Monitoring Plan
Location: via conference line

Start: Thu 3/26/2009 9:30 AM
End: Thu 3/26/2009 11:30 AM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; Jennifer Hand; Alison Guth

Importance: High

All:

After further consultation with NMFS, Prescott has indicated that the conference call approach will be fine for our meeting on Thursday March 26. **There will be no face-to-face component to this meeting as indicated in my previous e-mail (my apologies for any confusion).**

We are planning to meet via conference line from 9:30 - 11:30 am. The call in number is as follows:

76565 – SCE&G internal

(803) 217-6565 – local access (Columbia)

1-888-500-7717 – long distance access

Conference ID – 7549

A copy of the latest version of the Sturgeon Plan is attached below. This is the same version previously sent on 3/10/2009.



Saluda Sturgeon
Program DRAFT ...

Thanks to all for your continued dedication to the Saluda Relicensing process. Please don't hesitate to call with questions.

Shane

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

***Please note that meeting invitation will disappear from your inbox once you have clicked "accept." Click on

the meeting event in your Outlook calendar to access the e-mail and attached files.

Alison Guth

From: Shane Boring
Sent: Thursday, March 19, 2009 12:16 PM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; Jennifer Hand; Alison Guth
Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

All:

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Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Shane Boring
Sent: Tuesday, March 17, 2009 5:18 PM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; Jennifer Hand; Alison Guth
Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

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Vivianne Vejdani
Bill Post
Pres Brownell
Bill Argentieri
Milton Quattlebaum

Thanks,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
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Fax: (803)951-2124

-----Original Message-----

From: Shane Boring
Sent: Tuesday, March 10, 2009 10:37 AM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
Subject: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Hello folks,

Attached is an updated draft of the Sturgeon Protection and Adaptive Management Program, which was developed based on our discussions with you all over the past couple of months. Many thanks to Prescott Brownell and Bill Post for developing the framework document that served as the foundation for the proposed Program document.

We would like to convene a conference call to review the Program. We have tentatively identified **Thursday, March 26** (preferably in the AM). Please let us know of your availability on this date. An alternate date is **Tuesday, March 31**. Once we get a consensus on the date for the call, I will send out a final meeting invitation with the call-in number.

Thanks and please don't hesitate to call with questions,
Shane

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<< File: Saluda Sturgeon Program DRAFT 02-18-09 - CLEAN.doc >>

Alison Guth

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Alison Guth

From: Alison Guth
Sent: Thursday, March 19, 2009 8:57 AM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman; Chad Altman; Jennifer Hand; Scott Harder; Brandon Kulik; Alan Stuart; David Eargle; Jennifer O'Rourke; Jim Goller; Laura Boos (laura.mccary@gmail.com)
Subject: Tentative Agenda for Fish and Wildlife Meetings

Hello Everyone,

In preparation for the Fish and Wildlife Settlement Agreement meetings to be held next week, a discussion schedule has been developed and included below. As discussions have been progressing faster than anticipated within the other groups, Wednesday and Friday of next week has been allotted to finalize the RT&E brochure, Macroinvertebrate and Mussel Plans with the TWC. It has also been requested by Steve Bell of Lake Watch that the Fish and Wildlife RCG discuss the effects of the proposed guide curve on fish and wildlife resources. Therefore, the Fish and Wildlife RCG will be meeting to discuss this first on Monday. I suspect there may be quite a bit of carry over between Fish and Wildlife RCG members and those planning on attending the Fish and Wildlife Settlement Agreement meetings, however let me know if you do not plan on attending the entire day on Monday so that I may plan for lunch accordingly. With this said a tentative agenda for next week is as follows:

Monday, March 23rd:

Lake Levels Discussion with the Fish and Wildlife RCG
Discussion on the Settlement Agreement wording for Instream Flows, and wording for other issues under the Fish and Wildlife section of the Settlement

Wednesday, March 25th:

Fish and Wildlife TWC discussion on RT&E Brochure
Fish and Wildlife TWC discussion on Macroinvertebrates

Friday, March 27th:

Also, it was requested that we issue the draft plans for review prior to the meetings. Therefore, the Instream Flow proposal has been included below for Monday's discussions. Shane is still in the process of revising the other plans, so those will be forthcoming. Thanks, Alison

1.1. Minimum Flow Releases to the LSR:

As a result of Instream Flow Studies performed on the LSR during relicensing, a Microsoft Access® database was created and used to calculate flow and the weighted usable area (WUA) relative percentage for each month for flow scenarios of interest to stakeholders. This in turn was used to test the success of various flow scenarios at attaining and maintaining habitat protection thresholds. After exploring a number of scenarios, the Licensee has agreed that it shall operate the Project in accordance with the following minimum flow schedule:

TIME PERIOD	FLOW (CFS)	PRIMARY BIOLOGICAL FUNCTION
Jan. 1 – Mar. 31	700	Achieves 80-100% of overall maximum WUA
April 1 – May 10	Striped Bass Enhancement Flow Regime (See below for details.)	Enhances spawning and adult trout habitat
May 11 – May 31	1,000	Enhances adult trout habitat
June 1 – Dec. 31	700	Achieves 80-100% of overall maximum WUA

Striped Bass Enhancement Flow Regime

The Striped Bass Enhancement Flow Regime (STB Flows) were originally proposed by the South Carolina Department of Natural Resources (SCDNR) as a means of improving conditions for striped bass spawning in the Congaree River, which is formed by the confluence of the Broad and Saluda Rivers. It is SCDNR's contention that conditions most favorable to striped bass spawning have historically occurred when flow in the Congaree River near the I-77 bridge was approximately 9,000 CFS during the April 1st through May 10th period. Favorable conditions are also thought to have occurred when the Saluda River contributes approximately 30 percent of the total flow in the Congaree River at Columbia. This corresponds to a flow in the Saluda River which would be approximately 45 percent of the flow in the Broad River as measured at the USGS Broad River at Alston, SC gage site (No. 02161000). The SCDNR developed a target flow regime for the Saluda Project designed to maintain a Saluda River 30% flow contribution to the Congaree River when flow in the Broad River at Alston is between 2,900 and 7,700 CFS during the April 1st – May 10th period each year. The STB target flow request is summarized as follows:

- April 1st – May 10th: Each day that the previous day's daily average flow in the Broad River (measured at Alston gage) is between 2,900 CFS and 7,700 CFS, Saluda will release as a continuous target flow equal to the lesser of:
 - 45% of the previous day's daily average flow in the Broad River at the Alston gage, or
 - The balance of what is required to create a 9,000 CFS in the Congaree River.
- The striped bass request flows are intended to be released continuously 24 hours per day and will be treated as target flows subject to a 1,000 CFS minimum flow to be released from Saluda when the previous day's daily average flow in the Broad River (measured at Alston gage) is less than 2,900 CFS or greater than 7,700 CFS.

The STB target flows will be determined on a daily basis using the previous day's average flow in the Broad River measured at the Alston gage. The STB target flow for a given day will be released to the extent possible as a continuous flow, but the STB target flow will not be considered a minimum flow for the purpose of license compliance. The minimum flow for compliance during April 1st – May 31st will be 1,000 CFS. There will be no restriction on additional generation by Saluda Hydro if required during the STB flow period each year; when

than 7,700 CFS, STB target flows will not be in effect and a continuous minimum flow of 1,000 CFS will be released.

During a normal inflow year, these flows generally provide seasonally varying flows that mimic the pattern of a natural hydrograph, and provide close to 100% of maximum WUA for most target species/lifestages, thereby exceeding the minimum target threshold of 80% maximum WUA.

Exceptions to Prescribed Minimum Flow:

Because the Project is operated primarily and critically as a reserve facility, in the event of a reserve call, the Project outflows will likely increase above target minimum flows for short durations. In addition, recreational flow events, outlined in the Recreation Plan discussed in Section 2.2, will increase the referenced minimum flows for the duration of the events. In the event of a drought, minimum flows for the LSR will conform to the Low Inflow Protocol (LIP) outlined in section 5.4.

1.1. Flow Releases to Enhance Striped Bass Habitat in the Congaree River Adaptive Management Plan:

The schedule for “striped bass flows” in this agreement is intended as a first attempt to reasonably meet the habitat needs in the Saluda and Congaree Rivers. In order to evaluate flow interests, an Adaptive Management Team (AMT) consisting of SCE&G, state and federal agencies, and other relicensing stakeholders with relevant experience and interests will be formed. The AMT will meet annually, in February, to evaluate the results of the previous year’s striped bass flow period. In addition, the AMT may elect to meet as necessary during extreme, unforeseen weather events. The Instream Flow TWC members, the Instream Flow TWC will meet within one year after a new license is issued. Among the items of business to be addressed at this meeting will be establishing qualifications of and terms for members of the AMT, and the creation of a charter and guidelines to operate under. The charter and guidelines shall at a minimum provide for the following items.

- **Metrics:** The AMT will set goals, develop parameters, including required measurements, and develop study plans prior to implementation of the striped bass flow regime.
- **Monitoring Plan:** The AMT will develop a monitoring plan within one year of license issuance that will identify the timing, frequency, and sampling methods associated with previously identified metrics. The monitoring plan will also include an evaluation of priority species in the LSR. All monitoring will be performed by State or federal agencies. Funding may be provided by sources other than State and federal agencies. If monitoring is not performed during any year, the Licensee will not be obligated to provide the striped bass flows during subsequent years. The minimum flow will revert to 1,000 CFS or associated low inflow protocol flows during the striped bass flow period from April 1 through May 31.
- **Decision Thresholds:** After the 5th and 10th years following the Saluda Hydroelectric Project new license issuance, monitoring results will be assessed to determine if changes to the striped bass flows released from Saluda Dam are needed. If the striped bass flow scheme fails to meet goals identified by the AMT an alternative operational or monitoring approach may be recommended. Any increase in flows from those specified above as the STB flows, must have unanimous agreement from all participants of the AMT before being implemented.

Striped bass flows agreed upon by the AMT shall be implemented within one year after the AMT has developed a monitoring plan approved by the Commission.

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301

Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

Subject: Canceled: Settlement Agreement Meetings - Recreation
Location: Lake Murray Training Center

Start: Fri 3/20/2009 9:30 AM
End: Fri 3/20/2009 4:00 PM
Show Time As: Free

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: All RCG & TWC Members

Optional Attendees: Shane Boring; 'Tim Vinson'; Dave Anderson; 'James Glover'; 'Matt Rice'; 'Bill Marshall'; 'ARGENTIERI, WILLIAM R'; 'Gerrit Jobsis'; 'tpowers@newberrycounty.net'; 'Larry Turner'; 'dchristie@comporium.net'; 'BOOZER, THOMAS C'; 'BOWLES, THOMAS M'; 'Dobrasko, Rebekah'; 'James %22Will%22 Dillman'; 'STUTTS, BRANDON G'; 'QUATTLEBAUM, MILTON'; 'Mark Giffin'; 'Tony Bebbler'; 'MAHAN, RANDOLPH R'; 'Vivianne Vejdani'; 'SUMMER, MICHAEL C'; 'AMMARELL, RAYMOND R'; 'Charles Hightower'; 'SUMMER, STEPHEN E'; 'Gina Kirkland'; 'David Price'; 'Amy Bennett'; Mark Davis

Importance: High

Hello All,

We will be holding a Settlement Agreement Meeting for the Recreation Group Friday, March 20 beginning at 9:30. Please RSVP for gate access and lunch a week before the meeting date. Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Wednesday, March 18, 2009 4:14 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Beber; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Cancellation Notice - 19th and 20th

Importance: High

Hello All,

This email is to inform everyone that the Recreation Meetings tomorrow, March 19th and Friday March 20th, have been canceled. We were able to progress through all of our points of discussion today and therefore the meeting time allotted for the next two days is not needed. I will also be canceling the outlook calendar reminder that I sent out for tomorrow's meeting, so you will likely get another email regarding that. Please disregard the redundancy. Thanks! Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: LEAPHART,JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Tuesday, March 17, 2009 5:57 PM
To: Alan Stuart; BARGENTIERI@scana.com; Shane Boring; Alison Guth
Cc: dchristie@comporium.net; Hal Beard; Ron Ahle; Jim Bulak; selfr@dnr.sc.gov; Mike Waddell
Subject: FW: Trout Plan



Trout Management
Program DRAFT...

Here are comments on the Trout 'Monitoring' Plan from Mike Waddell in a attached marked up WORD doc. I will have additional comments as soon as I can this week, but in a simpler submission with section references.

From: Mike Waddell [mailto:mwaddell@esri.sc.edu]
Sent: Tuesday, March 10, 2009 12:54 PM
To: LEAPHART,JR., MALCOLML
Subject: RE: Trout Plan

Malcolm: Here are my comments and edits on the plan.

Mike

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Tuesday, March 17, 2009 5:54 PM
To: Alison Guth; DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; lakemurrayloa@earthlink.net; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Cc: lee.emery@ferc.gov
Subject: Recreation Meeting Issues

Thanks for the opportunity to submit comments prior to the settlement agreement meetings which we will try to attend as we can around our work schedules. There are a number of **recreation** issues for the lower Saluda River that should be discussed during the settlement process, many of which have been raised, but have not been adequately addressed. These issues include the following:

n The closure to the public of over 2200 feet of the lower Saluda River below the Lake Murray Dam is a major recreation issue, especially when considered along with the closure to the public of access to the immediate tailrace area below the dam in the 1990's. Both of these closures, including major mitigation for them, should be in settlement discussions and in the new license plan. Citing 'Homeland Security' concerns while refusing to discuss these closings with the stakeholders is not adequate as many of the questions deal with common sense public concerns, such as lack of similar .4 mile exclusion zones at other sites and for the dam, spillway, and intake towers exposed to major vehicular traffic daily.

n Developing a recreation plan based on a survey process questionable to the stakeholders is contradictory to working the plan out with the stakeholders whose views were overridden in many cases by survey study conclusions, even after coming to the table as willing and knowledgeable broad cross-sectional representatives of the community. PRT and TU for example questioned the failure to do a complete zip code mailing of the surveys developed in midlands counties; and, those with river interests noted the heavy emphasis on boat landing interviews which do not cover most lower Saluda River users.

n The decision to address the river properties other than directly with the stakeholders is not consistent with the goal now of a consensus based settlement agreement process. The properties along the lower Saluda should be clearly listed along with a map outlining the boundaries of each, and discussions of possible uses of each should occur with the stakeholders. This discussion was requested by TU along with a draft list of many sites with recreation potential, but the request was denied with a note from Shane Boring, supported by Alan Taylor, that SCE&G management would consider their properties and offer what they wished for the Recreation Plan without stakeholder involvement, only the input from the company surveys and focus group, not stakeholder 'wants' regardless of their merits or the expertise of those raising them.

n The areas listed for improvement on the lower Saluda River are not adequate for a license term of 30 years or more. And the noted recommendations for the Gardendale Landing should absolutely be included as obvious needs to all stakeholders of an existing site with a long history of use patterns. A systematic approach to either develop or protect/enhance, especially natural areas, should be incorporated into the license so that all properties along the lower Saluda are covered in the new license as noted above, including a phased-in schedule for each site for the license term.

n The recommendation from the Lower Saluda Advisory Council included below should be a major goal statement for the Recreation Plan of the new license. It is unanimously supported by all stakeholders, especially in the support for natural area protection appropriate for a state wild and scenic river. To state that there is no 'consensus' for this recommendation is disingenuous as it only means that utility company and consultant relicensing staff did not support it heavily. To leave the fate of this significant natural area 'up in the air', not acknowledging and identifying the recreational and natural area protection in a site-by-site plan as noted above would be a glaring deficiency of the new license.

Recommendations submitted during relicensing meetings by Bill Marshall on behalf of the Lower Saluda Advisory Council:

Lower Saluda River Lands

Designate all SCE&G lands along the river that are not required for power production as natural/recreation land; and develop a plan for implementation over the new license period to establish recreational parks and trails and habitat protection consistent with the Lower Saluda Corridor Plan and Plan Update. Encourage other landowners to conserve riparian lands.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, March 12, 2009 2:54 PM

To: DILLMAJW@dhec.sc.gov; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; LEAPHART, JR., MALCOLML; mdavis@scprt.com; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; lakemurrayloa@earthlink.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; rkidder1@sc.rr.com; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Draft Recreation Plan for review before meetings

Hello All,

It was requested in our Settlement Agreement Kick-off meeting that we re-distribute draft plans prior to their associated settlement agreement meetings. Therefore, I am re-distributing the RCG Draft recreation plan (see below) prior to our recreation meetings next week. Also, if you have not already RSVP'ed for one or all of the meetings next week, please do so before tomorrow. Thanks, Alison

-----Original Message-----

From: Dave Anderson

Sent: Thursday, March 05, 2009 9:13 AM

To: Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Leao; Marty Phillips; Matthew Rice ; Mike Waddell; Miriam Atria; Norman Ferris; Patrick Moore ; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tim Vinson; Tommy Boozer; Tony Bebbler; Van Hoffman

Subject: Saluda Project Recreation Plan RCG Draft

Recreation RCG Members,

Below is a link to download the "RCG Draft" of the Saluda Project Recreation Plan. This document represents many hours of work by Technical Working Committee members and I would like to thank all the TWC members for all of their thoughtful comments and suggestions.

As most of you are aware, we have set aside March 18, 19, and 20 as Settlement Agreement meeting dates for Recreation. Since the portion of the Settlement Agreement that deals with recreation depends on the Recreation Plan, I would like to take a portion of the first day (March 18) to present the Recreation Plan to you and discuss any comments you may have. However, since this date is only two weeks away, comments will be accepted until the end of the month (March 31). Hopefully, you will have enough time over the next two weeks to review and bring any questions/comments to the meeting on the 18th. If you didn't plan on participating in the Settlement Agreement discussions, I would still encourage you to attend on the 18th for the presentation and discussion session.

On another note, you will notice that this version does not include Appendix F (As Built and Concept Design Drawings). These drawings are mainly for FERC's benefit and are not necessary for your review of the Plan. Nevertheless, they will be distributed to you prior to the Settlement Agreement signing date and will be finalized for submission to FERC by this date. I will show some examples of what these drawings look like at the meeting on the 18th.

If you have any trouble retrieving the file, please let me know as soon as possible.

Dave

<ftp://ftp.kleinschmidtusa.com/455-051/>

Instructions: Click the link above; it should open Internet Explorer (or your browser) to a page that shows a link to "Saluda_Recreation_Plan_RCGDRAFT.pdf" Right click on this link and choose "Save Target As" (or equivalent). Save the file to your computer. The file size is about 11.2 mb so it may take a while to save.

Alison Guth

From: Shane Boring
Sent: Tuesday, March 17, 2009 5:18 PM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; Jennifer Hand; Alison Guth
Subject: RE: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Good day all,

I have spoken with a number of you over the past week regarding availability for the conference call proposed below for March 26. At our kick-off meeting last week for the Saluda Settlement Agreement, Prescott indicated that he would prefer to meet face-to-face. As such, we are planning to have a meeting room available for those who wish to attend in person, with an option to join via conference line. Please let me know by Thursday of this week whether you plan to attend the conference call or attend in person. I will send along a call in number and meeting room info as soon as I confirm the number of attendees. So far the following folks have confirmed:

Vivianne Vejdani
Bill Post
Pres Brownell
Bill Argentieri
Milton Quattlebaum

Thanks,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Shane Boring
Sent: Tuesday, March 10, 2009 10:37 AM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
Subject: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Hello folks,

Attached is an updated draft of the Sturgeon Protection and Adaptive Management Program, which was developed based on our discussions with you all over the past couple of months. Many thanks to Prescott Brownell and Bill Post for developing the framework document that served as the foundation for the proposed Program document.

We would like to convene a conference call to review the Program. We have tentatively identified **Thursday, March 26** (preferably in the AM). Please let us know of your availability on this date. An alternate date is **Tuesday, March 31**. Once we get a consensus on the date for the call, I will send out a final meeting invitation with the call-in number.

Thanks and please don't hesitate to call with questions,

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

<< File: Saluda Sturgeon Program DRAFT 02-18-09 - CLEAN.doc >>

Alison Guth

From: Alison Guth
Sent: Tuesday, March 17, 2009 3:00 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Safety Settlement Agreement Draft Notes

Hello all,

Attached are the draft meeting notes from the Safety Settlement Agreement meeting held on the afternoon of 3-11-09. If you attended this meeting and have edits to the notes, please provide them to me by March 31st. Thanks, Alison



2009-3-11 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, March 17, 2009 12:53 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Kick-off meeting notes

Hello All,

Attached are the draft meeting notes from the Settlement Agreement Kick-off meeting on 3-11-09. Please have any edits to me by March 31st. Thanks, Alison



2009-3-11 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Tuesday, March 17, 2009 12:17 PM
To: Alison Guth; Charlene Coleman; RMAHAN@scana.com; Tony Bebb; BOOZER, THOMAS C; dchristie@comporium.net; Mike Waddell; Patrick Moore; BARGENTIERI@scana.com; Alan Stuart; Brett Bursey; Karen Kustafik; Suzanne Rhodes
Subject: RE: Settlement Agreement Safety section review

Hello, all. Below is some suggested additional language for the Safety section of the agreement.

Last week, I think we agreed to organize the existing subsections to put the annual safety meeting first, at 1.1, and have other subsections follow.

For consideration, I'm suggesting a subsection 1.2 as presented below. This will have some redundancies with existing language but it captures the complete list of recommendations from the RCG as listed on p. 347 of the recent draft Recreation Plan, including the ring-down system, website, strobes/sirens, collaborations, and training flows.

Thanks,

Bill Marshall

1. Safety

1.1 RCG and Annual Safety Meeting

1.2 Warning/Notification System for Flow Releases on Lower Saluda River

As recommended in the Saluda Hydro Recreation Plan, to mitigate the effects of rising water in the lower Saluda River due to project operations, SCE&G will: (1) Continue to work with river users to make the current warning system on the river more effective; (2) Implement the electronic ring-down call system for the general public to provide notification of flow releases; (3) Install additional warning devices on the lower Saluda River that will provide auditory and/or visual warning of rising waters from the tailrace of the dam to the confluence with the Broad River; (4) Continue to implement and improve the SCE&G Lower Saluda River website providing notification of current operations and a schedule of planned operations for the Saluda Project; and (5) Coordinate with swiftwater rescue training agencies to determine an annual schedule for providing safety training flows.

1.3 Lower Saluda Rivers Warning System Installation

1.4 Downstream Safety Training Flows

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, March 12, 2009 3:10 PM

To: Charlene Coleman; MAHAN, RANDOLPH R; Tony Bebber; BOOZER, THOMAS C;
dchristie@comporium.net; Mike Waddell; Bill Marshall; Patrick Moore; ARGENTIERI, WILLIAM R;
Alison Guth; Alan Stuart; Brett Bursey; Karen Kustafik; Suzanne Rhodes

Subject: Settlement Agreement Safety section review

Hello All,

Attached is the Safety portion of the Settlement Agreement with recommended changes from yesterday's meeting. As most of you were in attendance, you are aware that Brett Bursey made the recommendation of an alternative to sirens due to noise pollution issues. If you were not in attendance yesterday you will notice that the siren installation section has subsequently changed based on meeting discussions. Please submit any further comments or recommended changes to me by next Wednesday, March 18th. The meeting notes will be coming out soon. Thanks, Alison

<<DRAFT Settlement Agreement 2-19-09 - Safety.doc>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, March 13, 2009 4:35 PM
To: 'Bob Perry '; Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Richard Miner ; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: FW: Saluda Project - AIR DNR Comments
Follow Up Flag: Follow up
Flag Status: Flagged

Hello Safety Group,

In light of our recent discussions in the Safety Group Settlement Agreement Meeting, Bob Perry has provided a clarification to SCDNR's AIR response. The DNR AIR response generated discussion in the meeting, as it appeared to indicate that SCDNR will be required to terminate the shoal marking program in Lake Murray. However, Bob clarifies DNR's position in the statement below. Thanks, Alison

-----Original Message-----

From: Bob Perry [mailto:PerryB@dnr.sc.gov]
Sent: Thursday, March 12, 2009 4:19 PM
To: BARGENTIERI@scana.com; SUMMER, MICHAEL C; Alan Stuart
Cc: Don Winslow; Dick Christie; Vivianne Vejdani; Bill Marshall
Subject: RE: Saluda Project - AIR DNR Comments

Bill, Mike, Alan,

In the DNR letter of last month to SCE&G responding to the AIR the following was noted on page 11 of 13:

DNR Comments: DNR has reviewed the proposed recreation plan. Section 7.5 states:

The Recreation RCG is recommending SCE&G continue to cooperate with the SCDNR in the marking of hazards in Lake Murray. This includes support for public communication regarding locations of unmarked hazards and a system whereby the SCDNR can be made aware of these areas.

With due respect to the Recreation RCG, the current funding crisis in South Carolina state government is forcing DNR to prioritize boating safety programs. DNR will be required to terminate

the shoal hazards marking program in many State waters including Lake Murray. The DNR approach to shoal marking will be consistently applied to all State waters and all FERC projects.

Please allow me to provide a clarification to the above paragraph, as noted in the paragraph below:

DNR will continue to work with SCE&G to mark navigation hazards in Lake Murray (and work with other licensees on other FERC licensed reservoirs) in the near term despite our dire budget situation. In the long term we will continue this program to the extent personnel and funding allows. Due to budgetary erosion, DNR currently is evaluating its ability to continue this program on all FERC licensed reservoirs. The DNR goal is to apply this program consistently to all FERC projects. DNR will be receptive to productive discussions with SCE&G and stakeholders on how this program can be continued in the interest of safe recreational boating on Lake Murray, and the same will hold true with other licensees and stakeholders with respect to other FERC projects.

I understand this issue was brought up earlier this week in settlement agreement discussions. Please forward this transmission as you deem it appropriate to those involved in these discussions. Please accept my apology for any problems caused by the wording in the original letter. These times are causing all of us to have a certain degree of uncertainty and trepidation. Finally, please do not hesitate to contact me or Dick Christie if you need any further clarification on this matter. Thank you,

Bob

Bob Perry

Certified Wildlife Biologist

Director, Office of Environmental Programs

SC Department of Natural Resources

PO Box 167

Columbia, SC 29202

O: 803-734-3766

F: 803-734-9809

Alison Guth

From: Alison Guth
Sent: Thursday, March 12, 2009 3:10 PM
To: 'Charlene Coleman'; 'MAHAN, RANDOLPH R'; 'Tony Bebber'; 'BOOZER, THOMAS C'; 'Dick Christie (dchristie@comporium.net)'; 'Mike Waddell'; 'Bill Marshall'; 'Patrick Moore'; 'ARGENTIERI, WILLIAM R'; Alison Guth; Alan Stuart; 'Brett Bursey'; 'Karen Kustafik'; 'Suzanne Rhodes'
Subject: Settlement Agreement Safety section review

Hello All,

Attached is the Safety portion of the Settlement Agreement with recommended changes from yesterday's meeting. As most of you were in attendance, you are aware that Brett Bursey made the recommendation of an alternative to sirens due to noise pollution issues. If you were not in attendance yesterday you will notice that the siren installation section has subsequently changed based on meeting discussions. Please submit any further comments or recommended changes to me by next Wednesday, March 18th. The meeting notes will be coming out soon. Thanks, Alison



DRAFT Settlement
Agreement 2-...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, March 12, 2009 3:10 PM
To: 'Charlene Coleman'; 'MAHAN, RANDOLPH R'; 'Tony Bebber'; 'BOOZER, THOMAS C'; 'Dick Christie (dchristie@comporium.net)'; 'Mike Waddell'; 'Bill Marshall'; 'Patrick Moore'; 'ARGENTIERI, WILLIAM R'; Alison Guth; Alan Stuart; 'Brett Bursey'; 'Karen Kustafik'; 'Suzanne Rhodes'
Subject: Settlement Agreement Safety section review

Hello All,

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DRAFT Settlement
Agreement 2-...

Alison Guth

Licensing Coordinator

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, March 12, 2009 2:54 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Draft Recreation Plan for review before meetings

Hello All,

It was requested in our [Settlement Agreement Kick-off meeting](#) that we re-distribute draft plans prior to their associated settlement agreement meetings. Therefore, I am re-distributing the RCG Draft recreation plan (see below) prior to our recreation meetings next week. Also, if you have not already RSVP'ed for one or all of the meetings next week, please do so before tomorrow. Thanks, Alison

-----Original Message-----

From: Dave Anderson
Sent: Thursday, March 05, 2009 9:13 AM
To: Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Leao; Marty Phillips; Matthew Rice ; Mike Waddell; Miriam Atria; Norman Ferris; Patrick Moore ; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tim Vinson; Tommy Boozer; Tony Bebbber; Van Hoffman

Subject: Saluda Project Recreation Plan RCG Draft

Recreation RCG Members,

Below is a link to download the "RCG Draft" of the Saluda Project Recreation Plan. This document represents many hours of work by Technical Working Committee members and I would like to thank all the TWC members for all of their thoughtful comments and suggestions.

As most of you are aware, we have set aside March 18, 19, and 20 as Settlement Agreement meeting dates for Recreation. Since the portion of the Settlement Agreement that deals with recreation depends on the Recreation Plan, I would like to take a portion of the first day (March 18) to present the Recreation Plan to you and discuss any comments

you may have. However, since this date is only two weeks away, comments will be accepted until the end of the month (March 31). Hopefully, you will have enough time over the next two weeks to review and bring any questions/comments to the meeting on the 18th. If you didn't plan on participating in the Settlement Agreement discussions, I would still encourage you to attend on the 18th for the presentation and discussion session.

On another note, you will notice that this version does not include Appendix F (As Built and Concept Design Drawings). These drawings are mainly for FERC's benefit and are not necessary for your review of the Plan. Nevertheless, they will be distributed to you prior to the Settlement Agreement signing date and will be finalized for submission to FERC by this date. I will show some examples of what these drawings look like at the meeting on the 18th.

If you have any trouble retrieving the file, please let me know as soon as possible.

Dave

<ftp://ftp.kleinschmidtusa.com/455-051/>

Instructions: Click the link above; it should open Internet Explorer (or your browser) to a page that shows a link to "Saluda_Recreation_Plan_RCGDRAFT.pdf" Right click on this link and choose "Save Target As" (or equivalent). Save the file to your computer. The file size is about 11.2 mb so it may take a while to save.

Alison Guth

From: Alison Guth
Sent: Thursday, March 12, 2009 2:54 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
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Hello All,

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From: Dave Anderson
Sent: Thursday, March 05, 2009 9:13 AM
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Subject: Saluda Project Recreation Plan RCG Draft

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If you have any trouble retrieving the file, please let me know as soon as possible.

Dave

<ftp://ftp.kleinschmidtusa.com/455-051/>

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Alison Guth

From: Alison Guth
Sent: Thursday, March 12, 2009 2:48 PM
To: Alison Guth; 'Will Dillman '; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bud Badr'; 'Chad Altman'; 'Dick Christie (dchristie@comporium.net)'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Hal Beard'; Jennifer Hand; 'Jim Glover'; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Prescott Brownell'; 'Randy Mahan'; 'Ron Ahle'; 'Scott Harder'; Shane Boring; 'Steve Summer'; 'Theresa Thom'; 'Vivianne Vejdani '; Brandon Kulik; Alan Stuart; Alan Stuart; 'David Eargle'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Bob Seibels (bseibels@yahoo.com)'; 'J. Hamilton Hagood'
Cc: 'QUATTLEBAUM, MILTON'; Brandon Kulik; Shane Boring; 'Scott Harder'; 'ARGENTIERI, WILLIAM R'; 'Vivianne Vejdani'; 'James Glover'; 'Gerrit Jobsis'; 'MAHAN, RANDOLPH R'; 'Chad Altman'; 'Mark Giffin'; 'Mike Waddell'; 'Jim Bulak'; Alan Stuart
Subject: Instream flow, RT&E and Macro/Mussels meeting

Hello All,

Attached are the meeting notes from last week's Fish and Wildlife TWC's meeting. If you have any comments or changes to these notes, please provide them by March 26th. Thanks, Alison



2009-3-3 draft
Meeting Minutes...

Alison Guth

From: Alison Guth
Sent: Wednesday, March 11, 2009 4:00 PM
To: Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Cancellation Notice - 3-12-09 Safety Group Meeting

Importance: High

Hello All,

This email is to inform everyone that the Safety Meeting tomorrow, March 12th, has been cancelled. We were able to progress through all of our points of discussion today and therefore the meeting time allotted for tomorrow is not needed. I will also be canceling the outlook calendar reminder that I sent out for tomorrow's meeting, so you will likely get another email regarding that. Please disregard the redundancy. Thanks! Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Elymay2@aol.com
Sent: Wednesday, March 11, 2009 12:03 AM
To: Alison Guth
Subject: LIP comments to SCE&G & FERC[1].doc



LIP comments to
SCE&G & FERC[1]...

Alison

We have sent this to Jim Landreth, Bill Argentieri and will forward to the FERC. Please include in LMA Comments wherever it is appropriate. I am assuming it will be sent to the FERC to be included with the license documentation.

Thanks Joy

A Good Credit Score is 700 or Above. [See yours in just 2 easy steps!](#)



The Lake Murray Association, Inc.

Telephone: (803) -749-3888

P. O. Box 495

Ballentine, South Carolina 29002

March 7, 2009

Mr. James Landreth Vice President
Hydro and Fossil Fuel
Mr. Bill Argentieri
Relicensing Co-coordinator
South Carolina Electric and Gas Company

Re: Official Comments and Position of the The Lake Murray Association, Inc. regarding 516-P

The Lake Murray Association, Inc. (LMA) has been in existence for 15 years and was established to protect and preserve Lake Murray for all users. The LMA has been an active member of the re-licensing process for the last 3 years and has served on all 7 Resource Conservation Groups (RCG) established at the beginning of the process.

The guides lines for these groups included a procedure for establishing Technical Working Committees (TWC) to do technical studies and then for their recommendations to come back to the RCG's for approval.

Generally this process has been very effective and the various groups have had productive meetings. Many areas of concern within the re-licensing process were resolved. However, LMA has several objections to the procedure and the manner in which the **Low Inflow Protocol (LIP)** has been developed.

A few years prior to the current license negotiations, agreement was reached with SCE&G and the downstream stakeholder, DHEC and SCDNR to provide an improved minimum flow from approximately 200 CFS (no flow) to 400 CFS due to seasonal dissolved oxygen (DO) issues in the lower Saluda.

There is now a request for a minimum flow of 700 CFS year round under normal conditions. This triples what the downstream has received over the last 70 years. LMA does not find a reasonable answer to this additional request. This minimum requirement could negatively affect SCE&G's ability to allow the lake to rise to the 358' PD target by March 1.

A proposal by the IFIM/Aquatic Habitat to consider downstream flows for non project use.

In December after much deliberation over the constantly evolving proposed LIP, the TWC presented a modified version which included a request for additional flows to enhance Stripe Bass spawning in the Congaree River which is downstream of the project boundary. DNR also suggested that the development of a new downstream flow regime should include the Santee Cooper lakes and the rivers below their dams. DNR stated that "out of project" requests warrants consideration based on the agencies long range goals of balancing lake interests with river interests under the SC water plan.

According to the re-licensing process, SCE&G and Stakeholders agreed that the issues would be confined to the project boundaries and that the project ended at the confluence of the Broad and the Lower Saluda River. SCE&G stated they would consider certain issues outside the scope of the process but made it clear those issues would not be given "official sanction" . In our opinion, SCE&G's acceptance of this request amounts to official sanction and does not represent the original agreement.

SCE&G's agreement to approve the flows without proper review of the stakeholders.

According to the agreed upon rules of the re-license, the TWC's were to report their findings and recommended proposals back to their RCG. It was the RCG's responsibility to try to obtain consensus. This process in the case of the Congaree Striped Bass flow proposal has not been followed. SCE&G presented a draft LIP proposal that has not been presented to the Fish and Wildlife RCG. We feel proper procedure was not followed.

Congaree Striped Bass Flow Proposal

Under this flow proposal, the lake could be requested to flow 35% of the flow of the Broad River during the spring season. Under this scenario the lake could experience lower lows than in previous low flow years. It is also a time when it is crucial for the lake to reach 358' PD to avoid extremely low mid summer levels that affect commercial entities and recreational use of the lake. This also could be detrimental to the fishing tournaments on South Carolina's # 1 bass fishing lake. Forty eight (48) percent of the 40,000 residents lose the use of their docks when the lake reaches 354' PD

LMA finds it unacceptable that the In Stream TWC, at the last minute, presented a plan to improve the spawning of the Striped Bass in the Congaree River. We feel the striped bass flow proposal should have been discussed with the stakeholders earlier so they could have been studied and the pros and cons debated instead of an eleventh hour effort by SCDNR to slip them into the license.

LMA's position remains:

1. Lake Level - **minimum winter level** of no less than 354' PD which provides winter use of docks for 52% of residents and year around use by all commercial facilities .
2. LMA supports SCE&G's new proposed Guide Curve:
 - a. Maintain lake at 358'PD March 1 through August 31.
 - b. Lowering lake from 358' PD to 356' PD between September 1 and November 30.
 - c. Lowering lake from 356'PD to no lower than 354'PD between December 1 and December 31.
 - d. Increasing lake from 354'PD to 358'PD between January 1 and February 28.
3. LIP proposal (when we are under drought conditions)
 - a. Use of 6" lake level trigger when the lake falls 6" below the guide curve and the average 14 day inflow is less than the scheduled outflow
 1. Reduce outflow to 700cfs if lake goes below 357.5'PD between March 1 and August 31
 2. Reduce outflow to 500cfs if lake level goes below 356' PD between March 1 and August 31
 3. Reduce outflow to **minimum/no flow** if lake level goes below 355' PD between March 1 and August 31.

LMA has requested a 355'PD stop loss so that we could not go below 354' PD except under extraordinary circumstances. LMA's has never changed their position that the lake should **not ever go below 354' PD winter level** (due to the havoc it wreaks among the businesses, homeowners and users) unless, the Circumstances are dire.

Sincerely

Dave Landis, President
Lake Murray Association
803-315-1628 803-781-8411

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From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Tuesday, March 10, 2009 3:21 PM
To: Shane Boring
Cc: Alan Stuart; Alison Guth; BARGENTIERI@scana.com; lee.emery@ferc.gov; amanda_hill@fws.gov; dchristie@dnr.sc.gov; Hal Beard; Jim Bulak; ahler@dnr.sc.gov; Mike Waddell; Gerrit Jobsis; Matt Rice; Patrick Moore ; Suzanne Rhodes; Vivianne Vejdani ; Bill Marshall; Tony Bebbber; Bob Perry
Subject: White Paper TU Scope & Comments



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(15 KB)

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Cc: rankind@dnr.sc.gov
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-- The implication that the LSR only has a 100' x 300' suitable for trout spawning is misleading. Most of the entire stretch of river on both sides of the islands below I26 where the 'Oh Brother Rapids' and 'Ocean Boulevard Rapids' are has the potential for trout spawning. Since the islands extend for nearly half a mile, that would mean over a mile of potential spawning sites alone exists there, counting both sides. Plus, the riffles at the spillway channel juncture, the rapids above Hopes Ferry Landing, the rapids at Corley Islands, and those below the islands below I26 extending all the way to the confluence would all have some potential. The .8 mile of riffle habitat is certainly a conservative estimate, and to infer that trout spawning would not occur anywhere else is questionable. That's not even consistent with the cited Raleigh conclusions that trout can spawn in up to 8.2 feet of water with suitable velocity and substrate which could certainly fall out of the observed riffle areas. Again, an empirical study apparently beyond the scope of the white paper is needed to be more definite here.

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Sent: Mon 10/15/2007 9:05 AM

To: Theresa Thom; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Hal Beard; Jennifer Summerlin; Jim Glover; LEAPHART, JR., MALCOLML; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Brandon Kulik; Alan Stuart

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Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
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Fax: (803)951-2124

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Even with the unwanted 'self sustaining' focus, much of the report however has value in that it establishes the needs of rainbow and brown trout and attempts to evaluate how the LSR fares in meeting those needs (ie, recruitment potential). Specific comments regarding the white paper follow.

-- We are not surprised that the temperature regime is satisfactory for trout reproduction and survival as that is consistent with the conclusions from the 1985 USGS study that TU funded for \$5,250 for SC DNR. The note that the temperature range during brown trout spawning is marginal is somewhat surprising, but does provide a target for an important habitat improvement that should be closely evaluated for remedies.

-- According to Monte Seehorn, retired USFS Southeast Fisheries Biologist, experience has shown that pool to riffle ratios are not absolutes and that many trout streams with much less than ideal ratios have significant reproduction, often from relatively small areas suitable for spawning. The point is that many other factors come to bear besides the ratio, or the size of the spawning area, and trout are quite resilient. Much of the documented brown trout spawn in the White River in Arkansas for example has been found to occur in stretches relatively short for the length of the river. And their resiliency has been shown there too as they adapted to huge fluctuations in release levels, including for spawning site selection.

-- The implication that the LSR only has a 100' x 300' suitable for trout spawning is misleading. Most of the entire stretch of river on both sides of the islands below I26 where the 'Oh Brother Rapids' and 'Ocean Boulevard Rapids' are has the potential for trout spawning. Since the islands extend for nearly half a mile, that would mean over a mile of potential spawning sites alone exists there, counting both sides. Plus, the riffles at the spillway channel juncture, the rapids above Hopes Ferry Landing, the rapids at Corley Islands, and those below the islands below I26 extending all the way to the confluence would all have some potential. The .8 mile of riffle habitat is certainly a conservative estimate, and to infer that trout spawning would not occur anywhere else is questionable. That's not even consistent with the cited Raleigh conclusions that trout can spawn in up to 8.2 feet of water with suitable velocity and substrate which could certainly fall out of the observed riffle areas. Again, an empirical study apparently beyond the scope of the white paper is needed to be more definite here.

-- There appears to be a lack of comparison with many southern trout rivers that have more in common with the LSR than many in Maine. Tailrace trout fisheries in Arkansas for example were previously pointed out as examples that were very analagous and whose management could be looked at for guidance giving the hundreds of miles of those rivers and their longer history of research and management by both that state and the Corps of Engineers that built most of the dams. What other state has an 'Aquatic Habitats Manager' as Arkansas has in Larry Rider? But, apparently Mr. Ryder was not consulted after I shared his expertise and contact information with you as to trout habitat for this white paper. The success of their revetments to deepen channels (while providing handicap and other angler access), of gravel beds developed from anchored tree tops, and from root wads installed to provide holding areas (as we have done on the Eastatoe and other upstate streams) are all examples of tailrace habitat improvements for trout that should be considered as the LSR potential is evaluated for trout.

In "The Future of Trout in South Carolina" (A Plan for the Management of South Carolina's Trout Resources" (Geddings, 1998), "Put, grow, and take" trout fisheries are described as having "various habitat deficiencies" that "do not permit successful reproduction" by trout. The LSR is essentially described as 'deficient habitat' in the white paper, though without any empirical studies or peer reviewed research to support that categorization, only observations and assumptions. However, it's difficult to question that description as the Lake Murray dam transformed a warm water piedmont river into a cold water fishery in the late 1920's. That the aquatic habitat that once was a 'self sustaining' warm water fishery is out of sync with the coldwater fishery created is not a surprise to no one. Indeed, that transformation is the crux of the 'habitat deficiency' problem for trout in the LSR and should be acknowledged, with remedies to get the two better in sync as part of the new license.

In summary: TU does not expect the utility company to develop a 'self sustaining' trout fishery as the white paper describes. TU does expect the utility to document steps in their plan to foster trout reproduction through habitat improvements, such as through annual projects developed in concert with TU, US Fish & Wildlife, and SC DNR. Those undertaken in upstate South Carolina in the SC DNR "Partners for Trout" program with the NRCS, and those in Arkansas as mentioned above would both be good starting points. While not totally replacing the need for trout stockings as the white paper indicates, the goal would be to improve the now coldwater habitat to the point where reproduction could at least occur, even if not in significant numbers to reduce stocking needs given the current fishing regs. To not do that while the dissolved oxygen and flow problems are being remedied would be short-sighted to say the least for a state 'wild and scenic' river that is the heart of the extensive river greenways of the Columbia area.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]

Sent: Mon 10/15/2007 9:05 AM

To: Theresa Thom; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Hal Beard; Jennifer Summerlin; Jim Glover; LEAPHART, JR., MALCOLML; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Brandon Kulik; Alan Stuart

Subject: Saluda Hydro Relicense: Trout White Paper

Dear Instream Flow/Aquatic Habitat TWC Members:

Attached for your review is the updated draft of the white paper examining the potential for a self-sustaining trout fishery on the Lower Saluda River. Many thanks to those who provided comments on the previous draft. Please provide us with your comments on the updated draft by Tuesday, October 31, 2007. Also, the paper will be an agenda item at our October 30th meeting of the Fish and Wildlife Technical Working Committees. Thanks again for your continued participation in the Saluda relicensing process.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Shane Boring
Sent: Tuesday, March 10, 2009 10:37 AM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
Subject: Saluda Relicensing: Sturgeon Protection and Adaptive Management Program

Hello folks,

Attached is an updated draft of the Sturgeon Protection and Adaptive Management Program, which was developed based on our discussions with you all over the past couple of months. Many thanks to Prescott Brownell and Bill Post for developing the framework document that served as the foundation for the proposed Program document.

We would like to convene a conference call to review the Program. We have tentatively identified **Thursday, March 26** (preferably in the AM). Please let us know of your availability on this date. An alternate date is **Tuesday, March 31**. Once we get a consensus on the date for the call, I will send out a final meeting invitation with the call-in number.

Thanks and please don't hesitate to call with questions,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
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Saluda Sturgeon
Program DRAFT ...

Alison Guth

From: Shane Boring
Sent: Tuesday, March 10, 2009 10:37 AM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vajdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
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Thanks and please don't hesitate to call with questions,
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Lexington, SC 29072
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Fax: (803)951-2124



Saluda Sturgeon
Program DRAFT ...

Alison Guth

From: lakemurrayloa@windstream.net
Sent: Monday, March 09, 2009 2:43 PM
To: Alison Guth
Subject: RE: EMAIL ADDRESS CHANGE

The new one is: LakeMurrayLOA@windstream.net. Please disregard the old earthlink address.

Thanks,
Phil

---- Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:
> Hello Phil,
>
> What has your email address changed too? Lakemurrayloa@earthlink.net
> is the address I currently have on file. Thanks, Alison
>
> -----Original Message-----
> From: lakemurrayloa@earthlink.net [mailto:lakemurrayloa@earthlink.net]
> Sent: Wednesday, March 04, 2009 1:57 PM
> To: Alison Guth
> Subject: EMAIL ADDRESS CHANGE
>
>
> The email address for the Lake Murray Landowners' Association has
> changed. Thank you, Phil Hamby
>

Alison Guth

From: Alan Stuart
Sent: Sunday, March 08, 2009 7:57 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; Dchristie@coporium.net; Giffinma@dhec.sc.gov
Cc: 'Bill Argentieri'; 'Mike Summer'; 'Steve Summer'; 'RMahan@scana.com'; 'BOWLES, THOMAS M'; 'Jim Ruane'; 'MQuattlebaim@scana.com
Subject: 2008 Operations Report For Saluda Hydro



Saluda Annual
Report on 2008 O...

Good morning all,

Attached to this email is a draft copy of the 2008 Operations report for Saluda Hydro. As has been the case in both 2006 and 2007, dissolved oxygen levels in the lower Saluda River were at or above standards for most of the low DO season during 2008. We are planning to have our annual meeting on **March 24, 2008 at 9:30 am** at the Lake Murray Training Center. Please review the document and be prepared to ask any questions or provide comment at that meeting. Our goal as always will be to discuss the findings from 2008 and begin developing the operating plan for the 2009 low DO season.

As I am technologically challenged, Alison will send out an Outlook reminder for everyone on Monday.

thanks,
Alan

Alison Guth

From: Alan Stuart
Sent: Sunday, March 08, 2009 7:57 PM
To: Alan Stuart; Alison Guth; 'Gerrit Jobsis'; 'Amanda_Hill@fws.gov'; 'Hal Beard'; 'Prescott.Brownell@noaa.gov'; 'Gina Kirkland'; 'rrcollins@n-h-i.org'; 'Julie Gantenbein'; Dchristie@coporium.net; Giffinma@dhec.sc.gov
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thanks,
Alan

Alison Guth

From: Alison Guth
Sent: Friday, March 06, 2009 1:07 PM
To: 'Randy@lakemurrayvacation.com'; Will Dillman (DILLMAJW@dhec.sc.gov); Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (lakemurrayloa@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylhowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: RCG Draft of Shoreline Management Plan and Permitting Handbook

Hello All,

This email is to inform RCG members that the Shoreline Management Plan and Permitting Handbook have been posted to the relicensing website for public review. You may access these documents at the following link: <http://www.saludahydrorelicense.com/milestones.htm> . SCE&G is also making arrangements to hold a public meeting in the next month or so to discuss these documents. Notice on the availability of these documents will also be provided to the public via a newspaper ad. The public comment period for these documents will be 45 days. Email me if you have any questions or any issues accessing these documents. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, March 05, 2009 2:18 PM
To: 'SC Progressive Network'
Subject: RE: Settlement Agreement Meetings

Brett,

The Feb. 19th email is the final schedule. All of the meetings will begin at 9:30 and last until around 3:00. I have been requested in the past to send out Microsoft Outlook reminders for these meetings because this works for the majority of individuals. If it has "updated" in the subject line it is because it was already on my Outlook calendar when I sent it out to the group.

-----Original Message-----

From: SC Progressive Network [mailto:network@scpronet.com]
Sent: Thursday, March 05, 2009 2:11 PM
To: Alison Guth
Cc: RMAHAN@scana.com
Subject: RE: Settlement Agreement Meetings

Alison,

If you will note, your Feb. 19 email does not list times of meetings. I now count 25 emails you have sent out regarding these meetings. Many of them have "updated", in the subject line. I do not understand your unwillingness to send out one - final - schedule with dates and times of the various meetings.

Brett Bursey

It was included in the February 19th email that I sent out to which you were a recipient of.

-----Original Message-----

From: SC Progressive Network [mailto:network@scpronet.com]
Sent: Thursday, March 05, 2009 1:07 PM
To: Alison Guth
Cc: Alan Stuart
Subject: Re: Settlement Agreement Meetings

Alison,

The 16 different emails you sent out regarding the settlement meetings was confusing. One is left wondering if each "update" you sent out on each meeting, was a new date, or an additional one.

Can you please put together one document that list all the meetings.

thank you,

Brett Bursey

--

South Carolina Progressive Network

POB 8325 Columbia SC 29202

803-808-3384 * fax: 803-808-3781

E-mail: network@scpronet.com

Web: <http://www.scpronet.com> www.scpronet.com

Blog: <http://www.scpronet.com/wordpress/> www.scpronet.com/wordpress

YouTube channel: <http://www.youtube.com/scpronet>

--

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Blog: <http://www.scpronet.com/wordpress/> www.scpronet.com/wordpress

YouTube channel: <http://www.youtube.com/scpronet>

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Thursday, March 05, 2009 10:21 AM
To: Alison Guth
Cc: Mark Davis
Subject: negotiation meetings

Can you add Mark Davis to the meeting requests for Intro Meeting, Recreation, and Lake and Land Management? His email is mdavis@scprt.com. Thanks.

Tony Bebber, AICP
Planning Manager, Product Services

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

Alison Guth

From: Bill_Hulslander@nps.gov
Sent: Tuesday, March 03, 2009 2:05 PM
To: Alison Guth
Subject: Re: clarification

Alison:

At this time, could you please clarify which Resource Groups will be meeting on the proposed dates? I plan to attend the kick off meeting on March 11th, but would like to only plan to attend future meetings that pertain to downstream flow issues.

