SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT

FERC NO. 516

SPRING USE ADDENDUM STUDY REPORT

FINAL

OCTOBER 2007

Prepared by:



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Prepared by:
Kleinschmidt Energy & Water Resource Consultants

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1.0 INTRODUCTION

The Saluda Project is an existing, licensed hydroelectric facility owned and operated by South Carolina Electric & Gas Company (SCE&G). The Project is located on the Saluda River in Richland, Lexington, Saluda, and Newberry Counties, SC. The Project impounds the 48,000 acre Lake Murray, a popular recreation attraction for boating and fishing, having numerous public access sites (Figure 1-1) and supporting several popular recreational sport fisheries. Below the dam is the lower Saluda River (LSR), which flows through the metropolitan area of Columbia, SC where it meets the Broad River to form the Congaree River (Figure 1-2).

Both Lake Murray and the LSR are used extensively for recreation. The lake supports many on-water recreation activities including several national and local fishing tournaments. There are 15 public access sites on Lake Murray owned by South Carolina Electric and Gas (SCE&G) and all but one, Dreher Island State Park, is managed by SCE&G. The LSR supports an active recreational fishery and offers 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). There are three formal public access sites owned by SCE&G on the LSR and all but one, Saluda Shoals Park, is managed by SCE&G. Two other informal sites are on property leased to the Riverbanks Zoological Society. For a full description of each site, see the Recreation Assessment Study Report (Kleinschmidt, 2007).

Figure 1-1: Lake Murray Recreation Sites

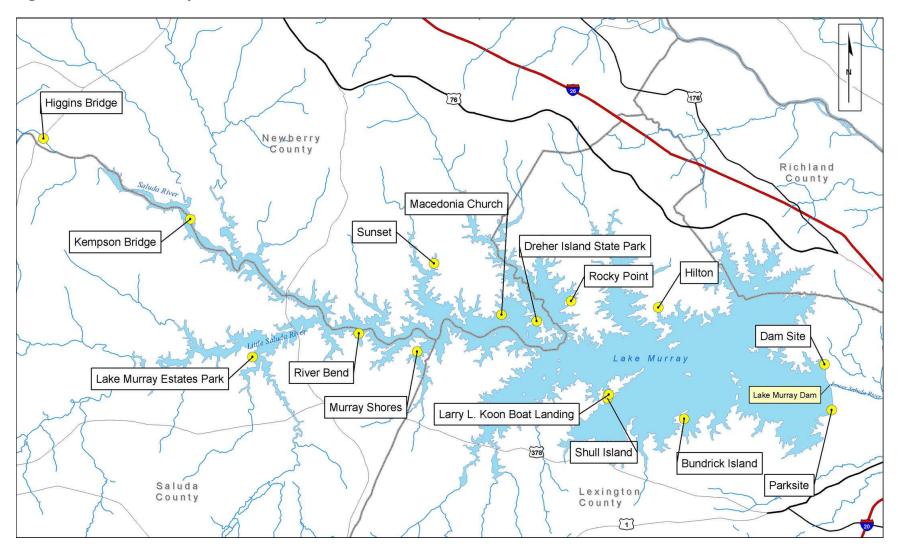
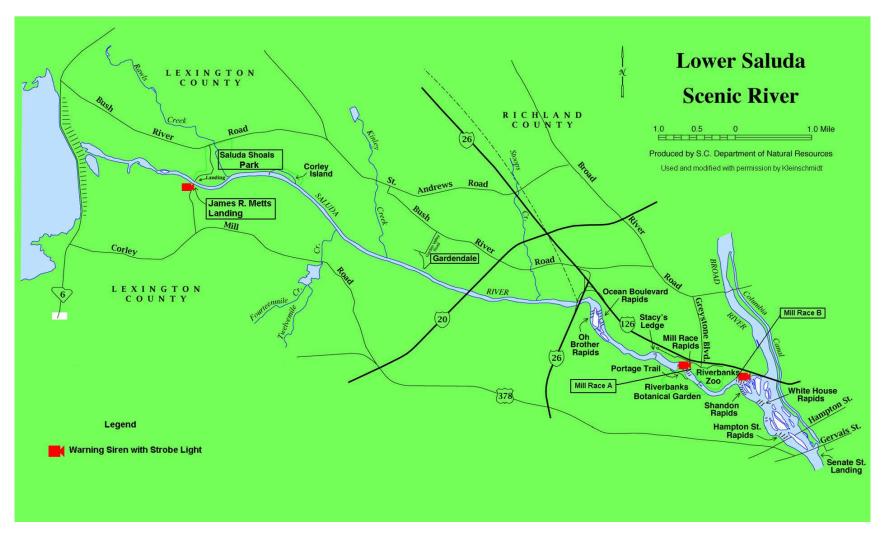


Figure 1-2: Lower Saluda River Recreation Sites



1.1 Purpose of Study

The completed assessment of existing and future recreational use, opportunities, and needs for the Saluda Project (Kleinschmidt, 2007) was designed to provide information pertinent to the current and future availability and adequacy of recreation sites at Lake Murray and the LSR. In comments received on the draft Recreation Assessment Study Report, the South Carolina Department of Parks, Recreation & Tourism (SCPRT), South Carolina Department of Natural Resources (SCDNR), and the Saluda River Chapter of Trout Unlimited (SRCTU) requested information concerning recreational use during winter/spring (January – May). The majority of comments were about areas downstream of the Saluda dam, with most comments focusing on an area outside the Project boundary (Mill Race rapids). Therefore, the goals of this study were to:

- Goal 1: Collect additional information concerning spring use (January May, 2006) on Lake Murray and the LSR.
 - Identify patterns of spring use at SCE&G-owned recreation sites on Lake Murray.
 - ii. Identify patterns of spring use on the LSR from the Saluda Dam to Mill Race.
 - iii. Characterize types of spring use on the LSR from the Saluda Dam to Mill Race.
- Goal 2: Identify needs of selected recreational user groups for facilities on the LSR to support spring use (January May).
 - Characterize the needs and preferences for recreational access and facilities on the LSR as it relates to wade fishing, canoeing and kayaking, and university student use of the Mill Race area.

2.0 METHODOLOGY

The methods used are described in detail below and follow the final study plan dated April 2007 (Appendix A), with two exceptions. The exceptions relate to how recreational use of Lake Murray recreation sites was estimated and how information on university student use was obtained. Most methods relied on secondary data sources and those sources are referenced where appropriate.

2.1 <u>Data Collection</u>

A combination of data collection efforts was used to obtain the information necessary to address the study objectives. <u>Table 2-1</u> identifies the information needed to address each objective and the data collection method that was used. Both primary and secondary data were required. Primary data entailed facilitated meetings and two days of personal interviews of recreationists who use recreation sites on the lower Saluda River. Secondary data included the 2006 Saluda Recreation Assessment, the Lower Saluda Corridor Plan and Update, and other relevant literature identified in <u>Table 2-1</u>.

Spring Use at the Saluda Project and Recreation Needs on the Lower Saluda River Study Objectives and Efforts **Table 2-1:**

OBJECTIVES	INFORMATION NEEDED	SOURCE
Goal 1: Collect additional information concerning spi	ring use (January – May, 2006) on Lake Murro	ay and the lower Saluda River.
Identify patterns of spring use at SCE&G owned recreation sites on Lake Murray.	 Percentage of use occurring in Jan. – May, 2006 based on results of the 2006 Recreation Assessment ^a 	 2006 Recreation Assessment Public site monitoring reports during drawdown Visitation records from Dreher Island State Park
Identify patterns of spring use on the LSR from the Saluda Dam to Mill Race.	 Percentage of use occurring in Jan – May, 2006 based on results of the 2006 Recreation Assessment ^a 	 2006 Recreation Assessment Visitation records from Saluda Shoals Regional Park SCDNR creel surveys
Characterize types of spring use on the LSR from the Saluda Dam to Mill Race.	Activities taking place on LSR and approximate location	Knowledgeable river usersLiterature review
Goal 2: Identify needs of selected recreational user gr	oups for facilities on the lower Saluda River to	o support Spring use (January – May).
Characterize the needs and preferences for recreational access and facilities on the LSR as it relates to wade fishing, canoeing and kayaking, and student use of the Mill Race area.	 Preferences of wade anglers Preferences of canoeists and kayakers Preferences of university students 	 Facilitated meetings and personal interviews of users Knowledgeable river users Lower Saluda River Corridor Plan / Update

^a Includes data from public recreation sites from May 27 (Memorial Day) to September 30, 2006. ^b Reports were not completed for the months of February and March.