Thanks -

Bill Hulslander
Congaree National Park
100 National Park Road
Hopkins, SC 29061
phone: (803) 647-3960 *please note new phone number*
fax: (803) 783-4241
bill_hulslander@nps.gov

"Alison Guth"
<Alison.Guth@KleinschmidtUSA.com>
nschmidtUSA.com> To
"Alison Guth"
01/29/2009 01:53 PM <Alison.Guth@KleinschmidtUSA.com>,
"Winward point Yacht Club "
<commodore@windwardpoint.org>,
"Alan Axson"
<cfdwaxson@columbiasc.net>, "Alan
Stuart"
<Alan.Stuart@KleinschmidtUSA.com>,
<aharmon@lpagroup.com>, "Alison
Guth"
<Alison.Guth@KleinschmidtUSA.com>,
"Amanda Hill"
<amanda_hill@fws.gov>, "Amy
Bennett" <BENNETAM@dhec.sc.gov>,
"Bertina Floyd"
<bertfloyd@sc.rr.com>, "Bill
Argentieri"
<bargentieri@scana.com>, "Bill
Brebner " <yaccove@bellsouth.net>,
"Bill East" <billeast@sc.rr.com>,
"Bill Hulslander"
<bill_hulslander@nps.gov>, "Bill
Marshall" <marshallb@dnr.sc.gov>,
"Bill Mathias" <bill25@sc.rr.com>,
<bseibels@yahoo.com>, "Brandon
Stutts " <bstutts@scana.com>, "Bret
Hoffman"
<Bret.Hoffman@KleinschmidtUSA.com>,
"Brett Bursey"
<network@scpronet.com>,
<btrump@scana.com>, "Bud Badr"
<badrb@dnr.sc.gov>, "Buddy Baker "

<BakerB@dnr.sc.gov>, "Charlene
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 "Charles Floyd"
 <jcharlesfloyd@sc.rr.com>, "Charlie
 Compton" <ccompton@lex-co.com>,
 "Charlie Rentz"
 <flyhotair@greenwood.net>, "Chris
 Page" <pagec@dnr.sc.gov>,
 <ccantley@scdah.state.sc.us>,
 "Chuck Hightower "
 <HIGHTOCW@dhec.sc.gov>, "Daniel
 Tufford" <tufford@sc.edu>, "Dave
 Anderson"
 <Dave.Anderson@KleinschmidtUSA.com>
 , "Dave Landis"
 <dlandis1@sc.rr.com>, "David Allen"
 <david.allen@scbar.org >, "David
 Hancock" <dhancock@scana.com>,
 "David Jones" <djones@scprt.com>,
 "David Price"
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 Simmons "
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 <dchristie@comporium.net>, "Don
 Tyler" <tyle6544@bellsouth.net>,
 "Donald Eng" <dengff@aol.com>, "Ed
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 "Edward Schnepel"
 <eschnepel@sc.rr.com>,
 <aregaf@dnr.sc.gov>, "George Duke"
 <kayakduke@bellsouth.net>, "Gerrit
 Jobsis \"(American Rivers)\"
 <gjobsis@americanrivers.org>, "Gina
 Kirkland" <kirklagl@dhec.sc.gov>,
 "Guy Jones" <guyjones@sc.rr.com>,
 "Hal Beard" <beardh@dnr.sc.gov>,
 "Hank McKellar"
 <McKellarH@dnr.sc.gov>,
 <ipitts@scprt.com>, "J. Hamilton
 Hagood" <jhamilton@scana.com>, "Jay
 Schabacher " <Jayschab@aol.com>,
 "Jeff Duncan"
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 "Jim Glover"
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 Goller" <wildlife@sc.rr.com >, "Jim
 Ruane " <jimruane@comcast.net>,
 "JoAnn Butler" <jbutler@scana.com>,
 "Joe Logan" <dianlog8@aol.com>,
 "Joel Huggins "
 <jbhuggins@lexhealth.org>, "John
 and Rob Altenberg"
 <seatowlakemurray@seatow.com>,
 <johned44@bellsouth.net>, "John
 Frick" <jsfrick@mindspring.com>,
 "Jon Leader" <leader@sc.edu>, "Joy
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 Kustafik"
 <kakustafik@columbiasc.net>, "Keith
 Ganz-Sarto"
 <keith_ganz_sarto@hotmail.com>,

"Ken Styer " <kstyer@smeinc.com>,
"Ken Uschelbec" <colkenu@aol.com>,
"Kenneth Fox" <skfox@sc.rr.com>,
"Kristina Massey"
<dvklmass@bellsouth.net >,
<turnerle@dhec.sc.gov>, "Lee
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Lester "
<linda_lester11@yahoo.com>, "Linda
Schneider " <wendy0815@sc.rr.com>,
"Malcolm Leaphart"
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<giffinma@dhec.sc.gov>, "Matthew
Rice " <mrice@americanrivers.org>,
"Michael Murrell"
<mdmurr@sc.rr.com>, "Mike Duffy"
<mikeduffy@sc.rr.com>, "Mike Sloan"
<lucky8lady@aol.com>,
<msummer@scana.com>, "Mike Waddell"
<mwaddell@esri.sc.edu>,
<mquattlebaum@scana.com>, "Miriam
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<miriam@lakemurraycountry.com>,
"Norm Nicholson"
<larana@mindspring.com>, "Norman
Ferris" <norm@sc.rr.com>, "Parkin
Hunter" <parkin@parkinhunter.com>,
"Patrick Moore "
<PatrickM@scccl.org>,
<LakeMurrayLOA@earthlink.net>,
"Prescott Brownell"
<prescott.brownell@noaa.gov>,
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"Randy Mahan" <rmahan@scana.com>,
"Ray Ammarell"
<rammarell@scana.com>, "Rebekah
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"Richard Kidder"
<rkidder@pbtcomm.net>, "Richard
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<adventurec@mindspring.com>,
<SKEENER@sc.rr.com>, "Robert
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"Ron Ahle" <ahler@dnr.sc.gov>,
"Ronald Scott" <rscott@lex-co.com>,
"Roy Parker"
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<s.padget@saludacounty.sc.gov>,
"Sandra Reinhardt"
<sandrar@www.ccppcrafts.com>, "Sean
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"Shane Boring"
<Shane.Boring@KleinschmidtUSA.com>,
"Sheri Armstrong "
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<sjones@imichotels.net>,
<lakewatchman@yahoo.com>, "Steve
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"Theresa Powers"
<tpowers@newberrycounty.net>,
"Theresa Thom"
<theresa_thom@nps.gov>, "Tim
Vinson" <vinsont@dnr.sc.gov>,
<tbowles@scana.com>, "Tom Ruple"
<truple@sc.rr.com>, "Tommy Boozer"
<tboozer@scana.com>, "Tony Bebbber"
<tbebbber@scprt.com>,
<tylehowe@nc-cherokee.com>, "Van
Hoffman" <vhoffman@scana.com>,
"Vivianne Vejdani "
<vejdaniv@dnr.sc.gov>, "Wenonah
Haire"
<wenonahh@www.ccppcrafts.com>, "Jon
Quebbeman"
<Jon.Quebbeman@KleinschmidtUSA.com>
cc

Subject
clarification

One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out.
Thanks, Alison

-----Original Message-----

From: Alison Guth
Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex
Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett;
Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill
Hulslander; Bill Marshall; Bill Mathias; Bob Seibels
(bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey;
btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles
Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley
(ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave
Anderson; Dave Landis; David Allen; David Hancock; David Jones; David
Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don
Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega
(aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers);
Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts
(ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan;
Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim
Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and
Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon
Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken
Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner
(turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ;
Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ;
Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer

(msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synthia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where

most of the interested individuals can participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th
Thursday the 12th

Wednesday the 18th
Thursday the 19th
Friday, the 20th

Monday, the 23rd
Wednesday the 25th
Friday the 27th

Monday, the 30th

April '09:

Wednesday the 1st
Friday the 3rd

Monday the 13th
Wednesday the 15th
Friday the 17th

Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)

Thursday the 7th (potential date, if needed)

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, February 27, 2009 11:12 AM
To: 'Dick Christie'
Subject: RE: Trout Management Program DRAFT

Hey Dick,

Below is the agenda, with the morning consisting of the first bullet and the Macro discussion and the following bullets beginning after lunch

- *Discussion of alternative flow proposal for meeting min flow and striped bass flow objectives.*
- *Macroinvertebrate Monitoring and Enhancement Program (beginning at 12:30)*
- *Freshwater Mussel Adaptive Management Program*
- *Trout Adaptive Management Program*
- *Draft RT&E Species Public Outreach Brochure*

-----Original Message-----

From: Dick Christie [mailto:dchristie@comporium.net]
Sent: Friday, February 27, 2009 10:25 AM
To: Alison Guth
Subject: RE: Trout Management Program DRAFT

Alison – do we have an agenda for the meeting on Tuesday? Thanks.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, February 26, 2009 5:03 PM
To: dchristie@comporium.net
Subject: FW: Trout Management Program DRAFT

-----Original Message-----

From: Alison Guth
Sent: Thursday, February 26, 2009 5:00 PM
To: Will Dillman ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Chad Altman; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Summerlin; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart
Subject: Trout Management Program DRAFT

Hello All,

Attached is the draft Trout Management Program for review before the meeting on Tuesday. We will be discussing this in more detail at the meeting.

Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Thursday, February 26, 2009 5:00 PM
To: Will Dillman ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Chad Altman; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Hand; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart
Subject: Trout Management Program DRAFT



Trout Management
Program DRAFT...

Hello All,

Attached is the draft Trout Management Program for review before the meeting on Tuesday. We will be discussing this in more detail at the meeting.

Thanks, Alison

Alison Guth

From: Alison Guth
Sent: Sunday, February 22, 2009 11:57 AM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Ben Gregg (ben@scwf.org); Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); James Leslie ; John Frick; Joy Downs; Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Subject: Final meeting notes, LLM RCG 1-8

Hello all,

Attached are the final meeting notes from the Lake and Land Management RCG meeting on January 8th. Thanks, Alison



2009-1-8 final
Meeting Minutes...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Sunday, February 22, 2009 11:44 AM
To: 'Charlene Coleman'; 'Mike Waddell'; Vivianne Vejdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Hand; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Patrick Moore ; Randy Mahan; Steve Bell (lakewatchman@yahoo.com); Tim Vinson; Tommy Boozer; Tony Bebbler; Van Hoffman; Alison Guth; Alan Stuart
Subject: 1-28-09 draft notes

Hello Recreation Management TWC,

Attached are the draft meeting notes from the 1-28-09 meeting. Please review and provide comments back to my by March 6. Thanks, Alison



2009-1-28 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Sunday, February 22, 2009 11:16 AM
To: Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Richard Miner ; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: 1-27-09 draft notes

Hello all,

Attached are the draft meeting notes from the Safety RCG meeting on January 27th. Please review and provide comments by March 6th. Thanks, Alison



2009-1-27 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, February 19, 2009 5:14 PM
To: Wenonah Haire; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder (rkidder1@sc.rr.com); Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Jon Quebbeman
Subject: Draft Settlement Agreement Wording

Hello All,

In preparation for the upcoming Settlement Agreement meetings, attached is the draft settlement agreement wording for your review prior to meeting attendance. It should be understood that this is a draft strawman with the potential to change during meeting discussions. You will also notice that there are placeholders for the associated management plans, which will be discussed at the meetings.

Based on responses, we have also been able to block out the dates for the various meetings and they are included on the attached schedule and below. Thanks, Alison



Settlement



Settlement

Agreement Schedule Agreement 2-19-09..

March '09:

Wednesday the 11th - Kick off meeting AM/Safety Group Meeting PM
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Monday, the 30th - Fish and Wildlife Group Meeting

April '09:

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Friday the 3rd - Water Quality Group Meeting

Monday the 13th - Lake and Land Management Group Meeting

Wednesday the 15th - Lake and Land Management Group Meeting

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May '09:

Tuesday the 5th (potential date, if needed)

Wednesday the 6th (potential date, if needed)

Thursday the 7th (potential date, if needed)

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Phone 803-951-2077

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Sent: Thursday, February 19, 2009 5:14 PM
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Alison Guth

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Vivianne Vejdani [VejdaniV@dnr.sc.gov]
Sent: Friday, February 13, 2009 4:21 PM
To: Alison Guth
Subject: Comments on Deed Restriction language



DNR
ts_DEED RESTRICT
Alison,

I believe that Ron submitted these way back, but I wanted to be sure that you got some of our preliminary comments on proposed Deed Restrictions language. Has the deed language been finalized already? Will we be doing this during the drafting of the Settlement Agreement?

1. DEED RESTRICTIONS.

1.1. This conveyance shall be made subject to any and all existing reservations, easements, encroachments, restrictions, covenants, zoning, governmental regulations, land use regulations, and rights-of-way, which may affect the Property which may be evident upon visible inspection of the Property and/or as shown on the Plat.

1.2. Buyer acknowledges SCE&G is and shall remain the fee simple owner of the area below the 360 foot contour elevation of Project 516 and within the 75 foot vegetative Buffer Zone, Buyer further acknowledges that the Property is located between the Project Boundary Line and Buffer Zone. As required by SCE&G's FERC license for Lake Murray, the deed of conveyance shall contain covenants specifying that the use of that portion of the Property up to the Project Boundary Line is under FERC jurisdiction and shall not endanger health, create a nuisance, or otherwise be incompatible with overall Project use as may from time to time be impacted by change in governmental law, regulation and policy, and Buyer shall take all reasonable precaution to ensure that the use of the Property will occur in a manner that will protect the current and prospective scenic, recreational, and environmental values of the Project. Additional covenants shall be included in the deed restricting the following activities on the Property up to the Project Boundary Line: no clearing of trees or shrubs on the Property with the exception of that vegetation measuring less than three inches in diameter at breast height; no alteration of the contour of the Property, no posting of the Property; and no structure of any kind may be built on the Property. The Property shall also be subject to the terms, conditions and restrictions as set out in the FERC Project 516 Land Use and Shoreline Management Plan as it may be amended or revised from time to time, and in the following Orders issued by FERC: the "Order Approving Land Use and Shoreline Management Plan with Modifications and Amending Exhibit R", dated June 23, 2004, and "Order Clarifying and Modifying Order and Denying Rehearing", dated October 28, 2004. These covenants are for the sole benefit of ecological integrity of the lake and immediate boundary and shall not be enforceable by anyone other than SCE&G, its successors and assigns. Buyer, in accepting the deed to the Property, agrees to comply with all of the above as affect or restrict the use of the Property. Buyer agrees to fully indemnify SCE&G, its successors and assigns, for all costs reasonably incurred by

Deleted: significant

Deleted: permanent

Deleted: without the prior written consent of SCE&G's Lake Management Department

Deleted: SCE&G

Buyer, including any attorney and court fees, to enforce the provisions above mentioned in this **Section 13**. This indemnity provision survives the Closing referenced in **Section 9** – *Effective Date and Closing Requirements* of this Agreement.

- 1.3. **[Check for dock letter?]** Docks – Pursuant to a letter from David E. Hancock, SCE&G Lake Management Department to Van Hoffman, SCE&G Land Department dated _____ (“Dock Letter”), after an application has been submitted and approved by SCE&G’s Lake Management Department, a dock may be constructed on the Property (“the property” will not have a dock on it because it lies shoreward of the 75” buffer. Why are docks included in deed restriction?). See a copy of the said Dock Letter attached hereto at **Exhibit B. Enforcement actions should be included in the deed restrictions.**

Deleted: .

DRAFT

Alison Guth

From: Alison Guth
Sent: Friday, February 13, 2009 4:18 PM
To: 'SC Progressive Network'
Subject: RE: Settlement Agreement

Brett,

That will likely be in the Safety group. Right now the Safety group is scheduled to tentatively meet after the kick off meeting on March 11th, however the meetings for the other groups have not been scheduled yet. Thanks, Alison

-----Original Message-----

From: SC Progressive Network [mailto:network@scpronet.com]
Sent: Wednesday, February 11, 2009 11:45 AM
To: Alison Guth
Subject: Settlement Agreement

Alison,

I never got an answer to my question regarding what resource group(s) will address the question of the means of public notification of increased flow in the lower Saluda.

Recreation?

Safety?

When do these resource groups meet?

Brett Bursey

--

South Carolina Progressive Network

POB 8325 Columbia SC 29202

803-808-3384 * fax: 803-808-3781

E-mail: network@scpronet.com

Web: <<http://www.scpronet.com>> www.scpronet.com

Blog: <<http://www.scpronet.com/wordpress/>> www.scpronet.com/wordpress YouTube channel:

<http://www.youtube.com/scpronet>

Alison Guth

From: Alan Stuart
Sent: Friday, February 13, 2009 3:37 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Perry ; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Operating Protocols during relicensing of Saluda Hydro

Dear Relicensing Members,

We are quickly approaching the time to start ironing out the details on the Protection, Mitigation and Enhancement (PME) Measures for the Saluda Project. We understand everyone is getting anxious and nervous to begin work on the Settlement Agreement (SA) wording as this will be a new process for many of you. We would like to again point out that operating protocols we established at the outset of the relicensing prohibit the use of the press as a conduit for expressing matters discussed during the resource group meetings.

We have recently noticed an increase in public press regarding the relicensing process and draft PME measures. Further, we also noticed an increase in position statements and opinions on PME measures and their possible outcomes after they are submitted to the FERC. Tempting as it may be to discuss these matters publicly, we must refrain from doing so. It has been our experience that this type of “posturing” in the press only serves to create undo stress, breaks down working relationships and creates an over-air of derisiveness among people trying to work towards a common goal. Entering the Settlement Agreement workshops, this is something we cannot have occur if we expect to be successful.

Therefore, we request that everyone abide by the guidelines set forth in the operating protocols, especially with respect to the release of information to the press. We would hate to see someone not be able to participate in the development of the comprehensive Settlement Agreement. The SA is truly the fruits of our labor over the past 4 years. Generally speaking, I think everyone has done a good job in honoring and abiding by this guideline and we want to thank you. We have worked very hard to address the issues related to the operation of Saluda Hydro and have developed a tremendous number of measures that will serve **all** members of the

community and make Lake Murray, the lower Saluda River and the Congaree River a much better place environmentally, recreationally, and aesthetically for us to enjoy.

As we embark on this Settlement Agreement Process, I am requesting each of you re-familiarize yourselves with all the operating procedures we distributed at the beginning of the process. If you need an additional copy of this document it is available on the relicensing website at the following address:

<http://www.saludahydrorelicense.com/documents/OperatingProceduresforRelicensing2005-December14unsh..pdf> .

As we have stated in the past, when we enter these RCG and TWC meetings, it is important to leave “positions” at the door and work for the common good in developing a comprehensive PME Plan that addresses all resource needs. We will encourage and expect that this be done by each of you as we enter into the Settlement Agreement Development Process. We believe this will facilitate document development and foster a good working environment for us all.

Thanks to each of you,

Alan

Senior Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Cell 803-640-8765

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, February 12, 2009 5:29 PM
To: 'Matthew Rice '; 'Mike Waddell'; 'Bob Perry'; Steve Bell (lakewatchman@yahoo.com); Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bud Badr; Dave Landis; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Patrick Moore ; Ray Ammarell; Reed Bull (rbull@davisfloyd.com); Scott Harder; Shane Boring
Subject: 1-30-09 LIP Focus Group Notes

Hello all,

Attached are the draft meeting notes from the January 30th LIP Focus Group Meeting. Please provide comments on the notes back to me by February 25th. Thanks, Alison



2009-1-30 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Kenneth Bell [lakewatchman@yahoo.com]
Sent: Wednesday, February 11, 2009 5:20 PM
To: Alison Guth; Winward point Yacht Club; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Amanda Hill; bertfloyd@sc.rr.com; Bill Argentieri <bargentieri@scana.com> Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane
Subject: Re: clarification

Alison- For those of us new to "settlement negotiations" What exactly are we trying to accomplish? Are we going to review the final license application? Will there be further negotiations on unsettled issues? You indicated that "There will be no line by line signing of the agreement". If one "can't live" with a certain resolution does that mean no chance of signing the settlement? A lot of questions need to be answered before we can decide which meetings if any we should attend. And shouldn't we have a chance to review and comment on the completed application i.e. the portions that are due by FERC's Feb 20th. deadline

At this time without more information, we have no option but to choose to attend all the meetings.

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On Thu, 1/29/09, Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: clarification
To: "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Winward point Yacht Club" <commodore@windwardpoint.org>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>, aharmon@lpagroup.com, "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner" <yaccove@bellsouth.net>, "Bill East" <billeast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, bseibels@yahoo.com, "Brandon Stutts" <bstutts@scana.com>, "Bret Hoffman" <Bret.Hoffman@KleinschmidtUSA.com>, "Brett Bursey" <network@scpronet.com>, btrump@scana.com, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker" <BakerB@dnr.sc.gov>, "Charlene Coleman" <cheetahtrk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <ccompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, ccantley@scdah.state.sc.us, "Chuck Hightower" <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <Dave.Anderson@KleinschmidtUSA.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "David

Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons " <dsimmons@thefittscompany.com>, dchristie@comporium.net, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, aregaf@dnr.sc.gov, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, ipitts@scprt.com, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher " <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, pricej@biol.sc.edu, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <GloverJB@dhec.sc.gov>, "Jim Goller" <wildlife@sc.rr.com>, "Jim Ruane " <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins " <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, johned44@bellsouth.net, "John Frick" <jfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Keith Ganz-Sarto" <keith_ganz_sarto@hotmail.com>, "Ken Styer " <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net>, turnerle@dhec.sc.gov, "Lee Barber" <lbarber@sc.rr.com>, "Linda Lester " <linda_lester11@yahoo.com>, "Linda Schneider " <wendy0815@sc.rr.com>, "Malcolm Leaphart" <malcolml@mailbox.sc.edu>, giffinma@dhec.sc.gov, "Matthew Rice " <mrice@americanrivers.org>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, "Mike Sloan" <lucky8lady@aol.com>, msummer@scana.com, "Mike Waddell" <mwaddell@esri.sc.edu>, mquattlebaum@scana.com, "Miriam Atria" <miriam@lakemurraycountry.com>, "Norm Nicholson" <larana@mindspring.com>, "Norman Ferris" <norm@sc.rr.com>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore " <PatrickM@scccl.org>, LakeMurrayLOA@earthlink.net, "Prescott Brownell" <prescott.brownell@noaa.gov>, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Ray Ammarell" <rammarell@scana.com>, "Rebekah Dobrasko" <dobrasko@scdah.state.sc.us>, rbull@davisfloyd.com, "Rhett Bickley" <rbickley@lex-co.com>, "Richard Kidder" <rkidder@pbtcomm.net>, "Richard Mikell" <adventurec@mindspring.com>, SKEENER@sc.rr.com, "Robert Lavisky" <rlavisky@alltel.net>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, ryanity@scana.com, "S padget" <s.padget@saludacounty.sc.gov>, "Sandra Reinhardt" <sandrar@www.ccppcrafts.com>, "Sean Norris" <snorris@trcsolutions.com>, "Shane Boring" <Shane.Boring@KleinschmidtUSA.com>, "Sheri Armstrong " <sarmstrong@lex-co.com>, "Skeet Mills " <MillsL@dnr.sc.gov>, sjones@imichotels.net, lakewatchman@yahoo.com, "Steve Summer" <ssummer@scana.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Theresa Thom" <theresa_thom@nps.gov>, "Tim Vinson" <vinsont@dnr.sc.gov>, tbowles@scana.com, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbber" <tbebbber@scprt.com>, tylehowe@nc-chokeee.com, "Van Hoffman" <vhoffman@scana.com>, "Vivianne Vejdani " <vejdani@dnr.sc.gov>, "Wenonah Haire" <wenonahh@www.ccppcrafts.com>, "Jon Quebbeman" <Jon.Quebbeman@KleinschmidtUSA.com>
Date: Thursday, January 29, 2009, 6:53 PM

One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out. Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Thursday, January 29, 2009 1:36 PM

To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-choke.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th. Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th

Thursday the 12th

Wednesday the 18th

Thursday the 19th

Friday, the 20th

Monday, the 23rd

Wednesday the 25th

Friday the 27th

Monday, the 30th

April '09:

Wednesday the 1st

Friday the 3rd
Monday the 13th
Wednesday the 15th
Friday the 17th
Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, February 11, 2009 11:59 AM
To: 'Bob Perry'
Cc: Alan Stuart; BARGENTIERI@scana.com; 'MAHAN, RANDOLPH R'
Subject: 1-30-09-Draft meeting notes

Hello Bob,

Attached below is the portion of the draft meeting notes from the afternoon session. I added in full names to the notes rather than the initials in my draft notes in order to make it more understandable. Call me if you have any questions.
Alison



Draft Meeting
Notes 1-30-09 - ...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Tuesday, February 10, 2009 2:08 PM
To: Alison Guth
Subject: Re: Second Update: Settlement Agreement Dates

Alison,

I will have difficulty attending meetings on Monday, Wed. and Fri. throughout March and April. I can potentially make one day of the three days per week through March and April.

I am interested in attending the following meetings:

Fish and Wildlife
Operations
Lake and Land
Water Quality

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end."
-Rachel Carson

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Tuesday, February 10, 2009 12:13 PM
To: Alison Guth; Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Cc: Alan Stuart; Mike Waddell
Subject: RE: Second Update: Settlement Agreement Dates

Alison,

I will try to attend the settlement meetings for the all of the groups except for Cultural Resources - as listed below. Thanks.

n fish and wildlife

n water quality

n recreation

n lake and land management

n safety

n operations

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, January 29, 2009 1:36 PM

To: Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey;

btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; LEAPHART, JR., MALCOLML; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know

that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th
Thursday the 12th

Wednesday the 18th
Thursday the 19th
Friday, the 20th

Monday, the 23rd
Wednesday the 25th
Friday the 27th

Monday, the 30th

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Wednesday the 1st
Friday the 3rd

Monday the 13th
Wednesday the 15th
Friday the 17th

Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth

Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, February 10, 2009 11:03 AM
To: 'Tony Bebbber'
Subject: RE: Declined: FW: Instream flow, RT&E and Macro/Mussels meeting

Thanks, I will let you know if it changes. If you decide to attend in the afternoon you are welcome to come; the afternoon topics will likely center around RT&E, Mussels and Macroinvertebrates. Malcolm emailed me this morning and noted he would like to discuss the trout in the morning with the instream flow discussions.

-----Original Appointment-----

From: Tony Bebbber [<mailto:tbebbber@scprt.com>]
Sent: Tuesday, February 10, 2009 10:34 AM
To: Alison Guth
Subject: Declined: FW: Instream flow, RT&E and Macro/Mussels meeting
When: Tuesday, March 03, 2009 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

Sorry I have another meeting scheduled that morning. I could do the afternoon - or let me know if it changes again.

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Tuesday, February 10, 2009 12:20 PM
To: Alison Guth; Matt Rice; Gerrit Jobsis
Subject: Settlement Meetings

Hi Alison,

CCL and American Rivers are interested in the following topics:

- fish and wildlife
- Any meeting relating to Flow levels
- water quality
- recreation
- safety
- operations

Gerrit, Matt and I are going to be covering the meetings for CCL and AR, I will be attending on the 11th.

Organizing all this seems like quite a task, good luck.

Patrick

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.552 / Virus Database: 270.10.19/1941 - Release Date: 2/9/2009 6:50 AM

Alison Guth

From: Alison Guth
Sent: Tuesday, February 10, 2009 11:00 AM
To: 'Jeff_Duncan@nps.gov'
Subject: RE: clarification

Hey Jeff,

All the days are pretty much locked in (the days in red were those that have changed from the original email), however the agenda's for these days are in the process of being formulated. They will likely be full days but that will depend on the agenda items. Our original intention was to have meetings on consecutive days (you may remember from the first email that I sent out), however, due to the lack of meeting space we had to change around our schedule a bit. I understand that this may be difficult for those out of town that would like to be involved in all meetings. I hope that you are able to share the workload with those at the park and still be able to attend the meetings that are of priority to you. Also if you let us know your particular RCG's of interest we could always attempt to schedule those meetings for the several consecutive day strings that are on the schedule. Thanks, Alison

-----Original Message-----

From: Jeff_Duncan@nps.gov [mailto:Jeff_Duncan@nps.gov]
Sent: Friday, February 06, 2009 4:15 PM
To: Alison Guth
Cc: Alan Stuart; Bill_Hulslander@nps.gov
Subject: Fw: clarification

Hi Alison--

Can you please clarify if the dates below are locked in and/or whether they are intended as full or partial day meetings. As I stated previously, I would very much like to be present at the kick-off meeting, but am unable to do so due to personal obligations. Also, I notice that many of the dates seem to be consecutive Friday-Monday combinations. This will make it very difficult for me to participate given that I have a 6 hour drive on either side of the meeting. Consecutive days within the same week would be much more beneficial to both me and the process as a whole. Obviously I may be able to share some of the burden with my colleagues at the park; however, they view my role as the lead on the project. Further, NPS interests extend beyond the park, making my participation essential.

Thanks for considering my comments and for accommodating my schedule to the degree that you are able. I know that organizing a process such as this is complex, and I appreciate your efforts to make it go as smoothly as possible.

Jeffrey R. Duncan, Ph.D.
Southeastern Rivers Program
National Park Service
175 Hamm Rd. Suite C, Chattanooga, TN 37405
Ph. (423) 266-1150 Fax. (423) 266-2558

----- Forwarded by Jeff Duncan/Atlanta/NPS on 02/06/2009 04:09 PM -----

Jeff
Duncan/Atlanta/NP
S To
"Alison Guth"
01/29/2009 02:57 <Alison.Guth@KleinschmidtUSA.com>
PM EST cc
Subject
Re: clarification(Document link:
Jeff Duncan)

Alison--Do you want to know our availability for these dates, or are you saying that the red dates are locked in? I very much want to be present, particularly for the kick-off meeting, but I'm not available the week of March 11. My wife has an out of town training all week, so I'm on the hook as a single dad.

Jeffrey R. Duncan, Ph.D.
Southeastern Rivers Program
National Park Service
175 Hamm Rd. Suite C, Chattanooga, TN 37405
Ph. (423) 266-1150 Fax. (423) 266-2558

"Alison Guth"
<Alison.Guth@KleinschmidtUSA.com>
To
"Alison Guth"
01/29/2009 01:53 PM EST <Alison.Guth@KleinschmidtUSA.com>, "Winward point Yacht Club "
<commodore@windwardpoint.org>, "Alan Axson" <cfdwaxson@columbiasc.net>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>, <aharmon@lpagroup.com>, "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Amy Bennett" <BENNETAM@dhec.sc.gov>, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill Brebner " <yaccove@bellsouth.net>, "Bill East" <billeast@sc.rr.com>, "Bill Hulslander" <bill_hulslander@nps.gov>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, <bseibels@yahoo.com>, "Brandon Stutts " <bstutts@scana.com>, "Bret Hoffman" <Bret.Hoffman@KleinschmidtUSA.com>, "Brett Bursey" <network@scpronet.com>, <btrump@scana.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Buddy Baker " <BakerB@dnr.sc.gov>, "Charlene Coleman" <cheetahtrk@yahoo.com>, "Charles Floyd" <jcharlesfloyd@sc.rr.com>, "Charlie Compton" <cocompton@lex-co.com>, "Charlie Rentz"

<flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, <ccantley@scdah.state.sc.us>, "Chuck Hightower " <HIGHTOCW@dhec.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "Dave Anderson" <Dave.Anderson@KleinschmidtUSA.com>, "Dave Landis" <dlandis1@sc.rr.com>, "David Allen" <david.allen@scbar.org >, "David Hancock" <dhancock@scana.com>, "David Jones" <djones@scprt.com>, "David Price" <pricedc@dhec.sc.gov>, "Dee Dee Simmons " <dsimmons@thefittscompany.com>, <dchristie@comporium.net>, "Don Tyler" <tyle6544@bellsouth.net>, "Donald Eng" <dengff@aol.com>, "Ed Diebold" <ediebold@riverbanks.org>, "Edward Schnepel" <eschnepel@sc.rr.com>, <aregaf@dnr.sc.gov>, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis \"(American Rivers)\" <gjobsis@americanrivers.org>, "Gina Kirkland" <kirklagl@dhec.sc.gov>, "Guy Jones" <guyjones@sc.rr.com>, "Hal Beard" <beardh@dnr.sc.gov>, "Hank McKellar" <McKellarH@dnr.sc.gov>, <ipitts@scprt.com>, "J. Hamilton Hagood" <jhamilton@scana.com>, "Jay Schabacher " <Jayschab@aol.com>, "Jeff Duncan" <jeff_duncan@nps.gov>, <pricej@biol.sc.edu>, "Jim Devereaux" <jdevereaux@scana.com>, "Jim Glover" <Glover.JB@dhec.sc.gov>, "Jim Goller" <wildlife@sc.rr.com >, "Jim Ruane " <jimruane@comcast.net>, "JoAnn Butler" <jbutler@scana.com>, "Joe Logan" <dianlog8@aol.com>, "Joel Huggins " <jbhuggins@lexhealth.org>, "John and Rob Altenberg" <seatowlakemurray@seatow.com>, <johnd44@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Jon Leader" <leader@sc.edu>, "Joy Downs" <elymay2@aol.com>, "Karen Kustafik" <kakustafik@columbiasc.net>, "Keith Ganz-Sarto" <keith_ganz_sarto@hotmail.com>, "Ken Styer " <kstyer@smeinc.com>, "Ken Uschelbec" <colkenu@aol.com>, "Kenneth Fox" <skfox@sc.rr.com>, "Kristina Massey" <dvklmass@bellsouth.net >, <turnerle@dhec.sc.gov>, "Lee

Barber" <lbarber@sc.rr.com>, "Linda Lester "
<linda_lester11@yahoo.com>, "Linda Schneider " <wendy0815@sc.rr.com>,
"Malcolm Leaphart"
<malcolml@mailbox.sc.edu>,
<giffinma@dhec.sc.gov>, "Matthew Rice " <mrice@americanrivers.org>,
"Michael Murrell"
<mdmurr@sc.rr.com>, "Mike Duffy"
<mikeduffy@sc.rr.com>, "Mike Sloan"
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<msummer@scana.com>, "Mike Waddell"
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<mquattlebaum@scana.com>, "Miriam Atria"
<miriam@lakemurraycountry.com>,
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"Patrick Moore "
<PatrickM@scccl.org>,
<LakeMurrayLOA@earthlink.net>,
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"Randy Mahan" <rmahan@scana.com>,
"Ray Ammarell"
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<rbull@davisfloyd.com>, "Rhett Bickley" <rbickley@lex-co.com>,
"Richard Kidder"
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"Shane Boring"
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"Sheri Armstrong "
<sarmstrong@lex-co.com>, "Skeet Mills " <MillsL@dnr.sc.gov>,
<sjones@imichotels.net>,
<lakewatchman@yahoo.com>, "Steve Summer" <ssummer@scana.com>,
"Suzanne Rhodes"
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"Theresa Powers"
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"Theresa Thom"

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Vinson" <vinsont@dnr.sc.gov>,
<tbowles@scana.com>, "Tom Ruple"
<truple@sc.rr.com>, "Tommy Boozer"
<tboozer@scana.com>, "Tony Bebber"
<tbebber@scprt.com>,
<tylehowe@nc-cherokee.com>, "Van
Hoffman" <vhoffman@scana.com>,
"Vivianne Vejdani "
<vejdani@dnr.sc.gov>, "Wenonah
Haire"
<wenonahh@www.ccppcrafts.com>, "Jon
Quebbeman"
<Jon.Quebbeman@KleinschmidtUSA.com>

cc

Subject

clarification

One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out.
Thanks, Alison

-----Original Message-----

From: Alison Guth
Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex
Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett;
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Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

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Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Tuesday, February 10, 2009 8:56 AM
To: Alan Stuart; Alison Guth
Subject: Comments from LW and LMHC



LMHOC Comments Lake Murray Watch
re bass flow pr... Comments of ...

Please include these comments in the next filing of our FLA (not including the AIR response)

William R. Argentieri

South Carolina Electric & Gas Company

111 Research Drive

Columbia, SC 29203

Phone - (803) 217-9162

Fax - (803) 933-7849

Cell - (803) 331-0179

February 9, 2009

To: Bill Argentieri
SCE&G Saluda Hydro Relicensing Coordinator

Re: Concerns with Striped bass flows for non-project issues/Stakeholder review process

Congaree Striped Flows

At the 11th hour, DNR has submitted a request for flows for striped bass habitat (spawning) in the Congaree River. Also at the 11th hour, DNR wants SCE&G to consider “sharing” water with the Santee Cooper lakes and the rivers below those dams. Furthermore, DNR insists that these requests should be considered based on the agency’s long range goals of balancing lake interest with river interest under the SC Water Plan.

When we started this process, SCE&G and stakeholders agreed that issues would be confined to the project boundaries and that the project ended where the lower Saluda River converges with the Broad River. SCE&G indicated that other issues including the ESWIM would be given consideration but would not be given “official status.”

As far as the DNR’s long range goals, the SC Water Plan will be developed via public process and will include many diverse stakeholder groups in addition to the DNR. These stakeholders will have input into developing a final plan which must be submitted to the SC General Assembly and the Governor for approval.

Stakeholder involvement in F&W TWC Proposals

Lake groups met with DNR (outside of the relicensing process) on December 2, 2008, to review the Instream Flow study and the striped bass passage flows for the lower Saluda. There was no mention at that meeting of the new striped bass flow proposal for the Congaree. Eight days later, DNR presented the new proposal to SCE&G at the December 10th F&W TWC.

Lake groups did not learn about the new flow request until our meeting with your staff on Jan 20th. It was at that same meeting that we learned of SCE&G’s counter proposal to the Dec. 10th request. This counter offer was presented at the F&W TWC January 12th meeting.

SCE&G has emphasized from the beginning that “good stakeholder engagement is important to resolving issues during a cooperative process.” And yet SCE&G has proposed a counter offer to the river interest without providing opportunity for other stakeholders outside of the F&W TWC to review, discuss and debate the issue. Discussion of the issue was not allowed in the Low Inflow Protocol Focus Group. There has been no opportunity to provide written comments on the latest SCE&G counter offer.

According to the operation procedures that were developed and agreed upon by all, **“All information gathered and developed by a TWC will be provided to the RCG to be used for decision making purposes.”** It was also agreed that proposals from one RCG will be shared with other RCG’s that might be affected. In this case the Recreation RCG appears to be affected by an increase in flows that at times would restrict wade fishing and recreation by “rock people.” On the lake, these additional flows increase the potential for low lake levels during the spring and summer months, affecting not only recreation, but the lake’s ecosystem and economic resources.

Understanding that the TWC is made up entirely of river advocates, it is ever so important that recommendations, especially those associated with “non-project” issues, be reviewed by the full RCG. As it stands now, it appears that the full RCG is in agreement; however, that is not the case.

Based on available information, it appears that the new bass flow proposal will increase the potential for negative impacts to the lake and the Lower Saluda River. Without opportunity for discussion and debate, we object in the strongest of terms to this “non-project related” flow request including demands from DNR that these “non-project” issues be given equal standing with project resources.

Our position regarding the Low Inflow Protocol stands as before: Six inch trigger level, 14 day averaging for inflows, with target flows of 700 cfs except for April and May. Target flows of 1000 cfs from April 1 to April 15, target flows of 1300 cfs from April 16- May 15 and target flows of 1000 cfs from May 16 to May 30. Target flows will be reduced to 400 cfs when the lake reaches 354’ elevation.

Respectfully,

Bertina Floyd
Co-Chair
Lake Murray Homeowners Coalition

Lake Murray Watch

Saluda Hydro Re-licensing Project 516
Fish and Wildlife RCG
General Comments
February 6, 2009

1-Introduction

Lake Murray Watch (LMW) has been an active participant in the re-licensing process serving on many of the Resource Conservation Groups and Technical Working Committees including the Fish and Wildlife RCG. These comments are directed to (1) a proposal by the F&W TWC to consider downstream flows for non-project needs (2) SCE&G's decision to approve the flows without proper stakeholder review, 3) Evaluation of TWC's assessment of Lake Murray (4) potential impacts from Congaree striped bass flow, (4) proposal for remedy.

2-Proposal to consider non-project related issues

For almost 3 years the F&W TWC's conducted various studies on the Lower Saluda River (LSR) including an Instream Flow Study (IFS) which provided information necessary to make recommendations on minimum flows, and desirable (target) flows. A determination was made and SCE&G presented the downstream flow recommendations at a July 2008 joint Resource Conversation Group meeting.

Almost 6 months later on December 10, the TWC proposed a modified version which included a request for additional flows to enhance striped bass spawning in the Congaree River, downstream from the project boundary. Also at that time, the SC DNR suggested that the development of a new downstream flow regime should include the Santee Cooper lakes and the rivers below those dams. DNR claimed that "out of the project" request warrant consideration based on the agency's long range goals of balancing lake interest with river interest under the SC Water Plan.

2a Discussion- LMW objects to DNR's last minute push to inject what amounts to be the agency's "opinion" on how to best manage the public's water resources. In addition this last minute maneuver is unfair, inappropriate and "slaps in the face" of what stakeholders agreed on at the beginning of the process. The request amounts to "changing the rules" at the last minute. SCE&G and stakeholders agreed that issues would be confined to the project boundaries and that the project ended at the confluence of the Broad and the Lower Saluda River. While SCE&G indicated that the company would consider certain issues outside the scope of the process, the Company made it clear those issues would not be given "official sanction".

As far as DNR's claim to have authority under the South Carolina Water Plan, details of that plan have yet to be determined. According to State Hydrologist Dr. Bud Bader, the development of a basin wide approach to water management will involve bringing a diverse group of stakeholders together. DNR will be just one of many players in this process. In addition to fishery issues, recreation, economics and water quality issues will be addressed. Final recommendations must be approved by SC General Assembly and the Governor.

As far as DNR's claim that river flows should get priority over lake levels based on basin wide issues, we disagree. As stated above, priorities have yet to be decided. It is likely that basin wide strategies will focus on minimum flows during drought conditions, not target flows designed to exceed the natural flow of the river.

3- SCE&G's decision to approve flow request in the absence of stakeholder and public review

At the beginning of this process, SCE&G emphasized that **“good stakeholder engagement is important to resolving issues during a cooperative process.”** SCE&G and stakeholders developed operational rules. One important rule designed to ensure stakeholder involvement related to the duties of the Technical Working Committees. The rule stated that, **“All information gathered and developed by a TWC will be provided to the RCG to be used for decision making purposes.”** It was also agreed that proposals from one RCG will be shared with other RCG's that might be affected. This rule is important because it doesn't leave out those of us who agreed to stay out of the TWC's in order to make that process more manageable and productive.

On November 10, 2005 the first F&W RCG convened. On December 7, 2005 a joint F&W and Water Quality RCG meeting took place. On Feb. 22, 2006 the F&W TWC met for the last time.. In July of 2008, a joint RCG meeting was held. At that time SCE&G presented its draft proposal for providing flows to meet various downstream needs. SCE&G also presented its draft proposal for a low inflow protocol.

On December 2, 2008 lake group representatives met with DNR to review the Instream Flow Study and the proposed striped bass passage flows and other fish flows. This meeting was held outside of the relicensing process. DNR made no mention of the Congaree striped bass flows which were later proposed at the December 10 TWC meeting. There was no agreement between the parties on the merits of the flow request.

At a December 10, 2008 meeting, the F&W TWC proposed a modified version of the previous proposal which included a request for additional flows to enhance striped bass spawning in the Congaree River. On January 13, 2009, SCE&G presented a counter offer to the TWC's December 10th proposal which approved the additional flow request but modified the LIP adding a 1 ft. lake level trigger and provisions to reduce the fish passage flows depending on 14 day averaging of inflows.

On January 30th the LIP focus group convened. (*note- discussion or debates on the merit of flow proposals were not allowed in the LIP meetings). After it was apparent that a consensus was not forthcoming, SCE&G announced that the company's latest proposal was final and would be submitted as part of the application.

Discussion- As noted above there have been no F&W RCG meetings since February of 2006; only the joint RCG meeting on July X.. Not long after that meeting, Lake Watch asked SCE&G to form a LIP focus group, and include lake representatives, as a means of reaching consensus on conditions of the LIP. SCE&G complied with the request. Participants were “appointed” by SCE&G. No other stakeholders or members of

the public were allowed to attend. SCE&G also placed a “gag order” on participants. In addition, SCE&G instructed that discussions and/or debates on the merits of the proposed flows would not be allowed.

LMW did not find out about the latest striped bass flow until our meeting with your staff on January 20th. This meeting was convened at our request to present our concerns relating to potential impacts to the lake’s environmental, recreational, and economic resources- as a result of the proposed striped bass passage flows. At the time of our presentation, SCE&G had already decided to allow the Congaree striped bass flows.

Our concern is that there has been no opportunity for stakeholder engagement in the development of the proposed flow regime or opportunity for F&W RCG members to review, discuss and debate the merits of the proposals as required by the operational procedures. At the present we object to these flows.

4- Comments on TWC’s assessment of Lake Murray

In reviewing the TWC meeting summaries, it is apparent the committee spent considerable time evaluating the needs of the LSR. On the other hand, very little effort was applied to evaluating the fish and wildlife resources on the reservoir. The mission statement of the RCG states, **“To achieve this mission, the Fish and Wildlife RCG shall identify the need for, define the scope of, and manage or influence as appropriate, data collection and/or studies relative to potentially impacted fish, wildlife, and plant species and ecological communities, ecosystems and/or habitat within the Saluda Hydroelectric Project.”** Based on the TWC’s record, one might conclude that the mission statement applies only to the river. Case in point; why did the DNR withdraw its request for a habitat assessment study on the lake? This study would have examined how various lake level stages impact the littoral zone. Results of the study would have been valuable in determining how best to allocate water during the April-May time frame. Nowhere in the record could we find a discussion and recommendation on where lake levels should be during certain months to enhance aquatic life on the reservoir. There’s been no discussion on the importance of Lake Murray’s fishery to South Carolina, understanding it is considered to be the top bass fishing lake in the state. Lake Murray is ranked in the top ten in the country. Ever more reason to understand the impacts downstream flows might have on Lake Murray. While a white paper on lake habitat assessment was deemed unnecessary, the Aquatic TWC did make the effort to review studies relating to issues outside of the project boundary including Congaree flood plain studies and Jim Bulak’s study on striped bass habitat in the Congaree. LMW is concerned with what appears to be a lack of interest by the Aquatic TWC to gather, review and consider lake data, in order to make fair and balanced decisions.

5- Congaree Striped Bass Proposal

On December 10, 2008, SC DNR submitted a proposal for striped bass flows in the Congaree. According to a study by DNR’s Jim Bulak, releases that coincide with flows in the Broad River should enhance striped bass spawning in the Congaree. The DNR proposal would require SCE&G to provide target flows based on a percentage of the flow in the Broad River. The flows would be provided from April 1 to May 10.

As a member of the F&W RCG, LMW strongly objects to this proposal. Target flows could reach as high as 2700 cfs with no guarantee that flows in the Saluda basin will coincide with flows in the Broad. It is likely at times, that Lake Greenwood managers will hold back water during early April in order to bring that lake back to full pool. Lake Greenwood is operating with a new guide curve with an April 1 target for full pool.

If inflows are substantially less than outflows Lake Murray could drop as much as two feet during the April-May time frame. (DNR is proposing that target flows be provided until the lake drops 2 feet.) Based on our analysis and the Lake Murray Fishermen's Focus group analysis, a 2 foot lake level drop would effectively de-water the littoral zone, impacting fish spawning activities, food web interactions, water fowl nesting, and survival of other aquatic species. In addition, this scenario would set the stage for low water levels during peak recreation on the lake and would impact the lake's economy.

Concerns about the striped bass fishery in the Congaree and the Santee lakes just recently surfaced. According to the December 12, TWC meeting notes, Jim Bulak indicated that the **“main reasons for the decline in STB populations in the basin are mostly due to over fishing and the drought that the basin has experienced in the past ten years.”** In addition Bulak noted that **“a flow of 1,300 cfs in itself would be a great benefit above existing conditions.”** Bulak was referring to DNR's proposal for striped bass passage.

This DNR request appears to be an “experiment” at best in an attempt to provide optimum flows during naturally occurring periods of low inflows; at the expense of increasing the probability of negative impacts to project resources, including fish flows and recreation opportunities in the LSR and fish habitat and recreational opportunities on the lake. As stated above, LMW strongly objects to these flows.

6- Conclusion

To summarize our concerns, based on our review of the records, it is apparent the F&W TWC's have done a “poor” job of representing fish, wildlife and other aquatic resources associated with Lake Murray. Stakeholders who are members of the F&W RCG have been left out of the process. SCE&G has approved a last minute request to expand the scope of the process without providing “due process” for other stakeholders as outlined in the operational procedures. SCE&G has approved a last minute request additional flows for concerns outside the project without providing “due process” as outlined in the operational procedures.

7- Proposed remedy:

(1) Withdraw your agreement to provide the Congaree striped bass flows

(2) Promptly reconvene the F&W RCG to allow opportunity for interested stakeholders to review, discuss, debate and if necessary challenge the findings and/or positions of the F&W TWC's. Provide ample time for review and debate.

(3) Require DNR to provide documentation that gives the agency authority under the SC Water Plan.

(4) Hold a quarterly public meeting for citizens who were unable to participate in the process. Present your draft proposal at that time.

(5) Consider all stakeholder concerns before making any final decisions.

9- Lake Murray Watch's position on balancing downstream interest with lake interest

- Provide 400 cfs minimum year round. Reduce to 200 cfs when the lake level falls below 252' msl
- Provide target flows of 700 cfs from January 1 to March 31 and from June 1 – December 31.
- Provide target flows of 1000 cfs for striped bass passage in LSR of 1000 cfs from April 1 –April 15, 1300 cfs from April 16 – May 15, and 1000 cfs from May 16 - May 30.
- Implement LIP using a 6 inch lake level trigger with 14 day inflow averaging. When the lake drops 6 inches below the guide curve flows should be reduced to 400 cfs. Once the lake rises above the 6 inch trigger, SCE&G will continue the target flows.
- Note* Lake Watch position does not imply that we agree with the proposed flows based on the merits. We accept the flows contingent on approval of the 6 inch LIP trigger.

Please include these comments in the Fish and Wildlife RCG record.

Regards,

Steve Bell
Lake Murray Watch www.lakemurraywatch.com
Ph.- 803-730-8121

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Monday, February 09, 2009 2:59 PM
To: Alan Stuart; Alison Guth
Cc: Mike Waddell
Subject: March 3 Agenda

Alan, Alison:

The trout adaptive management topic goes well with the morning topic of the min flow and striped bass flows. Please consider keeping the below 'batting order' for the March 3 meeting to keep those two topics together if possible in the morning session – rather than the new order listed in the March 3 meeting announcement that has the trout plan moved to the afternoon... Thanks.

Agenda for the February 20 meeting:

- **Discussion of alternative flow proposal for meeting min flow and striped bass flow objectives.**
- **Trout Adaptive Management Program**
- Macroinvertebrate Monitoring and Enhancement Program
- Freshwater Mussel Adaptive Management Program
- Draft RT&E Species Public Outreach Brochure

Alison Guth

From: Elymay2@aol.com
Sent: Friday, February 06, 2009 3:21 PM
To: Alison Guth; vejdaniv@dnr.sc.gov; Alan Stuart; Alison Guth; amanda_hill@fws.gov; ben@scwf.org; BARGENTIERI@scana.com; csundius@sc.rr.com; dhancock@scana.com; dchristie@comporium.net; jlesliejr@bellsouth.net; jsfrick@mindspring.com; PatrickM@sccl.org; RMAHAN@scana.com; rbickley@lex-co.com; ahler@dnr.sc.gov; rscott@lex-co.com; royparker38@earthlink.net; lakewatchman@yahoo.com; suzrhodes@juno.com; T.Brooks@saludacounty.sc.gov; truple@sc.rr.com; tboozier@scana.com; tbebber@scprt.com; vhoffman@scana.com; millerca@dhec.sc.gov; bertfloyd@sc.rr.com; billeast@sc.rr.com; marshallb@dnr.sc.gov; bill25@sc.rr.com; btrump@scana.com; ccompton@lex-co.com; flyhotair@greenwood.net; pagec@dnr.sc.gov; tufford@sc.edu; david.allen@scbar.org; dsimmons@thefittscompany.com; tyle6544@bellsouth.net; kayakduke@bellsouth.net; gjobsis@americanrivers.org; McKellarH@dnr.sc.gov; ipitts@scprt.com; kitoswald@lakemurrayspecialist.com; turnerle@dhec.sc.gov; laura.mccary@gmail.com; linda_lester11@yahoo.com; wendy0815@sc.rr.com; rkelly1@sc.rr.com; mdmurr@sc.rr.com; mikeduffy@sc.rr.com; msummer@scana.com; mwaddell@esri.sc.edu; parkin@parkinhunter.com; LakeMurrayLOA@earthlink.net; R1Shealy@aol.com; rparsons12@alltel.net; rkidder@pbtcomm.net; SKEENER@sc.rr.com; ryanity@scana.com; s.padget@saludacounty.sc.gov; sarmstrong@lex-co.com; swilliams@lex-co.com; tpowers@newberrycounty.net
Subject: Re: Wording review

OK by us (LMA) Joy

In a message dated 2/6/2009 1:21:02 P.M. Eastern Standard Time, Alison.Guth@KleinschmidtUSA.com writes:

Hello RCG and TWC,

As we were conducting a final review of the SMP and Permitting Handbook in order to add in group edits, it has come to our attention that a topic of previous TWC/RCG discussion was not included. SCE&G has noted that they would like to continue with the policy of keeping the small, isolated parcels of fringeland in the future development category. These parcels consist of areas that are fragmented within a subdivision, between properties owned down to the 360', and/or very small in size. You may recall discussing these parcels when we viewed GIS maps of Future Development property around the lake with Orbis during the rebalancing exercises. There were no objections to this at the time of discussion. When requested in the past, the FERC has allowed SCE&G to sell these parcels down to the 360' contour with a fifty foot building setback. SCE&G would like to continue to work with these individual property owners on a case by case basis. This being said, the following wording is proposed to be added under section 7.1.4, Future Development Prescriptions, in the SMP:

"SCE&G will retain as an element of its shoreline management program, the policy of considering on a case by case basis, requests for sale of individual parcels of fringe land down to the 360' contour and with a 50 foot building setback, in the following circumstance: the property is located in a previously developed area (usually a subdivision); the properties in the immediate area of the considered parcel already are owned by individuals down to the 360' contour and developed; and the size and/or configuration of the property is such that no meaningful ecological benefit to the area would result in requiring the new, non-disturbance buffer requirements. In appropriate circumstances, protective requirements may be imposed through covenants or other mechanisms."

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

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Alison Guth

From: Alison Guth
Sent: Friday, February 06, 2009 1:19 PM
To: 'Bob Perry'
Subject: FW: Second Update: Settlement Agreement Dates

Hey Bob,

Sorry about that. Here was the second update that I sent. It doesn't look like your name is on the list below so I will add you right now so you don't get left out of any further distribution. Hope you have a nice weekend. Alison

-----Original Message-----

From: Alison Guth
Sent: Thursday, January 29, 2009 1:39 PM
To: 'Winward point Yacht Club '; 'Alan Axson'; Alan Stuart; 'aharmon@lpagroup.com'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; BARGENTIERI@scana.com; 'Bill Brebner '; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'bseibels@yahoo.com'; 'Brandon Stutts '; Bret Hoffman; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker '; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'ccantley@scdah.state.sc.us'; 'Chuck Hightower '; 'Daniel Tufford'; Dave Anderson; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons '; 'dchristie@comporium.net'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'aregaf@dnr.sc.gov'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'ipitts@scprt.com'; 'J. Hamilton Hagood'; 'Jay Schabacher '; 'Jeff Duncan'; 'pricej@biol.sc.edu'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane '; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins '; 'John and Rob Altenberg'; 'johnd44@bellsouth.net'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer '; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'turnerle@dhec.sc.gov'; 'Lee Barber'; 'Linda Lester '; 'Linda Schneider '; 'Malcolm Leaphart'; 'giffinma@dhec.sc.gov'; 'Matthew Rice '; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'msummer@scana.com'; 'Mike Waddell'; 'mquattlebaum@scana.com'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore '; 'LakeMurrayLOA@earthlink.net'; 'Prescott Brownell'; 'Randal Shealy'; RMAHAN@scana.com; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'rbull@davisfloyd.com'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'SKEENER@sc.rr.com'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; Shane Boring; 'Sheri Armstrong '; 'Skeet Mills '; 'sjones@imichotels.net'; 'lakewatchman@yahoo.com'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'tbowles@scana.com'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbber'; 'tylehowe@nc-cherokee.com'; 'Van Hoffman'; 'Vivianne Vejdani '; 'Wenonah Haire'; Jon Quebbeman
Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only

specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th
Thursday the 12th

Wednesday the 18th
Thursday the 19th
Friday, the 20th

Monday, the 23rd
Wednesday the 25th
Friday the 27th

Monday, the 30th

April '09:

Wednesday the 1st
Friday the 3rd

Monday the 13th
Wednesday the 15th
Friday the 17th

Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, February 06, 2009 1:17 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; John Frick; Joy Downs; Patrick Moore ; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman; Andy Miller; Bertina Floyd; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; Dee Dee Simmons ; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Phil Hamby (LakeMurrayLOA@earthlink.net); Randal Shealy; Regis Parsons (rparsons12@alltel.net); Richard Kidder; Robert Keener (SKEENER@sc.rr.com); ryanity@scana.com; S padget; Sheri Armstrong ; Synithia Williams; Theresa Powers
Subject: Wording review

Hello RCG and TWC,

As we were conducting a final review of the SMP and Permitting Handbook in order to add in group edits, it has come to our attention that a topic of previous TWC/RCG discussion was not included. SCE&G has noted that they would like to continue with the policy of keeping the small, isolated parcels of fringeland in the future development category. These parcels consist of areas that are fragmented within a subdivision, between properties owned down to the 360', and/or very small in size. You may recall discussing these parcels when we viewed GIS maps of Future Development property around the lake with Orbis during the rebalancing exercises. There were no objections to this at the time of discussion. When requested in the past, the FERC has allowed SCE&G to sell these parcels down to the 360' contour with a fifty foot building setback. SCE&G would like to continue to work with these individual property owners on a case by case basis. This being said, the following wording is proposed to be added under section 7.1.4, Future Development Prescriptions, in the SMP:

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Fax 803-951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Friday, February 06, 2009 12:55 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Saluda Relicensing: Meeting Notes from Conference Call with NMFS RE Proposed Monitoring and Adaptive Recovery Program for Sturgeon



2009-01-20 NMFS
Conference Cal...

Hello Shane, and team,

Thank you for putting together our meeting notes. I have attached a copy of the notes with some edits added to reflect my best memory of the discussions and our recommendations/statements. The edits are in "track changes" and I hope they are readable. If not, let me know. Also if you have any questions, just call.

Regards
PB

Shane Boring wrote:

Good afternoon folks:

Attached for your review are the draft meeting notes from our January 20th conference call with NMFS regarding a potential PM&E Program for sturgeon. Please have comments on the notes back to us by February 26th, 2009. Thanks to all who contributed to the discussion.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Prescott Brownell [<mailto:Prescott.Brownell@noaa.gov>]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Attached is a copy of the proposal we sent out on November 20, with a few minor edits. The intent of the proposal is to provide a framework for a sturgeon protection plan, and consideration of sturgeon in the relicensing settlement agreement.

I look forward to discussing this proposal with interested stakeholders during our January 20 conference call.

Regards,
PB

Shane Boring wrote:

When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

~~*~*~*~*~*~*~*~*

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565

Columbia Area Local - 217-6565

Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER,

STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring

Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vajdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring

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Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Friday, February 06, 2009 12:55 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Saluda Relicensing: Meeting Notes from Conference Call with NMFS RE Proposed Monitoring and Adaptive Recovery Program for Sturgeon



2009-01-20 NMFS
Conference Cal...