2.1.1 Literature Review

Several studies have been completed on both the LSR and Lake Murray for multiple purposes. These studies provided additional information regarding recreation use on Lake Murray and the LSR. The SCDNR has performed several studies in order for them to effectively manage the fishery resources in Lake Murray (Hayes and Penny, 1994; Responsive Management, 2000) and the lower Saluda River (Beard, 1998, 1999; Fishery Information Management Systems [FIMS], 1997). SCE&G also completed a boating use study on Lake Murray (The Louis Berger Group [Berger], 2002). The Lower Saluda Corridor Plan (South Carolina Water Resources Commission [SCWRC] *et al.*, 1990) and Update (South Carolina Design Arts Partnership [SCDAP], 2000) were also consulted to provide information regarding facility needs on the LSR.

2.1.2 Facilitated Meetings and Personal Interviews

According to the SCDNR, SCPRT, and SRCTU, several activities were underrepresented because of the sampling period used in the Recreation Assessment. Among these activities are trout fishing, paddling, and student use of the Mill Race sites. In order to collect information from these particular user groups, a special effort was made to contact and hold a facilitated meeting with each group. Kleinschmidt personnel attended the May 14, 2007 meeting of the SRCTU, distributed surveys to chapter members (Appendix B), and hosted a general discussion regarding the LSR following survey implementation. It should be noted that responses to these questions dealt with all fishing on the LSR and not just trout fishing. Information from both the surveys and the discussion are included in the results section (Section 3.0).

Kleinschmidt also conducted a focus group of knowledgeable river users on May 16, 2007 as part of a downstream flows study being conducted concurrently with this study. This group consisted of anglers, boaters (both motorized and non-motorized), and kayakers. Rather than hold two focus group

meetings with basically the same group, it was decided to "piggy back" on the downstream flows focus group and collect information on types of activities on the LSR, when these activities take place on the river, sites used to access the river, improvements needed at these sites, and any additional sites needed on the LSR.

Finally, Kleinschmidt personnel made every effort to target students at the University of South Carolina, including multiple calls and emails to student advisors and students. The goal was to talk directly with student leaders of outdoors clubs and work with them to identify the best way (forum, location, etc.) to obtain input. A list of outdoors clubs and contact information was provided and, of the five clubs listed, only two had anything to do with the lower Saluda River. It was determined that those two groups would be targeted for assistance. The listed advisors to both groups were contacted. One group had disbanded (the Gamecock Bass Team). The second group's advisor was very helpful and allowed email contact with his group, the Mountaineering and Whitewater Club, which reportedly uses the LSR for practice and outings. Emails went out to the whole club on multiple occasions. No response was received, even though one of the emails went out just before a meeting. Therefore, Kleinschmidt personnel interviewed 34 college-aged people at the Mill Race sites on May 15 and May 19, 2007. Interviews occurred on one weekday and one weekend day during a period of warm sunny weather. Interview times varied between morning and afternoon hours. Most of the interviews were conducted on the upstream side of Riverbanks Zoo at Mill Race A. Individuals using Mill Race B are generally a different type of user and, as a group, were uncooperative and disinclined to participate in the interviews. At Mill Race A, individuals and groups of individuals were asked if they were university students and were interviewed if they replied in the affirmative. Students were asked about the frequency they visit the site; the time of year they visit; reasons why they choose to visit; recommendations for the area; and awareness of, reason for, and experience with the sirens and flashing lights.

2.1.3 Other Sources

Other than the facilitated meetings, personal interviews, and available literature on recreational use of Lake Murray and the LSR, two other sources of information were planned to be used to better understand January – May use at the Project. Saluda Shoal Regional Park collects visitation estimates and shared this information. In addition, SCE&G was required to submit monitoring reports of public recreation sites between 2003 and 2004 for the Saluda Dam Remediation Project. However, and unbeknownst during study planning, counts were not available for the months of February and March in the monitoring reports. An attempt was made to estimate these months by linear regression using the month as the independent variable and recreational use as the dependent variable. While this method did produce an estimate of use during February and March, the relationship between month and recreational use was poor ($r^2 = 0.03$). Therefore, we requested monthly use estimates from Dreher Island State Park.

2.2 Analysis

Most of the results presented in this report were taken from existing literature or from an analysis of the qualitative and quantitative data from the focus groups. However, an original effort was made to estimate monthly recreation use at the Project from January 2006 to May 2006. A description of the methods used in this estimate is below.

2.2.1 Use Estimates

Based on monthly use estimates provided by Dreher Island State Park (<u>Table 2-2</u>) and Saluda Shoals Regional Park (<u>Table 2-3</u>), total use occurring between the months of June – September was calculated for the year of the data used (2006). Once total use from June – September was calculated, the percent of use occurring from January – May (by month) was calculated. Once these

Prior to the Saluda Dam Remediation Project, the FERC recognized there would be some impacts to recreational access (only 7 public launches were usable) and required SCE&G to monitor use at these 7 public launches to determine if any of the sites were exceeding their capacity. The monitoring plan can be found in FERC Docket No. P-516-376.

percentages were calculated, they were applied to the total estimated use from June – September, 2006 reported in the Recreation Assessment (Kleinschmidt, 2007). For example, total use at Dreher Island State Park for the months of June – September, FY2006 was 89,090 persons. The percentage of use that occurred in January was 12.6% (11,240 / 89,090). Estimated use at the Dam Site from June – September, 2006 was 34,820 (Kleinschmidt, 2007). Therefore, estimated use in January 2006 at the Dam Site was 4,387 (34,820 * 0.126).

Table 2-2: Reported Use at Dreher Island State Park for Fiscal Year 2006 (Source: Ashley Berry, personal communication)

MONTH (FY06-07)	# OF VISITORS
July	32,796
August	20,384
September	17,640
October	13,748
November	12,100
December	8,200
January	11,240
February	11,108
March	18,608
April	23,540
May	26,760
June	18,270

Table 2-3: Reported Use at Saluda Shoals Regional Park for Fiscal Year 2005 and 2006 (Source: Jeanette Wells, personal communication)

MONTH	FY 05 - 06	FY 06 - 07
	# OF VISITORS a	# OF VISITORS a
July	44,723	46,533
August	31,945	35,703
September	29,430	28,138
October	29,253	30,558
November	33,120	
December	46,170	
January	17,878	
February	14,020	
March	20,735	
April	31,058	
May	34,538	
June	48,528	

^a The number of visitors to Saluda Shoals Regional Park includes non-river based recreation (for an excellent description of this non-river based use, see Holleman, 2007). However, percentages of use between months should be reflective of actual use of the park, regardless of river use or not.

3.0 RESULTS

This section presents results for Lake Murray and the lower Saluda River. First, a general characterization of spring use is presented followed by general information concerning spring use at the Project. Site-specific use estimates are also presented in their respective sections for the lake and the river.

3.1 Characterization of Spring Use

Based on use numbers from Dreher Island State Park and Saluda Shoals Regional Park, recreational use at Lake Murray from January – May, 2006 (91,256 persons and 118,229 persons, respectively) was about 43% of total FY2006 use and about 38% of January – October, 2006 use on the LSR (Use numbers for the months of November and December 2006 were not available from Saluda Shoals). Monthly percentages of use that occurred from January – May, 2006 for Lake Murray and the LSR are presented in Tables 3-1 and 3-2, respectively.

Table 3-1: Total Reported Use from July – September, 2006 and June 2007 at Dreher Island State Park and Percentage of Use that Occurs from January – May by Month

TOTAL USE	ESTIMATED USE	% USE				
FISCAL	JULY - SEPT. 2006	JANUARY FEBRUARY MARCH APRIL MAY				MAY
YEAR 2006	AND JUNE 2007	JANOMA	FEDROMA	MARCH		171/1 1
214,394	89,090	12.6%	12.5%	20.9%	26.4%	30.0%

Table 3-2: Total Reported Use from June – September, 2006 at Saluda Shoals Regional Park and Percentage of Use that Occurs from January – May by Month

TOTAL USE		% USE				
JAN OCT.	ESTIMATED USE					
2006	JUNE - SEPT. 2006	JANUARY	FEBRUARY	MARCH	APRIL	MAY
307,689	158,900	11.3%	8.8%	13.1%	19.6%	21.7%

3.1.1 Project

Total use at the Project from January – May, 2006 (<u>Table 3-3</u>) was estimated to be about 363,720 recreation days ². Most of the spring use occurred in the warmer months of April and May. The Mill Race sites, which are outside the project boundary, supported an additional 32,130 recreation days from January – May, 2006, for a total of 395,850 recreation days.