Hello Shane, and team,

Thank you for putting together our meeting notes. I have attached a copy of the notes with some edits added to reflect my best memory of the discussions and our recommendations/statements. The edits are in "track changes" and I hope they are readable. If not, let me know. Also if you have any questions, just call.

Regards
PB

Shane Boring wrote:

Good afternoon folks:

Attached for your review are the draft meeting notes from our January 20th conference call with NMFS regarding a potential PM&E Program for sturgeon. Please have comments on the notes back to us by February 26th, 2009. Thanks to all who contributed to the discussion.

Shane

C. Shane Boring
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From: Prescott Brownell [<mailto:Prescott.Brownell@noaa.gov>]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

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I look forward to discussing this proposal with interested stakeholders during our January 20 conference call.

Regards,
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When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

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Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565

Columbia Area Local - 217-6565

Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

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Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER,

STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

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From: Shane Boring
Sent: Thursday, February 05, 2009 1:36 PM
To: 'Prescott Brownell'; 'QUATTLEBAUM, MILTON'; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'SUMMER, STEPHEN E'; RMAHAN@scana.com; Jennifer Hand; Alison Guth
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Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Wednesday, February 04, 2009 4:49 PM
To: Dave Anderson; Alison Guth; Vivianne Vejdani ; Alan Stuart; BARGENTIERI@scana.com; Bill Marshall; Charlene Coleman; Guy Jones; J. Hamilton Hagood; Jennifer Hand; Karen Kustafik; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Patrick Moore ; RMAHAN@scana.com; David Hancock; dchristie@comporium.net; George Duke; Joy Downs; Lee Barber; Mark Davis; lakewatchman@yahoo.com; Tim Vinson; Tommy Boozer; Van Hoffman; Alan Stuart
Subject: RE: Recreation Management and Downstream Flows TWC



DRAFTPotential
addition to Rec...

At the meeting last week, I suggested listing some recreation facility improvements into years beyond the first 10 years. I believe FERC will be looking for longer term commitments in reviewing the license, especially if longer than 30 years. I have taken an initial stab at it (as I was encouraged to do) on the attachment. I tried to focus on "future" sites in proximity to growth areas and in proximity to current sites nearing or at capacity, and also tried to accommodate both sides of the lake. In addition, I looked at sites (such as Rocky Creek, Craynes Bridge, and Twelvemile Creek) that may provide different, more passive experiences than currently available. There are probably some expansions or additional facilities for current sites that should also be added to the second 10 year period but I felt that Tommy and David could suggest those. Again, all should be able to be adjusted or relocated to a different site if changing conditions warrant it at the review period.

Tony Bebber, AICP

Planning Manager, Recreation, Planning & Engineering Office

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

Alison Guth

From: Dan Tufford [tufford@sc.edu]
Sent: Wednesday, February 04, 2009 9:03 AM
To: Alison Guth
Subject: RE: clarification

Hello Allison,

My interests are in water quality, lake and land management, and operations. It is unlikely I will be able to attend all of even these meetings, but those are the ones I will try for.

I have March 11 on my calendar. Do you have times yet?

Regards,

Daniel L. Tufford, Ph.D.

University of South Carolina

Department of Biological Sciences

209A Sumwalt (office)

701 Sumter St, Room 401 (mail)

Columbia, SC 29208

Ph. 803-777-3292, Fx: 803-777-3292

e-mail: tufford@sc.edu

web: <http://www.biol.sc.edu/~tufford>

P Please think before you print.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]

Sent: Thursday, January 29, 2009 1:53 PM

To: Alison Guth; Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee

Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: clarification

One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out. Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Thursday, January 29, 2009 1:36 PM

To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire;

Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

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Thanks, Alison

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Alison Guth
Licensing Coordinator
Kleinschmidt Associates
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Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Monday, February 02, 2009 1:31 PM
To: Alan Stuart; Alison Guth
Cc: Mike Waddell
Subject: RE: Second Update: Settlement Agreement Dates

Thanks, Alan, for your reply to help us understand the settlement agreement approach better. We had anticipated that all of the working group and committee recommendations would be submitted to FERC in the license plan, with opportunities for stakeholders to further comment to FERC afterwards (during the first or second 'comment' periods). The settlement agreement process is a different approach than the traditional FERC process we expected and we want to make sure we understand it.

We have concerns at this time about the expectation to sign off on the entire agreement document even if not able to participate in all meetings. Please clarify the process at the initial meeting on Wednesday, March 11 as to whether there will be email distributions of meeting summaries with the opportunity for follow-up stakeholder email comments, including those who did not attend? Or, will there even be any summaries sent out after the meetings? If so, will those simply be 'finals' for the settlement agreement, with no further comments considered (ie, only comments made in person at the meetings will be considered)?

Also, please clarify on March 11 whether further comments will be accepted for consideration after a final settlement agreement is drafted and routed; or, will the decision for the stakeholders only be to sign or not sign the agreement?

Also, we will want to know which items being considered in the agreement meetings are also to be part of the FERC license, or whether an item is only covered by the settlement agreement?? Please keep that in mind as the meetings proceed with the meeting coordinators clarifying the distinction during the meetings.

Mike and I will participate as much as we can as volunteers in the new round of concentrated meetings this spring. Once a final settlement agreement is drafted, we will review it with the Saluda River Chapter of Trout Unlimited (TU) that he represents, and also with the SC TU Council and the TU national staff and advisers that I represent to decide whether to sign off on it (or to provide further comments if those will be given further consideration...).

Thanks again for your note.

From: Alan Stuart [mailto:Alan.Stuart@KleinschmidtUSA.com]
Sent: Monday, February 02, 2009 9:21 AM
To: LEAPHART, JR., MALCOLML; Alison Guth
Cc: Mike Waddell
Subject: RE: Second Update: Settlement Agreement Dates

Good Morning Malcolm,

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The settlement agreement is not an alternative to responding to the FERC additional information request (AIR). We still have to send a response to the FERC AIR by February 24, 2009.

If this doesn't answer your questions, please be more specific in what information you are seeking, I'll do my best to answer your questions.

thanks for your continued efforts in the relicensing, Alan

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Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; pricej@biol.sc.edu; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; LEAPHART, JR., MALCOLML; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokekee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

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Fax 803-951-2124

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Monday, February 02, 2009 10:05 AM
To: Alison Guth
Subject: RE: Second Update: Settlement Agreement Dates

Alison,

Our primary interests are recreation, lake and land management, and safety. However, we would like to be "aware" of any agreements in fish and wildlife, water quality, cultural resources, and operations before asking our attorney to review and our Director to sign any agreement in principle or final agreement. Perhaps there should be a "summary" meeting at some point down the line that explains all proposals to all involved.

Dates that you listed that don't work for me are:

Mar 20, 23, 25, 27

Thanks for working around those if possible.

Tony Bebber, AICP

Planning Manager, Recreation, Planning & Engineering Office

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

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Sent: Thursday, January 29, 2009 1:36 PM

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Fax 803-951-2124

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Cc: Mike Waddell
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Lexington, SC 29072

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Fax 803-951-2124

Alison Guth

From: Jeff_Duncan@nps.gov
Sent: Friday, February 06, 2009 4:15 PM
To: Alison Guth
Cc: Alan Stuart; Bill_Hulslander@nps.gov
Subject: Fw: clarification

Hi Alison--

Can you please clarify if the dates below are locked in and/or whether they are intended as full or partial day meetings. As I stated previously, I would very much like to be present at the kick-off meeting, but am unable to do so due to personal obligations. Also, I notice that many of the dates seem to be consecutive Friday-Monday combinations. This will make it very difficult for me to participate given that I have a 6 hour drive on either side of the meeting. Consecutive days within the same week would be much more beneficial to both me and the process as a whole. Obviously I may be able to share some of the burden with my colleagues at the park; however, they view my role as the lead on the project. Further, NPS interests extend beyond the park, making my participation essential.

Thanks for considering my comments and for accommodating my schedule to the degree that you are able. I know that organizing a process such as this is complex, and I appreciate your efforts to make it go as smoothly as possible.

Jeffrey R. Duncan, Ph.D.
Southeastern Rivers Program
National Park Service
175 Hamm Rd. Suite C, Chattanooga, TN 37405
Ph. (423) 266-1150 Fax. (423) 266-2558

----- Forwarded by Jeff Duncan/Atlanta/NPS on 02/06/2009 04:09 PM -----

Jeff
Duncan/Atlanta/NP
S To
"Alison Guth"
01/29/2009 02:57 <Alison.Guth@KleinschmidtUSA.com>
PM EST cc
Subject
Re: clarification(Document link:
Jeff Duncan)

Alison--Do you want to know our availability for these dates, or are you saying that the red dates are locked in? I very much want to be present, particularly for the kick-off meeting, but I'm not available the week of March 11. My wife has an out of town training all week, so I'm on the hook as a single dad.

Jeffrey R. Duncan, Ph.D.
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"Alison Guth"
<Alison.Guth@KleinschmidtUSA.com>
To
"Alison Guth"
01/29/2009 01:53 PM EST <Alison.Guth@KleinschmidtUSA.com>
"Winward point Yacht Club "
<commodore@windwardpoint.org>,
"Alan Axson"
<cfdwaxson@columbiasc.net>, "Alan
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<Alan.Stuart@KleinschmidtUSA.com>,
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Bennett" <BENNETAM@dhec.sc.gov>,
"Bertina Floyd"
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"Bill East" <billeast@sc.rr.com>,
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"Bill Mathias" <bill25@sc.rr.com>,
<bseibels@yahoo.com>, "Brandon
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<network@scpronet.com>,
<btrump@scana.com>, "Bud Badr"
<badrb@dnr.sc.gov>, "Buddy Baker "
<BakerB@dnr.sc.gov>, "Charlene
Coleman" <cheetahrk@yahoo.com>,
"Charles Floyd"
<jcharlesfloyd@sc.rr.com>, "Charlie
Compton" <cocompton@lex-co.com>,
"Charlie Rentz"
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<ccantley@scdah.state.sc.us>,
"Chuck Hightower "
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 "Donald Eng" <dengff@aol.com>, "Ed
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 <aregaf@dnr.sc.gov>, "George Duke"
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 Jobsis \"(American Rivers)\"
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 Kirkland" <kirklagl@dhec.sc.gov>,
 "Guy Jones" <guyjones@sc.rr.com>,
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 Schabacher " <Jayschab@aol.com>,
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 <pricej@biol.sc.edu>, "Jim
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 "Jim Glover"
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 Ruane " <jimruane@comcast.net>,
 "JoAnn Butler" <jbutler@scana.com>,
 "Joe Logan" <dianlog8@aol.com>,
 "Joel Huggins "
 <jbhuggins@lexhealth.org>, "John
 and Rob Altenberg"
 <seatowlakemurray@seatow.com>,
 <johned44@bellsouth.net>, "John
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 "Jon Leader" <leader@sc.edu>, "Joy
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 Kustafik"
 <kakustafik@columbiasc.net>, "Keith
 Ganz-Sarto"
 <keith_ganz_sarto@hotmail.com>,
 "Ken Styer " <kstyer@smeinc.com>,
 "Ken Uschelbec" <colkenu@aol.com>,
 "Kenneth Fox" <skfox@sc.rr.com>,
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 "Michael Murrell"
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 <msummer@scana.com>, "Mike Waddell"
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 <mquattlebaum@scana.com>, "Miriam
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<PatrickM@scccl.org>,
<LakeMurrayLOA@earthlink.net>,
"Prescott Brownell"
<prescott.brownell@noaa.gov>,
"Randal Shealy" <r1shealy@aol.com>,
"Randy Mahan" <rmahan@scana.com>,
"Ray Ammarell"
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<dobrasko@scdah.state.sc.us>,
<rbull@davisfloyd.com>, "Rhett Bickley" <rbickley@lex-co.com>,
"Richard Kidder"
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<sjones@imichotels.net>,
<lakewatchman@yahoo.com>, "Steve Summer" <ssummer@scana.com>,
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<tboozer@scana.com>, "Tony Bebber"
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<tylehowe@nc-cherokee.com>, "Van Hoffman" <vhoffman@scana.com>,
"Vivianne Vejdani"
<vejdaniv@dnr.sc.gov>, "Wenonah Haire"
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<Jon.Quebbeman@KleinschmidtUSA.com>

cc

Subject

clarification

One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out.
Thanks, Alison

-----Original Message-----

From: Alison Guth

Sent: Thursday, January 29, 2009 1:36 PM

To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming

Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

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In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can participate.

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Thanks, Alison

Updated Meeting Dates:

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Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Bill Mathias [bill25@sc.rr.com]
Sent: Sunday, February 08, 2009 9:21 PM
To: Alison Guth
Subject: RE: Wording review

Alison,

I don't see any problem with the additional paragraph.

Unfortunately, I missed the last, which I understand was final, meeting of the Safety RCG due to medical tests. However, I wanted you to know that I am still interested in participating in the on-going safety efforts in meetings to come.

Thanks.

Bill

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Friday, February 06, 2009 1:17 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; ben@scwf.org; Bill Argentieri; Carl Sundius; David Hancock; dchristie@comporium.net; James Leslie ; John Frick; Joy Downs; Patrick Moore ; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; lakewatchman@yahoo.com; Suzanne Rhodes; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Beber; Van Hoffman; Andy Miller; Bertina Floyd; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; Dee Dee Simmons ; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; ipitts@scprt.com; Kit Oswald ; turnerle@dhec.sc.gov; laura.mccary@gmail.com; Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; msummer@scana.com; Mike Waddell; Parkin Hunter; LakeMurrayLOA@earthlink.net; Randal Shealy; rparsons12@alltel.net; Richard Kidder; SKEENER@sc.rr.com; ryanity@scana.com; S padget; Sheri Armstrong ; Synithia Williams; Theresa Powers
Subject: Wording review

Hello RCG and TWC,

As we were conducting a final review of the SMP and Permitting Handbook in order to add in group edits, it has come to our attention that a topic of previous TWC/RCG discussion was not included. SCE&G has noted that they would like to continue with the policy of keeping the small, isolated parcels of fringeland in the future development category. These parcels consist of areas that are fragmented within a subdivision, between properties owned down to the 360', and/or very small in size. You may recall discussing these parcels when we viewed GIS maps of Future Development property around the lake with Orbis during the rebalancing exercises. There were no objections to this at the time of discussion. When requested in the past, the FERC has allowed SCE&G to sell these parcels down to the 360' contour with a fifty foot building setback. SCE&G would like to continue to work with these individual property owners on a case by case basis. This being said, the following wording is proposed to be added under section 7.1.4, Future Development Prescriptions, in the SMP:

“SCE&G will retain as an element of its shoreline management program, the policy of considering on a case by case basis, requests for sale of individual parcels of fringe land down to the 360' contour and with a 50 foot building setback, in the following circumstance: the property is located in a previously developed area (usually a subdivision); the properties in the immediate area of the

considered parcel already are owned by individuals down to the 360' contour and developed; and the size and/or configuration of the property is such that no meaningful ecological benefit to the area would result in requiring the new, non-disturbance buffer requirements. In appropriate circumstances, protective requirements may be imposed through covenants or other mechanisms."

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, January 29, 2009 1:53 PM
To: Alison Guth; 'Winward point Yacht Club'; 'Alan Axson'; Alan Stuart; 'Alex Harmon (aharmon@lpagroup.com)'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore'; 'Phil Hamby (LakeMurrayLOA@earthlink.net)'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Stan Jones (sjones@imichotels.net)'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbber'; 'Tyler Howe (tylehowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wenonah Haire'; 'Jon Quebbeman'
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One other item, the dates listed in red are those that are new and have replaced days from the previous list that I sent out.
Thanks, Alison

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Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester; Linda Schneider; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong; Skeet Mills; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani; Wenonah Haire; Jon Quebbeman
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Alison Guth

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Sent: Thursday, January 29, 2009 1:43 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; John Frick; Joy Downs; Patrick Moore ; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Subject: Existing Commercial Facilities - Moratorium Removal

Hello TWC,

SCE&G Lake Management will be lifting their moratorium on existing multi-slip facilities on Lake Murray. At this time the moratorium removal will only apply to existing facilities that may want to expand. The moratorium will still be in effect for any new facilities. If any of the existing facilities request an expansion permit, they will be required to follow the new proposed guidelines established during the relicensing process and developed by the Lake and Land TWC. These guidelines are provided below. Please give Tommy Boozer a call if you have any questions regarding this issue.

Thanks, Alison

- Existing marinas may remodel, rebuild, or repair within their existing footprint with the approval of the appropriate local, state, and federal agencies. To avoid additional permitting requirements, the facility would need to maintain or reduce the number of slips originally permitted.
- Additions to existing marinas that increase the number of slips or expand the existing footprint of the facility will require a permit for the additional slips.
- Expansion projects of existing marinas are evaluated on a case-by-case basis and must go through the MRC. SCE&G will have final approval of all projects.
- If damage to an existing marina caused by storm or other natural events requires maintenance and repair, the work completed on the facility must comply with the original permit conditions and specifications, and is not required to meet new standards.

Alison Guth

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From: Alison Guth
Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Second Update: Settlement Agreement Dates

Hello Folks,

We have finally been able to reserve rooms for the upcoming Settlement Agreement Meetings and I wanted to make everyone aware that a few of the meeting dates have changed (see below). First off, at this time all of the Settlement Agreement Meetings will take place at the Lake Murray Training Center. Furthermore, we originally discussed having our kick-off meeting on March 10th, however we have learned that there is another meeting that day that many of you will be attending. Therefore, we have pushed off our kick-off meeting date to March 11th.

Our plan is to coordinate the development the Settlement Agreement (SA) language by resource group areas (fish and wildlife, water quality, recreation, cultural resources, lake and land management, safety, and operations). This will allow those individuals who have little to no interest in certain resource areas the opportunity to opt out of the meetings allotted to develop the specific language in that area.

In the interest of coordinating this effort and developing agendas, I will need those interested in participating to do two things for me:

First, we would like each of you to indicate whether you will try and be present for every settlement meeting or only specific areas. If you are only interested in specific resource area(s), please indicate those areas of interest in an email back to me. For instance if you are solely interested in recreation, this gives you a chance to avoid sitting through each of the other 6 resource group settlement discussions. Of course, everyone is welcome to attend each of the settlement meetings regardless of resource area. Our intent is to try and get an idea of how many people we will need to accommodate during each meeting and the relative size of each resource area so we can develop a schedule and agenda.

Second, if you know that you will be unavailable for a certain date(s) listed below, please let me know that as well. We will do our best to schedule the resource area meetings on those dates where most of the interested individuals can

participate.

I do want to clarify something, it is the intent to develop this Comprehensive Settlement Agreement in good faith with a goal of signing into the entire agreement package. There will be no line by line signing of the agreement. Therefore, if you choose not to attend a specific resource area, you will not have the opportunity to contest or object to language in the settlement agreement dealing with those resource meetings you were absent from. Again, we encourage full participation by all in developing the Settlement Agreement. Alan will go into more detail on this at our March 11th kickoff meeting. Please let us know your intentions by February 14th.

Thanks, Alison

Updated Meeting Dates:

March '09:

Wednesday the 11th
Thursday the 12th

Wednesday the 18th
Thursday the 19th
Friday, the 20th

Monday, the 23rd
Wednesday the 25th
Friday the 27th

Monday, the 30th

April '09:

Wednesday the 1st
Friday the 3rd

Monday the 13th
Wednesday the 15th
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Monday the 27th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th (potential date, if needed)
Wednesday the 6th (potential date, if needed)
Thursday the 7th (potential date, if needed)

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

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Sent: Thursday, January 29, 2009 1:36 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokekee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: James L. Leslie, Jr. [jlesliejr@bellsouth.net]
Sent: Tuesday, January 27, 2009 4:04 PM
To: Alison Guth
Subject: Re: Comments of the SMP and Permitting Handbook

COMMENTS OF JAMES L. LESLIE, JR. - MARINA OWNER

I have two general comments and associated requests for specific language in the preamble to any FERC license that may be granted to SCE&G. I also request that the term of the license be limited to the shortest period feasible due in part to the current economic uncertainty.

FIRST: SCE&G does not own the waters of Lake Murray. The FERC license should contain a preamble that clearly states that Lake Murray is a navigable water of the United States, owned by the public.

In 1954, the case of *Thompson v. South Carolina Electric and Gas Co.*, 122 F.SUPP. 313. (D.C.S.C., 1954) held Lake Murray to be a navigable water of the United States. This ruling defines Lake Murray as public property.

SECOND: The preamble to the FERC license should clearly state that SCE&G is bound by the principles of "due process and equal protection" in its administration of Lake Murray.

The FERC should not enter into a license that appears on its face to convey more authority to SCE&G than the FERC possesses. The people of the United States grant governing authorities the right to administer their property. The FERC administers Lake Murray at the will of the public and pursuant to various laws and regulations and related court/regulatory decisions.

The FERC is bound by the principles of due process and equal protection in its administration of Lake Murray. Therefore the FERC should not grant a license to SCE&G that is free from the principles of due process and equal protection. The FERC should state in clear and unambiguous language that SCE&G is bound by due process and equal protection as it administers the FERC license.

James L. Leslie, Jr.

----- Original Message -----

From: [Alison Guth](#)

To: [Vivianne Vejdani](#) ; [Alan Stuart](#) ; [Alison Guth](#) ; [Amanda Hill](#) ; [Andy Miller](#) ; [ben@scwf.org](#) ; [Bertina Floyd](#) ; [Bill Argentieri](#) ; [Bill East](#) ; [Bill Marshall](#) ; [Bill Mathias](#) ; [btrump@scana.com](#) ; [Carl Sundius](#) ; [Charlie Compton](#) ; [Charlie Rentz](#) ; [Chris Page](#) ; [Daniel Tufford](#) ; [David Allen](#) ; [David Hancock](#) ; [Dee Dee Simmons](#) ; [dchristie@comporium.net](#) ; [Don Tyler](#) ; [George Duke](#) ; [Gerrit Jobsis \(American Rivers\)](#) ; [Hank McKellar](#) ; [ipitts@scprt.com](#) ; [James Leslie](#) ; [John Frick](#) ; [Joy Downs](#) ; [Kit Oswald](#) ; [turnerle@dhec.sc.gov](#) ; [laura.mccary@gmail.com](#) ; [Linda Lester](#) ; [Linda Schneider](#) ; [Mary Kelly](#) ; [Michael Murrell](#) ; [Mike Duffy](#) ; [msummer@scana.com](#) ; [Mike Waddell](#) ; [Parkin Hunter](#) ; [Patrick Moore](#) ; [LakeMurrayLOA@earthlink.net](#) ; [Randal Shealy](#) ; [Randy Mahan](#) ; [rparsons12@alltel.net](#) ; [Rhett Bickley](#) ; [Richard Kidder](#) ; [SKEENER@sc.rr.com](#) ; [Ron Ahle](#) ; [Ronald Scott](#) ; [Roy Parker](#) ; [ryanity@scana.com](#) ; [S padget](#) ; [Sheri Armstrong](#) ; [lakewatchman@yahoo.com](#) ; [Suzanne Rhodes](#) ; [Synithia Williams](#) ; [Theresa Powers](#) ; [Tom Brooks](#) ; [Tom Ruple](#) ; [Tommy Boozer](#) ; [Tony Bebber](#) ; [Van Hoffman](#)

Sent: Monday, January 05, 2009 2:54 PM

Subject: Comments of the SMP and Permitting Handbook

Hello all,

In preparation for the Lake and Land Management RCG meetings this Thursday and Friday, I have attached comments on the SMP and Permitting Handbook provided to me by the Lake Murray Landowners' Association. We will be reviewing these, along with all other comments, at the meetings. Thanks, Alison

<<LMLA SMP Comments.pdf>> <<LMLA Handbook Comments.pdf>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

From: Matt Rice [MRice@americanrivers.org]

Sent: Monday, January 26, 2009 5:31 PM

To: BARGENTIERI@scana.com

Cc: BulakJ@dnr.sc.gov; Bill Marshall; Ray Ammarell; Will Dillman ; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bud Badr; Chad Altman; dchristie@comporium.net; Gerrit Jobsis; Gina Kirkland; Hal Beard; Jim Glover; Malcolm Leaphart; giffinma@dhec.sc.gov; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; RMAHAN@scana.com; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart; Jennifer Hand

Subject: Excess Water for Generation and Naturalized Flows

Bill:

We believe SCE&G's commitment to operating Saluda in an "economically reasonable manner"; generating with excess water over longer periods of time rather than in short spikes or excessive downstream fluctuations is a tremendous step forward. This proposed change in operation will benefit aquatic communities in the LSR, limit the impact of cold water on striped bass spawning in the Congaree River, and enhance recreation for boaters and anglers. It will also make the Saluda a significantly safer place.

Because SCE&G had made it clear they are willing to operate Saluda in a manner that eliminates short excessive downstream fluctuations outside of reserve operations, the ESWM team proposed a minimum generation period of 12 hours with limited flow variation for all non-reserve operations. This was an effort to craft language that would be reflective of SCE&G's commitment to the proposed change in operation and ensure enforceability in the new operating license. At the Instream Flow TWC meeting on January 12, 2009 SCE&G rejected the 12 hour timeframe because it would reduce operational flexibility too much but suggested that a 6 hour timeframe could be agreed to. This was encouraging.

In the email containing the January 12 meeting notes it states the 6 hour timeframe has now been rejected by SCE&G because: "It was determined that placing such constraints on generation periods was impractical and would unacceptably reduce the flexibility necessary to operate the plant to meet system demand as efficiently, effectively, and reliably as necessary". While placing specific time constraints on generation periods may be considered unacceptable to SCE&G, it is imperative that SCE&G's commitment to improved operations is represented in the new operating license in a manner that is both transparent and enforceable.

American Rivers as well as several Instream Flow TWC stakeholders believe this to be a critical issue within this relicensing process. We commend SCE&G for their commitment to operations that will significantly reduce adverse impacts to downstream aquatic habitat needs in both the Saluda and Congaree Rivers, enhance recreation, and create safer conditions for Saluda River users. We look forward to resolving this issue during the settlement negotiations so that SCE&G can have the operational flexibility it needs while at the same time assuring downstream flows are delivered in a manner that supports ecological and recreational needs of the river.

Matt & Gerrit

Matthew Rice

Associate Director Southeast Conservation

American Rivers

2231 Devine Street, Suite 202, Columbia, SC 29205

Phone: 803-771-7206

Cell: 803-422-5244

Alison Guth

From: Tony Bebber [tbebber@scprt.com]
Sent: Monday, January 26, 2009 5:07 PM
To: Dave Anderson; Alan Stuart; Vivianne Vejdani ; BARGENTIERI@scana.com; Bill Marshall; David Hancock; dchristie@comporium.net; George Duke; Jennifer Hand; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis; Patrick Moore ; RMAHAN@scana.com; lakewatchman@yahoo.com; Tim Vinson; Tommy Boozer; Van Hoffman; Alison Guth
Subject: RE: Distribution of Final TWC Draft Recreation Plan

Thanks for making the Final Draft available. We have reviewed the document and offer the following comments:

LSR vs. Lower Saluda River: I may have brought this up before but I believe it makes sense to discuss “the lower Saluda River” throughout the document rather than “the LSR” in most cases (or use “the river” where appropriate). The draft did not abbreviate “Lake Murray” to “LM” nor provide acronyms for many other topographical features. The river should receive the same significance as the lake.

Table 3-1, Dreher Island State Recreation Area does have 2 Boat Pump Outs and 2 RV Dumping Stations.

Page 5-10, Old Corley Bridge Road should be “located on the west side of Cloud’s Creek”.

Page 5-12, under Dreher Island, where it mentions management, it should say “State Park Service” or “SCPRT” rather than “the state”. We would also like to consider some improvements to help offset costs of operating the park and the proposed new park.

Page 5-13, Bundrick Island, 1st paragraph, last sentence, “...this site supports primitive camping,...

Page 5-15, provide a list of “future recreation” sites along the lower Saluda River, with acreages as you did on 5-8 for the lake.

Table 6-1, This should be a 20-30 year plan with review/revision at 10 year intervals. All involved would like to see when these other “future” sites are anticipated to come on line. If there is a need to shuffle one for another in priority at the 10 year review, that should be possible. Also, list all of the current and future sites and if no action will be taken, leave it blank. It would also be good to attach a map (or series of maps) here to show where these facilities are and how they relate to each other.

Table 6-1, Clouds Creek, add: “Provide directional signs to site.”

Table 6-1, for Rocky Creek, we would like to see the following: Year 1-5 Negotiate lease and formal planning process; Year 6-10 Initial Development; Year 11-15 Phase 2 Development.

Page 6-4, 1st paragraph: Explain how the Form 80 reports will be generated, specifically how use and needs will be estimated – on-site surveys, telephone surveys, etc. Simply adjusting for population growth from the 2006 or earlier data will not give an accurate view of usage at public sites or on the project in general.

Page 7-2, 2nd paragraph of 7.2: Use new classifications (Easement, Commercial, Buffer Zone, Future Development, Public Recreation, Forest Management, Natural Areas, and Project Operations. Amend last sentence in that paragraph to read: “In general, the public may access SCE&G-owned lands, with the exception of lands reserved for Project Operations.”

Page 7-2, 3rd paragraph of 7.2: Describe the outcome of the discussion related to conservation on the Lower Saluda (xxx acres set aside in future recreation...).

Page 7-3, top of page: “...from the focus group to the Recreation RCG, although not all...” And describe the outcome of this action by the RCG.

Page 7-3, 1st sentence of 7.3: add SCPRT to the list of those expressing concern about river user safety.

Page 7-4, paragraph that starts "SCE&G also manages": move this paragraph to last paragraph in that section.

Page 7-4, paragraph that starts "The Recreation RCG": add to the end of this paragraph a discussion of the new lights and sirens added or planned.

Page 7-5, 4th paragraph: "...the recreational flow schedule yearly in consultation with affected groups and provides..."
Also, list proposed flow schedule or chart here as you did for the CFD below.

Page 7-5 and 7-6, paragraphs of CFD flows: Indent these so they fall under the "as follows" paragraph or use a chart.

Page 7-6, 2nd paragraph of 7.5: what is outcome of RCG recommendations?

Page 7-7, 3rd paragraph: before the "however" sentence, add: "Recent turbine improvements have increased DO concentrations."

Thanks for the opportunity to review.

Tony Bebber, AICP

Planning Manager, Recreation, Planning & Engineering Office

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]

Sent: Tuesday, December 30, 2008 2:52 PM

To: Alan Stuart; Vivianne Vajdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; dchristie@comporium.net; George Duke; Jennifer Hand; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis; Patrick Moore ; Randy Mahan; lakewatchman@yahoo.com; Tim Vinson; Tommy Boozer; Tony Bebber; Van Hoffman; Alison Guth

Subject: RE: Distribution of Final TWC Draft Recreation Plan

All,

I have posted the file to the FTP site here:

<ftp://ftp.kleinschmidtusa.com/455-051/>

You should be able to right click on the PDF file and choose "Save Target As" or something like that and save it to your computer. If you left click on it, the file will open in your browser (eventually, depending on your internet connection speed). If you still have trouble retrieving the file or want me to e-mail it to you, let me know as soon as possible.

Dave

-----Original Message-----

From: Alan Stuart

Sent: Tuesday, December 30, 2008 10:19 AM

To: Dave Anderson; Vivianne Vejdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Summerlin; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Patrick Moore ; Randy Mahan; Steve Bell (lakewatchman@yahoo.com); Tim Vinson; Tommy Boozer; Tony Bebbler; Van Hoffman; Alison Guth

Subject: RE: Distribution of Final TWC Draft Recreation Plan

Dave,

I have a suggestion, since the file is so large try posting it to the Kleinschmidt ftp site. Alison just recently did this for the Shoreline Management Plan and Permitting Handbook and it worked well. Jeni Watson can set up a directory for you with a login name and password. This way all you have to do is send the link to everyone with the login information and password. This should provide an easy and painless way for people to obtain the Plan and you won't have to worry about attachment size and email servers or producing CD's.

Alan

From: Dave Anderson

Sent: Mon 12/29/2008 9:18 PM

To: Vivianne Vejdani ; Bill Argentieri; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Summerlin; Joy Downs; Lee Barber; Malcolm Leaphart; Mark Davis (mdavis@scprt.com); Patrick Moore ; Randy Mahan; Steve Bell (lakewatchman@yahoo.com); Tim Vinson; Tommy Boozer; Tony Bebbler; Van Hoffman; Alison Guth; Alan Stuart

Subject: Distribution of Final TWC Draft Recreation Plan

Recreation Management TWC Members,

I trust everyone has had a good Christmas and is enjoying the holidays.

I am ready to distribute the final TWC draft of the Recreation Plan. We are currently trying to set up a meeting towards the end of January (January 28th) to review the plan and take final comments before distribution to the Recreation RCG. Once the meeting date has been finalized (waiting to make sure some internal folks can make it), Alison will send around a meeting notice with the location and time.

As far as the draft Plan, the file size is large (11 megabytes) so I have not attached it to this e-mail. If your e-mail system is capable of handling an attachment of this size, let me know and I can send it. If you cannot receive such a large attachment, send me your mailing address and I will get a CD in the mail for you.

The Plan is in PDF format so you can see the entire package (including appendices). Appendix F (As Built and Concept Design Drawings) is being completed and will be made available when finalized. I don't think these are necessary for your review and is really just information the FERC will need in their analysis.

Since it is a PDF, you have two options for submitting comments and edits. You may bring a marked up copy to the meeting or you can keep a running list of comments/edits by referencing the page number and paragraph. For example, Page 1, in the paragraph that begins "In the beginning".

Have a safe and happy new year and I will see y'all in January.

Dave

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Monday, January 26, 2009 11:52 AM
To: BARGENTIERI@scana.com
Cc: Mike Waddell; Jim Bulak; Dave Anderson; Alison Guth; gjobsis@americanrivers.org; MRice@americanrivers.org; patrickm@sccl.org
Subject: RE: Saluda Relicensing: January 12, 2009 IFIM Draft Meeting Notes

Bill,

Mike and I thought the striper flows were to **supersede** the below

April – May Rec Flows that I pulled out of Appendix E of the master Rec Plan... Thanks for clarifying that that is not the case. So, we amend our request to have the proposed 1000 CFS Rec flows for April and May lowered to 700 cfs, with no changes in times...

Hopefully that will be agreeable to all since the 1000 cfs flows were requested BEFORE the DRN striper flow requests when more days of less than 1000 were anticipated, and that flow was considered better for 'light boating' than 700 cfs. However, especially for Memorial Day, and even for the other weekend days in April and May, the 700 flows would be safer as so many would head for the river on weekends for many other warm weather activities, like sunbathing, swimming, etc; and, there would be plenty of other days very suitable for 'light boating' during those two months as the striper flow regime is met with the 1,000 minimum.

Would appreciate you following through as needed on our request that the April and May Rec Flows with no system reserve releases be modified from 1000 to 700 cfs flows, with no changes in the times. I'll cc this note to Dave and also to Gerrit and Matt, along with Jim and Mike, to give them a heads up before Wednesday afternoon when Dave mentioned he would hold the Rec Flow discussions after 2:00 pm. Mike will be at the meeting Wednesday all day, and I will be there by 2:00.

Thank You.

Current Recreation Flow Releases – Appendix E

-

April Recreation (Sat.) 1 5 12:00 17:00 **1,000** 0

General Recreation (Sun.) 1 5 7:00 12:00 **1,000** 0

CFK 1 9 7:30 16:30 10,000 6,470

May General Recreation 1 9 8:00 17:00 **1,000** 0

Memorial Day/ General

Recreation 1 9 8:00 17:00 **1,000** 0

Proposed Recreation Flow Releases 01/26/09

April Recreation (Sat.) 1 5 12:00 17:00 **750** 0

General Recreation (Sun.) 1 5 7:00 12:00 **750** 0

CFK 1 9 7:30 16:30 10,000 6,470

May General Recreation 1 9 8:00 17:00 **750** 0

Memorial Day/ General

Recreation 1 9 8:00 17:00 **750** 0

From: ARGENTIERI, WILLIAM R [mailto:BARGENTIERI@scana.com]

Sent: Friday, January 23, 2009 1:12 PM

To: LEAPHART, JR., MALCOLML

Cc: Mike Waddell; Jim Bulak

Subject: RE: Saluda Relicensing: January 12, 2009 IFIM Draft Meeting Notes

Malcolm,

First, I would like to thank you for acknowledging the improvements that SCE&G has made to safety on the lower Saluda River for the fishing community through our expanded warning system. Now I shall address your requests.

Your first request has to do with the number of days that the Instream Flow TWC will allow the minimum flow to be modified for wade fishing recreation periods. You originally asked for two days of reduced flows for each month during April and May (a total of four days). It was determined in the meeting to allow 6 hours of reduced minimum flows during each of those requested days. However, you now are asking for four days of reduced flows each month (a total of eight days). This is not something that Jim Bulak or I can agree to without input from the entire Instream Flow TWC. One thing to keep in mind is that according the Recreation Plan, April has 5 hours per weekend day for wade fishing flows and May has 9 hours per weekend day for wade fishing flows. So we will have to modify your original request of 6 hours per weekend day with the Instream Flow TWC anyway.

Your next request has to do with a permanent reduction in the minimum flow to 700 CFS for a six hour period, four days each month. The proposed minimum flow during this time of year is 1000 CFS

plus striped bass flows based on the USGS Broad River at Alston gauge. Even if the Instream Flow TWC were to agree to make a permanent change to the minimum flow scheme in response to your request, SCE&G would require them to be counted towards the allowed recreational flow days. Why?

Because they would be different from the flows that otherwise would occur at this time of year. They would be special flows, intended to draw people to the river for that specific recreational activity, i.e. wade fishing. Our policy in administering recreational flow days/events necessarily requires us to remove Saluda Hydro from reserve status inasmuch as people effectively are being "invited" to the river by a posting on our website alerting folks of those special flow-regulated events. Trying to create a special class of recreational flows, i.e. those for which SCE&G would not adhere to its policy of removing Saluda from its reserve status, creates an unacceptable potential for confusion among the recreating public who might miss the flag alerting them that it's a "wade at your own risk" recreational flow event. Because we will hold fast to our policy of removing Saluda from reserve status during recreational flow events, any periods of reduced flows allowed by the Instream Flow TWC will be counted among the 51 partial recreational flow days we have agreed to. They will not be allowed as additional recreational flow days.

Another element of your request was to post announcements on our website in advance of these flows. We will announce all recreational flows ahead of time on our website as recreational flows. During periods of minimum flow operation the website will list planned generation as follows "SCE&G is currently generating. The river flows are expected to be in the [blue range](#)" with the appropriate disclaimer for potential rapid and unannounced changes in operation.

Let me know if you would like me to request additional wade fishing recreational days during the April/May time period from the Instream Flow TWC.

Bill

From: LEAPHART, JR., MALCOLML [mailto:MALCOLML@mailbox.sc.edu]

Sent: Tuesday, January 20, 2009 3:36 PM

To: ARGENTIERI, WILLIAM R

Cc: Mike Waddell; Jim Bulak

Subject: FW: Saluda Relicensing: January 12, 2009 IFIM Draft Meeting Notes

Bill,

Mike and I would prefer for our request for some 6 hour weekend 700 cfs flows in April and May to be incorporated into the 'striper flows'... rather than making that a request for more Recreational Flows.

That preference is based on Jim Bulak's okay that some 700 cfs flows for 6 hour periods in those months would not affect the goals of the DNR flow regime; and, also because we are NOT looking for a guarantee that no reserve flows be released if needed as the Rec Flows call for.

In fact, we would further ask at this time of you and Jim if 700 cfs flows for 6 hour periods on a

Saturday or Sunday, with SCE&G website announcements at least a day in advance, could be incorporated into ALL the weekends in April and May as part of the striper flow regime – without any restrictions on reserve releases if needed?? That makes sense to us with the expanded warning system and should give you more flexibility than a Rec Flow; and, hopefully would not impact the positive effects of the flows as proposed by DNR on spring fisheries.

Thanks for considering... Mike and I look forward to your reply at your earliest convenience.

From: Jennifer Hand [mailto:Jennifer.Hand@KleinschmidtUSA.com]

Sent: Thursday, January 15, 2009 5:04 PM

To: Will Dillman ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Chad Altman; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Summerlin; Jim Glover; LEAPHART, JR., MALCOLML; giffinma@dhec.sc.gov; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart

Subject: Saluda Relicensing: January 12, 2009 IFIM Draft Meeting Notes

All:

Attached for your review are the January 12, 2009 Instream Flow Technical Working Committee meeting notes. Please have comments back to me by January 22, 2009. Ray Ammarell's PowerPoint presentation has been posted to the Saluda Hydro relicensing website. The link to the presentation may be found in the meeting notes.

<<2009-1-12 Instream Flows TWC Meeting Notes draft-jsh.doc>>

Thanks,

Jennifer S. Hand

Biologist

Kleinschmidt Associates

204 Caughman Farm Lane

Suite 301

Lexington, SC 29072

P:803.951.2077

F:803.951.2124

Jennifer.Hand@KleinschmidtUSA.com

Alison Guth

From: ARGENTIERI, WILLIAM R [BARGENTIERI@scana.com]
Sent: Friday, January 23, 2009 1:12 PM
To: Gerrit Jobsis
Cc: BertFloyd@sc.rr.com; Joy Downs; SUMMER, MICHAEL C; AMMARELL, RAYMOND R; Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; RMAHAN@scana.com; Dick Christie; Vivianne Vejdani
Subject: RE: New Minimum Flow/LIP Proposal

Gerrit,

You are correct that DNR questioned whether or not our proposal would be “equitable” in its impact upon the competing interests. DNR expressed particular concerns in regards to providing flows to the Santee Cooper lakes during low inflow periods. Acknowledging the validity of those concerns, DNR was asked by SCE&G to provide what they would suggest to be an appropriate method for determining “equitability” and to explain how it would be measured. Further, they were asked to identify the measurable benefits to the Santee Cooper lakes that they believed would derive from whatever additional flows they would see from a change from a one foot trigger and a two foot trigger during low flow years. Hopefully, they will be able to provide that information at this meeting. Should DNR also choose to evaluate other elevations, certainly they are free to do so. It was not, however, either an assignment or a proposal for DNR to do so. At the end of the meeting, I asked specifically whether there were any objections to our moving forward with this proposal, relative to these new, minimum flows and LIP, to present them to the LIP Focus Group. No one voiced any objection to doing so. Nevertheless, once we have a final draft of the LIP document, we shall present it to the appropriate RCG’s to be considered with the rest of the settlement issues.

The item of possibly imposing duration constraints on generation periods was discussed at the Instream Flow TWC. However, when I discussed this request with SCE&G system operations personnel and Management, it was determined that placing such constraints on generation periods was impractical and would unacceptably reduce the flexibility necessary to operate our plant to meet system demand as efficiently, effectively, and reliably as necessary. Each situation is different and dependent on unique conditions for that period of time. Situations can and have occurred that make it impracticable to maintain a flow once it has been set and to limit the licensee to a pre-determined period of time for generation would present new operational constraints that we do not want to occur. We have agreed to operate Saluda Dam in an economically reasonable manner favoring lower flows for longer periods of time within the operating efficiency of the units as opposed to higher flows for shorter periods that will ensure protection of life and property, respond to changed hydrologic or other circumstances, meet lake management objectives, and not interfere with required maintenance. Hence, because there are too many variables associated with how we would release the “excess water,” or even whether we would release it, SCE&G will not provide the information requested in the TWC meeting. My plans were to respond directly to the Instream Flow TWC with this news when the final meeting minutes for the January 12 meeting were distributed.

The last item I would like to address relates to the objectives developed through the ESWM process.

Our goals and objectives have been and still are to address, and hopefully provide answers, solutions, or plans relative to issues addressed in the TWC/RCG meetings. The ESWM process was not part of the relicensing process, but rather was a parallel, independent process. If the answers, solutions, or plans relative to issues addressed in the TWC/RCG meetings coincide with the ESWM goals and objectives, we consider that a positive. Based on the recommendations you have provided us, we suspect the ESWM flows are subsumed into the stripe bass, recreation, and other biological flows to the degree that they will be identified in the relicensing settlement agreement. However, because it is an extra-licensing matter, we are not planning to have ESWM referenced in any of the settlement agreements or license articles.

Bill

From: Gerrit Jobsis [mailto:gjobsis@americanrivers.org]

Sent: Thursday, January 22, 2009 5:24 PM

To: AMMARELL, RAYMOND R; Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; ARGENTIERI, WILLIAM R; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; MAHAN, RANDOLPH R

Cc: BertFloyd@sc.rr.com; Joy Downs

Subject: RE: New Minimum Flow/LIP Proposal

Ray,

Thank you for the update and a copy of SCE&G's proposal discussed at last week's instream flow meeting. One thing I'd like to clarify is that while we did have considerable discussion about SCE&G's proposal, we did not reach consensus about adopting a 1 foot LIP trigger. As I recall, DNR and others were going to evaluate the 1 ft vs. 2 ft LIP trigger data provided by SCE&G during that meeting, as well as something in between, say a 1.5 ft LIP trigger. SCE&G made it clear that they supported their 1 ft LIP proposal, however, my memory is that the committee as a whole never agreed to that.

Another important discussion at the instream flow meeting was how the project would operate when generating with water in excess of the minimum flow. SCE&G's proposal to release those flows on a continuous basis over a minimum of 6 hours is an important part of the new minimum flow proposal and step forward in meeting the objectives of the goals developed through the ESWM process.

Gerrit

Gerrit Jöbsis, American Rivers
Southeast Regional Director
2231 Devine Street, Suite 202, Columbia, S.C. 29205
803.771.7114 (t) 803.771.7580 (f)
gjobsis@americanrivers.org

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From: AMMARELL, RAYMOND R [mailto:RAMMARELL@scana.com]
Sent: Thursday, January 22, 2009 3:31 PM
To: Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; ARGENTIERI, WILLIAM R; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Gerrit Jobsis; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; MAHAN, RANDOLPH R
Cc: BertFloyd@sc.rr.com; Joy Downs
Subject: New Minimum Flow/LIP Proposal

To All,

This is being sent to the members of the LIP Focus Group, and to Ms. Downs and Ms. Floyd. At an Instream Flow TWC meeting in December, the Committee decided to incorporate the SCDNR striped bass flow request into the minimum flow proposal during the period April 1 – May 10. Their proposal replaces the originally proposed 1,000/1,300/1,000 CFS April-May flows with the SCDNR striped bass flows and 1,000 CFS minimum flows. The TWC proposal also included adopting a 2 foot below target reservoir level trigger for the LIP, using a 14 day flow average.

SCE&G evaluated the TWC proposal, and developed a modified version which we presented at the last Instream Flow TWC meeting on January 12. The attached slide summarizes SCE&G's proposal to the TWC. There were no major objections in the Instream Flow TWC meeting to the SCE&G proposal. As such we are moving forward with presenting this same proposal to the LIP Focus Group in an effort to resolve this issue prior to our settlement agreement meetings.

An invitation will be forthcoming shortly for a Focus Group meeting on January 30. At that meeting, we will give some background material on the new minimum flow and LIP proposal and present the results of our evaluation. Please review the attached proposal and be prepared to discuss it at the meeting.

Thanks,

Ray Ammarell

SCE&G - Fossil Hydro Technical Services

111 Research Drive

Columbia, SC 29203

803-217-7322 Phone

803-206-3710 Cell

803-933-7847 Fax

rammarell@scana.com

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Thursday, January 22, 2009 5:24 PM
To: AMMARELL, RAYMOND R; Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; RMAHAN@scana.com
Cc: BertFloyd@sc.rr.com; Joy Downs
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Gerrit

Gerrit Jöbsis, American Rivers
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gjobsis@americanrivers.org

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www.AmericanRivers.org/eRiver

From: AMMARELL, RAYMOND R [mailto:RAMMARELL@scana.com]
Sent: Thursday, January 22, 2009 3:31 PM
To: Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; ARGENTIERI, WILLIAM R; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Gerrit Jobsis; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; MAHAN, RANDOLPH R
Cc: BertFloyd@sc.rr.com; Joy Downs
Subject: New Minimum Flow/LIP Proposal

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An invitation will be forthcoming shortly for a Focus Group meeting on January 30. At that meeting, we will give some background material on the new minimum flow and LIP proposal and present the results of our evaluation. Please review the attached proposal and be prepared to discuss it at the meeting.

Thanks,

Ray Ammarell
SCE&G - Fossil Hydro Technical Services
111 Research Drive
Columbia, SC 29203
803-217-7322 Phone
803-206-3710 Cell
803-933-7847 Fax
rammarell@scana.com

Alison Guth

From: Shane Boring
Sent: Wednesday, January 21, 2009 5:12 PM
To: 'Amanda_Hill@fws.gov'
Cc: Alan Stuart
Subject: FW: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon



Saluda Sturgeon
Monitoring Rec...

Amanda:

To quickly summarize our discussion yesterday regarding the sturgeon proposal:

- The group reviewed the study ideas presented in the NMFS proposal (See Prescott's e-mail below and the attached proposal)
- Alan noted that much of what is being proposed are the same ideas that have been discussed for the first phase of the ACCORD sturgeon studies.
- It was determined that a plan would be drafted that incorporates the ideas for recommended studies. The plan will include a commitment to request that the NMFS-proposed studies be integrated into the first 5-year phase of the ACCORD studies (i.e., the Plan will serve as a conduit of the NMFS study ideas to the ACCORD process).
- The plan will be drafted by Kleinschmidt, incorporating much of the info provided in Prescott's document. Plan will include a commitment to consult with NMFS following completion of the initial 5 yrs of ACCORD studies regarding whether or not the ACCORD has adequately addressed the NMFS Saluda-specific objectives. If not, SCE&G will work with NMFS to ensure that all of the studies requested are addressed outside of the ACCORD.

I hope all of that made sense; it's getting late in the day. We will be preparing notes from the call and will distribute those ASAP. let me know if you have further questions.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Attached is a copy of the proposal we sent out on November 20, with a few minor edits. The intent of the proposal is to provide a framework for a sturgeon protection plan, and consideration of sturgeon in the relicensing settlement agreement.

I look forward to discussing this proposal with interested stakeholders during our

January 20 conference call.

Regards,
PB

Shane Boring wrote:

When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

~~*~*~*~*~*~*~*~*

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565

Columbia Area Local - 217-6565

Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until

January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring

Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, January 21, 2009 3:52 PM
To: Alison Guth; 'Winward point Yacht Club'; 'Alan Axson'; Alan Stuart; 'Alex Harmon (aharmon@lpagroup.com)'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore'; 'Phil Hamby (LakeMurrayLOA@earthlink.net)'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Stan Jones (sjones@imichotels.net)'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbber'; 'Tyler Howe (tylehowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wenonah Haire'; 'Jon Quebbeman'
Subject: Update: Saluda Hydro Project Settlement Agreement Meetings

Hello All,

As an update to my previous email regarding the Settlement Agreement Meetings, we are having some difficulties scheduling meeting facilities for all the dates proposed. Subsequently, some of these days may shift to a Monday or a Friday in order to obtain a meeting room. I will keep you posted of when final dates are scheduled. Thanks, Alison

-----Original Message-----

From: Alison Guth
Sent: Thursday, January 15, 2009 2:54 PM
To: Winward point Yacht Club; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester; Linda Schneider; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong; Skeet Mills; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-

Subject: Saluda Hydro Project Settlement Agreement Meetings

Hello RCG and TWC Members,

As we are winding down the relicensing, the time is approaching to have the Settlement Agreement Meetings. Although exact locations for each of the meeting dates listed below are not yet definite, we anticipate that the majority of these meetings will take place at the Lake Murray Training Center. In the next few weeks we will be sending out detailed agendas for these meeting dates so that one may choose to attend these meetings based on topics of interest. The first meeting, however, will be a kick-off meeting that everyone is encouraged to attend. At that time we will be presenting a guidance document developed for the Settlement Agreement process.

The following dates are being provided so that you may begin blocking dates off on your schedules. And again, more information on the meetings topics by date is forthcoming. Thanks! Alison

March '09:

Tuesday the 10th
Wednesday the 11th
Thursday the 12th
Tuesday the 17th
Wednesday the 18th
Thursday the 19th
Tuesday the 24th
Wednesday the 25th
Thursday the 26th
Tuesday the 31st

April '09:

Wednesday the 1st
Thursday the 2nd
Tuesday the 14th
Wednesday the 15th
Thursday the 16th
Tuesday the 28th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th
Wednesday the 6th
Thursday the 7th

Alison Guth
Licensing Coordinator

Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Sandra R [sandrar@ccppcrafts.com]
Sent: Wednesday, January 21, 2009 3:42 PM
To: Alison Guth
Subject: Re: Meeting Responses

Hi Alison,
I am on a leave of absence and will not attend any meetings until further notice.
Sandra

On Mon, 12 Jan 2009 16:51:28 -0500, Alison Guth wrote

> Hello All,
> In light of the previous meetings, both today and last week, I need to remind everyone about how important it is for a timely RSVP to meetings. As the meetings have wound down over the past few months, so have the responses to meeting notices, as well as the follow through. Last week we had a plethora of RSVP's, however about a third of the individuals who noted that they were coming did not show up. This resulted in a large amount of wasted food. Today the opposite issue occurred where a large number of individuals showed up to a meeting they did not RSVP for. This resulted in one individual, who had been planned for, not receiving a lunch even though extras were ordered. As this may seem a trivial issue to some, it is important to those who work hard to plan these meetings. This is a common courtesy that takes only seconds to do. If you plan on coming to the meeting, plan on RSVPing by the requested date, and if you are unsure if you can make it, please let the planner know so. Thank you to those of you who are currently regular about RSVP'ing and I look forward to a smoother planning process in the future. Alison

> **Alison Guth**

> **Licensing Coordinator**

> **Kleinschmidt Associates**

> 204 Caughman Farm Lane, Suite 301

> Lexington, SC 29072

> Phone 803-951-2077

> Fax 803-951-2124

Sandra Reinhardt
Catawba Indian Nation
THPO Archaeology Dept.
1536 Tom Steven Road
Rock Hill, SC 29730

803-328-2427 ext. 233

--

Open WebMail Project (<http://openwebmail.org>)

Alison Guth

From: Dave Anderson
Sent: Tuesday, January 20, 2009 9:33 AM
To: Alison Guth; Vivianne Vejdani ; Alan Axson; Alan Stuart; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: RE: Safety RCG Meeting

All,

Attached is the agenda for our meeting next week. I have also attached the proposed siren installation schedule we will be discussing.

Don't forget to RSVP to Alison for security clearance.

See you next week.

Dave



Siren Installation
Schedule - ...



2009-01-27 Safety
RCG Agenda.d...

-----Original Appointment-----

From: Alison Guth
Sent: Friday, January 09, 2009 12:32 PM
To: Alison Guth; Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: Safety RCG Meeting
When: Tuesday, January 27, 2009 12:00 PM-3:30 PM (GMT-06:00) Central Time (US & Canada).
Where: Lake Murray Training Center

Hello All,

There will be a Safety RCG Meeting on Tuesday, January 27th beginning at **1:00 pm**. Dave will be sending out a meeting agenda in the next week. Please RSVP for this meeting by January 23 for access through the guard gate. Thanks! Alison

Alison Guth

From: Alison Guth
Sent: Thursday, January 15, 2009 2:54 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Saluda Hydro Project Settlement Agreement Meetings

Hello RCG and TWC Members,

As we are winding down the relicensing, the time is approaching to have the Settlement Agreement Meetings. Although exact locations for each of the meeting dates listed below are not yet definite, we anticipate that the majority of these meetings will take place at the Lake Murray Training Center. In the next few weeks we will be sending out detailed agendas for these meeting dates so that one may choose to attend these meetings based on topics of interest. The first meeting, however, will be a kick-off meeting that everyone is encouraged to attend. At that time we will be presenting a guidance document developed for the Settlement Agreement process.

The following dates are being provided so that you may begin blocking dates off on your schedules. And again, more information on the meetings topics by date is forthcoming. Thanks! Alison

March '09:

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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon



Saluda Sturgeon
Monitoring Rec...

Attached is a copy of the proposal we sent out on November 20, with a few minor edits. The intent of the proposal is to provide a framework for a sturgeon protection plan, and consideration of sturgeon in the relicensing settlement agreement.

I look forward to discussing this proposal with interested stakeholders during our January 20 conference call.

Regards,
PB

Shane Boring wrote:

When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

~~*~*~*~*~*~*~*~*

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565

Columbia Area Local - 217-6565

Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring

Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to

include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, January 13, 2009 2:23 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Ben Gregg (ben@scwf.org); Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); James Leslie ; John Frick; Joy Downs; Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Subject: 1-8-09 Meeting notes

Hello All,

Attached are the meeting notes from the Lake and Land Management RCG Meeting on 1-8. Please have all comments and changes to the notes back to me by January 27th. Thanks, Alison



2009-1-8 draft
Meeting Minutes...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Tuesday, January 13, 2009 10:09 AM
To: FWS Amanda Hill
Cc: 'lora_zimmerman@fws.gov'; 'ARGENTIERI, WILLIAM R'; Alan Stuart
Subject: FW: Freshwater mussels at Saluda

Amanda:

See Bill's note below. Providing comments by January 23 is fine.

Thanks,
Shane

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: ARGENTIERI, WILLIAM R [mailto:BARGENTIERI@scana.com]
Sent: Tuesday, January 13, 2009 9:59 AM
To: Shane Boring; Alan Stuart
Subject: RE: Freshwater mussels at Saluda

That is fine with me.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Tuesday, January 13, 2009 9:53 AM
To: Alan Stuart; ARGENTIERI, WILLIAM R
Subject: FW: Freshwater mussels at Saluda

Amanda:

I am forwarding your request to SCE&G and will get you an answer ASAP.

Thanks,
Shane

-----Original Message-----

From: Amanda_Hill@fws.gov [mailto:Amanda_Hill@fws.gov]

Sent: Tuesday, January 13, 2009 9:31 AM

To: Shane Boring

Subject: Freshwater mussels at Saluda

Shane,

The Service is preparing comments regarding mussel mitigation. We would like to submit our comments by the 23th. January 20th is the annual Freshwater Mussel meeting and Lora Zimmerman would like to consult with other malacologists before submitting our comments. Please let me know if this presents any problems. Thanks.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

Alison Guth

From: colkenu@aol.com
Sent: Monday, January 12, 2009 9:03 PM
To: Alison Guth
Subject: Re: Meeting Responses

Alison

I was not aware of the meeting today. I am not very computer savvy so it's possible I received it and accidentally erased it. It's also possible I didn't get it or couldn't download the info.

I really want to attend again. I was involved in the beginning but because of work schedules missed some meetings. I do work Tuesdays and Thurs mornings.

Please reply to this email so I know it went through. And make sure I am on the list for future meetings. I agree with you it's not right to not RSVP, it happens to be one of my pet peeves. That and not returning phone calls are unprofessional traits I won't tolerate.

Excuse my typing. I always had others do it for me, that's what happens when you retire!

Ken Uschelbec

-----Original Message-----

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
To: Winward point Yacht Club <commodore@windwardpoint.org>; Alan Axson <cfdwaxson@columbiasc.net>; Alan Stuart <alan.stuart@kleinschmidtusa.com>; aharmon@lpagroup.com; Alison Guth <alison.guth@kleinschmidtusa.com>; Amanda Hill <amanda_hill@fws.gov>; Amy Bennett <BENNETAM@dhec.sc.gov>; Bertina Floyd <bertfloyd@sc.rr.com>; Bill Argentieri <bargentieri@scana.com>; Bill Brebner <yaccove@bellsouth.net>; Bill East <billeast@sc.rr.com>; Bill Hulslander <bill_hulslander@nps.gov>; Bill Marshall <marshallb@dnr.sc.gov>; Bill Mathias <bill25@sc.rr.com>; bseibels@yahoo.com; Brandon Stutts <bstutts@scana.com>; Bret Hoffman <bret.hoffman@kleinschmidtusa.com>; Brett Bursey <network@scpronet.com>; btrump@scana.com; Bud Badr <badrb@dnr.sc.gov>; Buddy Baker <BakerB@dnr.sc.gov>; Charlene Coleman <cheetahrk@yahoo.com>; Charles Floyd <jcharlesfloyd@sc.rr.com>; Charlie Compton <ccompton@lex-co.com>; Charlie Rentz <flyhotair@greenwood.net>; Chris Page <pagec@dnr.sc.gov>; ccantley@scdah.state.sc.us; Chuck Hightower <HIGHTOCW@dhec.sc.gov>; Daniel Tufford <tufford@sc.edu>; Dave Anderson <dave.anderson@kleinschmidtusa.com>; Dave Landis <dlandis1@sc.rr.com>; David Allen <david.allen@scbar.org>; David Hancock <dhancock@scana.com>; David Jones <djones@scprt.com>; David Price <pricedc@dhec.sc.gov>; Dee Dee Simmons <dsimmons@thefittscompany.com>; dchristie@comporium.net; Don Tyler <tyle6544@bellsouth.net>; Donald Eng <dengff@aol.com>; Ed Diebold <ediebold@riverbanks.org>; Edward Schnepel <eschnepel@sc.rr.com>; aregaf@dnr.sc.gov; George Duke <kayakduke@bellsouth.net>; Gerrit Jobsis (American Rivers) <gjobsis@americanrivers.org>; Gina Kirkland <kirklagl@dhec.sc.gov>; Guy Jones <guyjones@sc.rr.com>; Hal Beard <beardh@dnr.sc.gov>; Hank McKellar <McKellarH@dnr.sc.gov>; ipitts@scprt.com; J. Hamilton Ha good <jhamilton@scana.com>; Jay Schabacher <Jayschab@aol.com>; Jeff Duncan <jeff_duncan@nps.gov>; pricej@biol.sc.edu; Jim Devereaux <jdevereaux@scana.com>; Jim Glover <GloverJB@dhec.sc.gov>; Jim Goller <wildlife@sc.rr.com>; Jim Ruane <jimruane@comcast.net>; JoAnn Butler <jbutler@scana.com>; Joe Logan <dianlog8@aol.com>; Joel Huggins <jbhuggins@lexhealth.org>; John and Rob Altenberg

<seatowlakemurray@seatow.com>; johned44@bellsouth.net; John Frick <jsfrick@mindspring.com>; Jon Leader <leader@sc.edu>; Joy Downs <elymay2@aol.com>; Karen Kustafik <kakustafik@columbiasc.net>; Keith Ganz-Sarto <keith_ganz_sarto@hotmail.com>; Ken Styer <kstyer@smeinc.com>; Ken Uschelbec <colkenu@aol.com>; Kenneth Fox <skfox@sc.rr.com>; Kristina Massey <dvklmass@bellsouth.net>; turnerle@dhec.sc.gov; Lee Barber <lbarber@sc.rr.com>; Linda Lester <linda_lester11@yahoo.com>; Linda Schneider <wendy0815@sc.rr.com>; Malcolm Leaphart <malcolml@mailbox.sc.edu>; giffinma@dhec.sc.gov; Matthew Rice <mrice@americanrivers.org>; Michael Murrell <mdmurr@sc.rr.com>; Mike Duffy <mikeduffy@sc.rr.com>; Mike Sloan <lucky8lady@aol.com>; msummer@scana.com; Mike Waddell <mwaddell@esri.sc.edu>; mquattlebaum@scana.com; Miriam Atria <miriam@lakemurraycountry.com>; Norm Nicholson <larana@mindspring.com>; Norman Ferris <norm@sc.rr.com>; Parkin Hunter <parkin@parkinhunter.com>; Patrick Moore <PatrickM@scccl.org>; LakeMurrayLOA@earthlink.net; Prescott Brownell <prescott.brownell@noaa.gov>; Randal Shealy <r1shealy@aol.com>; Randy Mahan <rmahan@scana.com>; Ray Ammarell <rammarell@scana.com>; Rebekah Dobrasko <dobrasko@scdah.state.sc.us>; rbull@davisfloyd.com; Rhett Bickley <rbickley@lex-co.com>; Richard Kidder <rkidder@pbtcomm.net>; Richard Mikell <adventurec@mindspring.com>; SKEENER@sc.rr.com; Robert Lavisky <rlavisky@alltel.net>; Ron Ahle <ahler@dnr.sc.gov>; Ronald Scott <rscott@lex-co.com>; Roy Parker <royparker38@earthlink.net>; ryanity@scana.com; S padget <s.padget@saludacounty.sc.gov>; Sandra Reinhardt <sandrar@www.ccppcrafts.com>; Sean Norris <snorris@trcsolutions.com>; Shane Boring <shane.boring@kleinschmidtusa.com>; Sheri Armstrong <sarmstrong@lex-co.com>; Skeet Mills <MillsL@dnr.sc.gov>; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer <ssummer@scana.com>; Suzanne Rhodes <suzrhodes@juno.com>; Synithia Williams <swilliams@lex-co.com>; Theresa Powers <tpowers@newberrycounty.net>; Theresa Thom <theresa_thom@nps.gov>; Tim Vinson <vinsont@dnr.sc.gov>; tbowles@scana.com; Tom Ruple <truple@sc.rr.com>; Tommy Boozer <tboozer@scana.com>; Tony Bebbber <tbebbber@scprt.com>; tylehowe@nc-cherokee.com; Van Hoffman <vhoffman@scana.com>; Vivianne Vejdani <vejdani@dnr.sc.gov>; Wenonah Haire <wenonahh@www.ccppcrafts.com>; Jon Quebbeman <Jon.Quebbeman@KleinschmidtUSA.com>
Sent: Mon, 12 Jan 2009 4:51 pm
Subject: Meeting Responses

Hello All,

In light of the previous meetings, both today and last week, I need to remind everyone about how important it is for a timely RSVP to meetings. As the meetings have wound down over the past few months, so have the responses to meeting notices, as well as the follow through. Last week we had a plethora of RSVP's, however about a third of the individuals who noted that they were coming did not show up. This resulted in a large amount of wasted food. Today the opposite issue occurred where a large number of individuals showed up to a meeting they did not RSVP for. This resulted in one individual, who had been planned for, not receiving a lunch even though extras were ordered. As this may seem a trivial issue to some, it is important to those who work hard to plan these meetings. This is a common courtesy that takes only seconds to do. If you plan on coming to the meeting, plan on RSVPing by the requested date, and if you are unsure if you can make it, please let the planner know so. Thank you to those of you who are currently regular about RSVP'ing and I look forward to a smoother planning process in the future. Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

A Good Credit Score is 700 or Above. [See yours in just 2 easy steps!](#)

Alison Guth

Subject: Updated: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Start: Tue 1/20/2009 9:00 AM
End: Tue 1/20/2009 12:00 PM

Recurrence: (none)

Meeting Status: Accepted

Required Attendees: 'QUATTLEBAUM, MILTON'; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth

Optional Attendees: 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565
Columbia Area Local - 217-6565
Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forwarding to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring

Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Monday, January 12, 2009 4:51 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Meeting Responses

Hello All,

In light of the previous meetings, both today and last week, I need to remind everyone about how important it is for a timely RSVP to meetings. As the meetings have wound down over the past few months, so have the responses to meeting notices, as well as the follow through. Last week we had a plethora of RSVP's, however about a third of the individuals who noted that they were coming did not show up. This resulted in a large amount of wasted food. Today the opposite issue occurred where a large number of individuals showed up to a meeting they did not RSVP for. This resulted in one individual, who had been planned for, not receiving a lunch even through extras were ordered. As this may seem a trivial issue to some, it is important to those who work hard to plan these meetings. This is a common courtesy that takes only seconds to do. If you plan on coming to the meeting, plan on RSVPing by the requested date, and if you are unsure if you can make it, please let the planner know so. Thank you to those of you who are currently regular about RSVP'ing and I look forward to a smoother planning process in the future. Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, January 12, 2009 4:22 PM
To: Will Dillman ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Chad Altman; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Hand; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart
Subject: Today's Presentation - Instream Flow TWC

Hello All,

Ray's presentation from today's Instream Flow meeting has been posted to the Relicensing Website at the following link:
<http://www.saludahydrorelicense.com/documents/STBasMinFlowLIPComparison2009-01-12.pdf>

Thanks and email me if you have any issues accessing the presentation. Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Thursday, January 22, 2009 5:24 PM
To: AMMARELL, RAYMOND R; Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; RMAHAN@scana.com
Cc: BertFloyd@sc.rr.com; Joy Downs
Subject: RE: New Minimum Flow/LIP Proposal

Ray,

Thank you for the update and a copy of SCE&G's proposal discussed at last week's instream flow meeting. One thing I'd like to clarify is that while we did have considerable discussion about SCE&G's proposal, we did not reach consensus about adopting a 1 foot LIP trigger. As I recall, DNR and others were going to evaluate the 1 ft vs. 2 ft LIP trigger data provided by SCE&G during that meeting, as well as something in between, say a 1.5 ft LIP trigger. SCE&G made it clear that they supported their 1 ft LIP proposal, however, my memory is that the committee as a whole never agreed to that.

Another important discussion at the instream flow meeting was how the project would operate when generating with water in excess of the minimum flow. SCE&G's proposal to release those flows on a continuous basis over a minimum of 6 hours is an important part of the new minimum flow proposal and step forward in meeting the objectives of the goals developed through the ESWM process.

Gerrit

Gerrit Jöbsis, American Rivers
 Southeast Regional Director
 2231 Devine Street, Suite 202, Columbia, S.C. 29205
 803.771.7114 (t) 803.771.7580 (f)
gjobsis@americanrivers.org

Stand up for healthy rivers: Join the eRiver Community to download music, wallpaper and more.
www.AmericanRivers.org/eRiver

From: AMMARELL, RAYMOND R [mailto:RAMMARELL@scana.com]
Sent: Thursday, January 22, 2009 3:31 PM
To: Alison Guth; lakewatchman@yahoo.com; Alan Stuart; Amanda Hill; ARGENTIERI, WILLIAM R; Bill Marshall; Bud Badr; Dave Landis; dchristie@comporium.net; Gerrit Jobsis; Patrick Moore; rbull@davisfloyd.com; Scott Harder; Shane Boring; MAHAN, RANDOLPH R
Cc: BertFloyd@sc.rr.com; Joy Downs
Subject: New Minimum Flow/LIP Proposal

To All,

This is being sent to the members of the LIP Focus Group, and to Ms. Downs and Ms. Floyd. At an Instream Flow TWC meeting in December, the Committee decided to incorporate the SCDNR striped bass flow request into the minimum flow proposal during the period April 1 – May 10. Their proposal replaces the originally

7/28/2009

proposed 1,000/1,300/1,000 CFS April-May flows with the SCDNR striped bass flows and 1,000 CFS minimum flows. The TWC proposal also included adopting a 2 foot below target reservoir level trigger for the LIP, using a 14 day flow average.

SCE&G evaluated the TWC proposal, and developed a modified version which we presented at the last Instream Flow TWC meeting on January 12. The attached slide summarizes SCE&G's proposal to the TWC. There were no major objections in the Instream Flow TWC meeting to the SCE&G proposal. As such we are moving forward with presenting this same proposal to the LIP Focus Group in an effort to resolve this issue prior to our settlement agreement meetings.

An invitation will be forthcoming shortly for a Focus Group meeting on January 30. At that meeting, we will give some background material on the new minimum flow and LIP proposal and present the results of our evaluation. Please review the attached proposal and be prepared to discuss it at the meeting.

Thanks,

Ray Ammarell

SCE&G - Fossil Hydro Technical Services

111 Research Drive

Columbia, SC 29203

803-217-7322 Phone

803-206-3710 Cell

803-933-7847 Fax

rammarell@scana.com

Alison Guth

From: Shane Boring
Sent: Wednesday, January 21, 2009 5:12 PM
To: 'Amanda_Hill@fws.gov'
Cc: Alan Stuart
Subject: FW: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon



Saluda Sturgeon
Monitoring Rec...

Amanda:

To quickly summarize our discussion yesterday regarding the sturgeon proposal:

- The group reviewed the study ideas presented in the NMFS proposal (See Prescott's e-mail below and the attached proposal)
- Alan noted that much of what is being proposed are the same ideas that have been discussed for the first phase of the ACCORD sturgeon studies.
- It was determined that a plan would be drafted that incorporates the ideas for recommended studies. The plan will include a commitment to request that the NMFS-proposed studies be integrated into the first 5-year phase of the ACCORD studies (i.e., the Plan will serve as a conduit of the NMFS study ideas to the ACCORD process).
- The plan will be drafted by Kleinschmidt, incorporating much of the info provided in Prescott's document. Plan will include a commitment to consult with NMFS following completion of the initial 5 yrs of ACCORD studies regarding whether or not the ACCORD has adequately addressed the NMFS Saluda-specific objectives. If not, SCE&G will work with NMFS to ensure that all of the studies requested are addressed outside of the ACCORD.

I hope all of that made sense; it's getting late in the day. We will be preparing notes from the call and will distribute those ASAP. let me know if you have further questions.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: Prescott Brownell [mailto:Prescott.Brownell@noaa.gov]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Attached is a copy of the proposal we sent out on November 20, with a few minor edits. The intent of the proposal is to provide a framework for a sturgeon protection plan, and consideration of sturgeon in the relicensing settlement agreement.

I look forward to discussing this proposal with interested stakeholders during our

January 20 conference call.

Regards,
PB

Shane Boring wrote:

When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

~~*~*~*~*~*~*~*~*

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565

Columbia Area Local - 217-6565

Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

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Thanks and have a great holiday,

Shane

C. Shane Boring

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Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

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Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring

Environmental Scientist

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Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, January 21, 2009 3:52 PM
To: Alison Guth; 'Winward point Yacht Club'; 'Alan Axson'; Alan Stuart; 'Alex Harmon (aharmon@lpagroup.com)'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price (pricej@biol.sc.edu)'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Patrick Moore'; 'Phil Hamby (LakeMurrayLOA@earthlink.net)'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Stan Jones (sjones@imichotels.net)'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbber'; 'Tyler Howe (tylehowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wenonah Haire'; 'Jon Quebbeman'
Subject: Update: Saluda Hydro Project Settlement Agreement Meetings

Hello All,

As an update to my previous email regarding the Settlement Agreement Meetings, we are having some difficulties scheduling meeting facilities for all the dates proposed. Subsequently, some of these days may shift to a Monday or a Friday in order to obtain a meeting room. I will keep you posted of when final dates are scheduled. Thanks, Alison

-----Original Message-----

From: Alison Guth
Sent: Thursday, January 15, 2009 2:54 PM
To: Winward point Yacht Club; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane; JoAnn Butler; Joe Logan; Joel Huggins; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester; Linda Schneider; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong; Skeet Mills; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbber; Tyler Howe (tylehowe@nc-

Subject: Saluda Hydro Project Settlement Agreement Meetings

Hello RCG and TWC Members,

As we are winding down the relicensing, the time is approaching to have the Settlement Agreement Meetings. Although exact locations for each of the meeting dates listed below are not yet definite, we anticipate that the majority of these meetings will take place at the Lake Murray Training Center. In the next few weeks we will be sending out detailed agendas for these meeting dates so that one may choose to attend these meetings based on topics of interest. The first meeting, however, will be a kick-off meeting that everyone is encouraged to attend. At that time we will be presenting a guidance document developed for the Settlement Agreement process.

The following dates are being provided so that you may begin blocking dates off on your schedules. And again, more information on the meetings topics by date is forthcoming. Thanks! Alison

March '09:

Tuesday the 10th
Wednesday the 11th
Thursday the 12th
Tuesday the 17th
Wednesday the 18th
Thursday the 19th
Tuesday the 24th
Wednesday the 25th
Thursday the 26th
Tuesday the 31st

April '09:

Wednesday the 1st
Thursday the 2nd
Tuesday the 14th
Wednesday the 15th
Thursday the 16th
Tuesday the 28th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th
Wednesday the 6th
Thursday the 7th

Alison Guth
Licensing Coordinator

Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Sandra R [sandrar@ccppcrafts.com]
Sent: Wednesday, January 21, 2009 3:42 PM
To: Alison Guth
Subject: Re: Meeting Responses

Hi Alison,
I am on a leave of absence and will not attend any meetings until further notice.
Sandra

On Mon, 12 Jan 2009 16:51:28 -0500, Alison Guth wrote

> Hello All,
> In light of the previous meetings, both today and last week, I need to remind everyone about how important it is for a timely RSVP to meetings. As the meetings have wound down over the past few months, so have the responses to meeting notices, as well as the follow through. Last week we had a plethora of RSVP's, however about a third of the individuals who noted that they were coming did not show up. This resulted in a large amount of wasted food. Today the opposite issue occurred where a large number of individuals showed up to a meeting they did not RSVP for. This resulted in one individual, who had been planned for, not receiving a lunch even though extras were ordered. As this may seem a trivial issue to some, it is important to those who work hard to plan these meetings. This is a common courtesy that takes only seconds to do. If you plan on coming to the meeting, plan on RSVPing by the requested date, and if you are unsure if you can make it, please let the planner know so. Thank you to those of you who are currently regular about RSVP'ing and I look forward to a smoother planning process in the future. Alison

> **Alison Guth**

> **Licensing Coordinator**

> **Kleinschmidt Associates**

> 204 Caughman Farm Lane, Suite 301

> Lexington, SC 29072

> Phone 803-951-2077

> Fax 803-951-2124

Sandra Reinhardt
Catawba Indian Nation
THPO Archaeology Dept.
1536 Tom Steven Road
Rock Hill, SC 29730

803-328-2427 ext. 233

--

Open WebMail Project (<http://openwebmail.org>)

Alison Guth

From: Dave Anderson
Sent: Tuesday, January 20, 2009 9:33 AM
To: Alison Guth; Vivianne Vejdani ; Alan Axson; Alan Stuart; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: RE: Safety RCG Meeting

All,

Attached is the agenda for our meeting next week. I have also attached the proposed siren installation schedule we will be discussing.

Don't forget to RSVP to Alison for security clearance.

See you next week.

Dave



Siren Installation
Schedule - ...



2009-01-27 Safety
RCG Agenda.d...

-----Original Appointment-----

From: Alison Guth
Sent: Friday, January 09, 2009 12:32 PM
To: Alison Guth; Vivianne Vejdani ; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie (dchristie@comporium.net); Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); J. Hamilton Hagood; Jay Schabacher ; Jennifer O'Rourke; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore ; Randy Mahan; Roger Hovis ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Stephan Curry; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tommy Boozer
Subject: Safety RCG Meeting
When: Tuesday, January 27, 2009 12:00 PM-3:30 PM (GMT-06:00) Central Time (US & Canada).
Where: Lake Murray Training Center

Hello All,

There will be a Safety RCG Meeting on Tuesday, January 27th beginning at **1:00 pm**. Dave will be sending out a meeting agenda in the next week. Please RSVP for this meeting by January 23 for access through the guard gate. Thanks! Alison

Alison Guth

From: Alison Guth
Sent: Thursday, January 15, 2009 2:54 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Saluda Hydro Project Settlement Agreement Meetings

Hello RCG and TWC Members,

As we are winding down the relicensing, the time is approaching to have the Settlement Agreement Meetings. Although exact locations for each of the meeting dates listed below are not yet definite, we anticipate that the majority of these meetings will take place at the Lake Murray Training Center. In the next few weeks we will be sending out detailed agendas for these meeting dates so that one may choose to attend these meetings based on topics of interest. The first meeting, however, will be a kick-off meeting that everyone is encouraged to attend. At that time we will be presenting a guidance document developed for the Settlement Agreement process.

The following dates are being provided so that you may begin blocking dates off on your schedules. And again, more information on the meetings topics by date is forthcoming. Thanks! Alison

March '09:

Tuesday the 10th
Wednesday the 11th
Thursday the 12th
Tuesday the 17th
Wednesday the 18th
Thursday the 19th
Tuesday the 24th
Wednesday the 25th
Thursday the 26th
Tuesday the 31st

April '09:

Wednesday the 1st
Thursday the 2nd
Tuesday the 14th
Wednesday the 15th
Thursday the 16th
Tuesday the 28th
Wednesday the 29th
Thursday the 30th

May '09:

Tuesday the 5th
Wednesday the 6th
Thursday the 7th

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Wednesday, January 14, 2009 12:01 PM
To: Shane Boring
Cc: QUATTLEBAUM, MILTON; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth
Subject: Re: Updated: Saluda Relicensing: NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Attached is a copy of the proposal we sent out on November 20, with a few minor edits. The intent of the proposal is to provide a framework for a sturgeon protection plan, and consideration of sturgeon in the relicensing settlement agreement.

I look forward to discussing this proposal with interested stakeholders during our January 20 conference call.

Regards,
PB

Shane Boring wrote:

When: Tuesday, January 20, 2009 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

~~*~*~*~*~*~*~*~*

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:
Within SCE&G - 76565
Columbia Area Local - 217-6565
Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forwarding to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]
Sent: Thursday, December 18, 2008 1:26 PM
To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth
Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring
Sent: Wednesday, November 26, 2008 3:37 PM
To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring

Environmental Scientist

[Kleinschmidt Associates](#)

204 Caughman Farm Lane; Suite 301

Lexington, SC 29072

Phone: (803)951-2077

Fax: (803)951-2124

Alison Guth

From: Shane Boring
Sent: Tuesday, January 13, 2009 10:09 AM
To: FWS Amanda Hill
Cc: 'lora_zimmerman@fws.gov'; 'ARGENTIERI, WILLIAM R'; Alan Stuart
Subject: FW: Freshwater mussels at Saluda

Amanda:

See Bill's note below. Providing comments by January 23 is fine.

Thanks,
Shane

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: ARGENTIERI, WILLIAM R [mailto:BARGENTIERI@scana.com]
Sent: Tuesday, January 13, 2009 9:59 AM
To: Shane Boring; Alan Stuart
Subject: RE: Freshwater mussels at Saluda

That is fine with me.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Tuesday, January 13, 2009 9:53 AM
To: Alan Stuart; ARGENTIERI, WILLIAM R
Subject: FW: Freshwater mussels at Saluda

Amanda:

I am forwarding your request to SCE&G and will get you an answer ASAP.

Thanks,

Shane

-----Original Message-----

From: Amanda_Hill@fws.gov [mailto:Amanda_Hill@fws.gov]

Sent: Tuesday, January 13, 2009 9:31 AM

To: Shane Boring

Subject: Freshwater mussels at Saluda

Shane,

The Service is preparing comments regarding mussel mitigation. We would like to submit our comments by the 23th. January 20th is the annual Freshwater Mussel meeting and Lora Zimmerman would like to consult with other malacologists before submitting our comments. Please let me know if this presents any problems. Thanks.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

Alison Guth

From: colkenu@aol.com
Sent: Monday, January 12, 2009 9:03 PM
To: Alison Guth
Subject: Re: Meeting Responses

Alison

I was not aware of the meeting today. I am not very computer savvy so its possible i received it and accidentally ereased it. Its also possiable I didnt get it or couldnt download the info.

I really want to attend again. I was involved in the beginning but because of work schedules missed some meetings. I do work tuesdays and thurs mornings.

Please reply to this email so I know it went through. And make sure I am on the list for future meetings. I agree with you its not right to not RSVP, it happens to be one of my pet peeves. That and not returning phone calls are unprofessional traits I wont tolerate.

Excuse my typing. I always had others do it for me, that what happens when you retire!

Ken Uschelbec

-----Original Message-----

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
To: Winward point Yacht Club <commodore@windwardpoint.org>; Alan Axson <cfdwaxson@columbiasc.net>; Alan Stuart <alan.stuart@kleinschmidtusa.com>; aharmon@lpagroup.com; Alison Guth <alison.guth@kleinschmidtusa.com>; Amanda Hill <amanda_hill@fws.gov>; Amy Bennett <BENNETAM@dhec.sc.gov>; Bertina Floyd <bertfloyd@sc.rr.com>; Bill Argentieri <bargentieri@scana.com>; Bill Brebner <yaccove@bellsouth.net>; Bill East <billeast@sc.rr.com>; Bill Hulslander <bill_hulslander@nps.gov>; Bill Marshall <marshallb@dnr.sc.gov>; Bill Mathias <bill25@sc.rr.com>; bseibels@yahoo.com; Brandon Stutts <bstutts@scana.com>; Bret Hoffman <bret.hoffman@kleinschmidtusa.com>; Brett Bursey <network@scpronet.com>; btrump@scana.com; Bud Badr <badrb@dnr.sc.gov>; Buddy Baker <BakerB@dnr.sc.gov>; Charlene Coleman <cheetahrk@yahoo.com>; Charles Floyd <jcharlesfloyd@sc.rr.com>; Charlie Compton <ccompton@lex-co.com>; Charlie Rentz <flyhotair@greenwood.net>; Chris Page <pagec@dnr.sc.gov>; ccantley@scdah.state.sc.us; Chuck Hightower <HIGHTOCW@dhec.sc.gov>; Daniel Tufford <tufford@sc.edu>; Dave Anderson <dave.anderson@kleinschmidtusa.com>; Dave Landis <dlandis1@sc.rr.com>; David Allen <david.allen@scbar.org>; David Hancock <dhancock@scana.com>; David Jones <djones@scprt.com>; David Price <pricedc@dhec.sc.gov>; Dee Dee Simmons <dsimmons@thefittscompany.com>; dchristie@comporium.net; Don Tyler <tyle6544@bellsouth.net>; Donald Eng <dengff@aol.com>; Ed Diebold <ediebold@riverbanks.org>; Edward Schnepel <eschnepel@sc.rr.com>; aregaf@dnr.sc.gov; George Duke <kayakduke@bellsouth.net>; Gerrit Jobsis (American Rivers) <gjobsis@americanrivers.org>; Gina Kirkland <kirklagl@dhec.sc.gov>; Guy Jones <guyjones@sc.rr.com>; Hal Beard <beardh@dnr.sc.gov>; Hank McKellar <McKellarH@dnr.sc.gov>; ipitts@scprt.com; J. Hamilton Ha good <jhamilton@scana.com>; Jay Schabacher <Jayschab@aol.com>; Jeff Duncan <jeff_duncan@nps.gov>; pricej@biol.sc.edu; Jim Devereaux <jdevereaux@scana.com>; Jim Glover <GloverJB@dhec.sc.gov>; Jim Goller <wildlife@sc.rr.com>; Jim Ruane <jimruane@comcast.net>; JoAnn Butler <jbutler@scana.com>; Joe Logan <dianlog8@aol.com>; Joel Huggins <jbhuggins@lexhealth.org>; John and Rob Altenberg

<seatowlakemurray@seatow.com>; johned44@bellsouth.net; John Frick <jsfrick@mindspring.com>; Jon Leader <leader@sc.edu>; Joy Downs <elymay2@aol.com>; Karen Kustafik <kakustafik@columbiasc.net>; Keith Ganz-Sarto <keith_ganz_sarto@hotmail.com>; Ken Styer <kstyer@smeinc.com>; Ken Uschelbec <colkenu@aol.com>; Kenneth Fox <skfox@sc.rr.com>; Kristina Massey <dvklmass@bellsouth.net>; turnerle@dhec.sc.gov; Lee Barber <lbarber@sc.rr.com>; Linda Lester <linda_lester11@yahoo.com>; Linda Schneider <wendy0815@sc.rr.com>; Malcolm Leaphart <malcolml@mailbox.sc.edu>; giffinma@dhec.sc.gov; Matthew Rice <mrice@americanrivers.org>; Michael Murrell <mdmurr@sc.rr.com>; Mike Duffy <mikeduffy@sc.rr.com>; Mike Sloan <lucky8lady@aol.com>; msummer@scana.com; Mike Waddell <mwaddell@esri.sc.edu>; mquattlebaum@scana.com; Miriam Atria <miriam@lakemurraycountry.com>; Norm Nicholson <larana@mindspring.com>; Norman Ferris <norm@sc.rr.com>; Parkin Hunter <parkin@parkinhunter.com>; Patrick Moore <PatrickM@scccl.org>; LakeMurrayLOA@earthlink.net; Prescott Brownell <prescott.brownell@noaa.gov>; Randal Shealy <r1shealy@aol.com>; Randy Mahan <rmahan@scana.com>; Ray Ammarell <rammarell@scana.com>; Rebekah Dobrasko <dobrasko@scdah.state.sc.us>; rbull@davisfloyd.com; Rhett Bickley <rbickley@lex-co.com>; Richard Kidder <rkidder@pbtcomm.net>; Richard Mikell <adventurec@mindspring.com>; SKEENER@sc.rr.com; Robert Lavisky <rlavisky @alltel.net>; Ron Ahle <ahler@dnr.sc.gov>; Ronald Scott <rscott@lex-co.com>; Roy Parker <royparker38@earthlink.net>; ryanity@scana.com; S padget <s.padget@saludacounty.sc.gov>; Sandra Reinhardt <sandrar@www.ccppcrafts.com>; Sean Norris <snorris@trcsolutions.com>; Shane Boring <shane.boring@kleinschmidtusa.com>; Sheri Armstrong <sarmstrong@lex-co.com>; Skeet Mills <MillsL@dnr.sc.gov>; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer <ssummer@scana.com>; Suzanne Rhodes <suzrhodes@juno.com>; Synithia Williams <swilliams@lex-co.com>; Theresa Powers <tpowers@newberrycounty.net>; Theresa Thom <theresa_thom@nps.gov>; Tim Vinson <vinsont@dnr.sc.gov>; tbowles@scana.com; Tom Ruple <truple@sc.rr.com>; Tommy Boozer <tboozer@scana.com>; Tony Bebbber <tbebbber@scprt.com>; tylehowe@nc-cherokee.com; Van Hoffman <vhoffman@scana.com>; Vivianne Vejdani <vejdani@dnr.sc.gov>; Wenonah Haire <wenonahh@www.ccppcrafts.com>; Jon Quebbeman <Jon.Quebbeman@KleinschmidtUSA.com>
Sent: Mon, 12 Jan 2009 4:51 pm
Subject: Meeting Responses

Hello All,

In light of the previous meetings, both today and last week, I need to remind everyone about how important it is for a timely RSVP to meetings. As the meetings have wound down over the past few months, so have the responses to meeting notices, as well as the follow through. Last week we had a plethora of RSVP's, however about a third of the individuals who noted that they were coming did not show up. This resulted in a large amount of wasted food. Today the opposite issue occurred where a large number of individuals showed up to a meeting they did not RSVP for. This resulted in one individual, who had been planned for, not receiving a lunch even though extras were ordered. As this may seem a trivial issue to some, it is important to those who work hard to plan these meetings. This is a common courtesy that takes only seconds to do. If you plan on coming to the meeting, plan on RSVPing by the requested date, and if you are unsure if you can make it, please let the planner know so. Thank you to those of you who are currently regular about RSVP'ing and I look forward to a smoother planning process in the future. Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

A Good Credit Score is 700 or Above. [See yours in just 2 easy steps!](#)

Alison Guth

Subject: Updated: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Start: Tue 1/20/2009 9:00 AM
End: Tue 1/20/2009 12:00 PM

Recurrence: (none)

Meeting Status: Accepted

Required Attendees: 'QUATTLEBAUM, MILTON'; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth

Optional Attendees: 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565
Columbia Area Local - 217-6565
Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forwarding to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

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Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

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Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

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C. Shane Boring
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Alison Guth

From: Alison Guth
Sent: Monday, January 12, 2009 4:51 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price (pricej@biol.sc.edu); Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patrick Moore ; Phil Hamby (LakeMurrayLOA@earthlink.net); Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: Meeting Responses

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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, January 12, 2009 4:22 PM
To: Will Dillman ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Chad Altman; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Hand; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Vivianne Vejdani ; Brandon Kulik; Alan Stuart
Subject: Today's Presentation - Instream Flow TWC

Hello All,

Ray's presentation from today's Instream Flow meeting has been posted to the Relicensing Website at the following link:
<http://www.saludahydrorelicense.com/documents/STBasMinFlowLIPComparison2009-01-12.pdf>

Thanks and email me if you have any issues accessing the presentation. Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, January 12, 2009 12:51 PM
To: 'Lake Murray Landowners' Association'
Subject: RE: 1/9/09 RCG Lake & Land Meeting

Phil,

As most of the other comments provided by Lake Watch and SCPRT were editorial, the review through the comments was a general overview. As well as the floor being opened up for comments from the RCG attendees, provided comments were projected on the screen for group discussion. The group discussed how to best review comments submitted by the public and DNR suggested that they be included in the record and best addressed during the FERC public scoping. The group agreed with DNR, therefore there was no specific discussion on the comments that were provided by LMLA other than one in particular that Regis Parsons noted he would like the group to address. This was regarding the option for a dock in front of forest management lands. These discussions will be included in the meeting notes.

Alison

-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Friday, January 09, 2009 4:19 PM
To: Alison Guth
Subject: 1/9/09 RCG Lake & Land Meeting

Alison,

Boy, that was a shock that both of those documents could be reviewed in such short fashion! Would you please provide me with a summary of the discussion which took place for each of my suggested amendments? (Usually, the minutes just give a broad overview of the meeting.)

Many thanks,
Phil

-----Original Message-----

From: Alison Guth
Sent: Jan 9, 2009 2:55 PM
To: Lake Murray Landowners' Association
Subject: RE: Meetings

Hello Phil,

Your comments were brought up at the meeting yesterday, and they will also be included with the official record that is submitted to FERC. I will also email you a copy of the meeting notes when they come out. Thanks, Alison

-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Thursday, January 08, 2009 10:20 AM
To: Alison Guth
Cc: tboozzer@scana.com
Subject: Meetings

Alison:

I've had some things come up at work and will be unavailable to attend the meetings today & tomorrow. (We have two major time-sensitive projects on the line.)

Please have the Lake & Land RCG review my recommended amendments and follow-up with me on the results. The amendments are pretty much self-explanatory, but if you have any questions, feel free to call me at (803) 734-0139 [wk] or (803) 359-3729 [hm].

Thank you very much,
Phil

Phil Hamby
President, Lake Murray Landowners' Association
P.O. Box 1615
Lexington, SC 29071
(803) 359-3729
LakeMurrayLOA@earthlink.net

Alison Guth

From: C Coleman [cheetahtrk@yahoo.com]
Sent: Monday, January 12, 2009 5:18 AM
To: Alison Guth
Subject: Re: Recreation Management and Downstream Flows TWC

you do realize i have to work to pay bills and in this economy i can ill afford to screw around with my job. so back to back days is an insult to those of us that have jobs out side of this project.

There are no ordinary moments.
Dan Millman-

Charlene Coleman

American Whitewater
Regional Coordinator

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
To: C Coleman <cheetahtrk@yahoo.com>
Sent: Friday, January 9, 2009 2:38:49 PM
Subject: RE: Recreation Management and Downstream Flows TWC

[at this point, we might be insane :-\)](#)

-----Original Message-----

From: C Coleman [mailto:cheetahtrk@yahoo.com]
Sent: Friday, January 09, 2009 2:37 PM
To: Alison Guth
Subject: Re: Recreation Management and Downstream Flows TWC

back to back days are you guys insane?

There are no ordinary moments.
Dan Millman-

Charlene Coleman

American Whitewater
Regional Coordinator

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
To: Vivianne Vejdani <vejdani@dnr.sc.gov>; Alan Stuart <alan.stuart@kleinschmidtusa.com>; Bill Argentieri <bargentieri@scana.com>; Bill Marshall <marshallb@dnr.sc.gov>; Charlene Coleman <cheetahrk@yahoo.com>; Dave Anderson <dave.anderson@kleinschmidtusa.com>; Guy Jones <guyjones@sc.rr.com>; J. Hamilton Hagood <jhamilton@scana.com>; Jennifer Summerlin <Jennifer.Hand@KleinschmidtUSA.com>; Karen Kustafik <kakustafik@columbiasc.net>; Malcolm Leaphart <malcolml@mailbox.sc.edu>; Matthew Rice <mrice@americanrivers.org>; Mike Waddell <mwaddell@esri.sc.edu>; Patrick Moore <PatrickM@sccl.org>; Randy Mahan <rmahan@scana.com>; Tony Bebbler <tbebbler@scprt.com>; David Hancock <dhancock@scana.com>; dchristie@comporium.net; George Duke <kayakduke@bellsouth.net>; Joy Downs <elymay2@aol.com>; Lee Barber <lbarber@sc.rr.com>; mdavis@scprt.com; lakewatchman@yahoo.com; Tim Vinson <vinsont@dnr.sc.gov>; Tommy Boozer <tboozzer@scana.com>; Van Hoffman <vhoffman@scana.com>; Alison Guth <Alison.Guth@KleinschmidtUSA.com>; Alan Stuart <Alan.Stuart@KleinschmidtUSA.com>
Sent: Friday, January 9, 2009 1:35:16 PM
Subject: Recreation Management and Downstream Flows TWC

When: Wednesday, January 28, 2009 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello All,

There will be a TWC meeting for the Recreation Management and Downstream Flows groups on Wednesday, January 28th, beginning at 9:30. Dave will be sending out an agenda for this meeting in the next week or so. Please RSVP for lunch and gate access by January 21st. Thanks, Alison

Alison Guth

From: Lake Murray Landowners' Association [lakemurrayloa@earthlink.net]
Sent: Friday, January 09, 2009 4:19 PM
To: Alison Guth
Subject: 1/9/09 RCG Lake & Land Meeting

Alison,

Boy, that was a shock that both of those documents could be reviewed in such short fashion! Would you please provide me with a summary of the discussion which took place for each of my suggested amendments? (Usually, the minutes just give a broad overview of the meeting.)

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-----Original Message-----

From: Alison Guth
Sent: Jan 9, 2009 2:55 PM
To: Lake Murray Landowners' Association
Subject: RE: Meetings

Hello Phil,

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-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Thursday, January 08, 2009 10:20 AM
To: Alison Guth
Cc: tboozzer@scana.com
Subject: Meetings

Alison:

I've had some things come up at work and will be unavailable to attend the meetings today & tomorrow. (We have two major time-sensitive projects on the line.)

Please have the Lake & Land RCG review my recommended amendments and follow-up with me on the results. The amendments are pretty much self-explanatory, but if you have any questions, feel free to call me at (803) 734-0139 [wk] or (803) 359-3729 [hm].

Thank you very much,
Phil

Phil Hamby
President, Lake Murray Landowners' Association
P.O. Box 1615
Lexington, SC 29071
(803) 359-3729

LakeMurrayLOA@earthlink.net

Alison Guth

From: Alison Guth
Sent: Friday, January 09, 2009 2:55 PM
To: 'Lake Murray Landowners' Association'
Subject: RE: Meetings

Hello Phil,

Your comments were brought up at the meeting yesterday, and they will also be included with the official record that is submitted to FERC. I will also email you a copy of the meeting notes when they come out. Thanks, Alison

-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Thursday, January 08, 2009 10:20 AM
To: Alison Guth
Cc: tboozers@scana.com
Subject: Meetings

Alison:

I've had some things come up at work and will be unavailable to attend the meetings today & tomorrow. (We have two major time-sensitive projects on the line.)

Please have the Lake & Land RCG review my recommended amendments and follow-up with me on the results. The amendments are pretty much self-explanatory, but if you have any questions, feel free to call me at (803) 734-0139 [wk] or (803) 359-3729 [hm].

Thank you very much,
Phil

Phil Hamby
President, Lake Murray Landowners' Association
P.O. Box 1615
Lexington, SC 29071
(803) 359-3729
LakeMurrayLOA@earthlink.net

Alison Guth

Subject: Recreation Management and Downstream Flows TWC
Location: Lake Murray Training Center
Start: Wed 1/28/2009 9:30 AM
End: Wed 1/28/2009 3:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Required Attendees: Downstream Flows TWC; Recreation Management TWC

Hello All,

There will be a TWC meeting for the Recreation Management and Downstream Flows groups on Wednesday, January 28th, beginning at 9:30. Dave will be sending out an agenda for this meeting in the next week or so. Please RSVP for lunch and gate access by January 21st. Thanks, Alison

Alison Guth

From: Lake Murray Landowners' Association [lakemurrayloa@earthlink.net]
Sent: Thursday, January 08, 2009 10:20 AM
To: Alison Guth
Cc: tboozzer@scana.com
Subject: Meetings

Alison:

I've had some things come up at work and will be unavailable to attend the meetings today & tomorrow. (We have two major time-sensitive projects on the line.)

Please have the Lake & Land RCG review my recommended amendments and follow-up with me on the results. The amendments are pretty much self-explanatory, but if you have any questions, feel free to call me at (803) 734-0139 [wk] or (803) 359-3729 [hm].

Thank you very much,
Phil

Phil Hamby
President, Lake Murray Landowners' Association
P.O. Box 1615
Lexington, SC 29071
(803) 359-3729
LakeMurrayLOA@earthlink.net

Alison Guth

From: Kenneth Bell [lakewatchman@yahoo.com]
Sent: Thursday, January 08, 2009 8:27 AM
To: Alison Guth
Subject: Re: Lake and Land Management RCG - Permitting Handbook Review



LW Comments on
Permitting Poli...

Alison- Attached are my comments for the record.

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On **Fri, 12/19/08**, Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: Lake and Land Management RCG - Permitting Handbook Review
To: "Vivianne Vejdani " <vejdaniv@dnr.sc.gov>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, "Andy Miller" <millerca@dhec.sc.gov>, ben@scwf.org, "Bertina Floyd" <bertfloyd@sc.rr.com>, "Bill Argentieri" <bargentieri@scana.com>, "Bill East" <billeast@sc.rr.com>, "Bill Marshall" <marshallb@dnr.sc.gov>, "Bill Mathias" <bill25@sc.rr.com>, btrump@scana.com, "Carl Sundius" <csundius@sc.rr.com>, "Charlie Compton" <cocompton@lex-co.com>, "Charlie Rentz" <flyhotair@greenwood.net>, "Chris Page" <pagec@dnr.sc.gov>, "Daniel Tufford" <tufford@sc.edu>, "David Allen" <david.allen@scbar.org>, "David Hancock" <dhancock@scana.com>, "Dee Dee Simmons " <dsimmons@thefittscompany.com>, dchristie@comporium.net, "Don Tyler" <tyle6544@bellsouth.net>, "George Duke" <kayakduke@bellsouth.net>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Hank McKellar" <McKellarH@dnr.sc.gov>, ipitts@scprt.com, "James Leslie " <jlesliejr@bellsouth.net>, "John Frick" <jsfrick@mindspring.com>, "Joy Downs" <elymay2@aol.com>, "Kit Oswald " <kitoswald@lakemurrayspecialist.com>, turnerle@dhec.sc.gov, laura.mccary@gmail.com, "Linda Lester " <linda_lester11@yahoo.com>, "Linda Schneider " <wendy0815@sc.rr.com>, "Mary Kelly" <rkelly1@sc.rr.com>, "Michael Murrell" <mdmurr@sc.rr.com>, "Mike Duffy" <mikeduffy@sc.rr.com>, msummer@scana.com, "Mike Waddell" <mwaddell@esri.sc.edu>, "Parkin Hunter" <parkin@parkinhunter.com>, "Patrick Moore " <PatrickM@scccl.org>, LakeMurrayLOA@earthlink.net, "Randal Shealy" <r1shealy@aol.com>, "Randy Mahan" <rmahan@scana.com>, rparsons12@alltel.net, "Rhett Bickley" <rbickley@lex-co.com>, "Richard Kidder" <rkidder@pbtcomm.net>, SKEENER@sc.rr.com, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, ryanity@scana.com, "S padget" <s.padget@saludacounty.sc.gov>, "Sheri Armstrong " <sarmstrong@lex-co.com>, lakewatchman@yahoo.com, "Suzanne Rhodes" <suzrhodes@juno.com>, "Synithia Williams" <swilliams@lex-co.com>, "Theresa Powers" <tpowers@newberrycounty.net>, "Tom Brooks " <T.Brooks@saludacounty.sc.gov>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbber" <tbebbber@scprt.com>, "Van Hoffman" <vhoffman@scana.com>

Date: Friday, December 19, 2008, 6:50 PM

When: Thursday, January 08, 2009 9:30 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello All,

As you may recall, the SMP and Permitting Handbook were issued by email on December 1st to the group noting that meetings will be scheduled in January to review these documents. These meetings will take place on Thursday January 8th and Friday January 9th and will begin at 9:30 on both days at the Lake Murray Training Center. Please RSVP by December 31st for these meetings. I will be sending out an additional Outlook Calendar reminder with this information for the Jan. 9th meeting shortly. Thanks, Alison

Alison Guth

From: Tony Bebber [tbebbber@scprt.com]
Sent: Wednesday, January 07, 2009 3:30 PM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Andy Miller; ben@scwf.org; Bertina Floyd; BARGENTIERI@scana.com; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts; James Leslie ; John Frick; Joy Downs; Kit Oswald ; turnerle@dhec.sc.gov; laura.mccary@gmail.com; Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; msummer@scana.com; Mike Waddell; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Randal Shealy; RMAHAN@scana.com; rparsons12@alltel.net; Rhett Bickley; Richard Kidder; SKEENER@sc.rr.com; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; lakewatchman@yahoo.com; Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Van Hoffman
Subject: RE: Comments of the SMP and Permitting Handbook



Bebber comments
11-08 Handbook...

Sorry this is slow arriving but here are comments on the Handbook. I'll bring SMP comments to the meetings.

Tony Bebber, AICP

Planning Manager, Recreation, Planning & Engineering Office

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebbber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Monday, January 05, 2009 2:55 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; ben@scwf.org; Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts; James Leslie ; John Frick; Joy Downs; Kit Oswald ; turnerle@dhec.sc.gov; laura.mccary@gmail.com; Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; msummer@scana.com; Mike Waddell; Parkin Hunter; Patrick Moore ; LakeMurrayLOA@earthlink.net; Randal Shealy; Randy Mahan; rparsons12@alltel.net; Rhett Bickley; Richard Kidder; SKEENER@sc.rr.com; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; lakewatchman@yahoo.com; Suzanne Rhodes; Synithia Williams;

**Tony Bebber's Comments on 11/08 Draft
Lake Murray Shoreline Management Handbook and Permitting Guidelines**

Beginning: Because of all the acronyms/abbreviations, I recommend a “quick reference” page at the beginning (before page 1) that lists all the acronyms/abbreviations we use in the document (PBL, FERC, PD, ESA, etc.). There are quite a few, even for government work.

2.1. Consider changing to: “over which SCE&G obtained certain easement rights.”

2.1.3. Add last sentence (from 7.1.3 in SMP): “Access to Buffer Zone lands by the public is allowed for passive activities such as bird and wildlife viewing, and shoreline fishing. However, prohibitive uses include overnight camping, building fires, hunting, discharge of firearms, motorized vehicles, or any activity that may adversely impact the land.”

All figures: There is a lot of tiny writing along the edge of the figures. If it is too insignificant to print legibly; it should be eliminated so that users will not be responsible for understanding what it means.

Figure 2.4.1: show “Lake” in the drawing and 50 ft natural buffer around the ESA.

3.4. Last paragraph, last sentence: Change “lake visitors” to “lake users” so that visitors and property owners are all included.

5.1. At end of paragraph, add: “Current and planned generation information may be found at (list the website for the Lower Saluda River information).”

5.2. At end of last paragraph, add: “Current and planned generation information may be found at (list the website for the Lower Saluda River information).”

5.3. mid paragraph, add word: “...in accordance with federal and state migratory bird hunting regulations...”

5.3. last sentence, delete word: “...familiarize themselves with ~~state~~ hunting rules...”

7.1. 2nd paragraph, eliminate “etc.” since it is redundant.

7.2. first sentence, add space after the phone number.

7.2.1. 4th bullet, change “residential” to “private individual” and delete “area”.

7.2.1. 6th bullet, change “may” to “do” and add to end of sentence “nor exceed 1/3 the distance across the cove at the PBL.”

Figure 7.2.1. The dock shown on Tract B extends across the “imaginary property line.”

Figure 7.2.2. In reality, isn't 200 ft. dock measurement taken at the 360 contour rather than between the large part of the dock? Also, you have 200' per lot when the written info says 100'. Perhaps one should be shown as an individual dock (100') and one should be a slip dock (200'). Connect an arrow to the "10' meandering path" label.

Figure 7.2.4. Label both docks as "common dock". Same comment as above about measurement at shoreline?

Figure 7.2.5. This is confusing, is it for Common Docks or Multi-slip Docks? Eliminate the information about "serving at least 50 residential units." Show a Tract C and D or something. Or was this also supposed to show Community Access Dock arrangements in the cove (would need a ramp/courtesy dock)? Also change "Existing Cove" to "Lake".

Figure 7.2.6. Change the label for the turnaround to: "Launching/turnaround area not permitted below the 75' setback." Also, move label over for "Community Boat Ramp."

7.2.4. remove commas in 2nd sentence.

7.2.4 first bullet is inconsistent with Figure 7.2.7; is it 400' or 800'?. Also, change "shared docks" to "common docks."

Figure 7.2.7 (see above).

Figure 7.2.8 The term "allowable" implies automatic. I would label this "Example of Multi-slips on Private Easement Properties Containing ESA's."

Figure 7.2.9 (same as above).

Table 7.2.1. Should probably provide contact info for each county. Also, some more space is needed between the organizations for more clarity (or show lines between orgs).

Page 38. Should label "Commercial Public Marinas..." with a 7.2.5.1 and so on for the next several bold headings.

Page 38. First bullet, change to: "...no new commercial marina..."

Page 38. Eliminate 4th bullet since it is repeated in the next bullet.

Page 39. 1st bullet change to: "...high water mark or more than one third distance across the cove ~~whichever is less.~~"

Page 39. 3rd bullet, change "Multi-slip" to "Commercial marina".

Page 39. 4th bullet, change "Multi-slip" to "Commercial marina". Also, eliminate "covered dock" discussion (didn't we do this? And add it to the Private Multi-slip section too).

Page 39. 5th bullet, change “Multi-slip” to “Commercial marina”.

Page 39. Bold section should be “Commercial Public Marinas...”

Next bullet, change to: “...no new commercial marina...”

Page 40. 1st bullet, make “marina” plural.

Page 40. 2nd bullet, eliminate paragraph since it is repeated in next paragraph.

Page 40. 3rd bullet, change to: “...high water mark or more than one third distance across the cove ~~whichever is less~~. (Figure 7.2-13)”

Page 41. Bold section should be “Commercial Public Marinas...”

Next bullet, change to: “No new commercial marina...”

4th bullet this section: eliminate paragraph since it is repeated below.

5th bullet this section, change to: “...high water mark or more than one third distance across the cove ~~whichever is less~~. (Figure ?)”

Page 42. “Additional Specifications for all Public Marinas” should be labeled 7.2.5.4.

Figure 7.2.10 through 7.2.12, show “lake” on the peninsula diagram.

Page 50. 1st bullet: “shall” should be “shallow”.

Page 50. 2nd bullet, add a final sentence: “This buffer area will remain in the Forest Management classification.”

Page 50. 4th bullet, 3rd sentence: “...8 inches diameter at breast height...” And change last sentence: “...with the exception ~~being within~~ of the permitted access path.”

Page 50. 7th bullet, capitalize “Management.”

7.3. Third sentence, change to: “In cases where private boat ramps are ~~allowed~~ permitted by SCE&G, the following specifications...”

7.4. Add first sentence: “Boat lifts require a permit from SCE&G.”

7.6. Add first sentence: “Marine railways require a permit form SCE&G with the following specifications:”

7.8. Add 7.8.1 and 7.8.2 for the sections under here.

Page 53. Under Commercial Withdrawals, change first sentence to: “Commercial/Municipality requests for water...”