Table 3-3: Estimate of Recreation Days for Lake Murray and Lower Saluda River Sites by Month, January through May, 2006¹

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Lake Murray Sites	29,180	28,960	48,370	78,060	88,730
Lower Saluda River Sites	13,710	10,690	15,900	23,790	26,330
Mill Race Sites ^a	4,880	3,790	5,650	8,450	9,360
Total	47,770	43,440	69,920	110,300	124,420

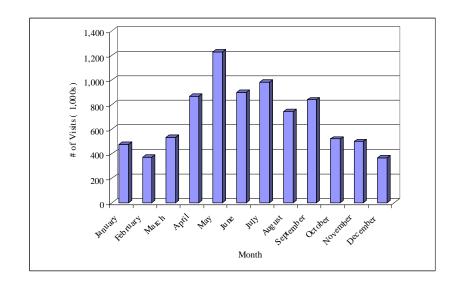
¹ Estimated have been rounded to the nearest ten.

The patterns of use at the Saluda Project were consistent with one other recently studied project in the region. The Catawba-Wateree Project (FERC No. 2232) had an estimated annual use of over 8 million recreation visits among the 10 developments that make up the project. Estimates of monthly recreation visits for the Catawba-Wateree project are presented in <u>Figure 3-1</u>.

^a Outside the project boundary.

² The Federal Energy Regulatory Commission (FERC) defines a recreation day as "each visit by a person to a development for recreational purposes during any portion of a 24-hour period."

Figure 3-1: Estimate of Recreation Visitation at Public Recreation Areas at the Catawba-Wateree Project (2004 – 2005)
(Source: Duke Power Company, 2006)



3.1.2 <u>Lake Murray</u>

Lake Murray was estimated to receive an additional 273,300 recreation days during January – May, 2006 (<u>Table 3-4</u>).

Table 3-4: Estimated Recreation Days by Site and Month for Lake Murray, January through May, 2006 ¹

SITE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	TOTAL a
Dam Site	4,390	4,350	7,280	9,190	10,450	35,660
Parksite ^b	0	0	0	990	1,130	2,120
Larry L. Koon Boat Landing	4,360	4,320	7,230	9,130	10,370	35,410
Shull Island	2,040	2,020	3,380	4,270	4,850	16,560
Bundrick Island b	0	0	0	15,960	18,140	34,100
Murray Shores	1,630	1,620	2,710	3,420	3,890	13,270
River Bend	2,330	2,320	3,870	4,890	5,560	18,970
Higgins Bridge	250	250	410	520	590	2,020
Kempson Bridge	450	450	750	950	1,080	3,680
Lake Murray Estates Park	1,240	1,230	2,050	2,590	2,950	10,060
Macedonia Church	550	550	910	1,150	1,310	4,470
Sunset	1,270	1,260	2,100	2,650	3,020	10,300
Rocky Point	30	30	40	60	60	220
Dreher Island State Park	9,400	9,330	15,590	19,690	22,380	76,390
Hilton	1,240	1,230	2,050	2,600	2,950	10,070
Total ^a	29,180	28,960	48,370	78,060	88,730	273,300

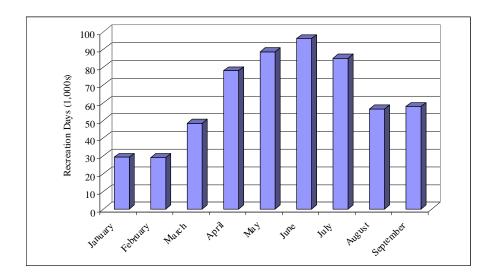
¹ Estimated have been rounded to the nearest ten.

^a Some additional rounding occurred when calculating monthly estimates, therefore totals may be off.

^b Parksite is closed for the months of January, February, and March. Bundrick Island is primarily a water-based activity (swimming, skiing, etc.), therefore, use in the months of January – March was not calculated.

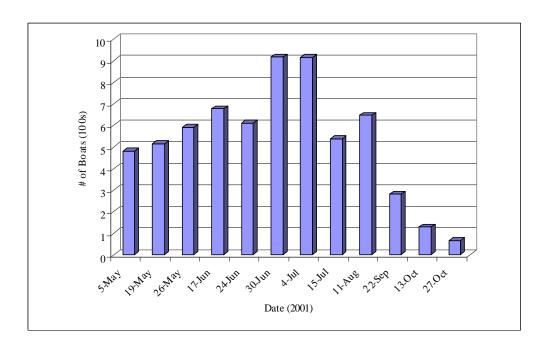
When viewed by month (Figure 3-2) for the entire study period (January – September, 2006), recreational use at Lake Murray exhibited the typical characteristics of expected use at a reservoir in the region; use grew through the spring until the summer months of June and July, when use peaked, and then tapered off toward the winter/colder months.

Figure 3-2: Estimated Recreation Days by Month for Lake Murray Sites, January through September, 2006



While this view of recreation days only accounted for recreation occurring at public use sites on Lake Murray, boating use exhibited the same characteristics (Figure 3-3). Recreation boating use in 2001 was moderate in late spring and heaviest on July 4th (Berger, 2002).

Figure 3-3: Total On-water Boats by Date (2001) (Source: Berger, 2002)

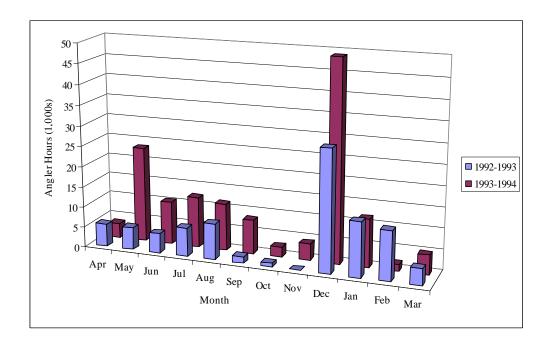


Angling is the most popular recreation activity on Lake Murray, accounting for over half of all recreational use from public access sites (Kleinschmidt, 2007). Largemouth bass, striped bass, bream, and crappie are the most sought after species. Striped bass anglers reportedly spent 163,468 angler hours³ on Lake Murray from April 1993 to March 1994 (Hayes and Penny, 1994). Striped bass angling was lowest in September, October, and November and peaked in December (Figure 3-4). Another study reported striped bass anglers spent most of their time on the water fishing between the Saluda Dam and Spence Islands, followed by the area from Spence Islands to Shull Island and the mouth of Bear Creek and that over half (51%) of striped bass anglers fished less than twenty days during 1999 (Responsive Management, 2000).

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³ Angler hours are defined as the sum of all hours fished by all anglers (Pollock, 1994). Angler hours, when divided by the average length of a fishing trip, are comparable to a recreation day (visit). Angler trips on Lake Murray averaged 3 hours and 37 minutes (or 3.6 for calculations)—the total length of trip (not just fishing time) from public access sites on Lake Murray (Kleinschmidt, 2007).

Figure 3-4: Estimates of Monthly Angler Effort Targeting Striped Bass on Lake Murray from April 1992 - March 1994 (Source: Hayes and Penny, 1994)



3.1.3 Lower Saluda River

The lower Saluda River was estimated to receive an additional 90,420 recreation days within the project boundary during January – May, 2006 (<u>Table 3-5</u>). Recreation use outside the project boundary (at the Mill Race sites) accounted for an additional 32,130 recreation days.

Table 3-5: Estimated Recreation Days by Site and Month for the Lower Saluda River, January through May, 2006 ¹

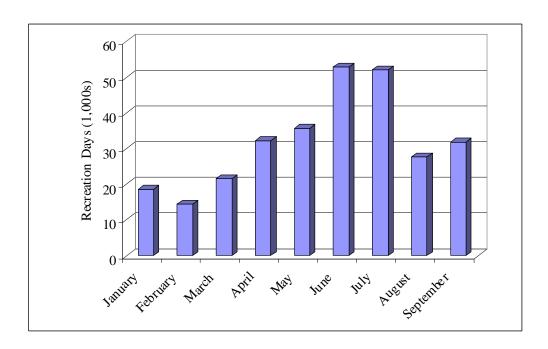
SITE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	TOTAL
Mill Race A ^a	1,840	1,430	2,130	3,190	3,530	12,120
Mill Race B ^a	3,040	2,360	3,520	5,260	5,830	20,010
Gardendale	950	740	1,110	1,650	1,830	6,280
Saluda Shoals	10,800	8,410	12,520	18,730	20,740	71,200
James R. Metts Landing	1,960	1,530	2,270	3,400	3,760	12,920
Total	18,590	14,480	21,550	32,240	35,690	122,550

¹ Estimated have been rounded to the nearest ten.