7.11. 12th bullet, consider adding “golf carts”.

7.12. 1st sentence: change “given the right of access” to “allowed access”. Change 2nd sentence from “is allowed” to “may be permitted.”

Page 64. Make last paragraph a new section: “7.15 No Brushing”

Figure 7.14.1. should the title include “Buffer Zone Prior to 2007”

7.17. Last sentence: Consider retaining one-half or “a portion” of the permit fee.

Alison Guth

From: Alison Guth
Sent: Monday, January 05, 2009 2:56 PM
To: 'Vivianne Vejdani '; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Andy Miller'; 'ben@scwf.org'; 'Bertina Floyd'; BARGENTIERI@scana.com; 'Bill East'; 'Bill Marshall'; 'Bill Mathias'; 'btrump@scana.com'; 'Carl Sundius'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Daniel Tufford'; 'David Allen'; 'David Hancock'; 'Dee Dee Simmons '; 'dchristie@comporium.net'; 'Don Tyler'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Hank McKellar'; 'ipitts@scprt.com'; 'James Leslie '; 'John Frick'; 'Joy Downs'; 'Kit Oswald '; 'turnerle@dhec.sc.gov'; 'laura.mccary@gmail.com'; 'Linda Lester '; 'Linda Schneider '; 'Mary Kelly'; 'Michael Murrell'; 'Mike Duffy'; 'msummer@scana.com'; 'Mike Waddell'; 'Parkin Hunter'; 'Patrick Moore '; 'LakeMurrayLOA@earthlink.net'; 'Randal Shealy'; RMAHAN@scana.com; 'rparsons12@alltel.net'; 'Rhett Bickley'; 'Richard Kidder'; 'SKEENER@sc.rr.com'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sheri Armstrong '; 'lakewatchman@yahoo.com'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Tom Brooks '; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'Van Hoffman'
Subject: Comments of the SMP and Permitting Handbook



LMLA SMP



LMLA Handbook

omments.pdf (1 MB) Comments.pdf (60..

Hello all,

In preparation for the Lake and Land Management RCG meetings this Thursday and Friday, I have attached comments on the SMP and Permitting Handbook provided to me by the Lake Murray Landowners' Association. We will be reviewing these, along with all other comments, at the meetings. Thanks, Alison

<<LMLA SMP Comments.pdf>> <<LMLA Handbook Comments.pdf>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Monday, January 05, 2009 8:18 AM
To: 'Elymay2@aol.com'
Subject: RE: Lake and Land Management RCG - Permitting Handbook Review

Hello Joy,

They were large files so it is possible that your email did not accept it due to file size. Below is a link were I believe the documents are still available:

<ftp://ftp.kleinschmidtusa.com/455-029/>

-----Original Message-----

From: Elymay2@aol.com [mailto:Elymay2@aol.com]
Sent: Friday, January 02, 2009 3:40 PM
To: Alison Guth
Subject: Re: Lake and Land Management RCG - Permitting Handbook Review

Alison

I will be at the meetings on Jan 8 and 9. I do not find evidence on December 1 I received the SMP and Permitting Handbook. Did it come from you or some other way. Thanks Joy

In a message dated 12/19/2008 1:53:17 P.M. Eastern Standard Time, Alison.Guth@KleinschmidtUSA.com writes:

When: Thursday, January 08, 2009 9:30 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello All,

As you may recall, the SMP and Permitting Handbook were issued by email on December 1st to the group noting that meetings will be scheduled in January to review these documents. These meetings will take place on Thursday January 8th and Friday January 9th and will begin at 9:30 on both days at the Lake Murray Training Center. Please RSVP by December 31st for these meetings. I will be sending out an additional Outlook Calendar reminder with this information for the Jan. 9th meeting shortly. Thanks, Alison

New year...new news. Be the first to know what is making [headlines](#).

Alison Guth

From: LakeMurray LandownersAssociation [lakemurrayloa@earthlink.net]
Sent: Saturday, January 03, 2009 10:27 PM
To: Alison Guth
Subject: RE: FW: TWC Draft Shoreline Management Plan



LTR - LMLOA to
Kleinschmidt - ...

Alison:

In addition to the previous letter which I forwarded to you regarding the Handbook, please review the attached letter which serves as a complement and correspondingly addresses the SMP.

Thank you very much-
Phil

----- Original Message -----

From: [Alison Guth](#)
To: LakeMurrayLOA@earthlink.net
Sent: 12/2/2008 8:51:47 AM
Subject: FW: TWC Draft Shoreline Management Plan

-----Original Message-----

From: Alison Guth
Sent: Monday, December 01, 2008 4:32 PM
To: 'PatrickM@scccl.org'; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Ben Gregg (ben@scwf.org); Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); James Leslie ; John Frick; Joy Downs; Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Phil Hamby ; Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman

Subject: TWC Draft Shoreline Management Plan

Hello Lake and Land Management RCG,

I am happy to issue to you the Draft Shoreline Management Plan (attached below) and Draft Permitting Handbook developed in consultation with the Technical Working Committee. I am attaching the Draft Permitting Handbook in a separate email due to its size. The TWC has worked hard to compile these documents and has done a great job of reviewing and developing large amounts of information. As the process determines in the Operating Procedures, the Technical Working Committee is submitting these documents to the RCG for review. Please keep in mind that this is a content review rather than a wordsmithing procedure. Please take until Jan. 1, 2009 to review these documents and a RCG meeting will be scheduled for the beginning of January. Thanks, and I hope everyone had a wonderful Thanksgiving!

Alison

<<Shoreline Management Plan DRAFT 12-01-08 - reduced file size.pdf>>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: LakeMurray LandownersAssociation [lakemurrayloa@earthlink.net]
Sent: Thursday, January 01, 2009 11:49 PM
To: Alison Guth
Subject: RE: FW: TWC Draft Permitting Handbook



LTR - LMLOA to
Kleinschmidt - ...



LTR - LMLOA to
Kleinschmidt - ...



LTR - LMLOA to
Kleinschmidt - ...

Alison:

Please see attached.

Thanks,
Phil

----- Original Message -----

From: [Alison Guth](#)
To: LakeMurrayLOA@earthlink.net
Sent: 12/2/2008 8:55:06 AM
Subject: FW: TWC Draft Permitting Handbook

-----Original Message-----

From: Alison Guth
Sent: Monday, December 01, 2008 4:36 PM
To: 'PatrickM@scccl.org'; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Ben Gregg (ben@scwf.org); Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); James Leslie ; John Frick; Joy Downs; Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Phil Hamby ; Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sheri Armstrong ; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebber; Van Hoffman

Subject: TWC Draft Permitting Handbook

Hello All,

As noted in the previous email, I have attached the draft Permitting Handbook below. Please take until Jan. 1, 2009 to review these documents and a RCG meeting will be scheduled for the beginning of January. Thanks, Alison

<<Permitting Handbook DRAFT 11-24-08.pdf>>

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Updated: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Start: Tue 1/20/2009 9:00 AM
End: Tue 1/20/2009 12:00 PM

Recurrence: (none)

Meeting Status: Accepted

Required Attendees: 'QUATTLEBAUM, MILTON'; BARGENTIERI@scana.com; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; SUMMER, STEPHEN E; RMAHAN@scana.com; Jennifer Hand; Alison Guth

Optional Attendees: 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'

Hello folks:

The phone numbers and access code for the below-referenced conference call are included below:

Within SCE&G - 76565
Columbia Area Local - 217-6565
Long distance - 1-888-500-7717

Meeting ID Number - 2308

Thanks and looking forward to talking with you all the 20th.

Shane

Hello all:

I've gotten feedback from most folks on the proposed dates for the rescheduled conference call to discuss the NMFS-proposed Sturgeon Monitoring and Adaptive Recovery Plan for Saluda Hydro (see e-mail thread below for details). It looks as if Tuesday January 20th is good for most of us. If I get a positive response from folks, I will send out a final meeting notice with a call-in number and code. Thanks and have a Happy New Year!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

From: Shane Boring [<mailto:Shane.Boring@KleinschmidtUSA.com>]

Sent: Thursday, December 18, 2008 1:26 PM

To: Shane Boring; ARGENTIERI, WILLIAM R; Alan Stuart; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; QUATTLEBAUM, MILTON; SUMMER, STEPHEN E; MAHAN, RANDOLPH R; Jennifer Hand; Alison Guth

Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring

Sent: Wednesday, November 26, 2008 3:37 PM

To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Via Conference Call

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

Subject: Canceled: Lake and Land Management RCG - SMP Review
Location: Lake Murray Training Center

Start: Fri 1/9/2009 9:30 AM
End: Fri 1/9/2009 4:00 PM
Show Time As: Free

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: Lake & Land Management RCG
Optional Attendees: 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; 'Patrick Moore'; 'BICKLEY, RHETT'; 'HANCOCK, DAVID E'; 'tpowers@newberrycounty.net'; 'Tony Bebber'; 'HOFFMAN, VAN B'; 'Larry Turner'; 'Brooks, Tom'; Alan Stuart; 'C. Andy Miller'; BOOZER, THOMAS C

Importance: High

Hello All,

The RCG was able to cover both the Permitting Handbook and the Shoreline Management Plan comments today. Therefore, there is no need to meet tomorrow and the meeting is cancelled. Thank you everyone for your hard work today. Alison

Alison Guth

From: Shane Boring
Sent: Thursday, December 18, 2008 3:35 PM
To: Shane Boring; 'Amanda Hill'; 'Randy Mahan'; 'Bill Argentieri'; 'QUATTLEBAUM, MILTON'; Alan Stuart; Jennifer Hand; 'Vivianne Vejdani '; 'pricej@biol.sc.edu'; 'eargleda@dhec.sc.gov'; 'lora_zimmerman@fws.gov'
Cc: Alison Guth
Subject: RE: Updated Saluda Hydro Freshwater Mussel Adaptive Management Program

It would help if I would include the attachment.



Freshwater Mussel
Program UPDA...

-----Original Message-----

From: Shane Boring
Sent: Thursday, December 18, 2008 3:33 PM
To: 'Amanda Hill'; 'Randy Mahan'; 'Bill Argentieri'; 'QUATTLEBAUM, MILTON'; Alan Stuart; Jennifer Hand; 'Vivianne Vejdani '; 'pricej@biol.sc.edu'; 'eargleda@dhec.sc.gov'; 'lora_zimmerman@fws.gov'
Cc: Alison Guth
Subject: Updated Saluda Hydro Freshwater Mussel Adaptive Management Program

Dear Saluda Hydro Freshwater Mussel Working Group Members:

Attached for your review is the updated version of an adaptive management and monitoring program for Saluda Hydro Project (Lake Murray). Please provide comments on the draft plan by January 16, 2009. If no comments are received from the Working Group, or if comments are editorial in nature, the program will be sent on to the TWC with the recommendation that it be considered the final TWC draft and passed on the RCG as a recommendation for inclusion in the settlement agreement. Thanks to all for your input on this issue. Please feel free to call with any question.

Have a great Holiday,
Shane

C. Shane Boring
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Have a great Holiday,
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Sent: Thursday, December 18, 2008 3:35 PM
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Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Shane Boring
Sent: Thursday, December 18, 2008 1:26 PM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
Subject: RE: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon

Hello folks:

As you may have noticed from my meeting cancellation yesterday, we will not be hosting a conference call on December 19 to discuss the Shortnose Sturgeon Monitoring and Adaptive Recovery Plan recently proposed by NMFS (see original meeting invitation below). NMFS has requested that this conference call be postponed until January 2009. It looks as if the week of January 19 is available, specifically I'm proposing January 20, 21 or 22nd as potential dates for the conference call. Please let me know of your preference and/or availability on these dates ASAP. Once I have gathered input from folks, I will send out an invitation finalizing the meeting.

Thanks and have a great holiday,
Shane

C. Shane Boring
Environmental Scientist
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Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Appointment-----

From: Shane Boring
Sent: Wednesday, November 26, 2008 3:37 PM
To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; 'prescott.brownell@NOAA.gov'; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth
Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon
When: Friday, December 19, 2008 9:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Via Conference Call

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We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

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Lexington, SC 29072
Phone: (803)951-2077
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Sent: Thursday, December 18, 2008 1:26 PM
To: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; 'Bill Post'; 'SCDNR Vivianne Vejdani'; 'FWS Amanda Hill'; 'prescott.brownell@NOAA.gov'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Steve Summer'; 'Randy Mahan'; Jennifer Hand; Alison Guth
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Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301

Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, December 17, 2008 3:29 PM
To: 'Lake Murray Landowners' Association'
Subject: RE: FW: TWC Draft Permitting Handbook

Hello Phil,

I was able to have the documents uploaded to the Kleinschmidt FTP site. These documents will be available on there for a week, so if anyone needs to download them they will need to do so before next Wednesday. Below is the link and email me if you have any problems with it working. Alison

<ftp://ftp.kleinschmidtusa.com/455-029/>

-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Wednesday, December 17, 2008 10:02 AM
To: Alison Guth
Subject: RE: FW: TWC Draft Permitting Handbook

Alison:

Of course. Will you separate the 10MB+ files into separate 2MB files so they can be sent electronically?

Phil

-----Original Message-----

>From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
>Sent: Dec 16, 2008 11:55 AM
>To: Lake Murray Landowners' Association <lakemurrayloa@earthlink.net>
>Subject: RE: FW: TWC Draft Permitting Handbook

>

>Phil,

>

>I am afraid that we will not be able to postpone the January meetings,
>and the position stands on the posting of the documents to the website.
>I believe that we have for the most part reached agreement among the
>participating TWC/RCG members, and the RCG meetings will serve to
>ensure that the documents are an accurate reflection of these
>agreements rather than to make substantive changes to the documents
>that have been under review for the past few years. Once the documents
>are submitted to the FERC, everyone will have an unrestricted
>opportunity to make comments and suggestions for changes to address any
>issues they might believe are not satisfactorily addressed.

>

>Alison

>

>-----Original Message-----

>From: Lake Murray Landowners' Association
>[mailto:lakemurrayloa@earthlink.net]
>Sent: Monday, December 15, 2008 10:43 AM
>To: Alison Guth
>Subject: RE: FW: TWC Draft Permitting Handbook

>

>

>Alison:

>Can you at least separate the 10MB+ file into separate 2MB files so
>they can be sent? Especially now that two weeks have passed since my

>request, now that leaves only 2 weeks for any type of review of a
>massive document (which will amount to less than two weeks with the
>Christams holidays.)
>
>As you know, the past shows a likely trend that little major changes
>occur after that group strikes an internal agreement. So, for the sake
>of the public truly having a say in the development of the plans (not
>just being able to react to what the RCG decides internally), please
>consider postponing the deadline & the meeting date so that an adequate
>time may pass for appropriate review.
>
>Please also reconsider the decision to not publicly post the documents
>online. With such a massive amount of information compiled in the SMP
>and Permitting handbook and its corresponding size, printing such a
>document and disbursing them to multiple members of the public can be
>cost-prohibitive in printing & mailing charges. This is especially
>>true when such a simple, inexpensive alternative is available via your
>posting of the information publicly on the relicensing website.

>Thank you-
>Phil

>
>
>-----Original Message-----
>>From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
>>Sent: Dec 15, 2008 10:05 AM
>>To: Lake Murray Landowners' Association <lakemurrayloa@earthlink.net>
>>Subject: RE: FW: TWC Draft Permitting Handbook

>>
>>Hello Phil,
>>
>>Since the SMP and Permitting handbook reviews may result in more
>>changes to these documents, these will only be posted to the website
>after the reviews by the RCG in January. Although I understand the
>difficulty in emailing, I had a couple bounce back as well. ~ Alison

>>
>>-----
>>
>>From: Lake Murray Landowners' Association
>>[mailto:lakemurrayloa@earthlink.net]
>>Sent: Tue 12/2/2008 11:04 AM
>>To: Alison Guth
>>Subject: Re: FW: TWC Draft Permitting Handbook

>>
>>
>>
>>Alison:
>>Thanks for the follow-up. Can ya'll post the documents online on your
>>website? It's too large (10MB+) to forward to my members.

>>
>>Thanks,
>>Phil

>>
>>
>>
>>-----Original Message-----
>>From: Alison Guth
>>Sent: Dec 2, 2008 8:47 AM
>>To: LakeMurrayLOA@earthlink.net
>>Subject: FW: TWC Draft Permitting Handbook

>>
>>
>>

>>
>>
>> -----Original Message-----
>> From: Alison Guth
>> Sent: Monday, December 01, 2008 4:36 PM
>> To: 'PatrickM@sccl.org'; Vivianne Vejdani ; Alan Stuart;
>Alison Guth; Amanda Hill; Andy Miller; Ben Gregg (ben@scwf.org);
>Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias;
>btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris
>Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ;
>Dick Christie (dchristie@comporium.net); Don Tyler; George Duke; Gerrit
>Jobsis (American Rivers); Hank McKellar; Irvin Pitts
>(ipitts@scprt.com); James Leslie ; John Frick; Joy Downs; Kit Oswald ;
>Larry Turner (turnerle@dhec.sc.gov); Laura Boos
>(laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mary Kelly;
>Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike
>Waddell; Parkin Hunter; Phil Hamby ; Randal Shealy; Randy Mahan; Regis
>Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert
>Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker;
>ryanity@scana.com; S padget; Sheri Armstrong ; Steve Bell
>(lakewatchman@yahoo.com); Suzanne Rhodes; Synithia Williams; Theresa
>Powers; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebbber; Van Hoffman
>>
>> Subject: TWC Draft Permitting Handbook
>>
>> Hello All,
>>
>> As noted in the previous email, I have attached the draft
>Permitting
>>Handbook below. Please take until Jan. 1, 2009 to review these
>>documents and a RCG meeting will be scheduled for the beginning of
>>January. Thanks, Alison
>>
>> <<Permitting Handbook DRAFT 11-24-08.pdf>>
>>
>> Alison Guth
>> Licensing Coordinator
>> Kleinschmidt Associates
>> 204 Caughman Farm Lane, Suite 301
>> Lexington, SC 29072
>> Phone 803-951-2077
>> Fax 803-951-2124
>>
>>
>

Alison Guth

Subject: Instream Flow Meeting
Location: Lake Murray Training Center

Start: Mon 1/12/2009 9:30 AM
End: Mon 1/12/2009 3:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; 'AMMARELL, RAYMOND R'; Jim Bulak; Alison Guth; Alan Stuart; 'QUATTLEBAUM, MILTON'; Shane Boring; 'Vivianne Vajdani'; 'Amanda Hill'; BARGENTIERI@scana.com; 'Bud Badr'; 'dchristie@comporium.net'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Hal Beard'; Jennifer Hand; 'Jim Glover'; 'Malcolm Leaphart'; 'giffinma@dhec.sc.gov'; 'Mike Waddell'; 'Prescott Brownell'; RMAHAN@scana.com; 'Ron Ahle'; 'Scott Harder'; 'SUMMER, STEPHEN E'; 'Theresa Thom'; Brandon Kulik

Hello All,

We would like to convene a Instream Flow meeting as a follow up to the December 10th meeting on Monday, January 12, 2009. This is the preferred date due to meeting space availability, however if you absolutely cannot make it on this date please let me know. Please RSVP by Monday so that I can get the logistics worked out. Hope everyone has a wonderful Holiday. Alison

Alison Guth

From: Alison Guth
Sent: Tuesday, December 16, 2008 11:55 AM
To: 'Lake Murray Landowners' Association'
Subject: RE: FW: TWC Draft Permitting Handbook

Phil,

I am afraid that we will not be able to postpone the January meetings, and the position stands on the posting of the documents to the website. I believe that we have for the most part reached agreement among the participating TWC/RCG members, and the RCG meetings will serve to ensure that the documents are an accurate reflection of these agreements rather than to make substantive changes to the documents that have been under review for the past few years. Once the documents are submitted to the FERC, everyone will have an unrestricted opportunity to make comments and suggestions for changes to address any issues they might believe are not satisfactorily addressed.

Alison

-----Original Message-----

From: Lake Murray Landowners' Association [mailto:lakemurrayloa@earthlink.net]
Sent: Monday, December 15, 2008 10:43 AM
To: Alison Guth
Subject: RE: FW: TWC Draft Permitting Handbook

Alison:

Can you at least separate the 10MB+ file into separate 2MB files so they can be sent? Especially now that two weeks have passed since my request, now that leaves only 2 weeks for any type of review of a massive document (which will amount to less than two weeks with the Christmas holidays.)

As you know, the past shows a likely trend that little major changes occur after that group strikes an internal agreement. So, for the sake of the public truly having a say in the development of the plans (not just being able to react to what the RCG decides internally), please consider postponing the deadline & the meeting date so that an adequate time may pass for appropriate review.

Please also reconsider the decision to not publicly post the documents online. With such a massive amount of information compiled in the SMP and Permitting handbook and its corresponding size, printing such a document and disbursing them to multiple members of the public can be cost-prohibitive in printing & mailing charges. This is especially true when such a simple, inexpensive alternative is available via your posting of the information publicly on the relicensing website.

Thank you-
Phil

-----Original Message-----

>From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
>Sent: Dec 15, 2008 10:05 AM
>To: Lake Murray Landowners' Association <lakemurrayloa@earthlink.net>
>Subject: RE: FW: TWC Draft Permitting Handbook

>

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>changes to these documents, these will only be posted to the website after the reviews by the RCG in January.
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>

>_____

>

>From: Lake Murray Landowners' Association

>[mailto:lakemurrayloa@earthlink.net]
>Sent: Tue 12/2/2008 11:04 AM
>To: Alison Guth
>Subject: Re: FW: TWC Draft Permitting Handbook

>
>
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>website? It's too large (10MB+) to forward to my members.

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>
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>-----Original Message-----
> From: Alison Guth
> Sent: Dec 2, 2008 8:47 AM
> To: LakeMurrayLOA@earthlink.net
> Subject: FW: TWC Draft Permitting Handbook

>
>
>
>
>-----Original Message-----
> From: Alison Guth
> Sent: Monday, December 01, 2008 4:36 PM
> To: 'PatrickM@scccl.org'; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Ben Gregg
> (ben@scwf.org); Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius;
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>Handbook below. Please take until Jan. 1, 2009 to review these
>documents and a RCG meeting will be scheduled for the beginning of
>January. Thanks, Alison

>
> <<Permitting Handbook DRAFT 11-24-08.pdf>>

>
> Alison Guth
> Licensing Coordinator
> Kleinschmidt Associates
> 204 Caughman Farm Lane, Suite 301
> Lexington, SC 29072
> Phone 803-951-2077
> Fax 803-951-2124

Alison Guth

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> Kleinschmidt Associates
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> Lexington, SC 29072
> Phone 803-951-2077
> Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Monday, December 15, 2008 10:11 AM
To: Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry ; Brandon Stutts ; Buddy Baker ; Chad Altman; Dick Christie (dchristie@comporium.net); Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Bob Seibels (bseibels@yahoo.com); Gerrit Jobsis (American Rivers); J. Hamilton Hagood; David Eargle; Jennifer Price (pricej@biol.sc.edu); Steve Summer
Subject: Saluda Relicensing: Management Programs for Rare, Threatened and Endangered Species and Aquatic Macroinvertebrates

Dear TWC Members:

Attached are the final TWC draft versions of the Rare, Threatened and Endangered Species and Benthic Macroinvertebrate Programs for Saluda Hydro. Both a mark-up and clean copy of the Benthic Macroinvertebrate Program are included to reflect the one edit that was requested for the program at our Oct 17 Fish and Wildlife meeting (addition of a commitment for follow up sampling after an interval of 10 yrs). These documents will serve as the TWC's recommendation to the Fish and Wildlife RCG regarding these two issues, and SCE&G's ultimate intent is to incorporate these programs into the relicensing Settlement Agreement for Saluda Hydro. Thanks to all who contributed to development of the Programs and please don't hesitate to call if you have questions.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



2008-06 Saluda
RTE Management ..



Saluda Hydro



Saluda Hydro

Macroinvert Progr...

Alison Guth

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To: Lake Murray Landowners' Association
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Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, December 12, 2008 12:48 PM
To: Shane Boring; Alan Stuart; Dave Anderson
Subject: AIR Task List

Hey folks,

I put together a task list for the Saluda AIR. Bill would like to send this to the agencies by January 7th. I need a little time to put everything together so please have everything to me by December 31. Hope everyone has a great weekend!
Alison



FERC AIR task list -
Saluda P-...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Monday, December 08, 2008 11:05 AM
To: Shane Boring; 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; 'Vivianne Vajdani '; Alan Stuart; 'Amanda Hill'; 'Bill Argentieri'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer Price '; Jennifer Hand; 'Jim Glover'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Randy Mahan'; 'Ron Ahle'; 'Steve Summer'; 'Bob Seibels (bseibels@yahoo.com)'; 'J. Hamilton Hagood'; 'Dick Christie (dchristie@comporium.net)'; 'Hal Beard'; 'Prescott Brownell'; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'; 'robert.newton@noaa.bov'
Cc: Alison Guth; Cheryl Balitz
Subject: Saluda Relicensing: Oct 17 Fish and Wildlife Meeting Notes

Hello All:

Attached for your records are the final meeting notes from the October 17 Fish and Wildlife meeting for Saluda Hydro Relicensing. Thanks for your continued participation in the Relicensing Process.

C. Shane Boring
Environmental Scientist
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204 Caughman Farm Lane; Suite 301
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Oct 17 2008 FW
Meeting Notes _...

Cheryl: Please post these to the Saluda Relicensing website under Fish and Wildlife. Thanks

-----Original Message-----

From: Shane Boring
Sent: Monday, November 03, 2008 1:10 PM
To: Shane Boring; 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vajdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'; 'robert.newton@noaa.bov'
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All:

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Shane

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<< File: Oct 17 2008 FW Meeting Notes (draft;csb;10292008).doc >>

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<< File: Oct 17 2008 FW Meeting Notes (draft;csb;10292008).doc >>

Alison Guth

From: Shane Boring
Sent: Friday, December 05, 2008 2:38 PM
To: Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry ; Brandon Stutts ; Buddy Baker ; Chad Altman; Dick Christie (dchristie@comporium.net); Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mqattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring
Subject: Lake Murray Waterfowl Surveys

All:

The first Lake Murray aerial waterfowl survey for the 2008-2009 season was performed by staff from Savannah River Ecology Laboratory on Tuesday, November 25. Approximately 18 mallards, 2 Scaup and 147 Canada geese were observed during the survey. Thanks for your continued interest in the Saluda Relicensing Process.

C. Shane Boring
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2008-2009 Lake
Murray Waterfow...



2008-2009 Lake
Murray Waterfow...



The University of Georgia

Savannah River Ecology Laboratory

2008-09 Lake Murray, South Carolina, Waterfowl Aerial Survey Data

Survey Date:	11/25/2008						All Surveys
Mallard	18						18
American Black Duck							0
Mottled Duck							0
Gadwall							0
American Wigeon							0
G-W Teal							0
B-W Teal							0
Cinnamon Teal							0
Northern Shoveler							0
Northern Pintail							0
Wood Duck							0
Whistling Ducks							0
Total Dabblers:	18	0	0	0	0	0	18
Redhead							0
Canvasback							0
Scaup spp.	2						2
Ring-necked Duck							0
Common Goldeneye							0
Bufflehead							0
Ruddy Duck							0
Total Divers:	2	0	0	0	0	0	2
Eider spp.							0
Scoter spp.							0
Long-tailed Duck							0
Harlequin Duck							0
Total Seaducks:	0	0	0	0	0	0	0
Merganser spp.							0
Unidentified Ducks							0
Total Ducks:	20	0	0	0	0	0	20
Brant							0
Snow Goose							0
Blue Goose							0
Ross's Goose							0
White-Fronted Goose							0
Canada Goose	147						147
Total Geese:	147	0	0	0	0	0	147
Tundra Swan							0
Trumpeter Swan							0
Mute Swan							0
Total Swans:	0	0	0	0	0	0	0
American Coot							0
Grand Total:	167	0	0	0	0	0	167

Savannah River Ecology Laboratory

Contact: Robert Kenamer (803-725-0387); kenamerr@uga.edu



The University of Georgia

Savannah River Ecology Laboratory

2008-09 Lake Murray, South Carolina, Waterfowl Aerial Survey Flight Conditions

Survey Date:	11/25/2008					
Observer	W.L. Stephens					
Start Time	13:00					
Stop Time	14:30					
Noted General Conditions	Windy					
Irmo Temp Range (C)*	13-14°C					
Irmo Wind (mph)*	SW@7-14; Gust@32					
Irmo Rainfall (mm)*	None					
Irmo Sky Conditions*	BKN					

*Dutch Oaks, Irmo, SC Lat: N 34 ° 8 ' 49 " (34.147 °); Lon: W 81 ° 12 ' 54 " (-81.215 °); Elev ation: 366 ft; Station Hardware: Oregon Scientific WMR968

Abbreviations: PC=Partly Cloudy, OVC=Overcast, FEW=Few Clouds, SCT=Scattered Clouds, CLR=Clear Skies, BKN=Broken Skies

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Permitting
ndbook DRAFT 11-2

Alison Guth

Licensing Coordinator

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Subject: TWC Draft Shoreline Management Plan

Hello Lake and Land Management RCG,

I am happy to issue to you the Draft Shoreline Management Plan (attached below) and Draft Permitting Handbook developed in consultation with the Technical Working Committee. I am attaching the Draft Permitting Handbook in a separate email due to its size. The TWC has worked hard to compile these documents and has done a great job of reviewing and developing large amounts of information. As the process determines in the Operating Procedures, the Technical Working Committee is submitting these documents to the RCG for review. Please keep in mind that this is a content review rather than a wordsmithing procedure. Please take until Jan. 1, 2009 to review these documents and a RCG meeting will be scheduled for the beginning of January. Thanks, and I hope everyone had a wonderful Thanksgiving!

Alison



Shoreline
Management Plan DRA

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Patrick Moore [PatrickM@scccl.org]
Sent: Monday, December 01, 2008 3:51 PM
To: RAMMARELL@scana.com
Cc: BARGENTIERI@scana.com; Alan Stuart; Alison Guth
Subject: Returning to FERC

Alison, Alan, Bill and Ray,

I wanted to write and let you know that I am returning to Columbia to do legislative affairs and FERC as of Jan. 1.

I have been reviewing the documents and want to say great job on the progress so far.

Ray, would you please add me to the operations update and remove jimc@scccl.org. Also, I will be replacing Jim on all of his duties so please add me to the pertinent lists.

I look forward to working with all of you again,

Thanks,

Patrick Moore

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.552 / Virus Database: 270.9.12/1822 - Release Date: 12/1/2008 8:23 AM

Alison Guth

Subject: Saluda Relicensing: Conference Call to Discuss NMFS Proposed Monitoring and Adaptive Recovery Program for Sturgeon
Location: Via Conference Call
Start: Fri 12/19/2008 9:00 AM
End: Fri 12/19/2008 12:00 PM
Show Time As: Tentative
Recurrence: (none)
Meeting Status: Not yet responded
Required Attendees: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; prescott.brownell@NOAA.gov; Milton Quattlebaum (mquattlebaum@scana.com); Steve Summer; Randy Mahan; Jennifer Hand; Alison Guth

Hello all,

We would like to convene a conference call to discuss the proposed monitoring and adaptive recovery program for shortnose sturgeon recently distributed by NMFS (via e-mail from Prescott Brownell on 11/20/2008). This proposal was developed by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process.

Please let us know of your availability as soon as possible. Once I have a firm count of attendees, I will send out a follow-up invitation with the call-in number and meeting ID. Thanks and have a great holiday!

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

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Alison Guth

From: Shane Boring
Sent: Monday, November 24, 2008 3:02 PM
To: Steve Summer; Will Dillman ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; Bill Argentieri; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Summerlin; Jim Cumberland ; Jim Glover; Jim Ruane ; Larry Turner (turnerle@dhec.sc.gov); Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Reed Bull (rbull@davisfloyd.com); Richard Kidder; Roger Hall; Ron Ahle; Roy Parker; Shane Boring; Tom Bowles (tbowles@scana.com); Vivianne Vejdani
Subject: Saluda Relicensing: Final Downstream Temperature Report

All:

Attached for your records is the final report for the downstream temperature study performed on the lower Saluda and Congaree rivers in 2006 and 2007. Thanks to all who provided comments and input on the study, and thanks for your continued interest in the Saluda Relicensing Process. Have a great holiday!

Shane

C. Shane Boring
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Saluda
Temperature Report FIN

Alison Guth

From: Shane Boring
Sent: Monday, November 24, 2008 3:02 PM
To: 'Steve Summer'; Will Dillman ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; Bill Argentieri; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Hand; Jim Cumberland ; Jim Glover; Jim Ruane ; Larry Turner (turnerle@dhec.sc.gov); Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Reed Bull (rbull@davisfloyd.com); Richard Kidder; Roger Hall; Ron Ahle; Roy Parker; Shane Boring; Tom Bowles (tbowles@scana.com); Vivianne Vejdani
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Saluda
Temperature Report FIN

SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT
FERC NO. 516

DOWNSTREAM TEMPERATURE STUDY

FINAL

NOVEMBER 2008

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SALUDA HYDROELECTRIC PROJECT
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FINAL

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SOUTH CAROLINA ELECTRIC & GAS COMPANY

SALUDA HYDROELECTRIC PROJECT FERC NO. 516

DOWNSTREAM TEMPERATURE STUDY

FINAL REPORT

1.0 INTRODUCTION

The Saluda Hydro Project (Project) is a Federal Energy Regulatory Commission (FERC) licensed project (FERC No. 516), owned and operated by South Carolina Electric & Gas Company (SCE&G), pursuant to the license issued by the FERC in 1984. The Project is located on the Saluda River within Richland, Lexington, Saluda, and Newberry Counties, South Carolina, and situated within proximity of the towns of Irmo, Chapin, and Lexington and within the metropolitan area of the City of Columbia, South Carolina, which is approximately 10 miles east of the Project (Figure 1-1).

SCE&G is in the process of relicensing the Project as the current operating license expires on August 31, 2010. This relicensing process involves cooperation and collaboration with a variety of stakeholders, including state and federal resource agencies, state and local government, non-governmental organizations (NGO), and interested individuals, in order to identify and address any operational, economic, and environmental issues associated with a new operating license for the Project. The Water Quality Technical Working Committee (WQTWC) is comprised of interested stakeholders who are collaborating with SCE&G to identify and make recommendations related to the effects of water releases from the Project on the temperature regime of the lower Saluda River (LSR) and Congaree River.

1.1 Background and Purpose

The Saluda River rises on the east slope of the Appalachian Mountains and flows southeasterly across the Piedmont geomorphic province to its confluence at the fall line with the Broad River in Columbia, South Carolina, where the combined flows from the

Congaree River. Between the Lake Murray dam and the confluence, LSR flows for approximately ten miles through generally low gradient riverine geomorphology punctuated by occasional shoals and riffle habitat. Flow in this reach is primarily influenced by releases from the Saluda Project powerhouse, although there are some additional contributions from small tributaries such as Rawls, Twelvemile, Kinley, and Stoop creeks and Senn Branch, which collectively contribute approximately 100 square miles of additional drainage area. The average annual flow from the Saluda powerhouse to the LSR is 2,595 cfs with a minimum average daily flow of 285 cfs (Kleinschmidt, 2005).

An important macrohabitat consideration on the LSR is that the ambient water temperature is dominated by coldwater releases from below the thermocline of Lake Murray via the project powerhouse. USGS data suggest that average water temperatures in the LSR below the Project dam range from approximately 9.5°C in February to 17.5°C in early-October, and from approximately 10 to 18.5°C in the vicinity of Riverbanks Zoo¹. Coldwater releases from the Saluda Hydro Project have supported a unique put, grow, and take rainbow and brown trout recreational fishery in the LSR since the early 1950's.

The objective of this study was to characterize the effects of water releases from the Project on the temperature regime of the LSR and Congaree River, including downstream extent of temperature alteration, timing and duration of temperature alteration, and mixing characteristics.

¹ Based on monthly averaged 2000 to 2006 data as measured at USGS Gage # 02168504 (below Murray Dam) and at USGS Gage # 2169000 (Columbia).

Figure 1-1: Map of Lower Saluda and Congaree Rivers Showing Location of Saluda Hydro Project and Temperature Sensor Deployment Sites



2.0 METHODOLOGY

Paired temperature probes (StowAway® TidbiT™) were deployed along the left and right riverbank (looking downstream) at 7 locations downstream of the Project dam in the LSR and Congaree River (Figure 1-1). A single temperature probe was also deployed adjacent to the USGS gage below Lake Murray Dam (# 02168504) to verify data collected by the gage. To allow for comparisons of the Broad River to areas downstream of the Project, an additional probe was placed at the City of Columbia Rowing Facility, located on the Broad River just upstream of the Columbia Diversion Dam and the confluence of the Broad with the LSR. All probes were anchored in the river's main flow by iron dumbbell weights tethered to a tree along the shoreline by a vinyl-coated cable. All probes were set to collect data at 15-minute intervals. Data were downloaded in the field to a PC-based laptop computer equipped with Boxcar software. For quality control purposes, all data files were cross-validated with the unit serial numbers and field notes. In addition, all datasets were plotted prior to analysis and examined for erroneous data (i.e. periods when the probe was obviously out of the water due to drought conditions, vandalism, displacement due to high flows, etc.).

Data and Statistical Methods

Data from the USGS gage downstream of the Saluda Hydro Dam (#02168504) and data from our probe at that site were compared graphically in order to verify the USGS data. For a two-month period following initiation of the study, our data differed from the USGS data by a maximum of 0.55°C, with 98% of the data differing by less than 0.3°C (based on 5899 paired observations), suggesting little difference between the two probes. USGS gage data were subsequently used for all comparison in this report.

For the site adjacent to Riverbanks Zoo in the LSR (SR2), preliminary graphical comparisons suggested little difference in temperature between left and right bank, as well as a high degree of correlation between the two datasets (0.997). These factors, along with the large number of observations for each probe ($n \approx 56,300$), suggested that most statistical analyses (e.g., a paired T-Test) would likely be “overpowered” (J. Grego, Department of Statistics,

University of South Carolina, Pers. Comm.). As such, a qualitative (graphical) comparison was deemed most appropriate for this site.

For the Congaree River sites (CR1 – CR6), preliminary T-test analyses revealed significant differences between the left and right bank. These results were not unexpected, however, due to the significant variability contributed by a number of factors that influence temperatures in the Congaree (i.e., seasonal effects, coolwater releases from Saluda Hydro, drought conditions during 2006-2007, etc.) and more robust statistical tests were deemed necessary for these sites. A more thorough statistical analysis was also requested by state and federal resources agencies following review of an earlier draft of this report.

Additional analyses of the Congaree River sites were subsequently provided by Dr. John Grego (Department of Statistics, University of South Carolina), who worked with a graduate student (Cossandra Bigini) to explore appropriate statistical methods. Specifically, Dr. Grego utilized tests of equality of two time series that relied on comparing Fourier coefficients for the two series (left and right bank). Fourier coefficients were calculated using the computer package **R**. Computing all Fourier coefficients for the two time series created storage problems for the computer package; therefore, analyses were focused primarily on Fourier coefficients for the first 50 low-frequency effects. This analysis was founded on the assumption that, if the two series were to differ, they would differ in their intercept term, annual terms, or daily terms. Fourier coefficients were subsequently computed for the 50 sine and cosine waves with the lowest frequency, and for the sine and cosine waves corresponding to the daily frequency, for a total of 102 model terms. For each site, normal quantile plots of Fourier coefficients for each of the two series were then studied separately and significant terms were pooled from each of the two series (left and right bank) to conduct tests for equivalency of the two series. Additional detail and an example are provided in the excerpted sections Bigini (2007), which is included as [Appendix A](#).

It should be noted that a number of gaps existed in the data due to a variety of factors including displacement of probes by high flows, drought conditions that exposed probes, theft and/or vandalism of probes, and equipment failure. Fortunately, these incidents were primarily limited to the first few months of the study period, and in all cases, there were long intact time series common to both banks (Table 2-1). Dr. Grego's analysis focused on these continuous

time series, and he expressed confidence in the results due to the length and continuity of the series (J. Grego, Pers. Comm.).

Table 2-1: Continuous Time Series Datasets Used for Statistical Analyses at Congaree River Sites

LOCATION	DATE RANGE	SERIES LENGTH
CR1	6/30/06-9/14/07	10581
CR2	9/14/06-11/1/07	9913
CR3	6/29/06-11/1/07	11780
CR4	12/23/06-11/1/07	6381
CR5	8/15/06-10/31/07	10631
CR6	3/22/06-5/8/07	9881

3.0 RESULTS

Lower Saluda River

Water temperatures in the LSR at the USGS gage downstream of the Saluda Hydro Dam (#02168504) ranged from approximately 9.5°C to 19°C during the course of the study (Figure 4-1). For the paired probes deployed adjacent to Riverbanks Zoo (SR2), temperatures ranged from approximately 8.7°C to 24°C. This site experienced warming of approximately 5° to 7°C during summer months, with periodic excursions to near-dam temperatures during periods of Project operation. As expected, significant temperature differences between left and right banks were not apparent at the Zoo site (SR2) based on graphical comparison (Figure 4-1).

Congaree River - Empirical Observations

Empirical observations from Dr. Grego's assessment of the Congaree River sites are summarized below:

- **CR1:** A location shift was anticipated here, with the Saluda River side being colder than the Broad River side (Figure 4-2). A difference in annual amplitude was actually more apparent, with the Broad being warmer in the summer and cooler in the winter. Downward temperature excursions in the spring and summer were apparent for the Saluda River side of the river, corresponding to dam releases. There was at least one temperature excursion common to both series, likely due to a rainfall event.
- **CR2:** This site demonstrated a similar, though attenuated, pattern to CR1 (Figure 4-3).
- **CR3:** The Broad River side was warmer in the late summer/fall of 2007, but this pattern was not apparent for the same period in 2006. Some of the other downstream locations demonstrated similar transient seasonal differences (Figure 4-4).
- **CR4:** The Broad River side was warmer in spring 2007 (Figure 4-5).

- **CR5:** The Broad River side was colder in the early winter 2006, and warmer in late spring 2007 (Figure 4-6). There were also more downward temperature excursions at this location than at adjacent locations.
- **CR6:** The two time series at this location were quite similar (Figure 4-7).

Congaree River – Statistical Analyses

Test results showed significant differences in the time series (left versus right bank) for CR1, CR2, and CR5; the two series for CR3, CR4, and CR6 were decidedly not significant. A comparison of CR1 and CR2 suggests that the CR2 series differ for the same reason that the CR1 series differ: temperature differences in the Saluda and Broad Rivers.

Table 3-1: Summary of Test of Equivalent Time Series for Congaree River Sites

LOCATION	F STATISTIC	P-VALUE
CR1	100.42	0+
CR2	2.55	.0016
CR3	.22	>.99
CR4	.19	>.99
CR5	5.38	0+
CR6	.22	>.99

4.0 DISCUSSION

The study results suggest that coldwater releases from Saluda Hydro have a significant influence on the thermal regime of the LSR and the upper Congaree River. In the LSR, bottom releases from Lake Murray maintain coolwater habitat throughout the year, with temperatures diverging from those in the Broad around the mid-March to early-April timeframe and returning to temperatures near those found in the Broad by approximately late October (Figure 4-1). Interestingly, the study data also showed that temperatures in the LSR are slightly warmer than those in the Broad during the winter months. This suggests that Lake Murray serves as a minimal heat sink, partially attenuating ambient winter temperatures in the basin, although this effect is very minimal ($< 1\text{-}2^{\circ}\text{C}$). This would also explain the patterns of cooler winter temperatures on the Broad side of the Congaree River at sites CR1 and CR5, which were noted in Dr. Grego's empirical observations.

Alterations of the temperature regime in the Congaree River are most pronounced upstream of the Granby Lock and Dam, where temperatures on the Saluda River side of the river are significantly cooler than those on the Broad River side. As expected, the most upstream Congaree River site (CR1), located near the Gervais St. Bridge just downstream of the confluence of the Broad and Saluda Rivers, experienced the most extreme variability during the study. As previously noted, downward temperature excursions corresponding to dam releases were apparent in the spring and summer for the Saluda side of the river (Figure 4-2). In addition to the site's proximity to the confluence and Saluda Hydro, the channel characteristics in this reach likely contributed significantly to periodic extreme variations in temperature observed during the study. Specifically, the Saluda side of the river in the vicinity of CR1 is dominated by an extensive submerged bedrock outcropping that extends greater than half-way across the river, with the main river channel located along Broad River side. As a result, water depths on the Saluda side of the river during the study period were typically only 2 – 4 ft and were as shallow as 1 ft or less during the most extreme period of the drought during Summer 2008. As a result, the majority of the LSR's volume shifted towards the center and left bank of the river. During extreme drought conditions (i.e., Summer 2007) this configuration likely allowed for significant, localized warming during periods of low flow, followed by significant temperature drops during Project operations. It should be noted that Project operations were also periodically detectable

on the Broad River side of the river at this site, presumably due to the channel characteristics and drought conditions discussed above.

The second Congaree River site downstream (CR2), located just upstream of the Interstate 77 Bridge, displayed similar, although attenuated, patterns to those observed upstream at CR1 (i.e., statistically significant differences between the left and right bank). In addition to increased distance from Saluda Hydro, the reduced influence observed at this site is likely attributed to its location just downstream of the abandoned Granby Lock and Dam (located approximately 0.5 mi upstream of the site). At the Granby Lock and Dam, the majority of the river's flow is forced through the open lock chamber, located along the extreme right bank (Saluda side of river), facilitating mixing in this reach. These results suggest that, while the effects are attenuated, waters from the Broad and Saluda rivers are not fully mixed at this site.

As previously noted, statistical analyses indicated that water temperatures differed significantly between the Broad and Saluda sides of the Congaree River at CR1, CR2, and CR5, but not at CR3, CR4 or CR6 (Table 3-1). The fact that CR2 differed significantly, and CR3 and CR4 did not, suggests that the mixing of Broad and Saluda waters is complete somewhere between CR2 and CR3. Stated differently, the data suggest that mixing is complete somewhere between the Interstate 77 Bridge and River Mile 35 (approximately 8 miles upstream of Congaree National Park). The differences observed between the left and right bank at CR5 are not easily explained, although Grego (2007) speculated that they may have been due to daily effects and/or transient seasonal differences at the site. The underlying cause of these effects is more elusive, though the location could have been a contributing factor.

Finally, it should be noted that project operations were often detectable at all of the Congaree River sites, even those that did not display statically significant differences in overall temperature between the left and right bank (i.e., CR3, CR4, and CR6). Specifically, project operations periodically resulted in short term temperatures excursions, which were detectable on timescales of several hours to a day (Figure 4-1 through Figure 4-7). Short-term temperature alterations at downstream sites resulting from project operations typically followed a similar pattern on both sides of the river, presumably due to the mixing occurring at Granby Lock and Dam and farther downstream.

Temperature alterations in the Congaree River resulting from project operations appeared to be detectable farther downstream and to be of greater magnitude during 2007 than in 2006, particularly during the summer and fall months. This trend was likely attributed to extremely low flows experienced in the Congaree River due to prevailing drought conditions in the basin during this period. This likely explains the transient seasonal trends observed at several sites where overall temperature regimes did not vary (i.e. warmer temperature on the Broad side at CR3 and CR4 during spring and summer of 2007, but not in 2006). These data suggest that the Summer/early-Fall 2007 data likely represents a “worse-case-scenario” and may not be reflective of temperature patterns during normal water years.

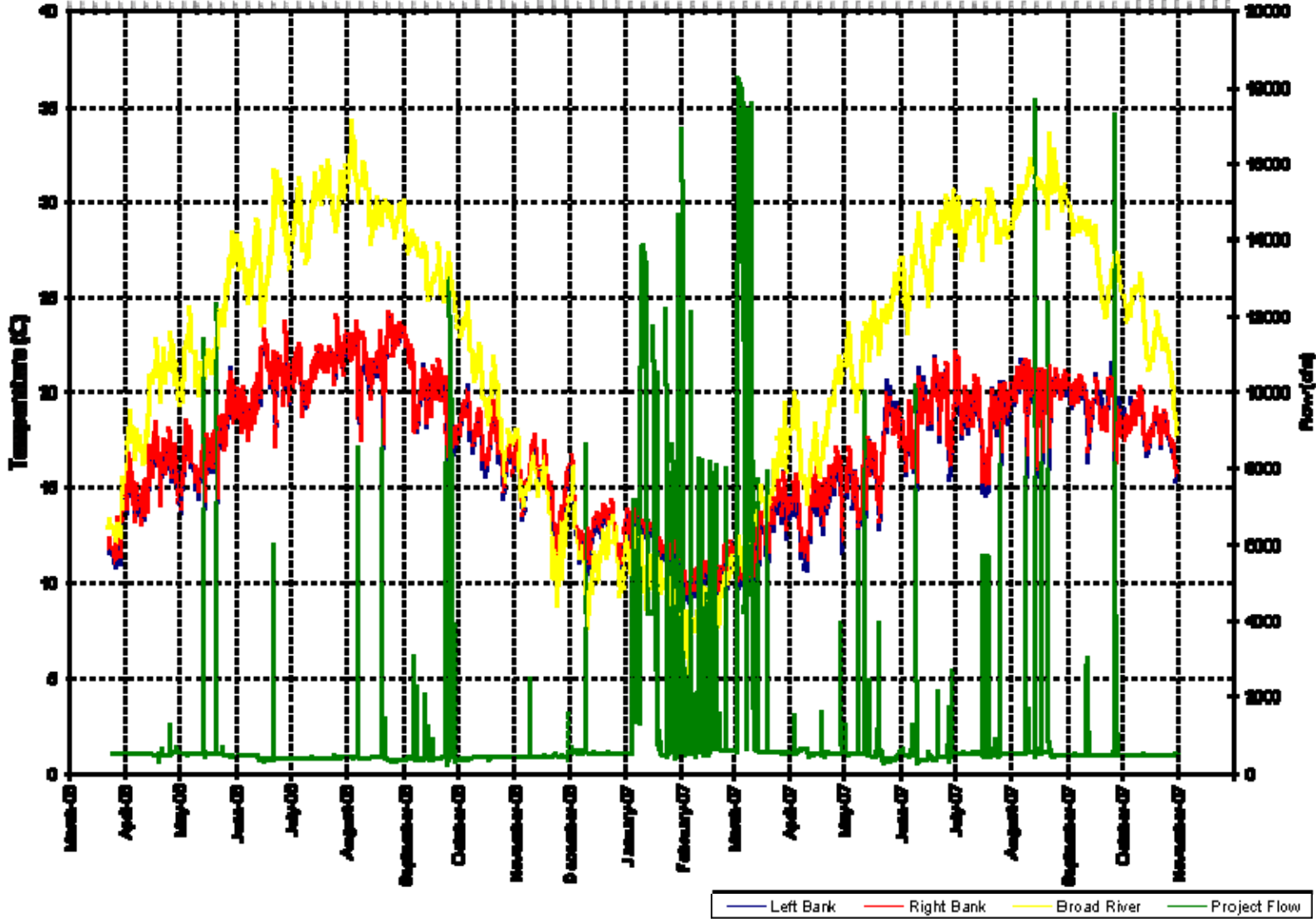


Figure 4-1: Water Temperatures at Lower Saluda River at Riverbanks Zoo (SR2) – 2006 and 2007