^a Outside the project boundary.

When viewed by month, recreational use on the lower Saluda River (both within and outside the project boundary) mirrored the pattern of use on Lake Murray; use grew through the spring until the summer months of June and July, when use peaked, and then tapered off toward the winter/colder months (Figure 3-5).

Figure 3-5: Estimated Recreation Days by Month for Lower Saluda River Sites, January through September, 2006



Angling is also a popular activity on the lower Saluda River, but less so than on Lake Murray, accounting for about 22% of activity on the River (Kleinschmidt, 2007). Creel surveys were conducted by the SCDNR from April 1996 to March 1999 (Beard, 1998, 1999; FIMS, 1997). General conclusions from these surveys indicated striped bass was the most targeted species followed by "anything" and trout. There appeared to be a distinct season for striped bass from May to September and a season for trout from December to April (trout are stocked in December of each year). During the final year of the survey (April 1998 to March 1999), anglers spent 66,639 angler hours⁴ on the lower Saluda

⁴ Angler trips on the lower Saluda River averaged 2 hours and 51 minutes (or 2.9 for calculations)—the total length of trip (not just fishing time) from public access sites on the Lower Saluda River (Kleinschmidt, 2007).

River. Most (58%) of this effort was from the bank (including wade fishing).

Patterns of angling use reflect that of general recreation use (<u>Figures 3-6</u> and <u>3-7</u>).

Figure 3-6: Estimates of Total Fishing Effort (Angler Hours) for the Lower Saluda River, January 1996 through March 1998 (Sources: Beard, 1998; FIMS, 1997)

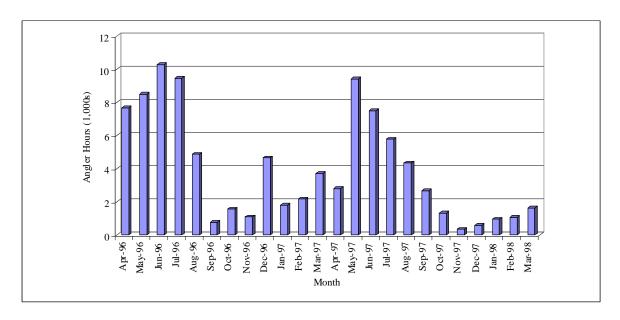
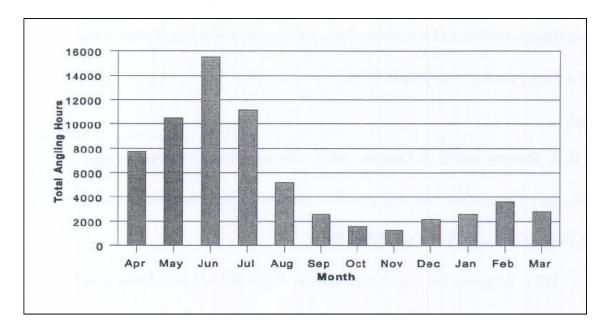
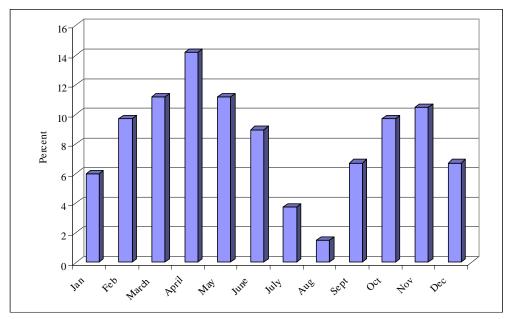


Figure 3-7: Total Monthly Angler Effort, in Hours, on the Lower Saluda River, April 1, 1998 through March 31, 1999 (Source: Beard, 1999)



In general, trout anglers (as represented by the SRCTU) fished in pairs of two people, on average, when fishing the LSR. Fishing by SRCTU members occurred year round on the River, and was most popular in the early spring months, followed by the fall and winter months (Figure 3-8). Mid to late summer months of July and August were the least favored months for fishing on the LSR.

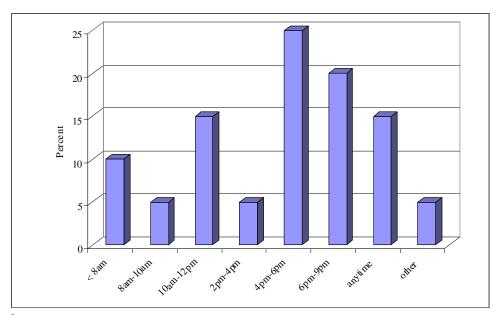
Figure 3-8: Months Typically Fished by SRCTU Members on the Lower Saluda River (n = 20) ^a



^a Percentages may sum to greater than 100 due to multiple responses.

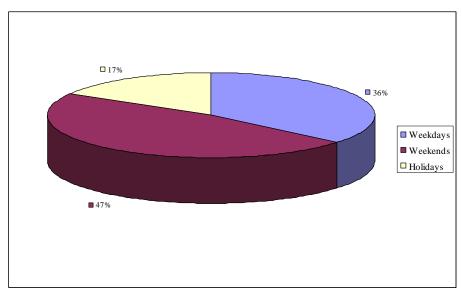
SRCTU members fished the LSR most frequently during late afternoon and evening hours (Figure 3-9). Trip lengths typically ranged from one to five hours and generally occurred on weekends and weekdays, with fewer people fishing over holidays (Figure 3-10). Overwhelmingly, the preferred means of fishing for SRCTU members on the LSR was by wading (Figure 3-11).

Figure 3-9: Time of Day Typically Fished by SRCTU Members on the Lower Saluda River $(n=20)^a$



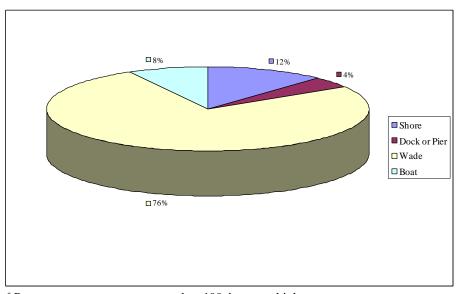
^a Percentages may sum to greater than 100 due to multiple responses.

Figure 3-10: Day Type Usually Fished by SRCTU Members on the Lower Saluda River (n = 20) ^a



^a Percentages may sum to greater than 100 due to multiple responses.

Figure 3-11: Preferred Fishing Method of SRCTU Members on the Lower Saluda River $(n = 20)^a$



^a Percentages may sum to greater than 100 due to multiple responses.

Knowledgeable river users identified a number of activities that take place on the LSR and the peak season for each activity. Activities that are more popular include canoeing/flatwater kayaking, fishing, whitewater paddling, and picnicking/rock hopping. Knowledgeable river users reported most activities identified peak in the warmer months of the year (May – August), with the exception of canoeing, which was reported as a year round activity, and wade fishing, which reportedly peaks in January, February and March.

Student use of the Mill Race sites also peaks during the warmer months (April – September). Half of the students interviewed indicated they came to the Mill Race sites from one to three times a week, usually on weekends. Results from the interviews also indicated the Mill Race sites are used like a designating swimming area and many people go there because it is closer than Lake Murray.

3.2 Site Use and Perceptions of Site Conditions and Needs on the Lower Saluda River

Limited information is available in the existing literature regarding which sites are used by various user groups or suggested improvements to sites for recreational use. The creel surveys conducted on the LSR indicated several items that were the "most important thing to make the fishing trip more enjoyable." Most anglers indicated "other," but no indication was given as to what these "other" responses were. About 27% responded "more or improved boat or bank angling access", 19% indicated "improvements to water quality and/or water level control", 10% said "litter", and about 2% said "law enforcement" (Beard, 1999).