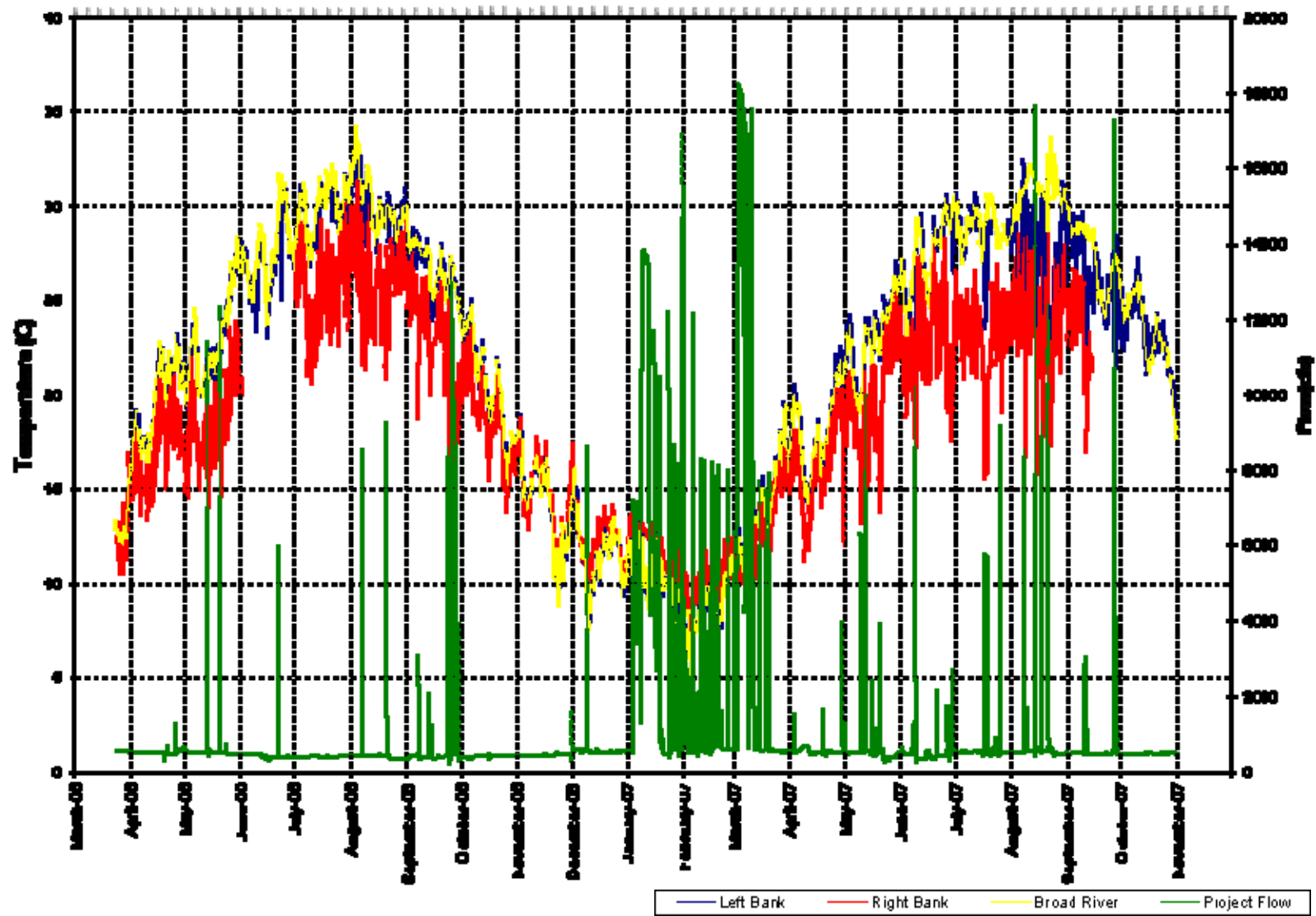


Figure 4-2: Water Temperatures at Congaree River Site 1 (CR1) – 2006 and 2007

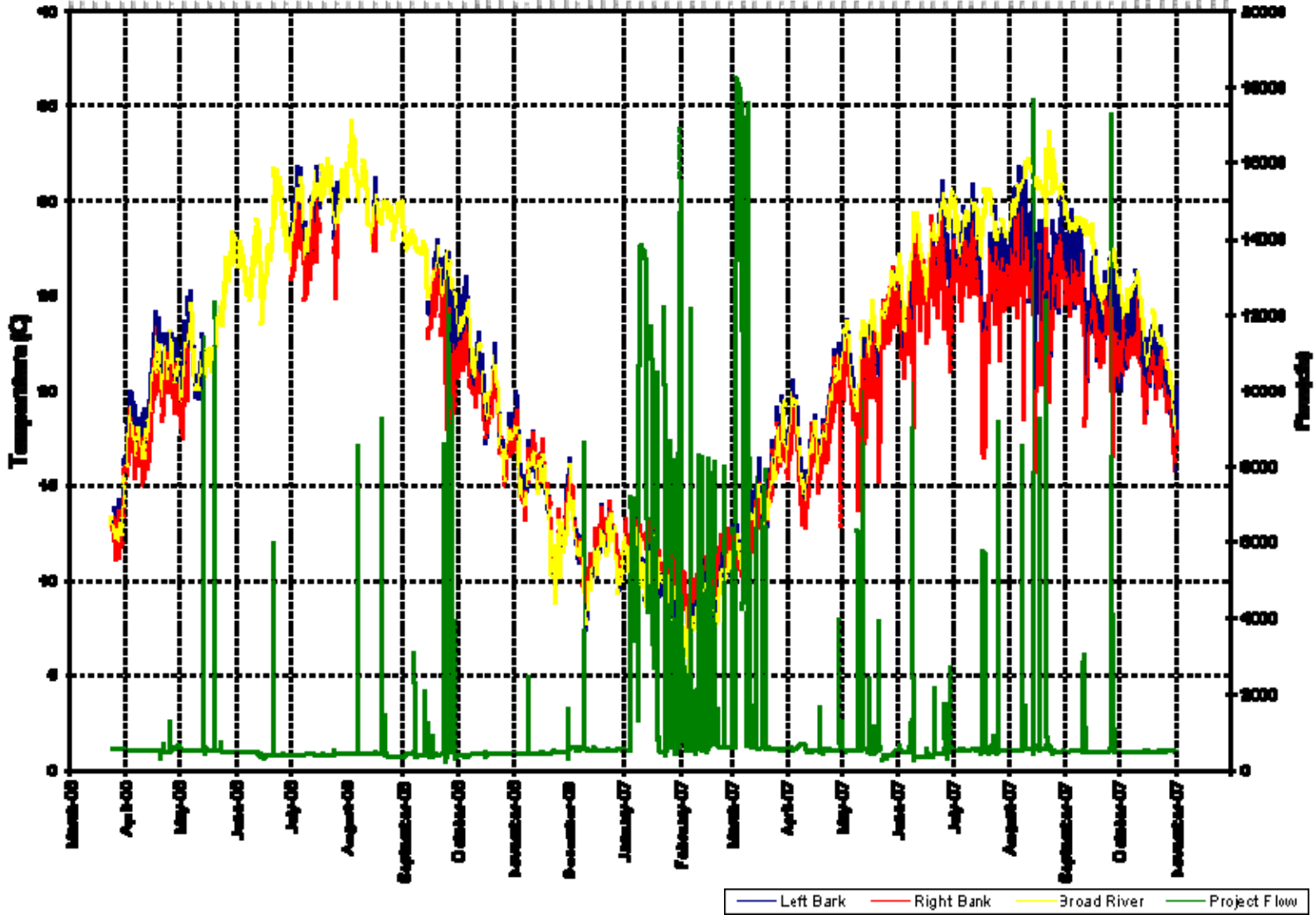


Figure 4-3: Water Temperatures at Congaree River Site 2 (CR2) – 2006 and 2007

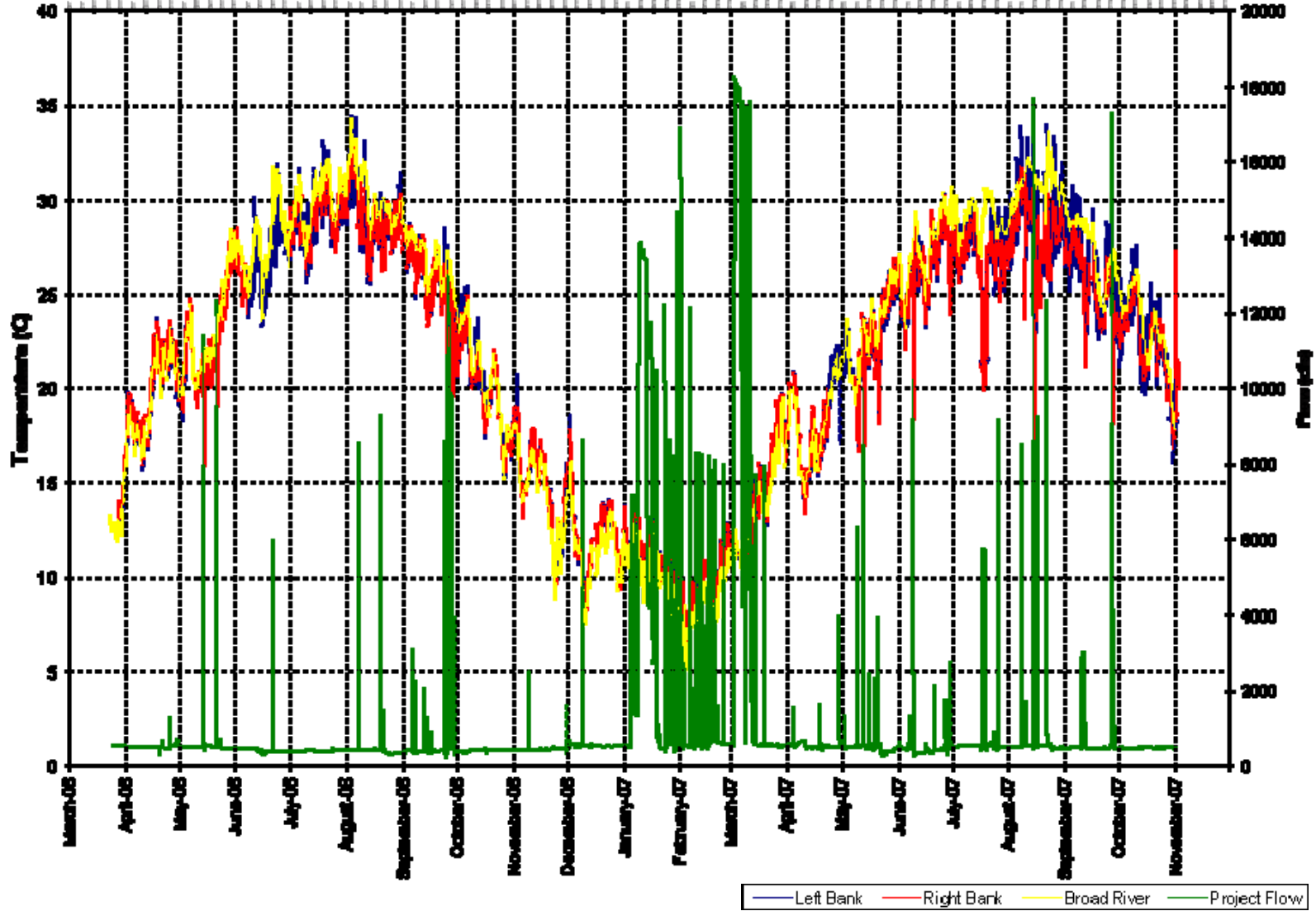


Figure 4-4: Water Temperatures at Congaree River Site 3 (CR3) – 2006 and 2007

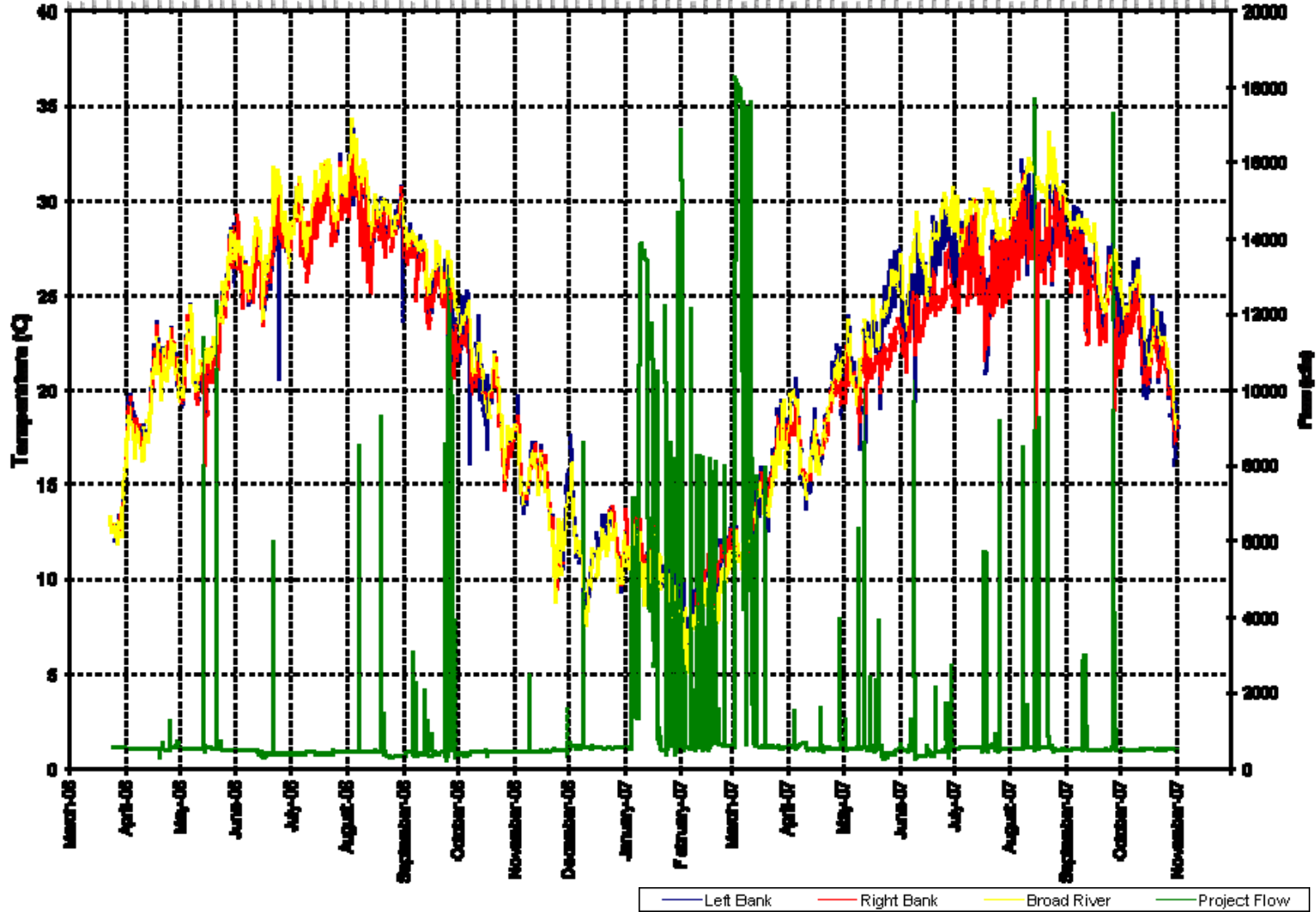


Figure 4-5: Water Temperatures at Congaree River Site 4 (CR4) – 2006 and 2007

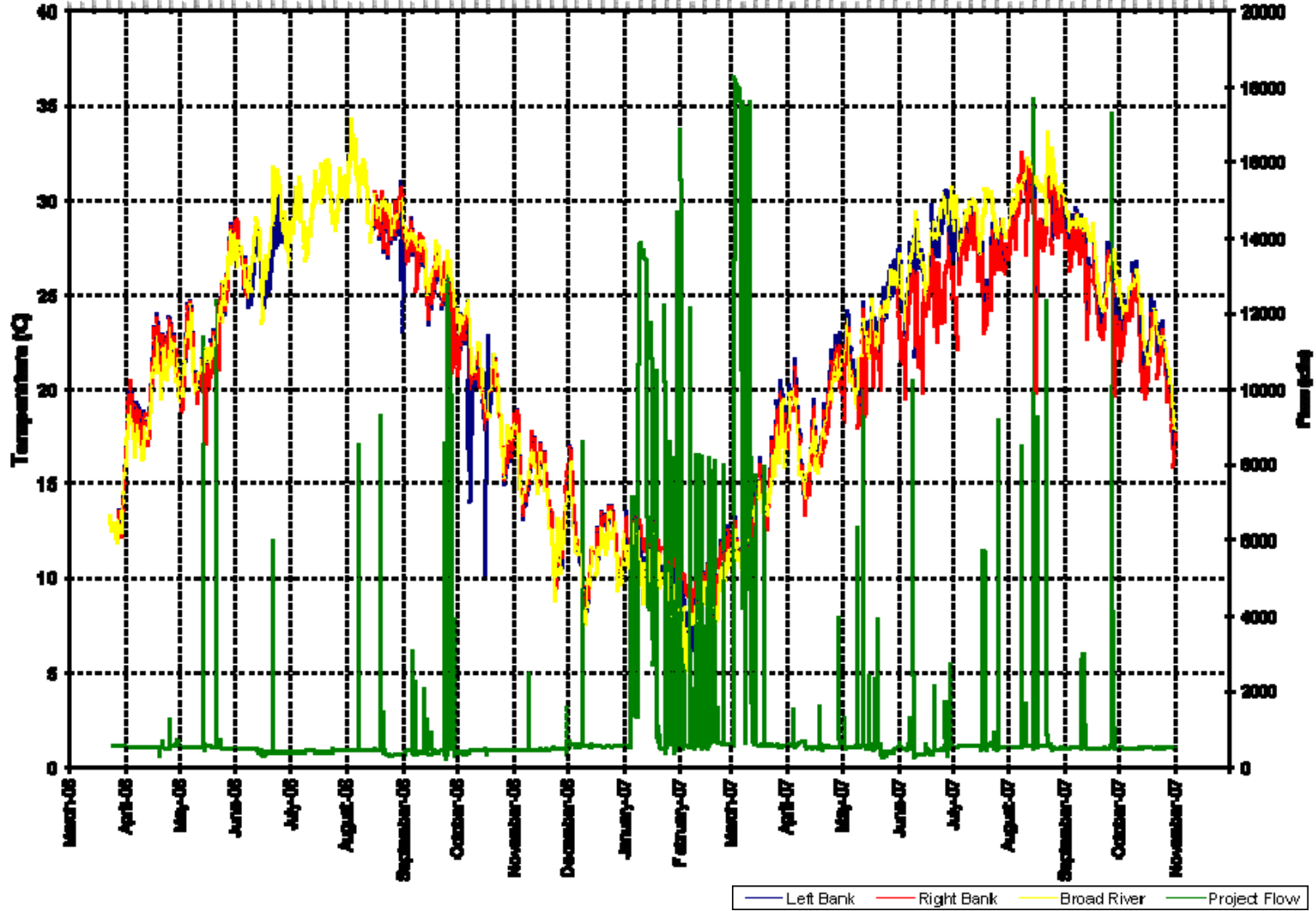


Figure 4-6: Water Temperatures at Congaree River Site 5 (CR5) – 2006 and 2007

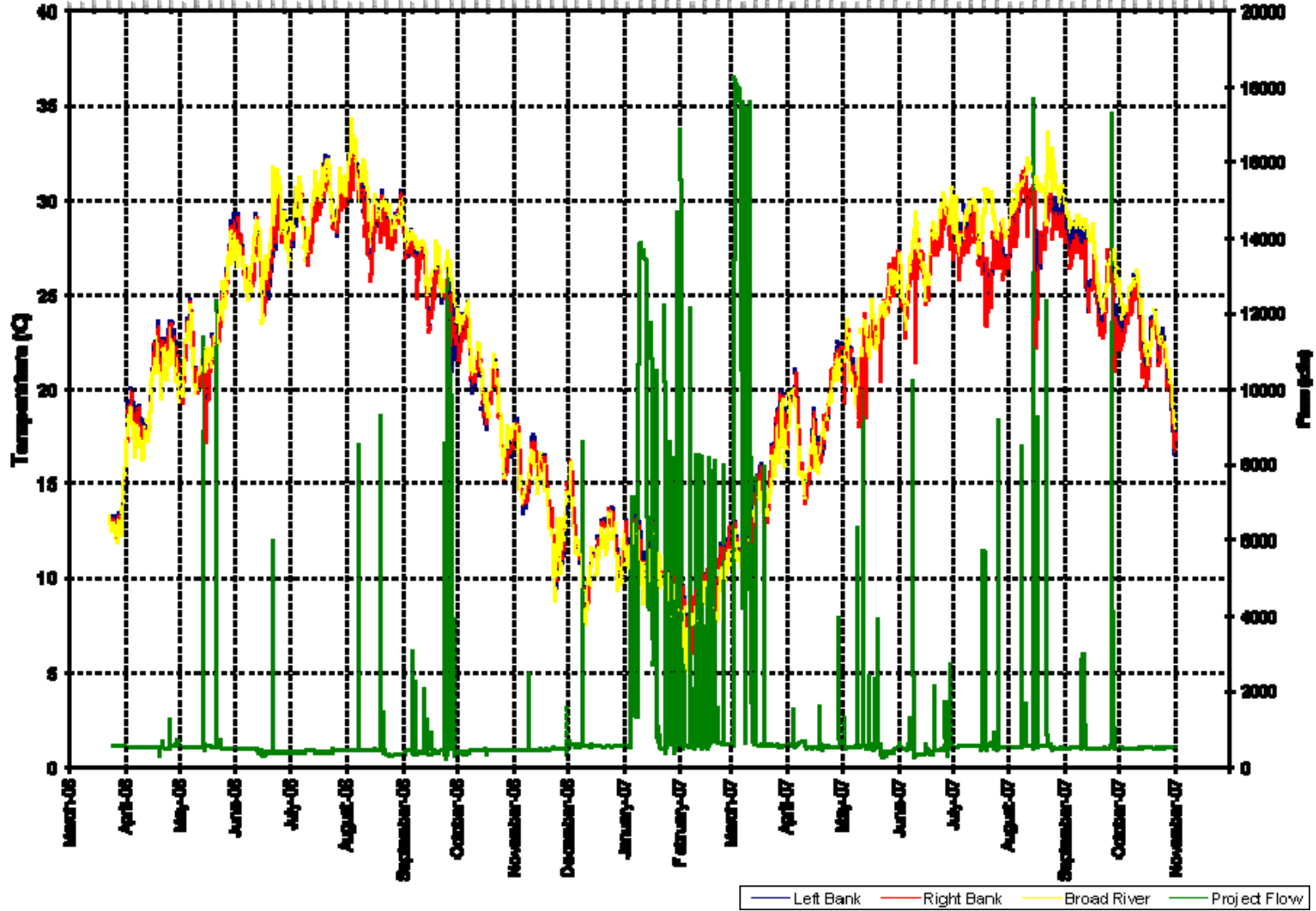


Figure 4-7: Water Temperatures at Congaree River Site 6 (CR6) – 2006 and 2007

APPENDIX A

SUMMARY OF STATISTICAL METHODS USED TO ANALYZE LOWER SALUDA
RIVER AND CONGAREE RIVER TEMPERATURE DATA EXCERPTED FOR BIGINI
(2007)

**Amended Sections from Bigini (2007) M.S. Thesis, University of South Carolina,
“Statistical Models in Analyzing Mixing Characteristics of the Congaree River for the
Saluda Hydroelectric Project”**

3. Test of Equal Timeseries

3.1 Introduction

The F test of equal time series will test if the temperature time series of the left and right banks are statistically equal. This is of importance in finding the distance from the confluence point at which the cold waters of the Saluda River and the warm waters of the Broad River mix. To conduct this test, a sinusoidal model needs to be fit to the original data so that appropriate parameters are estimated.

3.2 Least Squares Method for Linear Models

Consider the linear model $Y_i = \beta_0 + \beta_1 x_{1i} + \dots + \beta_p x_{pi} + \varepsilon_i$ for $i=1, \dots, n$, where Y_i is the response for observation i , x_{1i}, \dots, x_{pi} is a set of covariates for observation i , β_0, \dots, β_p are unknown but fixed parameters, and $\{\varepsilon_i\}$ are uncorrelated random variables with mean 0 and variance σ^2 . This linear model can be written in matrix form as:

$$\begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_n \end{bmatrix} = \begin{bmatrix} x_{10} & x_{11} & \cdots & x_{1p} \\ x_{20} & x_{21} & \cdots & x_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ x_{n0} & x_{n1} & \cdots & x_{np} \end{bmatrix} * \begin{bmatrix} \beta_0 \\ \vdots \\ \beta_p \end{bmatrix} + \begin{bmatrix} \varepsilon_0 \\ \varepsilon_1 \\ \vdots \\ \varepsilon_n \end{bmatrix}$$

To estimate β using least squares estimation, we must minimize over all β :

$$\begin{aligned} & \sum (y_i - \beta_0 - \beta_1 x_{1i} - \dots - \beta_p x_{pi})^2 \\ &= (\mathbf{Y} - \mathbf{X}\boldsymbol{\beta})^T (\mathbf{Y} - \mathbf{X}\boldsymbol{\beta}) \\ &= \|\mathbf{Y} - \mathbf{X}\boldsymbol{\beta}\|^2 \end{aligned}$$

3.3 Sinusoidal Models

By Fourier's decomposition theorem, a time series can be modeled by a sum of sine waves in a harmonic series (Martin-Fernandez, Alerola-Lopez, 2003). Fourier coefficients define each wave series' amplitudes and phases.

To fit a sinusoidal model to the temperature data, we could start with a single cosine function. This model is expressed as:

$$f(t) = \mu + A \cos(\omega t + \varphi)$$

where μ is the mean, A is the amplitude, $\omega=2\pi f$ and f is the frequency, and φ is the phase.

By Fourier's Theorem, a continuous, periodic function can be formed from summing a series of either sine or cosine terms together, called the Fourier series. To approximate the data better at time t , multiple sinusoids are added together, resulting in a sinusoidal model:

$$f(t) = \mu + \sum_{i=1}^C A_i \cos(\omega_i t + \varphi_i)$$

In modeling multiple data points at times t_j , the sinusoidal model is:

$$f(t_j) = \mu + \sum_{i=1}^C A_i \cos(\omega_i t_j + \varphi_i) + \varepsilon_j$$

for $1 \leq j \leq N$ and $N > 2C + 1$

and the error terms, ε_j , are iid with mean 0 and variance σ^2 .

Using the relationship between the angular frequency and frequency: $\omega=2\pi f$, we get the following relationship:

$$f(t_j) = \mu + \sum_{i=1}^C A_i \cos(2\pi f_i t_j + \varphi_i) + \varepsilon_j$$

for $1 \leq j \leq N$ and $N > 2C + 1$

where the amplitudes, A_i , and phases, φ_i , need to be estimated by the least squares method. By defining $\beta_i = A_i \cos(\varphi_i)$ and $\gamma_i = A_i \sin(\varphi_i)$, the parameter vector to estimate is:

$$\Phi = \begin{bmatrix} \mu \\ \beta_1 \\ \gamma_1 \\ \vdots \\ \beta_C \\ \gamma_C \end{bmatrix}.$$

For the multiple harmonic regression model:

$$Y_j = \mu + \sum_{i=1}^C \gamma_i \cos(2\pi f_i t_j) + \sum_{i=1}^C \beta_i \sin(2\pi f_i t_j) + \varepsilon_j,$$

Φ is then estimated by regressing the temperature data on the Fourier expansion through the linear model $Y_i = H\Phi + \varepsilon_i$, where the Fourier expansion matrix, H , is:

$$H = \begin{bmatrix} 1 & \cos(2\pi f_1 t_1) & \sin(2\pi f_1 t_1) & \cdots & \cos(2\pi f_C t_1) & \sin(2\pi f_C t_1) \\ 1 & \cos(2\pi f_1 t_2) & \sin(2\pi f_1 t_2) & \cdots & \cos(2\pi f_C t_2) & \sin(2\pi f_C t_2) \\ \vdots & \vdots & \vdots & \ddots & \vdots & \vdots \\ 1 & \cos(2\pi f_1 t_N) & \sin(2\pi f_1 t_N) & \cdots & \cos(2\pi f_C t_N) & \sin(2\pi f_C t_N) \end{bmatrix}$$

And the temperature data vector, \bar{Y} is:

$$\bar{Y} = \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_N \end{bmatrix}$$

This resulting Gaussian vector of parameter estimates has a normal distribution: $\hat{\Phi} \sim N(\Phi, \sigma^2 (H^T H)^{-1})$

3.4 Distribution of the Gaussian Vector for a Single Time Series

For $\hat{\Phi} = \begin{bmatrix} \hat{\mu} \\ \hat{\beta}_1 \\ \hat{\gamma}_1 \\ \vdots \\ \hat{\beta}_c \\ \hat{\gamma}_c \end{bmatrix}$, we have $\hat{\Phi} \sim N(\Phi, \sigma^2 (H^T H)^{-1})$. Using known results

Using known results for linear models, we know that the distribution of the Residual Sum of Squares of $\hat{\Phi}$ divided by its variance is distributed as follows:

$$\frac{(N - 2C - 1)\hat{\sigma}^2}{\sigma^2} = \frac{RSS(\hat{\Phi})}{\sigma^2} \sim \chi_{N-2C-1}^2$$

$$\text{and } \frac{(\hat{\Phi} - \Phi)^T (H^T H)(\hat{\Phi} - \Phi)}{\sigma^2} \sim \chi_{K+1}^2$$

Since a linear combination of a Gaussian vector is a Gaussian vector, linear combinations of $\hat{\Phi}$ can be performed as well. This allows the ability to test certain parameters of Φ instead of all the parameters at one time.

This linear combination matrix, B , has to have rank q ; with q being at most the rank of the temperature data, y and at least 1 in order to comply with Gaussian rules.

Incorporating this linear combination matrix, this Gaussian vector becomes:

$$\frac{(B\hat{\Phi} - B\Phi)^T (B(H^T H)^{-1} B^T)^{-1} (B\hat{\Phi} - B\Phi)}{\sigma^2} \sim \chi_q^2$$

Since σ^2 is unknown, another testing distribution must be used. By using the fact that the ratio of two independent chi square distributions divided by their degrees of freedom produce an F distribution and that $RSS(\hat{\Phi})$ and $\hat{\Phi}$ are independent:

$$\frac{\frac{(B\hat{\Phi} - B\Phi)^T (B(H^T H)^{-1} B^T)^{-1} (B\hat{\Phi} - B\Phi)}{\sigma^2 q}}{\frac{RSS(\hat{\Phi})}{\sigma^2 (N - 2C - 1)}} \sim \frac{\frac{\chi_q^2}{q}}{\frac{\chi_{N-2C-1}^2}{N - 2C - 1}}$$

$$= \frac{\frac{(B\hat{\Phi} - B\Phi)^T (B(H^T H)^{-1} B^T)^{-1} (B\hat{\Phi} - B\Phi)}{q}}{\frac{RSS(\hat{\Phi})}{(N - 2C - 1)}} \sim F_{q, N-2C-1}$$

Now that there are no unknown parameters, this F-statistic, F^* can be found and compared to a $F_{q, N-2C-1}$. The p-value is therefore $P(F^* \leq F_{q, N-2C-1})$.

3.5 Distribution of the Gaussian Vector for Difference of Two Time Series

To test the equality of two time series with respectful parameter estimates $\hat{\Phi}_1$ and $\hat{\Phi}_2$, the time series must be evaluated over the same time period so that the H matrix is identical for the two time series. If the time series are statistically equal, then the distributions of the parameter vectors should be the same. The distribution of the difference of these parameter vectors is:

$$\hat{\Phi}_1 - \hat{\Phi}_2 \sim N(0, (\sigma_1^2 + \sigma_2^2)(H^T H)^{-1})$$

Assuming equal variances, the following distribution should be exact, and assuming the variances are not equal, the distribution is approximate.

$$\frac{(B\hat{\Phi}_1 - B\hat{\Phi}_2)^T (B(H^T H)^{-1} B^T)^{-1} (B\hat{\Phi}_1 - B\hat{\Phi}_2)}{\frac{q}{RSS(\hat{\Phi}_1) + RSS(\hat{\Phi}_2)}} \sim F_{q, 2*(N-2C-1)}$$

$$\frac{q}{2*(N-2C-1)}$$

Now that there are no unknown parameters, this F-statistic, F^* can be found and compared to a $F_{q, 2*(N-2C-1)}$. The p-value is therefore $P(F^* \leq F_{q, 2*(N-2C-1)})$. The null hypothesis is that the linear combination matrices, $B\hat{\Phi}_1$ and $B\hat{\Phi}_2$ are equal.

7. Conducting the Equal Time Series Test for Saluda Hydroelectric Data

7.1 Constructing the Test

In testing for equal time series for the Saluda Hydroelectric data, hourly averaged data of the CO1A and CO1B will be used since this is the most interesting smoothed timeseries. Since the variances are approximately equal, this should be an exact test. 100 hours of averages will be used as the y vector:

$$\bar{Y} = \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_{100} \end{bmatrix}$$

There are 100 possible frequencies, ranging from $\frac{1}{100}$ to $\frac{1}{2}$, however the focus will be on the lower half of the frequencies, since these terms will account for the daily cycles in water temperature. The Fourier expansion matrix, H has been redefined, to simplify coding, to be:

$$H = \begin{bmatrix} \cos(2\pi f_1 t_1) & \cos(2\pi f_2 t_1) & \cdots & \cos(2\pi f_{50} t_1) & \sin(2\pi f_1 t_1) & \sin(2\pi f_2 t_1) & \cdots & \sin(2\pi f_{50} t_1) \\ \cos(2\pi f_1 t_2) & \cos(2\pi f_2 t_2) & \cdots & \cos(2\pi f_{50} t_2) & \sin(2\pi f_1 t_2) & \sin(2\pi f_2 t_2) & \cdots & \sin(2\pi f_{50} t_2) \\ \vdots & \vdots & \ddots & \vdots & \vdots & \vdots & \ddots & \vdots \\ \cos(2\pi f_1 t_{100}) & \cos(2\pi f_2 t_{100}) & \cdots & \cos(2\pi f_{50} t_{100}) & \sin(2\pi f_1 t_{100}) & \sin(2\pi f_2 t_{100}) & \cdots & \sin(2\pi f_{50} t_{100}) \end{bmatrix}$$

The H matrix removes the intercept term for now, though μ will be of interest later. The model has to be reduced to only the most significant terms so that the model will not be saturated and so that there are enough degrees of freedom present for testing. Under $H_0: \Phi=0$, the components of $\hat{\Phi}$ are iid normal random variables, so a normal QQ Plot can be used to identify significant terms. In analyzing the QQ plot, 11 terms were found to be significant (1,4,5,7,8,51,54,56,58,59,60) corresponding to the appropriate terms in the H matrix.

These i terms are 1,4,8,51,52,53,55,and 56. The significant parameters to be estimated are therefore:

$$\Phi = \begin{bmatrix} \mu \\ \beta_1 \\ \beta_4 \\ \beta_5 \\ \beta_7 \\ \beta_8 \\ \gamma_1 \\ \gamma_4 \\ \gamma_6 \\ \gamma_8 \\ \gamma_9 \\ \gamma_{10} \end{bmatrix},$$

where Φ is a 12x1 matrix consisting of the 11 significant terms for C01A and the intercept. The H matrix must also be further reduced to a 100*12 matrix of a column of 1's and the 11 columns of the significant terms. H is now:

$$\begin{bmatrix} 1 & \cos(2\pi f_1 t_1) & \cdots & \cos(2\pi f_8 t_1) & \sin(2\pi f_1 t_1) & \cdots & \sin(2\pi f_{10} t_1) \\ 1 & \cos(2\pi f_1 t_2) & \cdots & \cos(2\pi f_8 t_2) & \sin(2\pi f_1 t_2) & \cdots & \sin(2\pi f_{10} t_2) \\ \vdots & \vdots & \ddots & \vdots & \vdots & \ddots & \vdots \\ 1 & \cos(2\pi f_1 t_{100}) & \cdots & \cos(2\pi f_8 t_{100}) & \sin(2\pi f_1 t_{100}) & \cdots & \sin(2\pi f_{10} t_{100}) \end{bmatrix}$$

By regressing Y on H, the parameter vectors for C01A and C01B respectively, are estimated as:

$$\hat{\Phi}_1 = \begin{bmatrix} 16.1868 \\ -.5025 \\ 1.0154 \\ -2.013 \\ -.1761 \\ -.2058 \\ -.5581 \\ -.5570 \\ -.1912 \\ -.2479 \\ .1740 \\ .0775 \end{bmatrix} \quad \text{and} \quad \hat{\Phi}_2 = \begin{bmatrix} 17.643 \\ -.5428 \\ .4334 \\ -.1185 \\ .0081 \\ .1208 \\ -1.192 \\ -.0395 \\ -.2102 \\ -.1125 \\ -.0824 \\ -.1109 \end{bmatrix}$$

The RSS for $\hat{\Phi}_1$ is 4.804 and the RSS of $\hat{\Phi}_2$ is 15.397. The F statistic for different tests of the B matrix was performed in R, as shown in Appendix B. The F test statistic is:

$$\frac{(B\hat{\Phi}_1 - B\hat{\Phi}_2)^T (B(H^T H)^{-1} B^T)^{-1} (B\hat{\Phi}_1 - B\hat{\Phi}_2)}{\frac{RSS(\hat{\Phi}_1) + RSS(\hat{\Phi}_2)}{2 * (N - 2C - 1)}} \sim F_{q, 2*(N-2C-1)}$$

where N is 100, C is the number of significant terms (11), and q is the rank of B; $B=I_{(C+1) \times (C+1)}$ tests for equal time series and $B=(1,0,0,\dots,0)$ tests for equal means.

The resulting p-value is:

$$P(F^* \leq F_{q, N-2c-1}) = P(F^* \leq F_{q, 2*(100-22-1)}) = P(F^* \leq F_{q, 154})$$

The results of these tests, along with the tests for all other gauge locations can be found in Bigini (2007).

Alison Guth

From: Alan Stuart
Sent: Monday, November 24, 2008 2:10 PM
To: QUATTLEBAUM, MILTON; Shane Boring; Vivianne Vejdani ; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Hand; Jim Glover; Malcolm Leaphart; giffinma@dhec.sc.gov; Mike Waddell; Prescott Brownell; RMAHAN@scana.com; Ron Ahle; Scott Harder; SUMMER, STEPHEN E; Theresa Thom; Brandon Kulik
Subject: Saluda Instream Flow TWC Meeting



Congaree striped
bass memo fin...

Good Afternoon everyone,

There have been a couple of developments that may affect the flow regime for the lower Saluda River. We are planning a meeting for **Wednesday December 10th at the Lake Murray Training Center Room 100**. Please let me know your availability for that day.

To encapsulate things, Jim Bulak with the SCDNR has developed a proposal for enhanced flows for striped bass spawning/recruitment in the Congaree River. Below is the proposed flow regime:

Recommendation for instream flows to enhance striped bass spawning and recruitment:

- Instream flows are needed in the spring to provide adequate spawning habitat and nursery areas for a variety of fish species. One of these is striped bass, which is an important sport fish in the Santee River basin. Others include the American shad and the Robust redhorse, and the DNR has partnered with SCE&G and other resource agencies and utilities to restore these species. For these purposes, flows above the 1,300 cfs base flow previously discussed are needed in some years from April 1 through May 10.

- Instream flows should be released continuously (not on an average daily basis) to moderate the temperature change effects of releases from Lake Murray dam.

- When average daily flows in the Broad River for the previous day are less than 2,900, an instream flow of 1,300 cfs should be provided for the lower Saluda if hydrological conditions allow, or else the LIP should be implemented.

- When average daily flows in the Broad River for the previous day are $\geq 7,700$ cfs, there is no need to further augment the base flow of lower Saluda River as the sum of the Broad River flow ($\geq 7,700$ cfs) and lower Saluda base flow (1,300 cfs) would be $\geq 9,000$.

- When the target level for Lake Murray has been reached by April 1, and average daily flows in the Broad River are $\geq 2,900$ and $< 7,700$ cfs for the previous day, continually release from Lake Murray dam the lesser of 1) 45% of the previous day's flow of the Broad River measured at the Alston gage (which would mean the Saluda was supplying 31% of the flow in the Congaree River), OR 2) the flow required above the 1,300 cfs base flow to attain a flow in the Congaree of

9,000 cfs.

Since these flows may impact habitat for certain guild/species we thought it be best to have the TWC evaluate those flows. Attached is a memo which Brandon prepared which breaks down the various flows and their impacts on the guilds/species in the LSR. This is one of the items I'd like to discuss at the meeting.

Also, we'd like to give the TWC an update on the discussions held during the low inflow Protocol Focus Group.

The plan now is to have Jim Bulak give a presentation on striped bass flows and Ray Ammarell give a presentation on where the discussions in the LIP focus group are leading with respect to developing a draft protocol.

Please let me know if you can attend. I hope eveyrone has a very Happy and safe Thanksgiving holiday.

thanks..Alan

Alison Guth

From: Jim Cumberland [jimc@scccl.org]
Sent: Friday, November 21, 2008 12:16 PM
To: fjcumberland@yahoo.com
Subject: farewell & contact information

Hi all,

Today I am ending my time with the Coastal Conservation League. It has been a pleasure getting to know all of you, and to work with you over the past year and a half or so. Good luck and best wishes! I'll let you know where I land.

My predecessor, Patrick Moore, will be replacing me. Patrick's email is patrickm@scccl.org.

If you need or want to reach me, please email me at fjcumberland@yahoo.com. I will not be checking this email address after sending this message.

Thanks again for being a wonderful group.

Best Regards,

Jim

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Monday, November 17, 2008 2:40 PM
To: BARGENTIERI@scana.com; Alan Stuart; Shane Boring; Bill Post; SCDNR Vivianne Vejdani; FWS Amanda Hill; Bob Perry
Subject: Saluda Project, Proposed sturgeon monitoring program



Saluda Sturgeon
Monitoring Rec...

Attached is a proposed monitoring and adaptive recovery program for shortnose sturgeon recommended by NMFS for inclusion in development of the project's comprehensive relicensing settlement, and for development of a sturgeon protection plan. NMFS intends to include this proposed program in development of Section 10(j) recommendations, and for consideration during ESA consultation later in the relicensing process. The proposed monitoring program may be revised during settlement discussions.

If you have questions please call at your convenience.

Regards

Prescott Brownell

National Marine Fisheries Service
219 Fort Johnson Road
Charleston, SC 29412
843-953-7204

**Diadromous Fish Protection, Mitigation and Enhancement Measures
Saluda Hydroelectric Project**

Shortnose Sturgeon Monitoring and Adaptive Recovery Program

- NMFS Proposal-
November 17, 2008

Background

This draft proposal was prepared by National Marine Fisheries Service (NMFS) in coordination with South Carolina Department of Natural Resources (DNR) for South Carolina Electric & Gas Company and the Saluda Relicensing Team. This proposal is intended to be included in development of a relicensing settlement agreement for the Saluda Project's aquatic resource protection, mitigation and enhancement measures (PM&E). Revisions may be considered during the settlement discussions to better integrate proposed studies into an overall plan for aquatic resource PM&E measures. NMFS intends to include the proposed measures in development of recommendations to FERC pursuant to Section 10(j), and in resolution of consultation pursuant to the Endangered Species Act.

The Saluda Project relicensing proceeding includes fishery and aquatic resource studies designed by S.C. Electric & Gas Company in consultation with state and federal fishery management and water quality agencies including National Marine Fisheries Service, U.S. Fish and Wildlife Service, South Carolina DNR, and South Carolina Department of Health and Environmental Control. Other stakeholders including American Rivers, South Carolina Coastal Conservation League, Trout Unlimited also participated in developing the relicensing study plans. The purpose of the relicensing studies is to identify continuing project effects on the environment, and to aid in development of protection, mitigation and enhancement measures for inclusion in the new hydropower license.

Project Effects on Sturgeon

Construction and operation of the Saluda Project since its construction in the 1930's has resulted in blockage of access to many river miles of former spawning and maturation habitats above the Lake Murray Dam, permanent loss of riverine habitat by reservoir inundation, and alteration of natural flows, temperature, and dissolved oxygen in the lower Saluda and Congaree Rivers (Columbia Shoals). Hypolimnetic flows from the Lake Murray Dam depressed seasonal ambient dissolved oxygen levels and temperatures in the lower Saluda River for decades, potentially playing a role in the observed absence of diadromous species including sturgeon, striped bass, American shad and other alosines, and American eel. In recent years dissolved oxygen levels in the Saluda have been substantially improved through installation of turbine runner hub baffles and other design features. Because of the lower ambient temperatures in the lake Murray Dam flow releases, trout were introduced in the 1960's to provide a "put and take" fishery which has become popular and of economic importance to the public and state fishery management objectives for the Saluda River. Active management of the Saluda River as a cold water fishery for trout reduces habitat suitability for potential restoration of natural resident aquatic species

and migratory diadromous fishes including sturgeon, striped bass, American shad and other alosines, and American eel.

Development of practical actions for mitigation of continuing project effects on availability of suitable habitat is limited by the size and depth of the Lake Murray Dam and reservoir, limited options for effective fish passage, hydropower generation operations, and established management of the lower Saluda River for a cold water trout fishery.

Recommended Sturgeon Monitoring and Recovery Program

To promote protection and recovery of sturgeon in remaining accessible habitats in the Broad, Saluda and Congaree Rivers, the following integrated studies and an adaptive management program are recommended:

I. Sturgeon behavior and movements.

Purpose: Monitor sturgeon behavior and movements to improve understanding of habitat use patterns in response to river flow regulation, short term and seasonal temperature and dissolved oxygen variations, and availability of suitable habitat in the Saluda, lower Broad, and Congaree Rivers. Improved understanding of factors limiting recovery of sturgeon and other diadromous species is expected to support practical adaptive management actions.

Methods: Conduct a long term telemetry study to monitor movements of sturgeon in the Congaree, lower Broad, and Saluda Rivers, in concert with other telemetry studies in the Santee River Basin. This objective will be achieved by using a receiver array system already in place and in use (figure 1). Study budget should include funding for the Biologist and Technician and supply monies to purchase transmitters (table 1). Recommendations would be for a 10-year study with annual review of study findings and assessment of factors affecting sturgeon recovery.



Figure 1. Receiver array system currently in use.

II. Temperature and Water Quality Monitoring Study.

Purpose: Establish a temperature and water quality monitoring program to help develop a better understanding of physical habitat factors potentially affecting movements, migrations, spawning, and recovery of sturgeon and other diadromous and resident species of special management interest. Study area should include the Saluda River, lower Broad River, and the Congaree River.

Methods: Establish an array of temperature and water chemistry monitoring stations located throughout the study area to allow for automated data collection and analysis. Data analysis should help identify annual and seasonal variations in temperature throughout the study area using GIS spatial analysis tools. Funding should include purchasing dataloggers and project personnel (table 1). An initial 10-year study should be planned for with annual review of study findings and assessment of environmental factors actually or potentially affecting sturgeon recovery.

III. Habitat Characterization Study.

Purpose: Integrate the findings of Studies I and II with a detailed physical habitat study to identify characterize, and map habitats in the Saluda, lower Broad, and Congaree Rivers to provide support for a long term sturgeon recovery program in the Santee River Basin. Identify potential critical habitats and limiting factors.

Approach/Methods: Conduct a field study to characterize, classify, and map important habitat components in the study area including substrate type, depth/velocity characteristics, location of point source discharges, seasonal temperature and dissolved oxygen distribution, etc. Plan for a one-year initial physical habitat characterization study, with provisions to adapt the habitat characterization based on findings of studies I and II.

IV. Adaptive Management Study for Sturgeon Recovery.

Purpose: Integrate the findings of studies I-III to identify Saluda Project-specific effects and limiting factors, and other limiting factors affecting sturgeon recovery in the study area. Identify practical beneficial actions that can be undertaken to contribute positively to recovery of sturgeon in the Santee River Basin.

Approach: Establish a sturgeon technical advisory team to collaboratively participate in design and conduct of the proposed sturgeon study program, and to develop practical management and recovery actions. The technical advisory team would seek to integrate studies conducted and/or funded by S.C. Electric & Gas Company with other studies in order to develop sound and practical actions.

Table 1. Estimated costs for 2010

Sturgeon Studies	
Personnel	
Biologist II-6 months	17,250
Technician II - 12.0 months	21,000
Fringe	11,475
Indirect	11,253
Travel	5,000
Supplies	38,000
Misc.	5,000

Total	108,978
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Budget Justification, 2010:

Personnel – Biologist II and Tech. II employees including fringe and indirect for field sampling.

Travel -Vehicle mileage for field work.

Supplies -30 Vemco transmitters and shipping charges; 100 dataloggers plus associated software.

Misc -Equipment maintenance, long distance calls, and supplies.

Alison Guth

From: Jim Cumberland [jimc@scccl.org]
Sent: Friday, November 14, 2008 5:03 PM
To: Alison Guth
Cc: Gerrit Jobsis (American Rivers)
Subject: 2008-11-12 draft Meeting Minutes - LIP CUMBERLAND COMMENTS



2008-11-12 draft
Meeting Minut...

Hi Alison,

These notes look very reflective of the meeting- I just had a question regarding whether Alan was able to reach Jim Ruane and what the results of that conversation, if any, were.

Thanks!

Jim

Alison Guth

From: Alison Guth
Sent: Friday, November 14, 2008 2:17 PM
To: Steve Bell (lakewatchman@yahoo.com); Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bud Badr; Dave Landis; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Jim Cumberland ; Ray Ammarell; Reed Bull (rbull@davisfloyd.com); Scott Harder; Shane Boring
Subject: Draft Meeting Notes 11-12-08

Hello All,

Attached are the draft meeting notes from Wednesday's meeting. Please return any comments on these notes back to me by December 1. Scotts presentation is also attached to this email. A few of the numbers have been corrected on Slide 4. Thanks! Alison



2008-11-12 draft Meeting Minut...
DNR_policy_LIPpro posal_11-12-2...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: pricej@biol.sc.edu
Sent: Thursday, November 06, 2008 3:49 PM
To: Shane Boring
Cc: eargleda@dhec.sc.gov
Subject: Re: Conf Call to Discuss Mussel Restoration/Monitoring Effortsupstream of Saluda Dam

Shane,

Here is what I think should be included in the *Toxolasma pullus* conservation study:

1) A more detailed status survey, as discussed, including some water quality and sediment contaminant analysis. I can't comment on what specific contaminants should be tested for, but John's suggestion of whatever a government lab would consider to be standard. Water quality parameters should include the standard easy things, such as pH, DO, conductivity, as well as water hardness, which is often important as calcium is needed to form mussel shells. Some sort of measure of nutrient content such as nitrogen and phosphorous would be good to have as well-and maybe chlorophyll. This would help us to determine if too many nutrients are a problem or if there might not be enough food available for the mussels.

2) A comparison of the age-length curves obtained by counting the apparent growth lines on living animals vs. thin sectioning of shells found from recently dead mussels (ie the shells haven't eroded much yet).

3) Host tests focusing on sunfish species. I checked with Chris Eads at NC state U, who already has extensive facilities for mussel propagation and host tests set up. He estimated a ballpark figure of \$10,000 to \$15,000 for host tests involving one mussel and about 6-8 fish species. In addition to the University Lake study on *T. pullus*, which found hybrid bluegill x green sunfish to work as hosts for that population, most studies with other *Toxolasma* species, showed some sort of a sunfish as the successful host-a few used darters. However, not all sunfish worked for all *Toxolasma*. One study tested 4 *Lepomis* species and 2 out of the 4 worked.

4) A diet study-Lora and John seemed much more familiar with this. I don't have much info on what would be involved.

5) It would be nice, particularly if the the water or sediment contaminant analysis showed anything suggestive of a trend, to do some lab toxicology tests. This could be done with the offspring produced in a successful host test. Correlating the abundance of a species with physical habitat characteristics is only suggestive of a causal relationship. Controlled experiments can show cause and effect.

I was thinking about our discussion of a phase 1, phase 2, and possibly phase 3 approach to this vs. just putting forth one proposal, and assuming that its all that we'll do. I think it's good to put forth all of this together, but there still needs to be some room for adaptive management. Sometimes the results of research suggests more data that needs to be collected in order to solve a problem. Also, if there is anything that SCE&G can do in response to our data, there may be management recommendations or projects needed at that time. However, it seems impossible at this point to say what will be done or

how much it will cost when we don't yet know what it is or even if anything needs to be done.

Thanks.

Jennifer

Alison Guth

From: Sandra R [sandrar@ccppcrafts.com]
Sent: Wednesday, November 05, 2008 9:20 AM
To: Laura Mancuso; Lesley Drucker; Lewis, Ronald E; Lora Oxenine-Taylor; Mark Larocque; Martha Zierden; Natalie Adams; Nathaniel Ball; NATHPO.ORG eNews; Nick Boudreaux; Robert Chapman; Russell Townsend; Scott Seibel; Sean Bloom; Sean G. Taylor; Shane Belcher; Shaun Sagan; Wayne Roberts; Whitney Olvey; Alan May; Alison Guth; Brad Queener; Brett Riggs; Briece Edwards; Carl Steen; Carrie Collins; Carrie Shook; Cathy Hilscher; Chetna P. Dixon; Debbie Bevin; Elizabeth Johnson; Ellen Turco; Eric Poplin; Gail Wagner; Jacquie Payette; Jason Los; Jeff Irwin; Jen Huff; Jim Errante; Jon Pruitt
Subject: THPO

I will start a leave of absence at Thanksgiving. Please copy my e-mail to Dr. Wenonah G. Haire (wenonahh@ccppcrafts.com), Beckee Garris(Beckeeg@ccppcrafts.com), and KC Warren (kcgw@ccppcrafts.com) and add them to your contact list for the Tribal Historic Preservation Office.

Thanks,
Sandra

Sandra Reinhardt
Catawba Indian Nation
THPO Archaeology Dept.
1536 Tom Steven Road
Rock Hill, SC 29730

803-328-2427 ext. 233

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Open WebMail Project (<http://openwebmail.org>)

Alison Guth

From: Shane Boring
Sent: Monday, November 03, 2008 1:10 PM
To: Shane Boring; 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'; 'robert.newton@noaa.bov'
Cc: Alison Guth
Subject: Saluda Relicensing: Draft Oct 17 Fish and Wildlife Meeting Notes

All:

Attached for your review are the draft meeting notes from the Oct 17, 2008, joint meeting of the Fish and Wildlife Technical Working Committees. Please have comments on the notes back to me by Monday, December 1. Thanks to all who attended and for your continued participation in the Saluda Relicensing process.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



Oct 17 2008 FW
Meeting Notes (...)

Alison Guth

From: Shane Boring
Sent: Monday, November 03, 2008 1:10 PM
To: Shane Boring; 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; 'Vivianne Vejdani '; Alan Stuart; 'Amanda Hill'; 'Bill Argentieri'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer Price '; Jennifer Hand; 'Jim Glover'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Randy Mahan'; 'Ron Ahle'; 'Steve Summer'; 'Bob Seibels (bseibels@yahoo.com)'; 'J. Hamilton Hagood'; 'Dick Christie (dchristie@comporium.net)'; 'Hal Beard'; 'Prescott Brownell'; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'; 'robert.newton@noaa.bov'
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Shane

C. Shane Boring
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Phone: (803)951-2077
Fax: (803)951-2124



Oct 17 2008 FW
Meeting Notes (...)

Alison Guth

From: Alison Guth
Sent: Friday, October 31, 2008 3:36 PM
To: 'Vivianne Vejdani '; Alan Stuart; Alison Guth; 'Amanda Hill'; 'ben@scwf.org'; BARGENTIERI@scana.com; 'Carl Sundius'; 'David Hancock'; 'dchristie@comporium.net'; 'James Leslie '; 'Jim Cumberland '; 'John Frick'; 'Joy Downs'; RMAHAN@scana.com; 'Rhett Bickley'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'lakewatchman@yahoo.com'; 'Suzanne Rhodes'; 'Tom Brooks '; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebber'; 'Van Hoffman'
Subject: Final Meeting Notes - Lake and Land Mgt



2008-9-30 final
meeting notes ...



2008-10-15 final
Meeting Minut...

Hello Everyone,

Attached are the final meeting notes from the Sept 30th and October 15th Lake and Land TWC Meetings. Thank you for all of the comments and input. Alison

<<2008-9-30 final meeting notes - Lake and Land Management.pdf>> <<2008-10-15 final Meeting Minutes - LLM.pdf>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

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Sent: Friday, October 31, 2008 3:36 PM
To: 'Vivianne Vejdani '; Alan Stuart; Alison Guth; 'Amanda Hill'; 'ben@scwf.org'; BARGENTIERI@scana.com; 'Carl Sundius'; 'David Hancock'; 'dchristie@comporium.net'; 'James Leslie '; 'Jim Cumberland '; 'John Frick'; 'Joy Downs'; RMAHAN@scana.com; 'Rhett Bickley'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'lakewatchman@yahoo.com'; 'Suzanne Rhodes'; 'Tom Brooks '; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebber'; 'Van Hoffman'
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meeting notes ...



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<<2008-9-30 final meeting notes - Lake and Land Management.pdf>> <<2008-10-15 final Meeting Minutes - LLM.pdf>>

Alison Guth

Licensing Coordinator

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Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, October 31, 2008 3:33 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Brooks ; Tom Ruple; Tommy Boozer; Tony Bebber; Van Hoffman
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2008-9-30 final
meeting notes ...



2008-10-15 final
Meeting Minut...

Alison Guth

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Sent: Friday, October 31, 2008 3:33 PM
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2008-9-30 final
meeting notes ...



2008-10-15 final
Meeting Minut...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, October 31, 2008 3:31 PM
To: Alan Stuart; 'AMMARELL, RAYMOND R'; 'lakewatchman@yahoo.com'; 'Bud Badr'; 'Gerrit Jobsis (American Rivers)'; 'Amanda Hill'; 'dchristie@comporium.net'; 'Dave Landis'; 'rbull@davisfloyd.com'; 'Bill Marshall'; 'Jim Cumberland'; BARGENTIERI@scana.com; 'Scott Harder'; Shane Boring
Subject: LIP Meeting Notes



2008-8-19 final
Meeting Minute...



2008-9-19 final
Meeting Minute...

Hello all,

Attached are the final meeting notes from the August 19th and September 19th LIP Meetings. Thanks for all the comments and input. Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alan Stuart
Sent: Friday, October 31, 2008 11:17 AM
To: AMMARELL, RAYMOND R; lakewatchman@yahoo.com; Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring
Subject: Low Inflow Protocol---Proposed meeting date



Saluda Hydro
Project Draft MEL...

Dear LIP Participants,

We are trying to reconvene the focus group to press forward on fleshing out a low inflow protocol. Ray has run the requested analyses from our last meeting. Ray also spoke with Operations dispatch staff. In their discussions they expressed concerns about their ability to control Saluda flow releases in 100 cfs increments. Dispatch is concerned due to the age of the plant may significantly impact their ability to make adjustments to that level of precision. This is of special concern as flows decline below 700 cfs.

Ray indicated this is due to a number of factors, one being the size and age of the turbines currently installed. A change in flow of 100 CFS corresponds to about 1.5 MW change in unit load, which is less than 5% of the 32.5 MW rating for the smaller units at Saluda Hydro, and is a pretty fine adjustment for those units. The age of the unit means that the operating characteristics are a bit variable; flow at a certain MW load may vary by 100 or 200 CFS, depending on which unit is run, the particular load applied, power factor, and other (perhaps unknown) factors. It looks like an increment of 200 to 300 CFS (3 to 4.5 MW load, or 9% to 14% of full load) is achievable at Saluda Hydro. Another issue is that the discharge from one unit spinning at no load is actually about 500 to 550 CFS, this may be the lowest flow we can currently achieve without actually shutting down completely and only discharging about 250 CFS via leakage through the wicket gates. That makes 400 CFS a good value to use as a hard minimum during low flow conditions, as it provides a margin below 500 CFS.