The best indication of recreational needs for the lower Saluda River comes from the Lower Saluda River Corridor Plan and Update (SCDAP, 2000; SCWRC *et al.*, 1990). The general idea of the Corridor Plan Update is to have a trail down the entire length of the Saluda River and connect with the Three Rivers Greenway to link Saluda Shoals Park with Gardendale, Lake Murray, and Riverbanks Zoo. General recommendations from the Update about the number and location of recreational access points to the River from I-26 to the Saluda Dam indicate that the current access points at Hope Ferry (Metts Landing),

Gardendale, and Saluda Shoals are sufficient; however, the more detailed section plans recommend a trail system to access riverfront areas above Saluda Shoals Park where the Scenic River designation begins and all areas downstream of the park to the zoo. The original Corridor Plan recommends additional river-access points to include a park on the south side of the river at the mouth of Twelve-mile Creek. Both the original Corridor Plan and the Update recommend that no additional motorboat access be provided on the river, though the Update does acknowledge that a take-out for powered boats at Gardendale would help motor-boaters stranded downstream in high flow conditions. Below I-26, the Update recommends a new take-out on the north side of the River near Stacey's Ledge, improvements to the portage around Mill Race rapids, and a put-in with limited access by foot (with remote parking) for the Oh Brother Rapids/Ocean Boulevard area. The Update also identified a need for emergency access on the south side of the river below I-26, suggested access to parking areas, restrooms, and other improvements should be fee based, and the facilities should be ADA compliant. Furthermore, the Update suggested facilities at access areas should be as unobtrusive as possible. For example, the Update suggests no parking should be visible from the river and buildings should fit in to the landscape and use natural materials.

Nine of the twenty SRCTU members reported using public access sites for fishing on the LSR during the past year. The two sites reported most frequently were Saluda Shoals and James R. Metts Landing (<u>Table 3-6</u>). Although SRCTU members were asked to indicate the most important reason for choosing to fish at these sites, most elected to not answer the question. The few reasons reported for selecting these sites included that they are close to home, offer access to the river, and the ability to launch a boat.

Table 3-6: Public Access Sites Used by SRCTU Members and their Condition and Crowding Rating (n = 9)

SITE					ROWDING RATING ^b
		AVG	MODE	AVG	MODE
Saluda Shoals	7	4	3	2	1
James R. Metts Landing	5	3	2	3	2
Gardendale	2	4	2	2	2
Mill Race	3	2	1	4	2

a Rating occurred on a scale of 1 to 5, where a 1 was poor, a 3 was satisfactory, and a 5 was excellent. b Rating occurred on a scale of 1 to 5, where a 1 was light, a 3 was moderate and a 5 was heavy.

Saluda Shoals, James R. Metts Landing, and Gardendale were viewed by SRCTU members as in satisfactory or better condition, in general. Mill Race was viewed as in worse condition – most commonly reported as poor. With respect to crowding, SRCTU members generally perceived crowding at Saluda Shoals, James R. Metts Landing, and Gardendale as light to moderate. Mill Race was perceived as being moderately to heavily crowded.

Forty-three percent of SRCTU members (3 of 7 respondents) stated that public recreation sites are in need of improvements. Sites needing improvements were listed as James R. Metts Landing and Mill Race. Improvements included security, boat access/portage, and trash clean up.

In contrast to using public access sites, almost all SRCTU members (17 of 20) reported using private access sites to fish the LSR during the past year. By far the most popular site listed was River's Edge, a location where members of the SRCTU are permitted to access the water. Multiple reasons for using this location were offered, including provision of access at this location, river characteristics (e.g., the river is wadeable at this location and offers trout habitat), it is not crowded, and it is considered "TU" access.

Knowledgeable river users also identified the need for a formal motor boat launch at Gardendale and an additional access site above Mill Race rapids. They also recognized the need for angling access in the tailrace area of the Saluda Dam and an additional carry-in at Twelvemile Creek. Improvements needed at existing access sites acknowledged by this group were: removing the sewage discharge pipe at Saluda Shoals Regional Park; additional trash cans, better security, and restrooms at Metts Landing; trash cans, security, and increasing the size of Gardendale; and restrooms, trash cans, better security, additional walking paths, and better maintenance at the Mill Race sites.

Students provided additional perspective for improvements at the Mill Race sites. Virtually all of the students interviewed indicated better maintenance of the site is desirable, including more frequent trash pick up and more trashcans and wider and smoother walking paths. Other improvements mentioned by students included "more big rocks" and doing something about the graffiti.

3.3 Other Issues

One of the issues included in the Recreation Assessment was about safety on the LSR, specifically dealing with the knowledge of the warning devices presently on the River. The three user groups interviewed for this Addendum were also asked about this issue.

Eighty percent of SRCTU members (16 out of 20) stated they were aware of the siren and flashing lights on the LSR. When asked, all of the individuals aware of these features stated the sirens had something to do with rising water, changing flow, or release of water. Sixty-six percent of those who were aware of the siren and flashing lights stated they had never heard and/or seen them before. Of those who had heard and/or seen them, two people were in the water at the time and reported they left the water upon hearing the siren/seeing the flashing lights.

SRCTU members agreed that everyone wanted to get off the river safely when water levels rise. There was agreement that a call down system would be well received. Members also expressed concern over too much use of the siren system, as they did not wish to antagonize local residents. Members generally agreed they would prefer advance warning (e.g., schedule) of increased water flows.

Knowledgeable river users stated more education is needed about the dangers of the river for the public. This group thought additional warning devices would be most effective at Corley's Island, the Oh Brother/Ocean Boulevard area, and Sandy Beach.

The majority of students were aware of the warning devices and almost all of them knew what to do when they went off. About half of the students interviewed had actually heard the sirens and all of them got out of the river.

4.0 CONCLUSIONS

Spring use at the Saluda Project reflects recreational use patterns of water-based recreation in the southeast United States in general. While there are certain activities that differ from this norm, it is not surprising that recreation use at the Project peaks in June. Except for the personal interviews and facilitated meetings that occurred in May 2007, this report used secondary data primarily from prior years to estimate usage and patterns. Nevertheless, this Addendum provides some additional information that can be useful for recreation planning at the Project. Conclusions and a discussion of these conclusions are provided below.

While the methodology used in this report provides a general idea of recreation use at the Project, patterns of use at particular sites likely change in the winter/spring months. This may affect overall use numbers and has implications for recreation planning. Bundrick Island likely does not have the spring use reflected in this Report; it is a popular swimming/beach area accessible only by boat and it is likely recreationists will not visit this site during the cooler spring months. In addition, because of the winter drawdown on Lake Murray, use may shift between sites if boat ramps are not usable at the lower water levels. Recreation use probably shifts to those sites that offer a usable boat ramp and offer participation in recreation activities that can take place in cooler weather (e.g., picnic tables, walking trails, etc.).

As with expectations of future use during the peak recreation season, spring use is expected to grow as well. Overall, it is estimated the Saluda Project supported about 781,000 recreation days from January – September, 2006, with an additional 75,000 at the Mill Race sites, for a total of approximately 856,000 days of project related recreation during the period of January – September, 2006. As reported in the Recreation Assessment (Kleinschmidt, 2007), population in the area surround the project is expected to increase by an average of 4.4 percent for each five year period over the next 25 years. This means that spring use could grow by about 86,000 recreation days by the year 2030 at the project, with an additional 7,500 recreation days at the Mill Race sites. Total use from January – September could grow as much as 185,000 recreation days at the project by the year 2030 with an additional 18,000 recreation days at the Mill Race sites. Total projected use for the period January – September, 2030 could be about 1

million recreation days from Lake Murray sites, with an additional 100,000 recreation days at the sites on the LSR (including Mill Race).

Future recreation planning at the Saluda Project should take into account spring use occurring at the project. Whereas use numbers from the peak recreation season should still be the impetus for planning the number and size of new facilities, or expansion of existing facilities, types of use that occur in the spring should be reflected in activities available at recreation sites and any planned seasonal closure of recreation sites. While it is expected anglers intercepted during the original study period expressed the same concerns that anglers would have expressed if the spring addendum included additional surveys, the location that striped bass anglers fish should be taken into account during recreation planning. As was shown in the Recreation Assessment, recreationists generally choose a site that offers the amenities they are seeking and is closest to their home. The deeper water that striper anglers fish in the winter months should continue to be accessible by an appropriate number of ramps and/or shoreline access during the winter season. The same is true on the LSR for trout anglers. While none of the sites on the LSR are currently closed during the off-peak season, any new facilities should take into account the seasonality of this activity.

This study presents some additional information concerning spring use (January – May) at the Saluda Project. Patterns of use are similar to other FERC projects in the southeast. Types of use were characterized through interpretation of the qualitative data provided by the user group meetings and two interview days at the Mill Race sites in May, 2007. The addendum identified the needs of these additional user groups by soliciting their input on future desired recreation opportunities on the LSR. The results of the Recreation Assessment and this Addendum, along with other information gathered though the relicensing process, should be sufficient baseline information to plan for future recreational use at the Saluda Project.

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APPENDIX A LOWER SALUDA RIVER RECREATION STUDY ANGLER QUESTIONNAIRE

Lower Saluda River Recreation Study Angler Questionnaire

In this section we are interested in learning about your fishing experience on the lower Saluda River. When you go fishing on the lower Saluda River, including yourself, about how many people do 1. you **usually** go fishing with? (Fill in the blank) TOTAL PARTY SIZE, INCLUDING MYSELF 2. When you go fishing on the lower Saluda River, what time of day do you usually go fishing? (Circle one number) 1 BEFORE 8 AM 6 4 PM TO 6 PM 2 7 6 PM TO 9 PM 8 AM TO 10 AM 3 10 AM TO 12 PM AT NIGHT AFTER 9 PM 8 4 12 PM TO 2 PM 9 ANYTIME 5 2 PM TO 4 PM 10 OTHER, Please describe: 3. Which of the following categories best describes the length of you typical fishing trip on the lower Saluda River? (Circle one number) 1 1 HOUR OR LESS 4 3 TO 4 HOURS 2 5 1 TO 2 HOURS 4 TO 5 HOURS 3 **LONGER THAN 5 HOURS** 2 TO 3 HOURS 4. In what month(s) do you **usually** fish on the lower Saluda River? (Circle all numbers that apply) 1 **JANUARY** 7 JULY 2 8 **FEBRUARY AUGUST** 3 MARCH 9 **SEPTEMBER** 4 **APRIL** 10 **OCTOBER** 5 MAY 11 **NOVEMBER** JUNE **DECEMBER** 6 12

A-1 VERSION 1

- 5. Do you **usually** fish on the lower Saluda River on week days (Monday through Friday), week ends (Saturday or Sunday), or on holidays (Memorial Day weekend, Independence Day Weekend, Labor Day Weekend)? (Circle all numbers that apply)
 - 1 WEEK DAYS, MONDAY THROUGH FRIDAY
 - 2 WEEKENDS, SATURDAY AND SUNDAY
 - 3 HOLIDAYS
- 6. When you fish on the lower Saluda River, do you **usually** fish from the shore, from a pier, while wading, or from a boat? (Circle all numbers that apply)
 - 1 FISH FROM SHORE
 - 2 FISH FROM A PIER OR DOCK
 - 3 FISH WHILE WADING
 - 4 FISH FROM A BOAT

The next questions ask about the **public access areas** on the lower Saluda River that you typically used when you went fishing <u>during the past year, between March of 2006 through April of 2007</u>.

A **public access area** is a location that is open to the public without discrimination. Examples of public access sites on the lower Saluda River are Saluda Shoals Park, Hope Ferry (James R. Metts Landing), Gardendale, and Mill Race Rapids.

- 7. When was the last time you went fishing on the lower Saluda River? (Circle one number)
 - 1 MARCH THROUGH APRIL 2006
 - 2 MAY THROUGH SEPTEMBER 2006
 - 3 OCTOBER THROUGH DECEMBER 2006
 - 4 JANUARY THROUGH APRIL 2007
 - 5 NONE OF THE ABOVE ► SKIP TO QUESTION 15
- 8. When you went fishing on the lower Saluda River during the past year, did you use **public** access areas to get to the river? (Circle one number)
 - 1 YES
 - 2 NO► SKIP TO QUESTION 15

A-2 VERSION 1

In the table below, please indicate which **public access area(s)** you used when you went fishing on the lower Saluda River during the past year, and how you would rate the **overall** condition of the site(s).

Public Access		9 :his site? e no or	how over site	woul	10 cled " ld you ondition	rate on of	the	11 What is the most important reason for choosing to fish at this site? (Fill in the blank. If you need more room, please use the back of the page.)	over	all cr site?	owde	u rate dness le <u>one</u>	of
			Poor		Satisfactory		Excellent		Light		Moderate		Heavy
Saluda Shoals Park	No▼	Yes►	1	2	3	4	5		1	2	3	4	5
Hope Ferry (James R. Metts Landing)	No▼	Yes►	1	2	3	4	5		1	2	3	4	5
Gardendale	No▼	Yes►	1	2	3	4	5		1	2	3	4	5
Mill Race Rapids	No▼	Yes▶	1	2	3	4	5		1	2	3	4	5
Other public location(s), please list:													
1.	No▼	Yes▶	1	2	3	4	5		1	2	3	4	5
2.	No▼	Yes►	1	2	3	4	5		1	2	3	4	5

13.	Are there any additional facilities or improvements that are needed at public access areas on the lower Saluda River where you went fishing during the past year? (Circle one number)				
	1 YES 2 NO►SKIP TO QUESTION 15				
14.	Please list the public access area on the low improvements, and the identify what is needed				
	List the Public Access Area Needing Improvement	Additional Improvement or Facility Needed			
	1				
	2				
	3				
	next questions ask about the private access are when you went fishing <u>during the past year, bet</u>				
	vate access area is a location that is open only e by others. Examples of private access sites a	to a select group of individuals, but may restricted re homeowner's docks and private clubs.			
15.	When you went fishing on the lower Saluda Riaccess areas to get to the river? (Circle one r				
	1 YES				
	2 NO►SKIP TO QUESTION 19				

A-4 VERSION 1

In the table below, please indicate which **private access area(s)** you used when you went fishing on the lower Saluda River during the past year, and tell us the most important reason for choosing to fish there.

16 Private Access Area (Please list)	What is the most important reason for choosing to fish at this site? (Fill in the blank. If you need more room, please use the back of the page.)	How wou crowded one num	lness			
		Light		Moderate		Неаvу
		1	2	3	4	5
		1	2	3	4	5
		1	2	3	4	5

A-5 VERSION 1

1 2	e you aware of a siren or flashing lights on the Lower Saluda River? (Circle one number.) YES NO►SKIP TO QUESTION 24 nat do you think they are for? (Fill in the blank)
2	NO►SKIP TO QUESTION 24
2	NO►SKIP TO QUESTION 24
20. Wh	nat do you think they are for? (Fill in the blank)
	ve you ever heard the siren or seen the flashing lights on the Lower Saluda River? (Circle number) YES
2	NO►SKIP TO QUESTION 24
	e last time you heard the siren or saw the lights, were you on or in the water when the siren unded? (Circle <u>one</u> number)
1	YES
2	NO►SKIP TO QUESTION 24
23. Wh	nat did you do? (Fill in the blank.)

A-6 VERSION 1

nses to	others w	vho have completed this surv	ey.
•		•	e or condominium on the lower Saluda River ? ZIP code.)
1	YES	Permanent Home►	ZIP CODE:
2	YES	Seasonal Home►	ZIP CODE:
3	NO	Non-riverfront Resident►	ZIP CODE:
In wha	at year v	vere you born? (Fill in blank.))
	Do yo (Circle 1 2 3	Do you own a (Circle one nu 1 YES 2 YES 3 NO	(Circle one number and fill in the blank for 1 YES Permanent Home▶ 2 YES Seasonal Home▶

YEAR

In these last few questions, we would like to learn a little bit about you so that we can compare your

THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!

PLEASE RETURN THIS SURVEY TO A KLEINSCMIDT REPRESENTATIVE BEFORE YOU LEAVE TONIGHT.

HAVE A GREAT TIME ON THE RIVER THIS YEAR!

A-7 VERSION 1

APPENDIX B

RESPONSES TO COMMENTS RECEIVED FROM RECREATION MANAGEMENT TWC MEMBERS

Saluda Project

Comment	Commenter	Comment	Page #	Response
1	South Carolina Department of Parks, Recreation and Tourism (SCPRT)	Goal 1: should be (January-May, 2007).	1-4	The estimates of use in the Spring Addendum are for 2006. The data used from Dreher Island State Park and Saluda Shoals were data from 2006 and were applied to data collected in 2006 for the Recreation Assessment Study Report.
2	SCPRT	4 th sentence: "Primary data entailed facilitated meetings and two days of personal interviews of recreationists who use recreation sites on the lower Saluda River.	2-1	Edit has been made to the final report.
3	SCPRT	Table 2.1: Provide a footnote for both mentions of the "2006 Recreation Assessment": A. Includes data from public recreation sites only from Memorial Day weekend through Labor Day weekend, 2006.	2-2	A footnote has been included that reads: "Includes data from public recreation sites from May 27 (Memorial Day) to September 30, 2006" (the sampling period used in the Recreation Assessment Study Report).
4	SCPRT	Table 2.1: Provide a footnote for "Public site monitoring reports during drawdown": B. Excludes February and March data.	2-2	Edit has been made to the final report.