Ray has assembled for consideration an alternative to the 100 cfs ratcheted proposal. A summary of his approach is as follows:

To incorporate the larger flow steps into the LIP, I used 1,000 CFS and 700 CFS as the trigger points (consistent with the pulsing schedule put forward by the Instream Flow TWC). The pulsing schedule would be used April 15 – May 14 when the minimum flow is 1,300 CFS. The rest of the year, if average inflow fell below 1,000 CFS, Saluda would target a discharge of 700 CFS, and if average inflow fell below 700 CFS, the target discharge would be 500 CFS. 400 CFS would remain the lowest allowable minimum flow, and the 700 and 500 CFS values would be target flows with some agreed upon margin on at least the low side.

To have further discussion and press forward on development, we would like to meet on **November 12th**. At this meeting, Scott Harder and Bud Badhr would like to give a presentation on some of their findings in review of previously distributed information. Please let me know if you can attend on November 12th as I'd like to firm this date. As an

alternative we could meet on November 14th. Please let me know if you can attend on November 12th.

I've attached a memo prepared by Ray which outlines the new draft LIP protocols.

Have a good weekend and please let me know ASAP if you are available.

thanks,

Alan

Alison Guth

From: Alan Stuart
Sent: Friday, October 31, 2008 11:17 AM
To: AMMARELL, RAYMOND R; lakewatchman@yahoo.com; Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring
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Saluda Hydro
Project Draft MEL...

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Have a good weekend and please let me know ASAP if you are available.

thanks,

Alan

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Thursday, October 30, 2008 10:48 AM
To: Alison Guth
Subject: FWS COMMENTS



2008-9-30 draft
meeting notes ...

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

Alison Guth

From: Alison Guth
Sent: Thursday, October 30, 2008 10:00 AM
To: 'Amanda Hill'
Subject: FW: Revised SMP



Shoreline
Management Plan- grc

[Hey Amanda,](#)

[Here is the latest version with TWC edits.](#) Alison

-----Original Message-----

From: ARGENTIERI, WILLIAM R [mailto:BARGENTIERI@scana.com]
Sent: Wednesday, October 15, 2008 3:27 PM
To: Alison Guth
Cc: Alan Stuart
Subject: Revised SMP

William R. Argentieri

South Carolina Electric & Gas Company

111 Research Drive

Columbia, SC 29203

Phone - (803) 217-9162

Fax - (803) 933-7849

Cell - (803) 331-0179

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Thursday, October 30, 2008 7:57 AM
To: Alison Guth
Subject: Re:



2008-9-30 draft
meeting notes ...

Hello Alison,

I have been unable to attend the last several Lake and Land Management meetings due to school and illness. Can you please send me the latest version of the SMP?

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
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like the everflowing stream of time,
the beginning and the end." -Rachel Carson

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>

10/03/2008 12:18 PM To

"Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Vivianne Vejdani" <vejdani@dnr.sc.gov>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, <ben@scwf.org>, "Bill Argentieri" <bargentieri@scana.com>, "Carl Sundius" <csundius@sc.rr.com>, "David Hancock" <dhancock@scana.com>, <dchristie@comporium.net>, "James Leslie" <jlesliejr@bellsouth.net>, "Jim Cumberland" <jimc@scccl.org>, "John Frick" <jsfrick@mindspring.com>, "Joy Downs" <elymay2@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Rhett Bickley" <rbickley@lex-co.com>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, <lakewatchman@yahoo.com>, "Suzanne Rhodes" <suzrhodes@juno.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebber" <tbebber@scprt.com>, "Van Hoffman" <vhoffman@scana.com>

cc

"Jim Cumberland" <jimc@scccl.org>, "BICKLEY, RHETT" <RBICKLEY@lex-co.com>, "HOFFMAN, VAN B" <VHOFFMAN@scana.com>, "Vivianne Vejdani" <VejdaniV@dnr.sc.gov>, "MAHAN, RANDOLPH R" <RMAHAN@scana.com>, "ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>, "HANCOCK, DAVID E" <DHANCOCK@scana.com>, "BOOZER, THOMAS C" <TBOOZER@scana.com>

Subject

Hello all,

Attached are the meeting notes from the Lake and Land Management TWC meeting on 9-30. The Permitting Handbook with group changes is also included in the notes. Please provide any comments on the draft notes to me by the 17th. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Shane Boring
Sent: Wednesday, October 29, 2008 2:04 PM
To: 'pricej@biol.sc.edu'; 'John Alderman'; 'Amanda Hill'
Cc: 'Bill Argentieri'; 'QUATTLEBAUM, MILTON'; Alan Stuart
Subject: Follow-up conference call regarding Saluda mussel restoration

All:

Lora Zimmerman with USFWS is out of the office until Nov 3, so we will not be having a conference call this week to discuss Saluda Hydro mussel restoration. As you may remember, we had discussed convening a small group of technical folks to discuss potential survey and other activities that would be appropriate for the initial phase of a program focused on the upper portion of Lake Murray and selected tributaries. I will be in contact you all ASAP once I am able to coordinate with Lora.

Thanks,
Shane

Alison Guth

From: Jim Cumberland [jimc@scccl.org]
Sent: Monday, October 27, 2008 5:19 PM
To: lakewatchman@yahoo.com; Julie Gantenbein; John Seebach; rrcollins@n-h-i.org; John Seebach; Matt Rice; kevin@amwhitewater.org; frances.francis@spiegelmc.com; rcarter@sc.rr.com; skfox@bellsouth.net; cditmer@aol.com; gking11363@aol.com; moonlighter699@yahoo.com; PS2247365@aol.com; skfox@bellsouth.net; SCGayleR@aol.com; lbrowder@riso.com; DMSANDPKS@AOL.COM; jshealy@pbtcomm.net; samturner@pbtcomm.net; rparsons12@alltel.net; nbk42@isp.com; reskkeener@pbtcomm.net; skfox@sc.rr.com; lakemurraywatch@bellsouth.net; rkelly1@sc.rr.com; tandlmichalec@earthlink.net; MalcolmI@mailbox.sc.edu; eppsbq@dhec.sc.gov; RMAHAN@scana.com; Tony Bebber; hhamilton@scana.com; jlandreth@scana.com; Suzanne Rhodes; BMabry@scdnr.state.sc.us; lcrafty@aol.com; amanda_hill@fws.gov; jeff_duncan@nps.gov; susan_cielinski@fws.gov; gregory_hogue@ios.doi.gov; Prescott Brownell; Bill_Hulslander@nps.gov; Bill Marshall; elymay2@aol.com; BARGENTIERI@scana.com; Alison Guth; Alan.Stuart@KleinschmidtUSA.com; dchristie@comporium.net; Dave Landis; John Frick; Dave Anderson; lakewatchman@yahoo.com; mtaylor@willoughbyhoefer.com; Carl Sundius; Malcolm Leaphart; Randy Mahan
Subject: service in P-516-008



CCLARSaludaFLACo
mmentsFINAL.pd...

This email constitutes service of the attached filing in FERC P-516-008.

Regards,

Jim

Jim Cumberland

Project Manager

The Coastal Conservation League

2231 Devine Street, Suite 202

Columbia, SC 29205

803.771.7750

803.771.7580 (fax)

jimc@scccl.org

<http://coastalconservationleague.org>

Alison Guth

From: Alison Guth
Sent: Friday, October 24, 2008 2:54 PM
To: 'pavhamby@earthlink.net'
Subject: RE: Relicensing

No, there have not been any Lake and Land meetings since the 15th and another has not been scheduled but will likely be an RCG meeting to review the SMP and PH in the December timeframe.

An easy way to view the current vs. the proposed changes for marinas is by taking a look at Table 8-3 in Exhibit E of the license application.

Hope this helps,

Alison

-----Original Message-----

From: pavhamby@earthlink.net [mailto:pavhamby@earthlink.net]
Sent: Thursday, October 23, 2008 8:55 AM
To: Alison Guth
Subject: Relicensing

Alison:

Has there been another Lake & Land Meeting since Oct. 15? When is the next one?

Also - what are the current requirements for marinas to be built (number of docks, buffers, etc.)? What are the latest proposed changes?

Thanks,
Phil

Alison Guth

From: Alison Guth
Sent: Thursday, October 16, 2008 3:08 PM
To: Alison Guth; 'Vivianne Vejdani '; Alan Stuart; 'Amanda Hill'; 'ben@scwf.org'; BARGENTIERI@scana.com; 'Carl Sundius'; 'David Hancock'; 'dchristie@comporium.net'; 'James Leslie '; 'Jim Cumberland '; 'John Frick'; 'Joy Downs'; RMAHAN@scana.com; 'Rhett Bickley'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'lakewatchman@yahoo.com'; 'Suzanne Rhodes'; 'Tom Brooks '; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebber'; 'Van Hoffman'
Subject: Lake and Land TWC Notes and SMP



2008-10-15 draft
Meeting Minut...



Shoreline
Management Plan- grc

Hello TWC,

Attached are the meeting notes from yesterday's meeting as well as the SMP with group edits. As discussed, these changes will be incorporated before the document is sent out to the RCG, along with the Permitting Handbook. If you have any comments on the notes, please provide them to me by October 30th.

Thanks!
Alison

Alison Guth

From: Alison Guth
Sent: Thursday, October 16, 2008 3:08 PM
To: Alison Guth; 'Vivianne Vejdani '; Alan Stuart; 'Amanda Hill'; 'ben@scwf.org'; BARGENTIERI@scana.com; 'Carl Sundius'; 'David Hancock'; 'dchristie@comporium.net'; 'James Leslie '; 'Jim Cumberland '; 'John Frick'; 'Joy Downs'; RMAHAN@scana.com; 'Rhett Bickley'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'lakewatchman@yahoo.com'; 'Suzanne Rhodes'; 'Tom Brooks '; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebber'; 'Van Hoffman'
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2008-10-15 draft
Meeting Minut...



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Management Plan- grc

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Thanks!
Alison

Alison Guth

From: Shane Boring
Sent: Thursday, October 16, 2008 12:40 PM
To: Shane Boring; 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'
Subject: Saluda Hydro Relicense: Additional Items for Tomorrow's Fish and Wildlife Meeting

All:

Attached is the initial draft of an Aquatic Macroinvertebrate Enhancement and Monitoring Program for the lower Saluda River. The draft program has been developed by SCE&G as a framework to facilitate discussion regarding appropriate monitoring/mitigative measures that might be implemented under a new FERC license for Saluda Hydro. Although this document was not on the initial agenda for tomorrow's meeting, it looks as if we may have some time available during the meeting and thought it might be beneficial to walk the group through the document to see if we are on the right track. Again, considering the late date that this is being distributed, we certainly do not expect you all to have reviewed the document prior to tomorrow's meeting. If time allows, we will work through the content of the document together just to gauge whether the group feels the proposed framework is heading in an appropriate direction.

Similarly, Alan Stuart will also present a conceptual framework for trout monitoring on the LSR. Similar to the macroinvertebrate plan, our intent here will be to gauge whether the concept is generally acceptable to the group.

Thanks and look forward to seeing you all tomorrow at 9 AM at the Lake Murray Training Center.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



2008-10
croinvert Plan (DRA)

Alison Guth

Subject: Updated: Saluda Hydro Relicense: Rescheduled Fish and Wildlife Meeting
Location: Lake Murray Training Center

Start: Fri 10/17/2008 9:00 AM
End: Fri 10/17/2008 3:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'

Hello folks. Just a reminder of tomorrow's Saluda Relicensing Meeting to discuss fish and wildlife issues. See details below. Look forward to seeing you all tomorrow.

Shane

Hello folks,

Thanks for all of your input on an alternative meeting date. It looks as if Friday, October 17 is going to be best. Please note that the meeting will begin at 9:00 AM, rather than the usual 9:30 AM.

As previously noted, we will discuss the following:

- The proposed Mussel Enhancement Program for the Lower Saluda River
- The RT&E Species Management Program (bald eagle, wood stork, rocky shoals spider lily)
- the need for long-term monitoring for shortnose sturgeon (with NMFS)

Please respond by Monday, October 13 to let us know whether you plan to attend. Thanks again.

Shane



Driving Directions to
Training...

-----Original Message-----

From: Shane Boring
Sent: Thursday, August 28, 2008 11:58 AM
To: 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell
Subject: Saluda Relicensing: Draft Rare, Threatened and Endangered Species and Freshwater Mussel Programs

All:

Attached for your review are the draft Rare, Threatened and Endangered Species Program and Freshwater Mussel Program, which have been developed by SCE&G as proposed measures under a new license for the Saluda Project. The RT&E Species Program is intended to address those species identified by the RT&E TWC as occurring in the Project Area and thus in need of a management plan (bald eagle, wood stork, rocky shoals spider lily). The mussel plan outlines an adaptive strategy for experimental reintroduction of mussel fauna to the LSR to determine the feasibility and potential success of larger scale restoration efforts. The plan is short on details at the moment and is meant primarily as a framework to facilitate dialogue.

We would also like to dedicate some time during the meeting to discussing long-term needs for sturgeon monitoring in the basin.

Thanks to all who have contributed to the studies and negotiations that have led to development of these plans.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



LSR Freshwater Mussel Program(... RTE Management ... 2008-06 Saluda

Alison Guth

From: Alison Guth
Sent: Wednesday, October 08, 2008 5:23 PM
To: 'pavhamby@earthlink.net'
Subject: RE: Questions

I believe the last meeting scheduled meeting was in February of 2007. However, the TWC has been providing updates via the QPM's. Other than the rebalancing proposal, there has not been the necessity to convene a RCG meeting because the TWC has been tied up in the rebalancing and multiple reviews of the SMP for some time.

-----Original Message-----

From: pavhamby@earthlink.net [mailto:pavhamby@earthlink.net]
Sent: Wednesday, October 08, 2008 5:05 PM
To: Alison Guth
Subject: RE: Questions

No - I mean an actual scheduled meeting for the RCG itself.

-----Original Message-----

From: Alison Guth
Sent: Oct 8, 2008 4:35 PM
To: pavhamby@earthlink.net
Subject: RE: Questions

Essentially it was at the Quarterly Public Meeting on July 31, with the presentation of the rebalancing proposal

-----Original Message-----

From: pavhamby@earthlink.net [mailto:pavhamby@earthlink.net]
Sent: Wednesday, October 08, 2008 4:34 PM
To: Alison Guth
Subject: RE: Questions

When was the last Lake & Land RCG meeting?

-----Original Message-----

From: Alison Guth
Sent: Oct 8, 2008 2:04 PM
To: pavhamby@earthlink.net
Subject: RE: Questions

Hey Phil,

The next Lake and Land meeting is scheduled for October 15, at 9:00. They will be reviewing the SMP in a similar fashion to how the

Permitting Handbook was reviewed. There are no Recreation meetings scheduled at this time.

However, with regards to the Permitting Handbook, since it is still in draft form until final approval by the TWC, it is only being provided to members of the TWC. Although, individuals who attend as observers can certainly view what is projected on the screen, as well as listen to discussions. Because draft documents have in the past been shopped to the media, SCE&G no longer will provide non TWC members with copies of the draft documents.

Take care,
Alison

-----Original Message-----

From: pavhamby@earthlink.net [mailto:pavhamby@earthlink.net]

Sent: Wednesday, October 08, 2008 9:18 AM

To: Alison Guth

Subject: Questions

Alison:

- 1) When is the next Lake & Land or recreation meeting scheduled for?
- 2) I never received a copy of the draft that was being worked with at the 9/30/08 Lake & Land meeting. Would you please forward me this as well as the newly amended one that was produced the day of the 9/30/08 meeting?

Many thanks-
Phil

Alison Guth

From: Alison Guth
Sent: Wednesday, October 08, 2008 2:04 PM
To: 'pavhamby@earthlink.net'
Subject: RE: Questions

Hey Phil,

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Take care,
Alison

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Sent: Wednesday, October 08, 2008 9:18 AM
To: Alison Guth
Subject: Questions

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- 2) I never received a copy of the draft that was being worked with at the 9/30/08 Lake & Land meeting. Would you please forward me this as well as the newly amended one that was produced the day of the 9/30/08 meeting?

Many thanks-
Phil

Alison Guth

From: Jim Cumberland [jimc@scccl.org]
Sent: Wednesday, October 08, 2008 11:17 AM
To: Alison Guth
Subject: RE: Tentative: Lake and Land TWC review of SMP



DSC01684.JPG (2 MB)

In the meantime my Mini sits in the garage needing brake work – see attached (I have a blue Mini too!)

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Wednesday, October 08, 2008 11:14 AM
To: Jim Cumberland
Subject: RE: Tentative: Lake and Land TWC review of SMP

Thus entails the busy life of Jim :)

-----Original Appointment-----

From: Jim Cumberland [mailto:jimc@scccl.org]
Sent: Wednesday, October 08, 2008 9:42 AM
To: Alison Guth
Subject: Tentative: Lake and Land TWC review of SMP
When: Wednesday, October 15, 2008 9:00 AM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

Alison,

I need to leave at noon or thereabouts - I have another meeting in Columbia that I must attend.

Jim

No virus found in this incoming message.
Checked by AVG - <http://www.avg.com>
Version: 8.0.173 / Virus Database: 270.7.6/1713 - Release Date: 10/7/2008 6:40 PM

Alison Guth

Subject: Lake and Land TWC review of SMP
Location: Lake Murray Training Center
Start: Wed 10/15/2008 9:00 AM
End: Wed 10/15/2008 4:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Required Attendees: Lake & Land Mgt TWC

Hello TWC,

Just a reminder that there will be a meeting on Wednesday, October 15 to review and discuss the SMP. We will begin at 9:00 in order to allow for more discussion time and will be meeting at the Lake Murray Training Center. If you provide any more comments on the SMP to me before the meeting, I will incorporate them for group review at the meeting. Please RSVP by Monday so that I may have a final count for lunches. Thanks! Alison

Alison Guth

From: Suzanne Rhodes [suzrhodes@juno.com]
Sent: Monday, October 06, 2008 12:44 PM
To: tbebber@scprt.com
Cc: Alison Guth; vejdaniv@dnr.sc.gov; Alan Stuart; amanda_hill@fws.gov; ben@scwf.org; BARGENTIERI@scana.com; dhancock@scana.com; dchristie@comporium.net; jimc@scccl.org; RMAHAN@scana.com; ahler@dnr.sc.gov; lakewatchman@yahoo.com; tboozier@scana.com; vhoffman@scana.com; jimc@scccl.org; gjobsis@americanrivers.org; mrice@americanrivers.org; mwaddell@esri.sc.edu; vanlear1940@bellsouth.net; MALCOLML@mailbox.sc.edu
Subject: LLMTWC Notes & "homeland security"

Thanks for Tony's remarkable comments, as I have come to take for granted. I am reminded that the issue of "Homeland Security" on the Lower Saluda is a broad cover for the Lexington County Sheriff's office decisions. The decision of where to barrier the river "based on cost" deserves a much wider understanding. How do we best do that?

-- Tony Bebber <tbebber@scprt.com> wrote:

Attached are my comments to the meeting summary notes (don't think I suggested anything in the Handbook). Thanks Alison for getting them out so promptly!

Next meeting was scheduled for Wed, Oct. 15, 9:30am, I think?

Tony Bebber, AICP

Planning Manager, Recreation, Planning & Engineering Office

SC Department of Parks, Recreation & Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone 803-734-0189
Fax 803-734-1042
tbebber@scprt.com

Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Friday, October 03, 2008 12:18 PM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; ben@scwf.org; Bill Argentieri; Carl Sundius; David Hancock; dchristie@comporium.net; James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; lakewatchman@yahoo.com; Suzanne Rhodes; Tom Ruple; Tommy Boozer;

Tony Bebber; Van Hoffman

Cc: Jim Cumberland; BICKLEY, RHETT; HOFFMAN, VAN B; Vivianne Vejdani; MAHAN, RANDOLPH R; ARGENTIERI, WILLIAM R; HANCOCK, DAVID E; BOOZER, THOMAS C

Subject:

Hello all,

Attached are the meeting notes from the Lake and Land Management TWC meeting on 9-30. The Permitting Handbook with group changes is also included in the notes. Please provide any comments on the draft notes to me by the 17th. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

[Click to get a free auto insurance quotes from top companies.](#)

Alison Guth

From: Alison Guth
Sent: Friday, October 03, 2008 12:18 PM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebber; Van Hoffman
Cc: 'Jim Cumberland'; 'BICKLEY, RHETT'; 'HOFFMAN, VAN B'; 'Vivianne Vejdani'; 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; 'HANCOCK, DAVID E'; 'BOOZER, THOMAS C'



2008-9-30 draft
meeting notes ...

Hello all,

Attached are the meeting notes from the Lake and Land Management TWC meeting on 9-30. The Permitting Handbook with group changes is also included in the notes. Please provide any comments on the draft notes to me by the 17th. Thanks, Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, October 01, 2008 1:37 PM
To: Alison Guth; 'AMMARELL, RAYMOND R'; 'lakewatchman@yahoo.com'; 'Bud Badr'; 'Gerrit Jobsis (American Rivers)'; 'Amanda Hill'; 'dchristie@comporium.net'; 'Dave Landis'; 'rbull@davisfloyd.com'; 'Bill Marshall'; 'Jim Cumberland'; BARGENTIERI@scana.com; 'Scott Harder'; Shane Boring; Alan Stuart
Subject: 8-19-08 LIP Meeting Notes

Hello Everyone,

Attached are the draft meeting notes from the 8-19 LIP Meeting. I apologize that these are coming out after the 9-19 notes. Please provide any comments on the notes back to me by 10-14-08. Thanks, Alison



2008-8-19 draft
Meeting Minute...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Tuesday, September 30, 2008 11:15 AM
To: Shane Boring; grego@stat.sc.edu; DILLMAJW@dhec.sc.gov; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; BARGENTIERI@scana.com; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Hand; Jim Cumberland ; Jim Glover; Jim Ruane ; turnerle@dhec.sc.gov; giffinma@dhec.sc.gov; mquattlebaum@scana.com; RMAHAN@scana.com; rbull@davisfloyd.com; Richard Kidder; Roger Hall; Ron Ahle; Roy Parker; tbowles@scana.com
Subject: RE: Emailing: Saluda Temperature Report DRAFT 2008-09-29

Thanks, Shane. The study confirms the results of the 1985 Temperature and Flow Study conducted by the USGS for SC DNR – that the lower Saluda provides a year round temperature regime suitable for coldwater fisheries. The support for that assumption comes from the following annual temperature ranges from the report:

9.5 C to 19 C (49 F to 66 F) gauge below the dam

8.7 C to 24 C (47 F to 75 F) gauge above the zoo

The higher temperature in the lower reaches near the zoo could stress rainbow and brown trout, and are consistent with anecdotal observations over the years of fishermen of finding the larger holdover trout more in the middle sections where the water temperatures are probably not as high.

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Tuesday, September 30, 2008 9:54 AM
To: grego@stat.sc.edu; DILLMAJW@dhec.sc.gov; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; Bill Argentieri; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Summerlin; Jim Cumberland ; Jim Glover; Jim Ruane ; turnerle@dhec.sc.gov; LEAPHART, JR., MALCOLML; giffinma@dhec.sc.gov; mquattlebaum@scana.com; Randy Mahan; rbull@davisfloyd.com; Richard Kidder; Roger Hall; Ron Ahle; Roy Parker; Shane Boring; tbowles@scana.com
Subject: Emailing: Saluda Temperature Report DRAFT 2008-09-29

All:

Attached for your review is an updated draft of the Lower Saluda/Congaree Temperature Report. The updated draft incorporates many constructive comments from previous reviewers, as well as additional empirical observations and statistical analyses by John Grego at USC. The additional analyses suggest that the Congaree waters are well mixed somewhere between the I-77 Bridge and Rivermile 35 (approximately 8 mi upstream of Congaree National Park).

Many thanks to those who provided comments and a special thanks to John Grego for contributing

his expertise. Please have comments on the updated draft to me by Wednesday, October 22nd. Thanks again and please do not hesitate to call with questions.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

The message is ready to be sent with the following file or link attachments:

Saluda Temperature Report DRAFT 2008-09-29

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Alison Guth

From: Shane Boring
Sent: Tuesday, September 30, 2008 9:54 AM
To: 'grego@stat.sc.edu'; 'DILLMAJW@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Amy Bennett; Andy Miller; Bill Argentieri; Daniel Tufford; Gerrit Jobsis (American Rivers); Gina Kirkland; Jennifer Summerlin; Jim Cumberland ; Jim Glover; Jim Ruane ; Larry Turner (turnerle@dhec.sc.gov); Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Reed Bull (rbull@davisfloyd.com); Richard Kidder; Roger Hall; Ron Ahle; Roy Parker; Shane Boring; Tom Bowles (tbowles@scana.com)
Subject: Emailing: Saluda Temperature Report DRAFT 2008-09-29



Saluda
Temperature Report DR.
||:

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Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

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Saluda Temperature Report DRAFT 2008-09-29

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Subject: Emailing: Saluda Temperature Report DRAFT 2008-09-29



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Temperature Report DR.
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[Kleinschmidt Associates](#)
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Saluda Temperature Report DRAFT 2008-09-29

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Alison Guth

From: Alison Guth
Sent: Monday, September 29, 2008 3:53 PM
To: 'Jim Cumberland'
Subject: nevermind

Hey Jim,

I actually do see your comments in the Permitting Handbook. This document merge can get tricky sometimes...

-----Original Message-----

From: Alison Guth
Sent: Monday, September 29, 2008 3:23 PM
To: 'Jim Cumberland'
Subject: RE: Declined: Updated: Lake and Land Management TWC

Hey Jim,

That is fine, I will get the notes out to you within the week. Also, I was noticing on the Permitting handbook there were no track changes from you in the document you sent...

-----Original Appointment-----

From: Jim Cumberland [<mailto:jimc@sccl.org>]
Sent: Monday, September 29, 2008 2:37 PM
To: Alison Guth
Subject: Declined: Updated: Lake and Land Management TWC
When: Tuesday, September 30, 2008 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Lake Murray Training Center

Alison,

I will be unable to attend the meeting - I am tied up on another project. I will provide comments on the meeting notes ASAP after receiving them.

Sorry for the last-minute notice.

Regards,
Jim

Alison Guth

From: James L. Leslie, Jr. [jlesliejr@bellsouth.net]
Sent: Saturday, September 27, 2008 9:08 AM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Amanda Hill; ben@scwf.org; BARGENTIERI@scana.com; Carl Sundius; David Hancock; dchristie@comporium.net; Jim Cumberland ; John Frick; Joy Downs; RMAHAN@scana.com; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; lakewatchman@yahoo.com; Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Cc: Jim Cumberland; BICKLEY, RHETT; HOFFMAN, VAN B; Vivianne Vejdani; RMAHAN@scana.com; BARGENTIERI@scana.com; HANCOCK, DAVID E; BOOZER, THOMAS C
Subject: Re: Updated: Lake and Land Management TWC



lake murray
ocument.pdf (9 MB)

FROM JAMES L. LESLIE, JR. - LAKE MURRAY DOCKS, INC./WINDWARD POINT
YACHT CLUB

Attached is a copy of my September 8, 2008 letter to the FERC in support of the proposition that the license needs a "due process and equal protection" clause and a review mechanism as a check on the discretionary authority of SCE&G.

----- Original Message -----

From: [Alison Guth](#)
To: [Vivianne Vejdani](#) ; [Alan Stuart](#) ; [Alison Guth](#) ; [Amanda Hill](#) ; [ben@scwf.org](#) ; [Bill Argentieri](#) ; [Carl Sundius](#) ; [David Hancock](#) ; [dchristie@comporium.net](#) ; [James Leslie](#) ; [Jim Cumberland](#) ; [John Frick](#) ; [Joy Downs](#) ; [Randy Mahan](#) ; [Rhett Bickley](#) ; [Ron Ahle](#) ; [Ronald Scott](#) ; [Roy Parker](#) ; [lakewatchman@yahoo.com](#) ; [Suzanne Rhodes](#) ; [Tom Ruple](#) ; [Tommy Boozer](#) ; [Tony Bebbler](#) ; [Van Hoffman](#)
Cc: [Jim Cumberland](#) ; [BICKLEY, RHETT](#) ; [HOFFMAN, VAN B](#) ; [Vivianne Vejdani](#) ; [MAHAN, RANDOLPH R](#) ; [ARGENTIERI, WILLIAM R](#) ; [HANCOCK, DAVID E](#) ; [BOOZER, THOMAS C](#)
Sent: Tuesday, September 23, 2008 2:57 PM
Subject: Updated: Lake and Land Management TWC

When: Tuesday, September 30, 2008 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello All,

Just a reminder of our Lake and Land Management TWC meeting next Tuesday. If you have not already done so, please RSVP by Thursday. Also, please provide comments on the SMP and Permitting Handbook (sent out 9-17-08) by Friday so that I may incorporate them into one document for review.

Thanks, Alison

Previous Message:

Hello Lake and Land TWC,

We had originally scheduled our next Lake and Land Management TWC meeting for September 17, however we are canceling this meeting and **rescheduling it to September 30th**. On September 30th we will be meeting at 9:30 at the Lake Murray Training Center. As discussed, we will be reviewing the Permitting Handbook and SMP. I will be sending out a reminder closer to the meeting date. Email me if you have any questions.

Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: James L. Leslie, Jr. [jlesliejr@bellsouth.net]
Sent: Saturday, September 27, 2008 8:13 AM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Amanda Hill; ben@scwf.org; BARGENTIERI@scana.com; Carl Sundius; David Hancock; dchristie@comporium.net; Jim Cumberland ; John Frick; Joy Downs; RMAHAN@scana.com; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; lakewatchman@yahoo.com; Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Cc: Jim Cumberland; BICKLEY, RHETT; HOFFMAN, VAN B; Vivianne Vejdani; RMAHAN@scana.com; BARGENTIERI@scana.com; HANCOCK, DAVID E; BOOZER, THOMAS C
Subject: Re: Updated: Lake and Land Management TWC

COMMENTS OF JAMES L. LESLIE, JR. President
Lake Murray Docks, Inc./Windward Point Yacht Club

1. All reference to SCE&G's authority to regulate Lake Murray derived from SCE&G's claim to ownership of the land under the lake (or within the Project Boundary) should be eliminated from the license.

A. It is unnecessary because the license forms the basis for SCE&G's authority.

B. It is misleading because navigable waters belong only to natural citizens, not to corporations.

C. Any rights SCE&G may have in the lake basin are subject to public easements and public rights by virtue of being within the Project Boundary.

Granting SCE&G authority based on claim of land ownership may be interpreted as a severe limitation on public rights to use the lands within the Project Boundary.

D. There are approximately 7,000 acres of lake basin not claimed by SCE&G. These property owners would have the same rights as SCE&G, save powers granted SCE&G by license.

E. Acknowledgement in the license of questionable property rights claimed by SCE&G may give these rights claimed by SCE&G and other property owners who have similar rights to the lake basin undue credibility.

2. The license should contain provisions that require SCE&G to abide by the principals of "due process and equal protection" as a limiting factor on their discretion. A formal process should be established to review decisions of SCE&G should they fail to meet these standards.

3. All permit documents for all commercial marinas (having more that 10 slips) should be placed on the web for public review. The initial application should be placed on the web - either at the time first submitted to the study committee - or immediately after the committee issues its recommendation.

----- Original Message -----

From: [Alison Guth](#)

To: [Vivianne Vejdani](#) ; [Alan Stuart](#) ; [Alison Guth](#) ; [Amanda Hill](#) ; [ben@scwf.org](#) ; [Bill Argentieri](#) ; [Carl Sundius](#) ; [David Hancock](#) ; [dchristie@comporium.net](#) ; [James Leslie](#) ; [Jim Cumberland](#) ; [John Frick](#) ; [Joy Downs](#) ; [Randy Mahan](#) ; [Rhett Bickley](#) ; [Ron Ahle](#) ; [Ronald Scott](#) ; [Roy Parker](#) ;

lakewatchman@yahoo.com ; [Suzanne Rhodes](#) ; [Tom Ruple](#) ; [Tommy Boozer](#) ; [Tony Bebber](#) ; [Van Hoffman](#)

Cc: [Jim Cumberland](#) ; [BICKLEY, RHETT](#) ; [HOFFMAN, VAN B](#) ; [Vivianne Vejdani](#) ; [MAHAN, RANDOLPH R](#) ; [ARGENTIERI, WILLIAM R](#) ; [HANCOCK, DAVID E](#) ; [BOOZER, THOMAS C](#)

Sent: Tuesday, September 23, 2008 2:57 PM

Subject: Updated: Lake and Land Management TWC

When: Tuesday, September 30, 2008 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

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Thanks, Alison

Previous Message:

Hello Lake and Land TWC,

We had originally scheduled our next Lake and Land Management TWC meeting for September 17, however we are canceling this meeting and **rescheduling it to September 30th**. On September 30th we will be meeting at 9:30 at the Lake Murray Training Center. As discussed, we will be reviewing the Permitting Handbook and SMP. I will be sending out a reminder closer to the meeting date. Email me if you have any questions.

Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: MAHAN, RANDOLPH R [RMAHAN@scana.com]
Sent: Thursday, September 25, 2008 9:41 AM
To: lakewatchman@yahoo.com; Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; ben@scwf.org; BARGENTIERI@scana.com; Carl Sundius; HANCOCK, DAVID E; dchristie@comporium.net; James Leslie; Jim Cumberland; John Frick; Joy Downs; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Suzanne Rhodes; Tom Ruple; BOOZER, THOMAS C; Tony Bebbler; HOFFMAN, VAN B; Alison Guth
Cc: BICKLEY, RHETT; HOFFMAN, VAN B; Vivianne Vejdani; BARGENTIERI@scana.com; HANCOCK, DAVID E; BOOZER, THOMAS C
Subject: RE: Updated: Lake and Land Management TWC

Steve, can you be a bit more specific as to what you are asking about? Is it the potential for the addition of a waterfowl management area, the whole issue of waterfowl hunting around and on the Lake, or some other aspect of what falls into both a recreation and possibly a shoreline management issue? Waterfowl hunting opportunities around the Lake? Does it have to do with the FERC's requirement that SCE&G consult and cooperate with DNR in regards to waterfowl hunting around the Lake as part of our recreation efforts, or what?

Thanks.

Randy

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Thu 9/25/2008 9:08 AM
To: Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; ben@scwf.org; ARGENTIERI, WILLIAM R; Carl Sundius; HANCOCK, DAVID E; dchristie@comporium.net; James Leslie; Jim Cumberland; John Frick; Joy Downs; MAHAN, RANDOLPH R; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Suzanne Rhodes; Tom Ruple; BOOZER, THOMAS C; Tony Bebbler; HOFFMAN, VAN B; Alison Guth
Cc: BICKLEY, RHETT; HOFFMAN, VAN B; Vivianne Vejdani; MAHAN, RANDOLPH R; ARGENTIERI, WILLIAM R; HANCOCK, DAVID E; BOOZER, THOMAS C
Subject: Re: Updated: Lake and Land Management TWC

Alison- I would like to request that we review the "duck hunting area" issue as part of the SMP discussion. Thanks

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On Tue, 9/23/08, Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: Updated: Lake and Land Management TWC
To: "Vivianne Vejdani " <vejdani@dnr.sc.gov>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, ben@scwf.org, "Bill Argentieri"

<bargentieri@scana.com>, "Carl Sundius" <csundius@sc.rr.com>, "David Hancock" <dhancock@scana.com>, dchristie@comporium.net, "James Leslie " <jlesliejr@bellsouth.net>, "Jim Cumberland " <jimc@scccl.org>, "John Frick" <jsfrick@mindspring.com>, "Joy Downs" <elymay2@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Rhett Bickley" <rbickley@lex-co.com>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, lakewatchman@yahoo.com, "Suzanne Rhodes" <suzrhodes@juno.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbber" <tbebbber@scprt.com>, "Van Hoffman" <vhoffman@scana.com>

Cc: "Jim Cumberland" <jimc@scccl.org>, "BICKLEY, RHETT" <RBICKLEY@lex-co.com>, "HOFFMAN, VAN B" <VHOFFMAN@scana.com>, "Vivianne Vejdani" <VejdaniV@dnr.sc.gov>, "MAHAN, RANDOLPH R" <RMAHAN@scana.com>, "ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>, "HANCOCK, DAVID E" <DHANCOCK@scana.com>, "BOOZER, THOMAS C" <TBOOZER@scana.com>

Date: Tuesday, September 23, 2008, 6:57 PM

When: Tuesday, September 30, 2008 9:30 AM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Lake Murray Training Center

~~*~*~*~*~*~*~*~*

Hello All,

Just a reminder of our Lake and Land Management TWC meeting next Tuesday. If you have not already done so, please RSVP by Thursday. Also, please provide comments on the SMP and Permitting Handbook (sent out 9-17-08) by Friday so that I may incorporate them into one document for review.

Thanks, Alison

Previous Message:

Hello Lake and Land TWC,

We had originally scheduled our next Lake and Land Management TWC meeting for September 17, however we are canceling this meeting and **rescheduling it to September 30th**. On September 30th we will be meeting at 9:30 at the Lake Murray Training Center. As discussed, we will be reviewing the Permitting Handbook and SMP. I will be sending out a reminder closer to the meeting date. Email me if you have any questions.

Alison

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, September 23, 2008 3:38 PM
To: 'Ron Ahle'
Subject: FW: SMP and Permitting Handbook

-----Original Message-----

From: Alison Guth
Sent: Wednesday, September 10, 2008 2:56 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Subject: SMP and Permitting Handbook

Hello All,

In light of our meeting scheduled for September 30th, attached are the newly revised SMP and Permitting Handbook. Please come prepared to discuss SMP and Permitting Handbook so that we may finalize them at the meeting. It would be helpful if you could provide comments prior to the meeting so that I may compile comments in a way that they may be easily reviewed and discussed during the meeting. Also, I know that there is one or two of you that will not be able to make it to the meeting due to scheduling and conflicts with classes. If you will provide me with any comments on the SMP and Permitting Handbook prior to the meeting, I will make sure they get discussed at the meeting.

Please note that there are a few figures in these documents that are still in the process of being finalized.

Thanks,
Alison



Shoreline Management Plan- TWHandbook update...
001-Permitting

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Tuesday, September 23, 2008 3:29 PM
To: 'T.Brooks@saludacounty.sc.gov'
Subject: FW: SMP and Permitting Handbook

-----Original Message-----

From: Alison Guth
Sent: Wednesday, September 10, 2008 2:56 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
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Hello All,

In light of our meeting scheduled for September 30th, attached are the newly revised SMP and Permitting Handbook. Please come prepared to discuss SMP and Permitting Handbook so that we may finalize them at the meeting. It would be helpful if you could provide comments prior to the meeting so that I may compile comments in a way that they may be easily reviewed and discussed during the meeting. Also, I know that there is one or two of you that will not be able to make it to the meeting due to scheduling and conflicts with classes. If you will provide me with any comments on the SMP and Permitting Handbook prior to the meeting, I will make sure they get discussed at the meeting.

Please note that there are a few figures in these documents that are still in the process of being finalized.

Thanks,
Alison



Shoreline Management Plan- TWHandbook update...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

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Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

Subject: Updated: Saluda Hydro Relicense: Rescheduled Fish and Wildlife Meeting
Location: Lake Murray Training Center

Start: Fri 10/17/2008 9:00 AM
End: Fri 10/17/2008 3:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Hand; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell; 'DILLMAJW@dhec.sc.gov'; 'pricej@biol.sc.edu'

Hello folks. Just a reminder of tomorrow's Saluda Relicensing Meeting to discuss fish and wildlife issues. See details below. Look forward to seeing you all tomorrow.

Shane

Hello folks,

Thanks for all of your input on an alternative meeting date. It looks as if Friday, October 17 is going to be best. Please note that the meeting will begin at 9:00 AM, rather than the usual 9:30 AM.

As previously noted, we will discuss the following:

- The proposed Mussel Enhancement Program for the Lower Saluda River
- The RT&E Species Management Program (bald eagle, wood stork, rocky shoals spider lily)
- the need for long-term monitoring for shortnose sturgeon (with NMFS)

Please respond by Monday, October 13 to let us know whether you plan to attend. Thanks again.

Shane



Driving Directions to
Training...

-----Original Message-----

From: Shane Boring
Sent: Thursday, August 28, 2008 11:58 AM
To: 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell
Subject: Saluda Relicensing: Draft Rare, Threatened and Endangered Species and Freshwater Mussel Programs

All:

Attached for your review are the draft Rare, Threatened and Endangered Species Program and Freshwater Mussel Program, which have been developed by SCE&G as proposed measures under a new license for the Saluda Project. The RT&E Species Program is intended to address those species identified by the RT&E TWC as occurring in the Project Area and thus in need of a management plan (bald eagle, wood stork, rocky shoals spider lily). The mussel plan outlines an adaptive strategy for experimental reintroduction of mussel fauna to the LSR to determine the feasibility and potential success of larger scale restoration efforts. The plan is short on details at the moment and is meant primarily as a framework to facilitate dialogue.

We would also like to dedicate some time during the meeting to discussing long-term needs for sturgeon monitoring in the basin.

Thanks to all who have contributed to the studies and negotiations that have led to development of these plans.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



LSR Freshwater Mussel Program(... RTE Management ... 2008-06 Saluda

Alison Guth

From: Shane Boring
Sent: Friday, September 19, 2008 1:20 PM
To: 'DILLMAJW@dhec.sc.gov'; Vivianne Vejdani ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Summerlin; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Brandon Kulik; Alan Stuart
Subject: Additional LIP Modeling Results

Dear Instream Flow TWC Members:

As you all may remember, our most recent IFIM TWC meeting focused on presenting results of the initial Low Inflow Protocol (LIP) developed by SCE&G for the Saluda Project. At the meeting, a request was developed to examine the effects of altering the lake-levels triggers (1 ft vs 2 ft triggers, etc) on the LIP model results (i.e., percentage of time in the various stages, Percentage of time in the target lake elevation zone, etc). Please note that this focuses on the original LIP proposal, which includes lake level, 28 day average inflow and US Drought Monitor Value (USDMV). Attached is a memo prepared by Jon Quebbeman at Kleinschmidt summarizing the results of these model runs. The memo also addresses the effects of eliminating the 28 day moving average of project inflow as a trigger. Thanks for your continued participation in the IFIM process and please don't hesitate to call with questions.

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



2008-09-12 Saluda
LIP Model Re...

MEMORANDUM

TO: Saluda Instream Flow TWC
FROM: Jenny Stevens
Jon Quebbeman, Kleinschmidt
DATE: September 12, 2008
RE: LIP Operations Model Results

INTRODUCTION

Using the Low Inflow Protocol (LIP) standards, the Lake Murray lake operations were evaluated for a recent period of record (1990 – present), and compared to the entire period of record (1940 – present).

Operational changes to the minimum flow were dependent on the three factors listed below:

- Percent Total Usable Storage (TUS)
- U.S. Drought Monitor Value (USDMV)
- USGS 28-Day Percentile for upstream gages (28-Day)

The TUS was calculated on a percentage basis, and was correlated to Normal and Stage 1-4 LIP zones. The model followed these operating LIP zones, but did not cycle the pond down to El. 350' (i.e. no winter drawdown for water quality).

The USDMV in the LIP varies from *None* through levels D0 to D3¹, and is a function of the Palmer Drought Severity Index. Records for this index were available prior to 1900, and were converted to USDMV for the entire period of hydrologic record. According to the LIP rules, the highest (worst drought) value in the watershed was used. For the current model, the USDMV for Region 2 was referenced, which includes the counties of Anderson, Cherokee, Greenville, Laurens, Oconee, Pickens, Spartanburg, and Union. Region 2 was used instead of Region 6, which includes Lake Murray, because most of the drainage area for the lake was in Region 2. The drainage area drought conditions represented the actual drought conditions of the lake better than the area in Region 6.

There are three USGS stream gages available upstream of Lake Murray (*Bush River, Little River and Saluda River -Chappells*), but the periods of record are limited. The values that were available were converted to the 28-Day.

¹ USDMV also includes D4, classified as *Exceptional*, but it is considered equivalent to D3 for the purpose of this study.

MODEL OPERATIONS

The model used the current LIP rules and four alternatives for the operation zones. The alternatives varied the difference between zones for the warm season period (March 1st to September 1st). [Table 1](#) outlines each of the operation band scenarios, with differences in stage for each band (width of the band) shown in feet:

Table 1: Summary of Operation Zone Alternatives²

Zone	LIP Normal	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Normal					
I	1	2	2	1	1
II	2	2	2	2	1
III	1	2	1	2	1
IV	1	2	1	2	1

The model used rules to determine the current LIP stage and the appropriate minimum flow requirements. The operation zone was determined by the TUS guide curves, but the applicable LIP stage was determined by the current stage, the USDMV and/or the 28-Day. Originally, during periods when the pool elevation was rising to a new operating stage zone the LIP release would increase only if the USDMV *and* 28-Day increased as well. While modeling, it was found that the operating stage zone was usually the controlling factor, and therefore the LIP release was regulated by the stage only. Originally, during periods when the operating stage zone was falling the LIP release would fall only if *either* the USDMV or 28-Day fell as well. This rule remained the same in the model. During periods when the operating stage zone remained the same, a combination of the two rules was used.

During periods of excess inflow, flows were released as discretionary generation, whereas during low inflow periods, just minimum flow was released. Reserve generation was not included, but recreational flows were added to the model runs.

MODEL RESULTS

The model results are shown in the tables below. The tables indicate the percent time spent in each zone, the average and maximum duration, as well as the average difference in depth between the target guide elevation and the current elevation.

² LIP Normal has bandwidths that vary through-out the year. Alternatives 1-4 have equally spaced bandwidths throughout entire year. Bandwidth differences between the LIP Normal and LIP Alternatives are insignificant and allow for comparison of all options.

[Table 2](#) shows the results for the time span of 1990-Present with the U.S. Drought Monitor Value (USDMV) and USGS 28-Day Percentile (28-Day) restrictions. The limited availability of historic data for the 28-Day required the shorter time span to be modeled.

Table 2: Summary of USDMV & 28-Day LIP Operations (1990-Present)

			Target	Stage I	Stage II	Stage III	Stage IV
USDMV & 28-Day (1990-Present)	LIP Normal	% of Time in Zone	87.1%	12.3%	0.6%	0.0%	0.0%
		Maximum Duration (days)	2569.0	131.0	17.0	0.0	0.0
		Average Duration (days)	344.1	40.7	11.0	0.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.1	0.0	0.0
	LIP Alternative 1	% of Time in Zone	94.4%	5.6%	0.0%	0.0%	0.0%
		Maximum Duration (days)	3715.0	125.0	0.0	0.0	0.0
		Average Duration (days)	1112.0	66.0	0.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.5	0.0	0.0	0.0
	LIP Alternative 2	% of Time in Zone	94.4%	5.6%	0.0%	0.0%	0.0%
		Maximum Duration (days)	3715.0	125.0	0.0	0.0	0.0
		Average Duration (days)	1112.0	66.0	0.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.5	0.0	0.0	0.0
	LIP Alternative 3	% of Time in Zone	87.1%	12.4%	0.5%	0.0%	0.0%
		Maximum Duration (days)	2569.0	131.0	16.0	0.0	0.0
		Average Duration (days)	344.0	40.8	10.7	0.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.1	0.0	0.0
	LIP Alternative 4	% of Time in Zone	87.9%	9.3%	2.7%	0.1%	0.0%
		Maximum Duration (days)	2569.0	131.0	75.0	8.0	0.0
		Average Duration (days)	372.0	30.6	31.8	8.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.4	-2.5	-3.0	0.0

[Table 3](#) shows the results for the time span of 1990-Present with the USDMV restriction only. By modeling the USDMV restriction only, it is possible to determine if omitting the 28-day average significantly affected the results of the LIP approach. The single USDMV restriction allows the LIP release stage to drop only when the stage and USDMV have decreased.

Table 3: Summary of USDMV LIP Operations (1990-Present)

			Target	Stage I	Stage II	Stage III	Stage IV
USDMV Only (1990-Present)	LIP Normal	% of Time in Zone	86.9%	12.5%	0.6%	0.0%	0.0%
		Maximum Duration (days)	2568.0	131.0	18.0	0.0	0.0
		Average Duration (days)	367.8	43.7	11.3	0.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.1	0.0	0.0
	LIP Alternative 1	% of Time in Zone	94.4%	5.6%	0.0%	0.0%	0.0%
		Maximum Duration (days)	3715.0	125.0	0.0	0.0	0.0
		Average Duration (days)	925.8	55.8	0.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.5	0.0	0.0	0.0
	LIP Alternative 2	% of Time in Zone	94.4%	5.6%	0.0%	0.0%	0.0%
		Maximum Duration (days)	3715.0	125.0	0.0	0.0	0.0
		Average Duration (days)	925.8	55.8	0.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.5	0.0	0.0	0.0
	LIP Alternative 3	% of Time in Zone	86.9%	12.5%	0.6%	0.0%	0.0%
		Maximum Duration (days)	2568.0	131.0	17.0	0.0	0.0
		Average Duration (days)	367.8	43.8	11.0	0.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.1	0.0	0.0
	LIP Alternative 4	% of Time in Zone	87.7%	9.3%	2.8%	0.2%	0.0%
		Maximum Duration (days)	2568.0	131.0	75.0	10.0	0.0
		Average Duration (days)	399.7	32.4	33.8	10.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.4	-2.4	-3.1	0.0

In comparing [Tables 1](#) and [Table 2](#), it is evident that there is little difference between the two scenarios. For a majority of the two operational scenarios, they release matching flows and operate in a similar manner regardless if the 28-Day parameter is included. When there is a difference between the models, there is a significant trend for just the USDMV approach to have higher releases as compared to the UDMV and 28-Day parameter approach. Similarly, there is a trend that the USDMV and 28-Day model approach shows a higher pool level than when just evaluating the LIP using the USMDV.

The differences seem to occur when there is a Normal TUS zone with a one-foot wide band. This occurs in the LIP Normal case as well as LIP Alternative 3 and LIP Alternative 4. This produces a difference because the model is primarily stage driven, meaning that the operating stage zone must change before the LIP release can change. For example, if the pool elevation remains in the stage I zone, and the USDMV drops to a 2, the release cannot change until the pool elevation drops to the stage II zone. The lake elevation is in the Target Zone most of the time, but if the Target Zone is smaller, it will fall to the Stage I Zone more often. This will allow the LIP releases to reduce more frequently. The scenario with two restrictions has the ability to drop LIP release stages more often, and consequently spends more time in the Target Zone. This is because less water can be released, which allows the pond elevation to rise more quickly. When there is only the USDMV restriction, the release stage cannot always drop, and

therefore might release an LIP normal in a Stage I Zone. This would require the pond to stay at a lower elevation longer.

[Table 4](#) shows the results for the complete record span of 1940-Present with the USDMV operation parameter only. This restriction allows the LIP release stage to drop only when the stage and USDMV have decreased.

Table 4: Summary of USDMV LIP Operations (1940-Present)

			Target	Stage I	Stage II	Stage III	Stage IV
USDMV Only (1940-Present)	LIP Normal	% of Time in Zone	91.1%	8.2%	0.5%	0.1%	0.1%
		Maximum Duration (days)	3822.0	168.0	42.0	28.0	15.0
		Average Duration (days)	451.6	33.3	12.0	28.0	15.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.2	-3.9	-4.3
	LIP Alternative 1	% of Time in Zone	96.4%	3.4%	0.2%	0.0%	0.0%
		Maximum Duration (days)	9128.0	125.0	29.0	0.0	0.0
		Average Duration (days)	1230.8	37.8	17.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.6	-4.2	0.0	0.0
	LIP Alternative 2	% of Time in Zone	96.4%	3.4%	0.2%	0.0%	0.0%
		Maximum Duration (days)	9128.0	125.0	29.0	0.0	0.0
		Average Duration (days)	1230.8	37.8	17.0	0.0	0.0
		Difference from Target Guide (ft)	-0.2	-2.6	-4.2	0.0	0.0
	LIP Alternative 3	% of Time in Zone	91.0%	8.3%	0.6%	0.0%	0.0%
		Maximum Duration (days)	3822.0	168.0	49.0	0.0	0.0
		Average Duration (days)	451.6	36.2	21.7	0.0	0.0
		Difference from Target Guide (ft)	-0.1	-1.6	-3.5	0.0	0.0
	LIP Alternative 4	% of Time in Zone	91.3%	6.5%	1.6%	0.5%	0.1%
		Maximum Duration (days)	3822.0	168.0	75.0	35.0	15.0
		Average Duration (days)	472.3	25.4	20.1	18.7	9.0
		Difference from Target Guide (ft)	-0.1	-1.4	-2.4	-3.4	-4.2

When comparing the USDMV restriction results for the complete record span and the 1990-Present span, there is an obvious increase in the amount of time spent in the Target Zone for the complete record span. The large difference is related to the period of 1990-Present being dryer than 1940-Present. The statistics of the longer period are not affected by a drought year as much as the shorter period. Since there are 50 more years of data in the complete record span, the affects of a drought year do not influence the percent time spent in a zone as much as they do in the shorter time span.

The purpose of the LIP standards is to allow for drought conditions to be balanced equally between stakeholder interests in Lake Murray and the lower Saluda River. By requiring minimum flows to be released during drought and low operating stage zones the LIP standards achieve the purpose.

In evaluating the different alternatives, Alternatives 1 and 2 have the most time spent in the target stage zone and the lake is above El. 352' and El. 353' (respectively) 100% of the time. Alternative 4 allows for the LIP to reach to a stage IV, but the lake is above El. 354' 99.9% of the time. For all Alternatives, the LIP remains in the target zone over 90% of the time.

Alternative 1 and 2 have the highest percent in the target zone, although the average duration in Stage 1 is longer than the other alternatives.

If reserve generation calls had been included in the model, there would have been a slight difference in the results. The reserve calls would require a sudden release of high flow and could potentially draw down the pond elevation. An individual reserve call typically has an insignificant impact on the pond elevation, but if several reserve calls were implemented the pond elevation could theoretically be effected. If reserve calls were to occur during a drought condition, then the LIP standards would apply and minimum flow requirements would be in effect after the reserve releases finished. The reduction in reduced minimum flow releases would allow for the pond to rise faster. If reserve releases were made during a non-drought condition, the pond elevation could drop, but the LIP standards might not apply and normal or previous downstream flows would be continued. Without a minimum flow reduction implemented, the pond elevation would take longer to increase.

Alison Guth

From: Alison Guth
Sent: Thursday, September 18, 2008 11:53 AM
To: Charles Ruth
Cc: Marty Phillips
Subject: RE: hunting licenses by county

Charles,

Thank you so much for this information. I am going to go ahead and forward this email to our recreational specialist that is working on the report. From what I understood she needed, this will be sufficient, but she may contact you if she has any other questions. Again, thank you, I appreciate this information.

Take care,
Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

From: Charles Ruth [mailto:RuthC@dnr.sc.gov]
Sent: Thu 9/18/2008 8:55 AM
To: Alison Guth
Cc: Bob Perry; Bryan Kyzer
Subject: RE: hunting licenses by county

Alison,

Bob forwarded your e-mail to me and I offer the following.

Our License Section can generate a printout of license sales by county of residence. I have copied Bryan Kyzer with this e-mail as he would be your point of contact in licensing.

Now, if you are specifically interested in deer hunters I would refer you to the 2007 Deer Harvest Report (link below). If you open the document and study it there will be a table with the estimated number of deer hunters by county. Keep in mind that there is a difference between number of licensees in a county and the number of deer hunters, i.e. although deer hunting is very popular not all licensees deer hunt. The information in the harvest report is based on an annual random survey of licensees but questions allow for the differentiation of deer hunters.

<http://www.dnr.sc.gov/wildlife/deer/2007DeerHarvestReport.html>

Let me know if you have any other questions.