Saluda Project

Comment	Commenter	Comment	Page #	Response
#				
5	SCPRT	Table 2.1: There is a discrepancy from the study plan to the draft addendum in the source column. Originally it should have been the Recreation Management TWC rather than knowledgeable river users. Perhaps this should be explained in a footnote.	2-2	You are correct that one of the sources for the information on types of spring use on the lower Saluda River (LSR) was originally the Recreation Management TWC. However, due to the participants at the focus group held for the Downstream Recreation Flow Assessment (including Tony Bebber-SCPRT, Bill Marshall-SCDNR, Dave Lansberry-SCDNR, Stuart Greeter-SCDNR, Karen Kustafik-City of Columbia Parks and Recreation, and
				Charlene Coleman-American Whitewater), we felt another meeting
				concerning types of use on the LSR
				would have been duplication of effort.

Saluda Project

Comment	Commenter	Comment	Page #	Response
#				_
6	SCPRT	Provide a statement that USC (and other local colleges?) adjourn in early May (perhaps students did not respond because they were in exams or at home by the time the attempted contact was made?). Provide how many students were interviewed.	2-4	We have included the number of college aged people that we interviewed on the two days in May, 2007. The attempts to contact University of South Carolina students occurred in April—when no response was received, a decision was made to move forward with interviews at the Mill Race sites. Commencement at USC was May 12. We think it is probable that USC students did not leave the day after graduation. USC students participate in May session courses or even summer courses; USC students may have apartment leases that are not up until the end of the month; they may have part-time and/or summer jobs/internships in Columbia that keep them here over the summer, etc. Second, we have no reason to believe the noncollege students we interviewed both in May and as part of the surveys conducted for the Recreation Assessment would feel any differently or participate in different activities than college students interviewed.
7	SCPRT	Edit: Interviews occurred on one week days	2-4	Edit has been made to the final report.
		and one weekend days during a period of		
		warm sunny weather.		

Saluda Project

Comment	Commenter	Comment	Page #	Response
8	SCPRT	Section 2.1.3: The lack of data for February and March in the drawdown report is another reason <u>real</u> surveying was needed during this January through May time period, rather than dependence on secondary data. Thank you for explaining in the addendum that the estimate provided gives a poor relationship between month and recreational use.	2-5	Comment noted. Also, the poor relationship is not for the estimate provided—we did not try to fit a regression to the data used. The poor relationship was from the remediation data, which was not used for estimates in the report.
9	South Carolina Department of Natural Resources (SCDNR)	Regarding visitor numbers from Saluda Shoals Park – It may be appropriate to qualify the figures in some way explaining that some portion of the visitors are not recreating on the river or outdoors. The attached article highlights visitation at the park and notes that many are visiting for meetings and receptions and not outdoor recreation. Perhaps folks at the park have a ballpark estimate of how this would split out.	2-6	A footnote has been added to Table 2-3.
10	SCDNR	Section 3.1.1 It will be helpful to explain the term "recreation days."	3-2	A footnote has been added defining recreation day.

Saluda Project

Comment	Commenter	Comment September 2007	Page #	Response
#				
11	SCPRT	Table 3.4: Note that Parksite is closed January through March and these 1,730 estimated recreation days should be distributed to other nearby recreation sites. Also, Bundrick Island is primarily a summer venue (swimming, skiing, gathering). Its usage should also be distributed to other nearby sites – at least January through March.	3-3	We have edited the estimated use to reflect the fact that Parksite is closed from January – March, and agree that use of Bundrick Island is non-existent during this time. However, due to the methodology employed for use estimates, it is not necessary to redistribute use from these sites. Percentages of use were applied to the individual sites (not the total use of all sites); therefore, redistributing a percentage of total use is not necessary.
12	SCPRT	Did the recreational use on the river "mirror the pattern of use on Lake Murray" because it was estimated from Dreher Island State Park data, with no adequate river usage data from the same time period?	3-7	No. Patterns of use on the lake and the river were similar, however, patterns of use on the lake were derived from data from Dreher Island State Park and patterns of use on the LSR were derived from data from Saluda Shoals Regional Park.
13	SCPRT	"Most (58%) of this effort was from the bank (including wade fishing)."	3-8	Edit has been made to the final report.

Saluda Project

Comment	Commenter	Comment	Page #	Response
14	SCDNR	Section 3.2 The attachment contains my edits for Section 3.2 to clarify that the Saluda	3-12	Edits have been made to the Final Report.
		Corridor Plan Update of 2000 does recommend additional, new access to the river above I-26 (and elsewhere); and that		
		would be via the proposed trail system along the river, even upstream of Saluda Shoals Park. It is only the "number and location" of		
		"access points" (i.e. points of entry to the corridor) that was considered "sufficient" in the words of the plan. I also added mention of an access recommendation (at Twelvemile		
		Creek) from the original Corridor Plan of 1990 that is still worthy of consideration.		
15	SCPRT	Use Bill Marshall's corrections regarding the LSR Corridor Plan and Update.	3-12	See response to Comment #14.
16	SCPRT	Where is Old State Road public access? It has not been discussed in other documents.	3-13	We believe the Old State Road reported by SCTU members is the old bridge below the new Riverbanks Zoo bridge. However, there is also access to the Congaree River on "Old State Road." Since we can not pinpoint the location, and do not have the ability to improve this access site, references to Old State Road have been removed from the report.

Saluda Project

Comment	Commenter	Comment	Page #	Response
17	SCDNR	Regarding additional motorboat access: a closer read of the Plan Update shows that this is not recommended. It says that "the consensus was that improvements to access points should only develop new facilities for non-powered watercraft" and then goes on to acknowledge that motorboat access at Gardendale would be helpful to those who become stranded downriver in high flow conditions. In other words, we recognize there is a legitimate point regarding boater safety here, but most are reluctant to open the river to any more motor boat use at this time.	3-13	Comment noted and reflected in the edits made to Section 3.2.
18	SCPRT	Typo in walking.	3-14	Edit has been made to the final report.
19	SCPRT	"Sixty-six percent of those who were aware of the siren and flashing lights stated they had never heard and/or seen them before."	3-14	Edit has been made to the final report.
20	SCPRT	Chorley Island should be Corley Island.	3-15	Edit has been made to the final report
21	SCPRT	Insert as first sentence or third sentence: "Except for specific surveys in late May, this "Spring Addendum" used secondary data primarily from prior years to estimate usage and patterns."	4-1	A modified version of this sentence has been added to the first paragraph of Section 4.0.
22	SCPRT	Change to: "This study presents some additional information concerning spring use (January-May) at the Saluda Project.:"	4-2	Edit has been made to the final report.

Saluda Project

Comment	Commenter	Comment	Page #	Response
23	SCPRT	Change to: "Types of use were characterized through interpretation of the qualitative data provided by the user group meetings and two interview days at the Mill Race sites in late May, 2007."	4-2	Edit has been made to the final report except for the word "late." We do not consider May 15 and May 19 to be "late" May.
24	SCPRT	Please add appendixes with responses to various questions, number of interviews, etc. so the TWC and Resource Committee may evaluate the usefulness of the addendum.	Appendix	We have added the number of completed interviews to Section 2.1.2 and percentages of responses are discussed in the text. Numbers and percentages of responses to the survey of SCTU members are also given in the text. A brief write up about our observations and results from the informal interviews are below.

Saluda Project

Comment	Commenter	Comment	Page #	Response
25	SCPRT	It appears that the only "new" on-site data collected was in late May and only on three (?) dates on the lower Saluda River. This was after local colleges adjourned in early May. This time period likely reflects similar usage as the "Summer" study done in 2006 and adds very little to the concern about different usage patterns in January through May. Some new data was collected from user groups – anglers at a special meeting of the Saluda River Chapter of Trout Unlimited/Federation of Fly Fishers, and knowledgeable river users during the test flows for another study in late May. Specific responses to the questions were not provided in an appendix so it could reviewed by those on the committees. The "Spring Addendum" uses the "Summer" study and two other secondary data sources to estimate January through May usage, providing very suspect data and negates the original reason for the "Spring Addendum." I am not sure the goals of the study were met.	General	Comment noted. However, we feel the Spring Addendum did meet its goal of providing information on spring use and identifying the needs of the selected user groups identified as missing from the Recreation Assessment. We have seen no data to indicate spring use patterns are any different from what is presented in the report, except for two activities—striped bass fishing on Lake Murray and trout fishing on the LSR. But, when these two activities are combined with other uses, the pattern of use reflects typical water bases recreation use patterns in the Southeast U.S.

Saluda Project

September 2007

Informal Interviews at the Mill Race Sites – May 15 and May 19, 2007

Mill Race A and B were both well used with people in groups and as individuals, on the rocks sunbathing, socializing, relaxing, tubing, net fishing and kayaking. In short, it was mobbed on both days, with probably 100-200 people per day spread between both sites – possibly more. Interviewing at Mill Race A was much easier than at Mill Race B. The crowds using these two areas seem to be fairly different. Interviewing everyone there was not feasible – some were in the water and some were on the other side of the river. We only approached people on the shoreline near the zoo and in the parking area for Mill Race A.

We approached and spoke with 34 people who appeared to be of college age. Of those 4 individuals were there for the first time, from out of state. They were construction workers, and English was difficult for them. Two were from somewhere in Texas and 2 were from the Chicago area. Here's what we heard from the remaining; none had been interviewed by us.

- Mill Race is used like a beach. It is closer than Lake Murray or other places.
- Trash cans and trash pick up are desirable. This was noted by 17 students.
- Trash cans in the parking area are always full.
- Wider trails/paths are desirable.
- There was one request to try and modify the behavior of "the crowd" that contributes to the litter problem, and a complaint about broken glass in the water.
- One person requested that graffiti on the rocks be stopped.
- Roughly 2/3 of people said that they use the area between April/May through September, while the remaining said they used it year round.
- All people are aware of the sirens and know what to do if they go off. Only a few had actually heard them. One person was caught in the river when the sirens went off -- said he knew what to do and left, but hadn't known how quickly the water would rise and said that he had to wade out while holding his belongings above his head.
- Roughly half stated that they had seen the water high, even if they hadn't heard the sirens.

APPENDIX C

SPRING USE AT THE SALUDA PROJECT AND RECREATION NEEDS ON THE LOWER SALUDA RIVER STUDY PLAN

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SPRING USE AT THE SALUDA PROJECT AND RECREATION NEEDS ON THE LOWER SALUDA RIVER STUDY PLAN

FINAL

SALUDA PROJECT

(FERC NO. 516)

APRIL 2007

Prepared by:



SOUTH CAROLINA ELECTRIC & GAS COMPANY

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SALUDA PROJECT (FERC NO. 516)

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SOUTH CAROLINA ELECTRIC & GAS COMPANY

SPRING USE AT THE SALUDA PROJECT AND RECREATION NEEDS ON THE LOWER SALUDA RIVER

SALUDA PROJECT (FERC NO. 516)

1.0 PURPOSE OF THE STUDY

South Carolina Electric & Gas (SCE&G) requested an assessment of existing and future recreational use, opportunities, and needs for the Saluda Project. The completed assessment (Kleinschmidt, 2007) was designed to provide information pertinent to the current and future availability and adequacy of recreation sites at Lake Murray and the lower Saluda River. In comments received on the draft Recreation Assessment Study Report (Kleinschmidt, 2007), the South Carolina Department of Parks, Recreation & Tourism (SCPRT), South Carolina Department of Natural Resources (SCDNR), and Trout Unlimited (TU) requested information concerning recreational use during winter/spring (January – May). The majority of comments were about areas downstream of the Saluda dam, with most comments focusing on an area outside the Project boundary (Mill Race rapids). SCE&G proposes to complete this study to address these comments and promote cooperation in their relicensing efforts. The goals of this study are to:

Goal 1: Collect additional information concerning spring use (January – May) on Lake Murray and the lower Saluda River.

- iv. Identify patterns of spring use at SCE&G-owned recreation sites on Lake Murray.
- v. Identify patterns of spring use on the lower Saluda River from the Saluda Dam to Mill Race.
- vi. Characterize types of spring use on the lower Saluda River from the Saluda Dam to Mill Race.

Goal 2: Identify needs of selected recreational user groups for facilities on the lower Saluda River to support spring use (January – May).

ii. Characterize the needs and preferences for recreational access and facilities on the lower Saluda River as it relates to wade fishing, canoeing and kayaking, and student use of the Mill Race area.

2.0 DATA COLLECTION

A combination of data collection efforts will be used to obtain the information necessary to address the study objectives. Table 2-1 identifies the information needed to address each objective and the data collection method that will be used. Both primary and secondary data will be required. Primary data will entail facilitated meetings of recreationists who use recreation sites on the lower Saluda River. Secondary data will include the 2006 Saluda Recreation Assessment, the Lower Saluda Corridor Plan and Update, and other relevant literature.

Table 2-1: Spring Use at the Saluda Project and Recreation Needs on the Lower Saluda River Study Plan Objectives and Efforts

Objectives	Information Needed	Source
Goal 1: Collect additional information concerning spring use (January – May) on Lake Murray and the lower Saluda River.		
Identify patterns of spring use at SCE&G owned recreation sites on Lake Murray.	Percentage of use occurring in Jan May based on results of the 2006 Recreation Assessment	 2006 Recreation Assessment Public site monitoring reports during drawdown
Identify patterns of spring use on the lower Saluda River from the Saluda Dam to Mill Race.	Percentage of use occurring in Jan - May based on results of the 2006 Recreation Assessment	 2006 Recreation Assessment Visitation records from Saluda Shoals Regional Park SCDNR creel surveys
Characterize types of spring use on the lower Saluda River from the Saluda Dam to Mill Race.	Activities taking place on lower Saluda River and approximate location	Recreation Management TWCLiterature review
Goal 2: Identify needs of selected recreational user gr	oups for facilities on the lower Saluda River to	support Spring use (January – May).
Characterize the needs and preferences for recreational access and facilities on the lower Saluda River as it relates to wade fishing, canoeing and kayaking, and student use of the Mill Race area.	 Preferences of wade anglers Preferences of canoeists and kayakers Preferences of college students 	 Facilitated meetings of users Downstream Flows TWC Lower Saluda River Corridor Plan / Update

3.0 METHODS

Secondary data sources will provide much of the needed information. The exception is the use of facilitated meetings to gather preferences from river users. These two sources of data are explained below.

3.1 <u>Secondary Data Sources</u>

In order to estimate use during the winter/spring (January – May) season, there are a number of data sources to be used. Among these are creel surveys from the SCDNR and visitation records from Saluda Shoals Regional Park to estimate use on the lower Saluda River, and monitoring reports of public recreation sites conducted during 2003 and 2004 for public sites on Lake Murray. Other information concerning site specific patterns of use, regional patterns of recreation participation, and any other literature concerning yearly recreation participation patterns will be used as available. Once this information is gathered and analyzed, monthly participation estimates will be calculated either from direct records (Saluda Shoals) or from an estimation of the percentage of use that occurs from January to May based on visitation numbers reported in the Recreation Assessment Study Report (Kleinschmidt, 2007).

3.2 Facilitated Meeting

In comments to the Recreation Assessment Report (Kleinschmidt, 2007), the SCDNR, SCPRT, and TU expressed some concerns that the preferences and opinions of select user groups were not collected in the public survey conducted at public access sites on the lower Saluda River. In order to understand these issues and facility and access needs for these user groups, facilitated meetings will be held. A meeting will be held at or near the University of South Carolina campus in Columbia on a date to be determined. The meeting will be noticed in the student newspaper and elsewhere on campus, possibly with student outing clubs. Information asked of students will be similar to the

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⁵ Prior to the Saluda Dam Remediation Project, the FERC recognized there would be some impacts to recreational access (only 7 public launches were usable) and required SCE&G to monitor use at these 7 public launches to determine if any of the sites were exceeding their capacity. The monitoring plan can be found in FERC Docket No. P-516-376.

information solicited during the onsite recreation survey. We will attempt to target students who use or have used public recreation sites on the lower Saluda River. The opinions of river anglers will be obtained by targeting that user group individually. We will attend the May 14th meeting of the Saluda Chapter of Trout Unlimited. Information solicited will be similar to the information requested during the onsite recreation survey. An additional meeting will be held with paddlers to solicit input from this group. Information gathered from these meetings will be compiled and summarized for inclusion in the addendum.

4.0 SCHEDULE

The proposed schedule for completion of the Recreation Assessment Addendum is as follows:

Task	Date
Review and summarize pertinent literature	April 2007
Facilitated meetings	May 2007
Submit draft report	June 2007
Client and TWC Review	June 2007
Finalize report	July 2007

5.0 REFERENCES

Kleinschmidt Associates. 2007. Recreation Assessment Study Report. South Carolina Electric & Gas Company, Columbia, SC.