Charles Ruth
Wildlife Biologist
Deer/Turkey Project Supervisor
SCDNR
P. O. Box 167
Columbia, SC 29202-0167

803-734-8738
803-734-6020 fax

From: Bob Perry
Sent: Wednesday, September 17, 2008 5:47 PM
To: Charles Ruth
Subject: FW: hunting licenses by county

Charles, What say you on the question below asked by SCE&G's FERC consultant? Thanks, Bob

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Wednesday, September 17, 2008 3:49 PM
To: Bob Perry
Subject: hunting licenses by county

Hey Bob,

We are doing the rec study up at Woods Ferry for SCE&G and was wondering if you knew who we should contact in order to find out numbers of hunting licenses sold by county. Tracking the number of deer hunters is what we are mainly concerned with. Thanks so much in advance, Alison

Alison Guth

From: Alison Guth
Sent: Wednesday, September 17, 2008 11:55 AM
To: Alan Stuart; 'Steve Summer'; 'al.blott@verizon.net'; 'Amanda Hill'; 'Ben_Rizzo@fws.gov'; BARGENTIERI@scana.com; 'Bill Post'; 'Dee Bennett'; 'dchristie@comporium.net'; 'GibbonsJ@dnr.sc.gov'; 'Hal Beard'; 'Harold Moxley'; Jennifer Hand; 'Joey Jaco'; 'Lee Youmans'; 'mquattlebaum@scana.com'; 'Prescott Brownell'; 'Ross Self'; Shane Boring; 'Al Crosby'
Subject: Columbia Fishway Report



Table B-3.pdf (12 KB)



Appendix A - Columbia Fishway ..



Table B-1.pdf (61 KB)



Table B-2.pdf (52 KB)



2008 Columbia Fish Ladder Eval...

Hello All,

Although it was noted in the previous email sent by Alan regarding the October 22 meeting that the Fishway report was sent out by Jeni, I am attaching the draft Columbia Fishway Report for 2008 to this email. As Alan noted in his email, we would like to finalize this report at the meeting. Therefore, please review this report prior to attending. Thanks and take care, Alison

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, September 17, 2008 11:51 AM
To: Alan Stuart; 'Steve Summer'; 'Al Blott (al.blott@verizon.net)'; 'Amanda Hill'; 'Ben Rizzo (Ben_Rizzo@fws.gov)'; 'Bill Argentieri'; 'Bill Post'; 'Dee Bennett '; 'Dick Christie (dchristie@comporium.net)'; 'GibbonsJ@dnr.sc.gov'; 'Hal Beard'; 'Harold Moxley'; Jennifer Hand; 'Joey Jaco'; 'Lee Youmans '; 'Milton Quattlebaum (mqattlebaum@scana.com)'; 'Prescott Brownell'; 'Ross Self'; Shane Boring; 'Al Crosby'
Subject: Columbia Fishway Report



Table B-3.pdf (15 KB)



Appendix A - Columbia Fishway ..



Table B-1.pdf (64 KB)



Table B-2.pdf (56 KB)



2008 Columbia Fish Ladder Eval...

Hello All,

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Alison Guth
Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Fax 803-951-2124

Alison Guth

From: AMMARELL, RAYMOND R [RAMMARELL@scana.com]
Sent: Thursday, September 11, 2008 1:09 PM
To: lakewatchman@yahoo.com; Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring; Alan Stuart
Subject: Inflow Tracking LIP Evaluation Part 3/3



Saluda Hydro
Inflow Tracking L...

Attached is the last of three files.

Ray Ammarell
SCE&G - Fossil Hydro Technical Services
111 Research Drive
Columbia, SC 29203
803-217-7322 Phone
803-206-3710 Cell
803-933-7847 Fax
rammarell@scana.com

Alison Guth

From: Alison Guth
Sent: Wednesday, September 10, 2008 2:56 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
Subject: SMP and Permitting Handbook

Hello All,

In light of our meeting scheduled for September 30th, attached are the newly revised SMP and Permitting Handbook. Please come prepared to discuss SMP and Permitting Handbook so that we may finalize them at the meeting. It would be helpful if you could provide comments prior to the meeting so that I may compile comments in a way that they may be easily reviewed and discussed during the meeting. Also, I know that there is one or two of you that will not be able to make it to the meeting due to scheduling and conflicts with classes. If you will provide me with any comments on the SMP and Permitting Handbook prior to the meeting, I will make sure they get discussed at the meeting.

Please note that there are a few figures in these documents that are still in the process of being finalized.

Thanks,
Alison



Shoreline
Management Plan-



001-Permitting
TWHandbook update...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Wednesday, September 10, 2008 2:56 PM
To: Vivianne Vejdani ; Alan Stuart; Alison Guth; Amanda Hill; Ben Gregg (ben@scwf.org); Bill Argentieri; Carl Sundius; David Hancock; Dick Christie (dchristie@comporium.net); James Leslie ; Jim Cumberland ; John Frick; Joy Downs; Randy Mahan; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Steve Bell (lakewatchman@yahoo.com); Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbler; Van Hoffman
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Please note that there are a few figures in these documents that are still in the process of being finalized.

Thanks,
Alison



Shoreline
Management Plan-



001-Permitting
TWHandbook update...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Brooks, Tom [T.Brooks@saludacounty.sc.gov]
Sent: Friday, September 05, 2008 9:58 AM
To: Alison Guth
Subject: RE: 9/17 meeting

Thanks, could you do me a favor and send all Saluda County Correspondence to my office. I think we received at least 3 copies of the permit. Maybe we can save you some copy money, ha ha

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Friday, September 05, 2008 8:54 AM
To: Brooks, Tom
Subject: RE: 9/17 meeting

Hello Tom,

The meeting has been rescheduled to 9/30 and will begin at 9:30 am

-----Original Message-----

From: Brooks, Tom [mailto:T.Brooks@saludacounty.sc.gov]
Sent: Wednesday, September 03, 2008 4:39 PM
To: Alison Guth
Subject: 9/17 meeting

What time will this meeting start?

Tom Brooks

Saluda County Planning Director

400 W. Highland Street

Saluda, SC 29138

(864)445-4500 ex.2224 Office

(864)445-9405 fax

(803)673-4644 cell

Alison Guth

From: LEAPHART, JR., MALCOLML [MALCOLML@mailbox.sc.edu]
Sent: Wednesday, September 03, 2008 1:43 PM
To: Alison Guth
Cc: Mike Waddell; Imccaryvt@yahoo.com
Subject: RE: Submittal of the Final Application for New License for P-516

Alison

Would you please send me another copy of the mailing? I would like to pass my copy on to Mike Waddell as he leaves the country this week for several months. He will first add his name to the FERC service list for project 516 for future mailings, but is not on there now.

Also, Luke McCary is retrieving the mailing from the previous President, Larry Craft, and will also have his name added to the service list as the current Saluda River TU Chapter President.

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Thursday, August 28, 2008 4:32 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; LEAPHART, JR., MALCOLML; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Submittal of the Final Application for New License for P-516

Hello All,

We are pleased to announce the submittal of the Final Application for New License for the Saluda Hydroelectric Project. Today, the Final Application was received by the FERC, as the License

Application was due by August 31st. We will also be issuing CD copies of the License Application by USPS to those agencies, organizations and individuals on the Service List for the Project, which should be received over the next several days. If you are not on the Service List and would like to receive a CD-ROM copy of the Application, please email me.

Thank you to everyone who has been involved in this process. We look forward to continuing to work with you as we wrap up this process over the upcoming months!

Take Care,

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: James Glover [GLOVERJB@dhec.sc.gov]
Sent: Thursday, August 28, 2008 5:13 PM
To: Shane Boring
Cc: Chad Altman; James "Will" Dillman; David A. Eargle
Subject: Re: Saluda Relicensing Committees

Shane,

Chad Altman can be removed from the Mussel/Macro committee. If possible could you add Will Dillman (in my section) to the Instream Flow and Water Quality Committees? Otherwise looks good.

Thanks Shane!

Jim

James B. Glover, Ph.D., Manager
Aquatic Biology Section
South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia SC 29201
Phone- 803-898-4081
Fax- 803-898-4200
E-Mail- GloverJB@DHEC.SC.Gov

>>> "Shane Boring" <Shane.Boring@KleinschmidtUSA.com> 8/28/2008 1:21 PM

>>> >>>

Jim:

I wanted to follow up on a request from a few weeks ago. I have placed David Eargle on the Freshwater Mussel/Macroinvertebrate TWC. Chad Altman has been placed on all of the Fish and Wildlife TWCs (RT&E Species, Fish Entrainment, Mussels/Macros, Instream Flow, diadromous fish, water quality). Please let me know whether this is satisfactory and will modify as needed.

Thanks
Shane

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

-----Original Message-----

From: James Glover [mailto:gloverjb@dhec.sc.gov]
Sent: Tuesday, August 26, 2008 8:23 AM
To: Shane Boring
Subject: Re: Pacolet Project

Looks fine Shane.

Jim

James B. Glover, Ph.D., Manager

Aquatic Biology Section
South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia SC 29201
Phone- 803-898-4081
Fax- 803-898-4200
E-Mail- GloverJB@DHEC.SC.Gov

>>> "Shane Boring" <Shane.Boring@KleinschmidtUSA.com> 08/25/08 3:38 PM
>>> >>>

Jim:
SCDNR staff at a recent meeting for the Pacolet relicensing suggested that a brief discussion of our conversation regarding additional upstream data be included in the report introduction. As such, the following paragraph was added. Let me if you feel that this is not representative of our conversation.

As previously noted, data from the current study were compared to a previous study conducted on the Pacolet River upstream of the Pacolet Projects (Shealy 2003). Inclusion of the Shealy (2003) data resulted from agency review of an earlier version of this report, during which agency staff requested that LCP seek out additional upstream data to serve as additional reference sites. LCP subsequently consulted with Dr. Jim Glover (SCDHEC, Aquatic Biology Section Manager), who identified the 2003 study as the most appropriate data available. The two stations from the 2003 study located upstream of Pacolet projects are described below.

Thanks
Shane

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates <<http://www.kleinschmidtusa.com/>>
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Alison Guth
Sent: Thursday, August 28, 2008 4:32 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman
Subject: Submittal of the Final Application for New License for P-516

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We are pleased to announce the submittal of the Final Application for New License for the Saluda Hydroelectric Project. Today, the Final Application was received by the FERC, as the License Application was due by August 31st. We will also be issuing CD copies of the License Application by USPS to those agencies, organizations and individuals on the Service List for the Project, which should be received over the next several days. If you are not on the Service List and would like to receive a CD-ROM copy of the Application, please email me.

Thank you to everyone who has been involved in this process. We look forward to continuing to work with you as we wrap up this process over the upcoming months!

Take Care,
Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: pricej@biol.sc.edu
Sent: Thursday, August 28, 2008 3:14 PM
To: Shane Boring
Subject: Saluda Reliscencing

Shane,

I got your e-mail regarding the RTEs and freshwater mussels in the Saluda. Either of the dates suggested Oct. 8 or Oct. 13 is acceptable to me. I have several comments on the mussel program document. Also, please e-mail me at USC in the future, since my dnr account will be disappearing soon-as soon as the networking person gets around to deleting it from the system.

1) your species list leaves out *Ligumia nasuta* which we found to be moderately abundant both in the Broad and around the confluence of the two rivers. It has been reproducing well this year, as we've checked for gravid individuals & found many that were releasing glochidia. We also found gravid individuals in 2007 with mature glochidia. Alderman may not have found it, as it is very patchily distributed, but you could add it to the list and cite me as unpublished data. I don't know if your report was supposed to incorporate all the available data or just data collected as part of the FERC process. We didn't find any *Ligumia* below the confluence, and we had several sites between Blossom St. Bridge and the Rosewood boat landing. A group led by Tim Savidge found it in the lower Congaree R. in 2005 (near 601), and Jim Williams found it in 2 spots on the Congaree R. bordering Congaree NP. I can get you a copy of Jim's report if you need it.

2)The nature serve rankings may be a bit out of date. I checked *T. pullus* and it is now ranked G2 not G3-there is a note that it was changed on March 6, 2007. I didn't check all of the species-that one just didn't seem correct to me.

3)Section 3.0 describing your restoration program-1st paragraph. "phases" should be "phase".

4) Table 3-1 lists potential species to use in the restoration. FYI-I just met with Chris Eads who did all of the host testing work for our Broad R. project. He said that he has some surviving offspring of *Ligumia nasuta*, *Lampsilis cariosa* and *Lampsilis splendida* from the host tests. If they are still alive at the time of the restoration study, we could use them too. *Ligumia* might not be as good a choice as *Lampsilis* and *Elliptio* as it seems to like slow flowing areas with soft sand or mud. However, I'm not that familiar with the substrates in the Saluda. I expect the strong currents produced during large scale water releases would be a problem unless we had the downstream end of an island or somewhere pretty sheltered. *Lampsilis* was not suggested previously due to it's scarcity and the difficulty of obtaining stock to put there that will probably die.

5) table 3-1 Why would limitation of hosts to an anadromous species disqualify a species as a candidate for restoration? Anadromous species are found in the Broad R. below the Columbia dam and they can now get upstream. I suppose they couldn't get past L. Murray dam, but the point of this project is to determine if restoration could succeed below the dam rather than above it. Above the dam you have much different habitat and the impoundment is the issue there.

6) the study is stated to determine survival and reproductive potential-how would reproductive potential be assessed?

7) The condition of mussels is stated to be assessed during the process of monitoring the relocated mussels. How will condition be assessed? Will this involve checking for evidence of reproduction? In this case, we'd need to make sure that densities are high enough that fertilization could occur-as these species won't be present farther upstream.

8) The study design needs to involve a control of relocated caged and uncaged mussels in the Broad or Congaree in an area where the species are known to successfully live. We need to account for the handling stress and cage effects so we can determine if lack of survival is due to the conditions in the river or artifacts such as cage effects, tagging, and handling stress.

9) What is the duration of the monitoring of mussels in the Lower Saluda?

Some of these questions will be interesting to address at the meeting.

I also have lots of data on the effects of temperature on reproduction of mussels both due to dams and other reasons. I can bring them to the meeting or show them to you at another time.

Jennifer

Alison Guth

From: Shane Boring
Sent: Thursday, August 28, 2008 11:58 AM
To: 'altmankc@dhec.sc.gov'; 'eargleda@dhec.sc.gov'; Vivianne Vejdani ; Alan Stuart; Amanda Hill; Bill Argentieri; Gerrit Jobsis (American Rivers); Jennifer Price ; Jennifer Summerlin; Jim Glover; Milton Quattlebaum (mquattlebaum@scana.com); Randy Mahan; Ron Ahle; Shane Boring; Steve Summer; Bob Seibels (bseibels@yahoo.com); J. Hamilton Hagood; Dick Christie (dchristie@comporium.net); Hal Beard; Prescott Brownell
Subject: Saluda Relicensing: Draft Rare, Threatened and Endangered Species and Freshwater Mussel Programs

All:

Attached for your review are the draft Rare, Threatened and Endangered Species Program and Freshwater Mussel Program, which have been developed by SCE&G as proposed measures under a new license for the Saluda Project. The RT&E Species Program is intended to address those species identified by the RT&E TWC as occurring in the Project Area and thus in need of a management plan (bald eagle, wood stork, rocky shoals spider lily). The mussel plan outlines an adaptive strategy for experimental reintroduction of mussel fauna to the LSR to determine the feasibility and potential success of larger scale restoration efforts. The plan is short on details at the moment and is meant primarily as a framework to facilitate dialogue.

Our intent is to convene a meeting in the near future to discuss these plans. As such, please let us know of your availability on the following days:

- Wednesday, October 8 (currently our preferred date)
- Monday, October 13

We would also like to dedicate some time during the meeting to discussing long-term needs for sturgeon monitoring in the basin.

Thanks to all who have contributed to the studies and negotiations that have led to development of these plans.

Shane

C. Shane Boring
Environmental Scientist
[Kleinschmidt Associates](#)
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124



LSR Freshwater 2008-06 Saluda
Mussel Program(... RTE Management ...

Alison Guth

From: Alison Guth
Sent: Monday, August 25, 2008 10:28 AM
To: BARGENTIERI@scana.com; 'rmahan@sc.rr.com'; Alan Stuart
Subject: FW: LMASept05SurveyReport-Final.doc



LMASept05SurveyR
eport-Final.do...

-----Original Message-----

From: Elymay2@aol.com [mailto:Elymay2@aol.com]
Sent: Monday, August 18, 2008 3:34 PM
To: Alison Guth
Subject: LMASept05SurveyReport-Final.doc

Alison

I am just now getting back to go over the web site and documents submitted since my surgery. When you called me in May concerning comments, it didn't occur to me that our survey was no where in the license application. I also realize that you do not have the document on Lake Level I gave the committee at the same time I gave you the preliminary on the Jim Ruane Drawdown I am sending a more complete copy.

I am sending both documents (2)under separate e-mail.

I hope they will become part of the license comments since we gave you the survey a long time ago. Let me know. Tried to call you today but you were out so just sending them along. Call me if you get a chance. 781-8411

Thanks Joy

Looking for a car that's sporty, fun and fits in your budget? [Read reviews on AOL Autos.](#)

Alison Guth

From: Amanda_Hill@fws.gov
Sent: Wednesday, August 20, 2008 1:49 PM
To: vejdaniv@dnr.sc.gov; Alan Stuart; Alison Guth; Amanda_Hill@fws.gov; ben@scwf.org; BARGENTIERI@scana.com; csundius@sc.rr.com; dhancock@scana.com; dchristie@comporium.net; jlesliejr@bellsouth.net; jimc@sccl.org; jsfrick@mindspring.com; elymay2@aol.com; RMAHAN@scana.com; rbickley@lex-co.com; ahler@dnr.sc.gov; rscott@lex-co.com; royparker38@earthlink.net; lakewatchman@yahoo.com; suzrhodes@juno.com; truple@sc.rr.com; tboozer@scana.com; tbebber@scprt.com; vhoffman@scana.com
Subject: Sept. 30 meeting

Alison,

I will not be able to attend on Sept. 30. As a reminder, I am taking classes this semester on Tues. and Thurs. and will not be able to attend any meetings out of town on these days. Please keep me apprised of any decisions made at the meeting. Thanks.

Amanda Hill
Fisheries Biologist
U.S. Fish and Wildlife Service
176 Croghan Spur Rd., Suite 200
Charleston, SC 29407
843-727-4707 ext. 303
843-727-4218 fax
amanda_hill@fws.gov

"For all at last returns to the sea -
to Oceanus, the ocean river,
like the everflowing stream of time,
the beginning and the end." -Rachel Carson

Alison Guth

From: Elymay2@aol.com
Sent: Monday, August 18, 2008 3:35 PM
To: Alison Guth
Subject: Lakedrawdown2.doc



Lakedrawdown2[1].Lakedrawdowns1.doc (22 KB) Lakedrawdowns1.doc (26 KB)

Here are the two documents referring to lake level and the one you have on Jim Ruane drawdown with a paragraph we apparently thought you had. lakedrawdowns1.doc should replace the one currently under comments on the web site. lakedrawdown2 refers to the lake level position of LMA.

Thanks Joy

Looking for a car that's sporty, fun and fits in your budget? [Read reviews on AOL Autos.](#)

LAKE MURRAY OPERATION POLICY FOR FERC RELICENSING

The LMA recommends a minimum water level of 354 msl as an operation policy in the license agreement to be approved by the FERC. It is understood by the LMA that under emergency and extraordinary circumstances the lake could be lowered down to 345'. This should be on rare occasions. Examples for lowering the lake are for dam and downstream safety, for dam or equipment repair and for inadequate inflow to maintain the 354 msl during extended droughts. Stakeholders around the lake should be notified and given the opportunity to discuss the needs for deviating from the approved operation policy.

LMA has done 2 studies on the impact to the residents, commercial business people, and users of Lake Murray and it has been demonstrated to us that 354" is the lowest the lake can be drawn down to keep the Marina's docks in place and eliminate the need to go through excessive expense to move the docks out and then back when the lake is brought up. The marina's can manage the docks at 354 elevation.

The survey has indicated that approximately 51 % of the residents of Lake Murray who responded have indicated that at 354 el. they are able to use their docks.

The survey also indicates that approximately 74 % of the residents can use their docks at 355 elevation, 98 % of the residents would prefer a minimum 356 el. . LMA understands and respects that SCE&G has concerns about the possibility of flood and considers a minimum of 354 el to be the least acceptable minimum winter level for what should be a very short time before the lake is allowed to rise. Minimum flow to the downstream should be limited to allow the lake to rise for the spring and summer to a level of no less than 358 elevation.

Commercial marinas and business on the lake produce much in the way of revenue to the 4 counties. This has also become a major fishing tournament lake and the revenues to the surrounding counties and the state are immeasurable and will continue to grow. Without reasonable levels, this attraction goes away.

There are many areas in the draft license that have not been resolved in the license and we request the opportunity to comment on these issues when they are included in the application.

**THE LAKE MURRAY ASSOCIATION
POSITION ON LOWERING LAKE LEVELS
AT TWO YEAR INTERVALS FOR SCOURING
TO IMPROVE WATER QUALITY**

It has been suggested by consultant Jim Ruane employed by SCE&G and Kleinschmidt that water quality in Lake Murray may be improved by periodic winter draw downs to the 350 ft msl level to increase sediment scouring in the vicinity of water inflows feeding the lake. Specifically, the desire is to elevate levels of dissolved oxygen in the lake to make a more favorable environment for fish and thus reduce the incident of fish kills that occur from time to time during late summer months. Even though Mr. Ruane has investigated the presence and nature of sediment in some parts of Lake Murray, information he presented regarding the benefits of scouring are theoretical and are not based on collected data from the lake.

There are a number of reasons The Lake Murray Association is opposed to any proposed operational policy for Lake Murray that calls for a periodic draw down to the 350 msl level for the purpose of sediment scouring.

- Coves that have no stream inflows would not benefit from scouring, especially where the inflow terrain is fairly flat and the velocity of water movement would be insufficient for sediment scouring.
- Unless there is torrential, high volume rainfall, any scouring will be confined to narrow stream beds and will be of insignificant benefit.
- Scouring benefits occur at the interface of stream entry to the lake. This dynamic occurs whether the lake level is at 350 msl or at 354 msl. There is no available data that supports a greater benefit of scouring when lake levels are 350 msl versus when lake levels are at 354 msl.
- There has been no data presented that show that the recent multi-year draw down associated with dam remediation provided any benefit that reduced the chances for fish kills. In fact, despite the recent extended drawdown, there was a fish kill in 2007.

Alison Guth

From: Alan Stuart
Sent: Thursday, August 14, 2008 11:32 AM
To: 'lakewatchman@yahoo.com'; Alison Guth; 'Bud Badr'; 'Gerrit Jobsis (American Rivers)'; 'Amanda Hill'; 'dchristie@comporium.net'; 'Dave Landis'; 'rbull@davisfloyd.com'; 'Bill Marshall'; 'Jim Cumberland'; BARGENTIERI@scana.com; 'Scott Harder'; Shane Boring; 'AMMARELL, RAYMOND R'
Subject: RE: August 19 LIP Focus Group Meeting

Steve,

In the interest in continuing the information exchange I think we should push forward while things are still fresh in everyone's minds. We are a couple of meetings away from getting a draft LIP developed so I would not worry. If you have questions I'm sure others do as well and this is a great way to share those. I know both Ray and I sent you the information today regarding additional information. Please review it and the meeting on August 19th will be a perfect forum for asking questions and trying to understand how the systems work. I also plan to have Bret Hoffman attend the meeting and he can answer detailed questions or share on how Mill Race responds based on data obtained during the level logger study. This may be helpful to not just you but to the entire group. Let me know if you have questions...

See ya on the 19th !....thanks...Alan

-----Original Message-----

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Thursday, August 14, 2008 5:04 AM
To: Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring; Alan Stuart; AMMARELL, RAYMOND R
Subject: August 19 LIP Focus Group Meeting

Alan and Bill- Lake Watch request that the meeting on the 19th be postponed to give additional time to review the latest proposal. I have not received the graphs on the scenerio we presented or the info on "pulsing" that I requested from Alan. Also if possible we would like a written summary on the need for fish flows during the April-May time frame.

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On Tue, 8/5/08, AMMARELL, RAYMOND R <RAMMARELL@scana.com> wrote:

From: AMMARELL, RAYMOND R <RAMMARELL@scana.com>
Subject: August 5 Presentation and August 19 LIP Focus Group Meeting
To: "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Amanda Hill" <amanda_hill@fws.gov>, lakewatchman@yahoo.com, dchristie@comporium.net, "Dave Landis" <dlandis1@sc.rr.com>, rbull@davisfloyd.com, "Bill Marshall" <marshallb@dnr.sc.gov>, "Jim Cumberland" <jimc@scccl.org>, "ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>, "Scott Harder" <HarderS@dnr.sc.gov>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>

Date: Tuesday, August 5, 2008, 9:19 PM

To All,

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Also, we have scheduled a follow up meeting of this LIP focus group on Tuesday, August 19, 2008 at 9:30 A.M. at the Lake Murray Training Center, Room 115.

Thanks,

Ray Ammarell

SCE&G - Fossil Hydro Technical Services
111 Research Drive
Columbia, SC 29203
803-217-7322 Phone
803-206-3710 Cell
803-933-7847 Fax
rammarell@scana.com

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Bud Badr -- SC State Hydrologist
Gerrit Jobsis -- American Rivers
Steve Bell -- Lake Watch
Amanda Hill -- USFWS
Dick Christie -- SCDNR
Dave Landis -- Lake Murray Association
Reed Bull -- Midlands Striper Club
Bill Marshall -- Lower Saluda River Scenic River Advisory Council
Ray Ammarell -- SCE&G
Bill Argentieri -- SCE&G
Jim Cumberland -- SC Coastal Conservation League

Alison Guth

From: AMMARELL, RAYMOND R [RAMMARELL@scana.com]
Sent: Thursday, August 14, 2008 10:32 AM
To: lakewatchman@yahoo.com; Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring; Alan Stuart
Subject: Requested LIP Runs



Inflow Splitting LIP
Bell Scen...

Steve/LIP Group,

Sorry I am late getting this out - we had some network problems yesterday and I could not finish it until this morning. Attached is a PDF of a PowerPoint file which gives the results of the simulated scenario Steve had requested in his e-mail below.

Please call me with any questions.

Thanks,

Ray Ammarell
SCE&G - Fossil Hydro Technical Services
111 Research Drive
Columbia, SC 29203
803-217-7322 Phone
803-206-3710 Cell
803-933-7847 Fax
rammarell@scana.com

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Wednesday, August 06, 2008 9:10 AM
To: Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; ARGENTIERI, WILLIAM R; Scott Harder; Shane Boring; Alan Stuart; AMMARELL, RAYMOND R
Subject: Re: August 5 Presentation and August 19 LIP Focus Group Meeting

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Steve Bell

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Sent: Thursday, August 14, 2008 5:04 AM
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Thanks,

Ray Ammarell

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111 Research Drive

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803-217-7322 Phone

803-206-3710 Cell

803-933-7847 Fax

rammarell@scana.com

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Dick Christie -- SCDNR

Dave Landis -- Lake Murray Association

Reed Bull -- Midlands Striper Club

Bill Marshall -- Lower Saluda River Scenic River Advisory Council

Ray Ammarell -- SCE&G

Bill Argentieri -- SCE&G

Jim Cumberland -- SC Coastal Conservation League

Alison Guth

From: Marty Phillips
Sent: Wednesday, August 13, 2008 9:31 AM
To: 'Vivianne Vejdani'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; Dave Anderson; 'David Price'; 'Dick Christie (dchristie@comporium.net)'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jennifer O'Rourke'; 'Jim Cumberland'; 'Jim Devereaux'; 'Joel Huggins'; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Matthew Rice'; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Randy Mahan'; 'Roger Hovis'; 'Skeet Mills'; 'Stan Jones (sjones@imichotels.net)'; 'Stephan Curry'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Suzanne Rhodes'; 'Tommy Boozer'
Cc: 'Brian J. McManus'
Subject: Safety and Outreach Program



001-Safety and
Outreach Progra...

Good Morning:

I hope your summer has been going well.

Attached for your use is a final draft of the Safety and Outreach Program. As you know, this document was created for use by the Safety Resource Conservation Group. This version is based on the comments we received from you, with the understanding that this will be a working document, which the group will review annually and make appropriate amendments to keep the information current and useful.

Should you have any questions, please feel free to ask.

Sincerely,
Marty Phillips
Kleinschmidt Associates
141 Main Street P.O. Box 650
Pittsfield, ME 04967
(207) 487-3328 phone
(207) 487-3124 fax
Marty.Phillips@KleinschmditUSA.com

Alison Guth

From: Keith Able [ckable@msn.com]
Sent: Tuesday, August 12, 2008 4:03 PM
To: Alison Guth; BARGENTIERI@scana.com
Subject: Fed Ex letter to you delivered on August 5th.

Greetings,

Please confirm you have received my letter dated August 3rd concerning our property located at 146 Bark Avenue, Prosperity which is Lake Murray "back property".

What is the status of the application and what does the proposal recommend for shoreline sales and dock permits? Has it changed? We are concerned about the potentially negatively impact that will be created if the proposal stands as detailed in my letter. Let me be clear again - we have NO PLANS (immediate or future) to develop our 23 acre parcel. We simply would like to move our home closer to the water and have SOME view of the water. As it stands now, our view of the lake is and would continue to be through a "football field" of pines.

Please contact me as soon as possible, via email or phone, concerning the above. What else can I do to state my case and be heard?

Thank you for your time.

Keith Able

843-846-4542 home office
843-384-2328 cell
843-247-2328 cell
20840 Nextel ID #
843-846-5861 fax
ckable@msn.com - email

Alison Guth

From: AMMARELL, RAYMOND R [RAMMARELL@scana.com]
Sent: Thursday, August 07, 2008 1:52 PM
To: lakewatchman@yahoo.com; Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; BARGENTIERI@scana.com; Scott Harder; Shane Boring; Alan Stuart
Subject: RE: August 5 Presentation and August 19 LIP Focus Group Meeting

Steve,

I'll have more time to work on your scenario next week, right now I am finalizing the application exhibits.

Thanks,

Ray Ammarell
SCE&G - Fossil Hydro Technical Services
111 Research Drive
Columbia, SC 29203
803-217-7322 Phone
803-206-3710 Cell
803-933-7847 Fax
rammarell@scana.com

From: Kenneth Bell [mailto:lakewatchman@yahoo.com]
Sent: Wednesday, August 06, 2008 9:10 AM
To: Alison Guth; Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland; ARGENTIERI, WILLIAM R; Scott Harder; Shane Boring; Alan Stuart; AMMARELL, RAYMOND R
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Thanks,

Steve

Steve Bell

Lake Murray Watch

Ph. 803-730-8121

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From: AMMARELL, RAYMOND R <RAMMARELL@scana.com>

Subject: August 5 Presentation and August 19 LIP Focus Group Meeting

To: "Alison Guth" <Alison.Guth@KleinschmidtUSA.com>, "Bud Badr" <badrb@dnr.sc.gov>, "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>, "Amanda Hill" <amanda_hill@fws.gov>, lakewatchman@yahoo.com, dchristie@comporium.net, "Dave Landis" <dlandis1@sc.rr.com>, rbull@davisfloyd.com, "Bill Marshall" <marshallb@dnr.sc.gov>, "Jim Cumberland" <jimc@scccl.org>, "ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>, "Scott Harder" <HarderS@dnr.sc.gov>, "Shane Boring" <shane.boring@kleinschmidtusa.com>, "Alan Stuart" <Alan.Stuart@KleinschmidtUSA.com>

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Bill Marshall -- Lower Saluda River Scenic River Advisory Council
Ray Ammarell -- SCE&G
Bill Argentieri -- SCE&G
Jim Cumberland -- SC Coastal Conservation League

Alison Guth

Subject: Canceled: Meeting with NMFS to Discuss Shortnose Sturgeon Monitoring Needs
Location: Kleinschmidt Associates Office, Lexington, SC

Start: Thu 8/7/2008 9:30 AM
End: Thu 8/7/2008 3:30 PM
Show Time As: Free

Recurrence: (none)

Meeting Status: Not yet responded

Required Attendees: Shane Boring; BARGENTIERI@scana.com; Alan Stuart; RMAHAN@scana.com; 'QUATTLEBAUM, MILTON'; 'SUMMER, STEPHEN E'; Jennifer Hand; Dick Christie (dchristie@comporium.net); 'Amanda_Hill@fws.gov'; Vivianne Vejdani ; Alison Guth; Hal Beard (BeardH@scdnr.state.sc.us); Ron Ahle (ahler@dnr.sc.gov); 'MAHAN, RANDOLPH R'; 'ARGENTIERI, WILLIAM R'; Mark_A_Cantrell@fws.gov

Importance: High

All:

Tomorrow's meeting to discuss PM&E measures for shortnose sturgeon at the Saluda Project has been cancelled at the request of NMFS to allow additional coordination time with other state and federal agencies. Please stay tuned for a proposed meeting date.

Shane

Alison Guth

From: Alison Guth
Sent: Thursday, July 31, 2008 12:50 PM
To: Reed Bull
Subject: RE: August 5 Meeting --Alternative LIP Focus Group Meeting

Hello Reed,

You are welcome to send another representative from the Midlands Striper Club in your absence. I hope everything goes well with the surgery and that you have a speedy recovery. Alison

From: Reed Bull [mailto:rbull@davisfloyd.com]
Sent: Thu 7/31/2008 8:06 AM
To: Alison Guth
Cc: Alan Stuart
Subject: RE: August 5 Meeting --Alternative LIP Focus Group Meeting

Allison, I am having ankle surgery at Duke University Hospital next Wednesday and will be immobile for a few weeks after that, therefore I will not be at the meeting next Tuesday.

I am trying to get a club member to attend for me and should know something on this today. I sure hate to miss this meeting, but hopefully the Midlands Striper Club interest can be supported by another club representative.

Thanks, REED

From: Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]
Sent: Wednesday, July 30, 2008 10:50 AM
To: Bud Badr; Gerrit Jobsis (American Rivers); Amanda Hill; lakewatchman@yahoo.com; dchristie@comporium.net; Dave Landis; rbull@davisfloyd.com; Bill Marshall; Jim Cumberland ; Ray Ammarell; MARTINJ1@dhec.sc.gov; Vivianne Vejdani ; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; dchristie@comporium.net; Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Summerlin; Jim Glover; Malcolm Leaphart; giffinma@dhec.sc.gov; Mike Waddell; mquattlebaum@scana.com; Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Brandon Kulik; Alan Stuart
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The LIP Focus group will be meeting at the Lake Murray Training Center in Room 100 beginning at 9:30. Please email me if you have any questions or concerns.

Alison

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Sent: Sunday, July 27, 2008 8:33 PM

To: Alison Guth; Winward point Yacht Club ; Aaron Small; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebbler; Tyler Howe (tylehowe@nc-chokeee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire

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Regards,
Alan

Senior Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Cell 803-640-8765
Fax 803-951-2124

No virus found in this incoming message.
Checked by AVG - <http://www.avg.com>
Version: 8.0.138 / Virus Database: 270.5.7/1581 - Release Date: 7/30/2008 6:56 AM

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Sent: Wednesday, July 30, 2008 10:50 AM
To: 'Bud Badr'; 'Gerrit Jobsis (American Rivers)'; 'Amanda Hill'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Dick Christie (dchristie@comporium.net)'; 'Dave Landis'; 'Reed Bull (rbull@davisfloyd.com)'; 'Bill Marshall'; 'Jim Cumberland'; 'Ray Ammarell'; 'MARTINJ1@dhec.sc.gov'; Vivianne Vejdani; Alison Guth; Amanda Hill; Bill Argentieri; Bud Badr; Dick Christie (dchristie@comporium.net); Gerrit Jobsis (American Rivers); Gina Kirkland; Hal Beard; Jennifer Hand; Jim Glover; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Prescott Brownell; Randy Mahan; Ron Ahle; Scott Harder; Shane Boring; Steve Summer; Theresa Thom; Brandon Kulik; Alan Stuart
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Cell 803-640-8765
Fax 803-951-2124

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Alison Guth

From: Alison Guth
Sent: Monday, July 28, 2008 4:48 PM
To: Winward point Yacht Club ; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire; Jon Quebbeman

Subject: May 22, draft notes

Hello RCG and TWC members,

Attached are the draft meeting notes from the May 22 All RCG's Meeting. Please have any comments back to me by Friday (8-1). Thanks! Alison



2008-5-22 draft
Meeting Minute...

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Jim Cumberland [jimc@sccl.org]
Sent: Monday, July 28, 2008 10:39 AM
To: Alan Stuart; Alison Guth; Winward point Yacht Club ; Aaron Small; Alan Axson; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire
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Sent: Sunday, July 27, 2008 8:33 PM
To: Alison Guth; Winward point Yacht Club ; Aaron Small; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck

Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-cherokee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire

Subject: Low In Flow Protocol --Alternative LIP and formation of a Focus Group PLEASE READ

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We look forward to working on this LIP with you and will see you on August 5th.

Regards,
Alan

Senior Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Cell 803-640-8765

Fax 803-951-2124

Alison Guth

From: Gerrit Jobsis [gjobsis@americanrivers.org]
Sent: Monday, July 28, 2008 10:35 AM
To: Alan Stuart; Alison Guth; Winward point Yacht Club ; Aaron Small; Alan Axson; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; BARGENTIERI@scana.com; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; RMAHAN@scana.com; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebber; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire
Subject: RE: Low In Flow Protocol --Alternative LIP and formation of a Focus Group PLEASE READ

Alan,

Thank you for organizing the LIP focus group. I agree that such a small working group is the best way to proceed. See you and the rest of the focus group on the 5th.

Gerrit

Gerrit Jobsis, American Rivers

Southeast Regional Director

2231 Devine Street, Suite 202, Columbia, S.C. 29205

803.771.7114 (t) 803.771.7580 (f)

gjobsis@americanrivers.org

Stand up for healthy rivers: Join the eRiver Community to download music, wallpaper and more.
www.AmericanRivers.org/eRiver

From: Alan Stuart [mailto:Alan.Stuart@KleinschmidtUSA.com]

Sent: Sunday, July 27, 2008 8:33 PM

To: Alison Guth; Winward point Yacht Club ; Aaron Small; Alan Axson; Alan Stuart; aharmon@lpagroup.com; Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; bseibels@yahoo.com; Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; ccantley@scdah.state.sc.us; Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; dchristie@comporium.net; Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; aregaf@dnr.sc.gov; George Duke; Gerrit Jobsis; Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; ipitts@scprt.com; J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; johned44@bellsouth.net; John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; turnerle@dhec.sc.gov; Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; giffinma@dhec.sc.gov; Matt Rice; Michael Murrell; Mike Duffy; Mike Sloan; msummer@scana.com; Mike Waddell; mquattlebaum@scana.com; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; rbull@davisfloyd.com; Rhett Bickley; Richard Kidder; Richard Mikell; SKEENER@sc.rr.com; Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; sjones@imichotels.net; lakewatchman@yahoo.com; Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; tbowles@scana.com; Tom Ruple; Tommy Boozer; Tony Bebbler; tylehowe@nc-chokeee.com; Van Hoffman; Vivianne Vejdani ; Wenonah Haire

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Regards,
Alan

Senior Licensing Coordinator
Kleinschmidt Associates
204 Caughman Farm Lane, Suite 301
Lexington, SC 29072
Phone 803-951-2077
Cell 803-640-8765
Fax 803-951-2124

Alison Guth

From: Alan Stuart
Sent: Sunday, July 27, 2008 8:33 PM
To: Alison Guth; 'Winward point Yacht Club'; 'Aaron Small'; 'Alan Axson'; Alan Stuart; 'Alex Harmon (aharmon@lpagroup.com)'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner'; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts'; 'Bret Hoffman'; 'Brett Burse'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker'; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower'; 'Daniel Tufford'; 'Dave Anderson'; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons'; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'J. Hamilton Hagood'; 'Jay Schabacher'; 'Jeff Duncan'; 'Jennifer Price'; 'Jim Cumberland'; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane'; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins'; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester'; 'Linda Schneider'; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Phil Hamby'; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong'; 'Skeet Mills'; 'Stan Jones (sjones@imichotels.net)'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synithia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'Tyler Howe (tylhowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani'; 'Wenonah Haire'
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Phone 803-951-2077

Cell 803-640-8765

Fax 803-951-2124

Alison Guth

From: Bret Hoffman
Sent: Friday, July 25, 2008 10:52 AM
To: 'Winward point Yacht Club '; 'Aaron Small'; 'Alan Axson'; Alan Stuart; 'Alex Harmon (aharmon@lpagroup.com)'; Alison Guth; 'Amanda Hill'; 'Amy Bennett'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill Brebner '; 'Bill East'; 'Bill Hulslander'; 'Bill Marshall'; 'Bill Mathias'; 'Bob Seibels (bseibels@yahoo.com)'; 'Brandon Stutts '; Bret Hoffman; 'Brett Bursey'; 'btrump@scana.com'; 'Bud Badr'; 'Buddy Baker '; 'Charlene Coleman'; 'Charles Floyd'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Chuck Cantley (ccantley@scdah.state.sc.us)'; 'Chuck Hightower '; 'Daniel Tufford'; Dave Anderson; 'Dave Landis'; 'David Allen'; 'David Hancock'; 'David Jones'; 'David Price'; 'Dee Dee Simmons '; 'Dick Christie (dchristie@comporium.net)'; 'Don Tyler'; 'Donald Eng'; 'Ed Diebold'; 'Edward Schnepel'; 'Feleke Arega (aregaf@dnr.sc.gov)'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Guy Jones'; 'Hal Beard'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'J. Hamilton Hagood'; 'Jay Schabacher '; 'Jeff Duncan'; 'Jennifer Price '; 'Jim Cumberland '; 'Jim Devereaux'; 'Jim Glover'; 'Jim Goller'; 'Jim Ruane '; 'JoAnn Butler'; 'Joe Logan'; 'Joel Huggins '; 'John and Rob Altenberg'; 'John Davis (johned44@bellsouth.net)'; 'John Frick'; 'Jon Leader'; 'Joy Downs'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Ken Styer '; 'Ken Uschelbec'; 'Kenneth Fox'; 'Kristina Massey'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Linda Lester '; 'Linda Schneider '; 'Malcolm Leaphart'; 'Mark Giffin (giffinma@dhec.sc.gov)'; 'Matthew Rice '; 'Michael Murrell'; 'Mike Duffy'; 'Mike Sloan'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Milton Quattlebaum (mquattlebaum@scana.com)'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Parkin Hunter'; 'Phil Hamby '; 'Prescott Brownell'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Rebekah Dobrasko'; 'Reed Bull (rbull@davisfloyd.com)'; 'Rhett Bickley'; 'Richard Kidder'; 'Richard Mikell'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Robert Lavisky'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'S padget'; 'Sandra Reinhardt'; 'Sean Norris'; 'Shane Boring'; 'Sheri Armstrong '; 'Skeet Mills '; 'Stan Jones (sjones@imichotels.net)'; 'Steve Bell (lakewatchman@yahoo.com)'; 'Steve Summer'; 'Suzanne Rhodes'; 'Synthia Williams'; 'Theresa Powers'; 'Theresa Thom'; 'Tim Vinson'; 'Tom Bowles (tbowles@scana.com)'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'Tyler Howe (tylhowe@nc-cherokee.com)'; 'Van Hoffman'; 'Vivianne Vejdani '; 'Wenonah Haire'

Subject: Saluda Model Scoping Document

Good morning,

Please find attached the scoping document for the Saluda hydrologic model, including a description of the model and results of the model runs.

If you have any questions or comments, please submit them to Alison Guth or Alan Stuart, via email if possible.

Thanks,

Bret R. Hoffman, P.E.

Kleinschmidt Associates

Energy & Water Resource Consultants

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

(803) 951-2077

FAX (803) 951-2124

Bret.Hoffman@KleinschmidtUSA.com



Saluda Model
Scoping Document ..

Alison Guth

From: Alison Guth
Sent: Friday, July 25, 2008 9:44 AM
To: Winward point Yacht Club ; Aaron Small; Alan Axson; Alan Stuart; Alex Harmon (aharmon@lpagroup.com); Alison Guth; Amanda Hill; Amy Bennett; Bertina Floyd; Bill Argentieri; Bill Brebner ; Bill East; Bill Hulslander; Bill Marshall; Bill Mathias; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Page; Chuck Cantley (ccantley@scdah.state.sc.us); Chuck Hightower ; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dee Dee Simmons ; Dick Christie (dchristie@comporium.net); Don Tyler; Donald Eng; Ed Diebold; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); J. Hamilton Hagood; Jay Schabacher ; Jeff Duncan; Jennifer Price ; Jim Cumberland ; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; Joel Huggins ; John and Rob Altenberg; John Davis (johned44@bellsouth.net); John Frick; Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Styer ; Ken Uschelbec; Kenneth Fox; Kristina Massey; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Linda Lester ; Linda Schneider ; Malcolm Leaphart; Mark Giffin (giffinma@dhec.sc.gov); Matthew Rice ; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Milton Quattlebaum (mquattlebaum@scana.com); Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Phil Hamby ; Prescott Brownell; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; S padget; Sandra Reinhardt; Sean Norris; Shane Boring; Sheri Armstrong ; Skeet Mills ; Stan Jones (sjones@imichotels.net); Steve Bell (lakewatchman@yahoo.com); Steve Summer; Suzanne Rhodes; Synithia Williams; Theresa Powers; Theresa Thom; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Ruple; Tommy Boozer; Tony Bebber; Tyler Howe (tylehowe@nc-cherokee.com); Van Hoffman; Vivianne Vejdani ; Wenonah Haire
Subject: Quarterly Public Meeting

Hello RCG and TWC Members,

This is a reminder that there will be a Quarterly Public Meeting next Thursday, July 31. This meeting will be held at the Saluda Shoals Park Rivers Conference Center (the building at the top of the hill) at 9:00 am and 6:00 pm. SCE&G will be presenting the Land Rebalancing Proposal. Thanks, Alison.

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Alison Guth
Sent: Friday, July 18, 2008 12:58 PM
To: Alison Guth; Vivianne Vejdani ; Alan Stuart; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Hand; Jim Cumberland ; Karen Kustafik; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Randy Mahan; Tony Bebber
Subject: RE: April 16 Downstream Flows TWC

Hello All,

I apologize, these notes are from April 23, not April 16th.

-----Original Message-----

From: Alison Guth
Sent: Friday, July 18, 2008 12:51 PM
To: Vivianne Vejdani ; Alan Stuart; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Summerlin; Jim Cumberland ; Karen Kustafik; Malcolm Leaphart; Matthew Rice ; Mike Waddell; Randy Mahan; Tony Bebber
Subject: April 16 Downstream Flows TWC

Hello all,

Attached are the draft meeting notes for the April 16 downstream flows twc meeting. Please have comments back to me by July 28. Thanks! Alison

<< File: 2008-4-16 Downstream Flows TWC Meeting Notes-jsh.doc >>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124

Alison Guth

From: Kenneth Bell [lakewatchman@yahoo.com]
Sent: Friday, July 11, 2008 9:31 AM
To: Bob Perry; Vivianne Vejdani; Alan Stuart; Alison Guth; Amanda Hill; ben@scwf.org; BARGENTIERI@scana.com; Carl Sundius; David Hancock; dchristie@comporium.net; James Leslie; Jim Cumberland; John Frick; Joy Downs; RMAHAN@scana.com; Rhett Bickley; Ron Ahle; Ronald Scott; Roy Parker; Suzanne Rhodes; Tom Ruple; Tommy Boozer; Tony Bebbber; Van Hoffman; Alison Guth
Subject: Re: June 10 draft proposal and spreadsheet



Comments by Lake
Murray Watch ...

Alison- Attached are my comments for Monday's meeting.

Steve Bell
Lake Murray Watch
Ph. 803-730-8121

--- On **Wed, 6/18/08**, Alison Guth <Alison.Guth@KleinschmidtUSA.com> wrote:

From: Alison Guth <Alison.Guth@KleinschmidtUSA.com>
Subject: June 10 draft proposal and spreadsheet
To: "Bob Perry " <perryb@dnr.sc.gov>, "Vivianne Vejdani " <vejdanim@dnr.sc.gov>, "Alan Stuart" <alan.stuart@kleinschmidtusa.com>, "Alison Guth" <alison.guth@kleinschmidtusa.com>, "Amanda Hill" <amanda_hill@fws.gov>, ben@scwf.org, "Bill Argentieri" <bargentieri@scana.com>, "Carl Sundius" <csundius@sc.rr.com>, "David Hancock" <dhancock@scana.com>, dchristie@comporium.net, "James Leslie " <jlesliejr@bellsouth.net>, "Jim Cumberland " <jimc@scccl.org>, "John Frick" <jsfrick@mindspring.com>, "Joy Downs" <elymay2@aol.com>, "Randy Mahan" <rmahan@scana.com>, "Rhett Bickley" <rbickley@lex-co.com>, "Ron Ahle" <ahler@dnr.sc.gov>, "Ronald Scott" <rscott@lex-co.com>, "Roy Parker" <royparker38@earthlink.net>, lakewatchman@yahoo.com, "Suzanne Rhodes" <suzrhodes@juno.com>, "Tom Ruple" <truple@sc.rr.com>, "Tommy Boozer" <tboozer@scana.com>, "Tony Bebbber" <tbebbber@scprt.com>, "Van Hoffman" <vhoffman@scana.com>
Date: Wednesday, June 18, 2008, 8:48 PM

Hello TWC Members,

Attached is a copy of the draft SCE&G proposal and spreadsheet from the June 10th TWC meeting. You will notice that a couple of numbers have changed slightly due to additional QAQC. Please remember that this is a work in progress and is draft. It is not to the benefit of the project or process to disseminate this outside of the TWC. This could give the impression that this proposal has received more approval than it actually has. However, I trust that through discussions in the meeting that everyone is already aware and will be respectful of this.

Thanks, and I look forward to seeing comments next week!

Alison

<<2008-06-10 SCEG draft proposal for Lake and Land TWC.pdf>> <<Copy of 6-10 draft spreadsheet.pdf>>

Alison Guth

Licensing Coordinator

Kleinschmidt Associates

204 Caughman Farm Lane, Suite 301

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Phone 803-951-2077

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Alison Guth

From: Vivianne Vejdani [VejdaniV@dnr.sc.gov]
Sent: Thursday, May 01, 2008 9:32 AM
To: Shane Boring
Cc: Dick Christie; Dick Christie
Subject: FW: Saluda Hydro relicensing: Draft 2007-2008 Lake Murray Waterfowl Report



LakeMurrayWaterfo
wlSurveys2003...

Hi Shane,

I sent the waterfowl survey to Buddy Baker for his review. This is his response, with the attached DNR survey data that he's referred to. Do you need formal comments for this report, or will this suffice?

Vivianne Vejdani
Wildlife Biologist

SC Department of Natural Resources
Wildlife and Freshwater Fisheries Division
P.O. Box 167
1000 Assembly Street, Room 202
Columbia, SC 29202
Off: 803/734-4199
Fax: 803/734-6020

-----Original Message-----

From: Buddy Baker
Sent: Monday, April 28, 2008 11:48 AM
To: Vivianne Vejdani
Subject: RE: Saluda Hydro relicensing: Draft 2007-2008 Lake Murray Waterfowl Report

Vivianne, Attached is updated DNR waterfowl survey data for Lake Murray which should be coupled with the report. The current draft of the report only shows DNR survey data through 2006. Please forward as you see fit.

-----Original Message-----

From: Vivianne Vejdani
Sent: Wednesday, April 23, 2008 9:11 AM
To: Buddy Baker
Subject: FW: Saluda Hydro relicensing: Draft 2007-2008 Lake Murray Waterfowl Report

Buddy, would you look this survey over when you have time and send me any thoughts you might have? They're asking for any comments by May 9th. Thanks!

Vivianne Vejdani
Wildlife Biologist

SC Department of Natural Resources
Wildlife and Freshwater Fisheries Division P.O. Box 167 1000 Assembly Street, Room 202 Columbia, SC 29202
Off: 803/734-4199
Fax: 803/734-6020

-----Original Message-----

From: Shane Boring [mailto:Shane.Boring@KleinschmidtUSA.com]
Sent: Thursday, April 17, 2008 5:28 PM
To: Vivianne Vejdani; Alan Stuart; Amanda Hill; Bill Argentieri; Bob Perry; Brandon Stutts ; Buddy Baker; dchristie@comporium.net; Jennifer Summerlin; Jim Glover; Randy Mahan; Ron Ahle; Shane Boring
Subject: Saluda Hydro relicensing: Draft 2007-2008 Lake Murray Waterfowl Report

All:

Attached for your review is the draft report summarizing waterfowl surveys conducted by Savannah river Ecology Lab on Lake Murray during winter 2007-2008. If possible, please have comments on the draft report back to me by May 9th. Thanks for your continued interest in the Lake Murray waterfowl surveys.

C. Shane Boring
Environmental Scientist
Kleinschmidt Associates
204 Caughman Farm Lane; Suite 301
Lexington, SC 29072
Phone: (803)951-2077
Fax: (803)951-2124

Alison Guth

From: Prescott Brownell [Prescott.Brownell@noaa.gov]
Sent: Tuesday, January 22, 2008 2:39 PM
To: Hal Beard; SCDNR Ron Ahle; AMRIVERS Gerrit Jobsis; FWS Amanda Hill; SCDNR Dick Christie; Brandon Kulik; Shane Boring
Subject: Saluda Striped Bass Model, potential variables



Striped Bass Inland prescott_brownell.v
Riverine S...



cf (421 B)

Hello all,

I checked with Joe Hightower and Pete Kornegay in NC about potential habitat model considerations for striped bass, from their experience in the Roanoke, Tar, Neuse Rivers. Copied below is a response from Joe with some suggestions: (also attached is a proposed model we could adapt for use)

Hi Press,

I don't recall striped bass being one of the species used in the Roanoke instream flow work. Shortnose sturgeon and American shad are the anadromous species that I remember.

I don't believe there is much good field data on striped bass spawning sites, in terms of depth and substrate. The Bain and Bain HSI model for coastal populations (<http://www.nwrc.usgs.gov/wdb/pub/hsi/hsi-001.pdf>) includes natural river discharge (100% or greater being optimal), TDS, and water temp for the spawning component. Temp, DO, and water velocity are used in the egg component. I don't know about TDS but otherwise, those variables seem consistent with what appears to be important in the Roanoke. As far as I am aware, they primarily spawn downstream of the rocks. They will move into the rocky section near Roanoke Rapids when flows are high, but they drop back downstream when flows (and depths) decrease. In the Neuse, our study of spawning habitat prior to removal of Quaker Neck Dam (Beasley and Hightower 2000) indicated that striped bass spawned at velocities of 0.2-0.7 m/s. They also spawned at sites with larger substrates than observed at random locations, although that may have been simply a function of the higher velocities at spawning sites.

The inland HSI model by Crance (<http://www.nwrc.usgs.gov/wdb/pub/hsi/hsi-085.pdf>) uses temperature, depth and velocity for the spawning component. Our Quaker Neck results (p. 1324, Fig. 4) supports a low suitability for very shallow water but suggest that the Crance model might underestimate the suitability of depths less than 2 m.

Hope that helps. Let me know if you have additional questions.

Joe

Attached to this message is a proposed model for use in the Saluda for striped bass summer refuge, and for potential spawning. This could be a start for a model that would help evaluate striped bass habitat needs for our instream flow study. Just a suggestion.

Regards
PB

Alison Guth

From: Alison Guth
Sent: Thursday, July 26, 2007 12:28 PM
To: Prescott.Brownell@noaa.gov
Cc: Alan Stuart
Subject: Exhibit F

Hello Pres,

Alan had noted that you had requested a copy of the Exhibit F for King Mill. It is attached below. Feel free to email me if you have any questions or problems opening the document. Alison



Exhibit F -
Boundary Map.pdf (.

Alison Guth
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