

# **SHORELINE MANAGEMENT PLAN MONTICELLO RESERVOIR**

**PARR HYDROELECTRIC PROJECT  
(FERC No. 1894)**

**South Carolina Electric & Gas Company  
Cayce, South Carolina**

June 2018

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**SHORELINE MANAGEMENT PLAN  
MONTICELLO RESERVOIR**

**PARR HYDROELECTRIC PROJECT  
(FERC No. 1894)**

**EXECUTIVE SUMMARY**

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South Carolina Electric & Gas Company ("SCE&G") is the Licensee of the Parr Hydroelectric Project (Federal Energy Regulatory Commission ["FERC"] No. 1894) ("Project"). The Project consists of the Parr Shoals Development and the Fairfield Pumped Storage Development. The developments are located along the Broad River in Fairfield and Newberry Counties, South Carolina.

The Project developments form two distinct Project reservoirs. Parr Reservoir is located along the Broad River, as impounded by Parr Shoals Dam, and functions as the lower reservoir for the Fairfield Development. Monticello Reservoir is located adjacent to the Broad River and functions as the upper reservoir for the Fairfield Development. Both Project reservoirs serve as popular recreation destinations and are used and enjoyed by local residents as well as visitors to the state.

In conjunction with its relicensing activities, SCE&G has assembled a diverse and inclusive group of stakeholders to advise and assist in the development of two Shoreline Management Plans ("SMPs"), each tailored to a specific reservoir. SMPs are comprehensive plans for the management of Project land and adjoining water resources and their uses, consistent with License requirements and broad Project purposes, and appropriately accessible and beneficial to adjacent shoreline residents and the recreating public. A SMP serves to identify existing and appropriate future uses and to provide plans and programs for responsible future use and management of project lands and waters as well as the flora and fauna encompassed within them. This SMP exists specifically to address shoreline uses surrounding Monticello Reservoir. A SMP to address Parr Reservoir is included under separate cover and available from the SCE&G Lake Management Department (Lake Management).

In addition to a SMP for each Project reservoir, a Shoreline Management Handbook and Permitting Guidelines (Permitting Handbook) was developed for both developments in

consultation with governmental, non-governmental, and individual stakeholders to address activities that will require consultation with and/or permits from SCE&G. These activities include construction, maintenance, and placement of docks, shoreline stabilization, lake access pathways and other shoreline activities.

The classification of Project lands surrounding Monticello Reservoir is described in Section 5.0 and includes five management classifications. These classifications are as follows: Project Operations; Nuclear Exclusion Zone; Shoreline Permitting; Public Recreation; and Non-Development Areas. Lands reserved for Project operations are those lands that are specifically required for operation of the Project. They include areas such as plant facility locations, dams, electrical substations, etc. The Nuclear Exclusion Zone (NEZ) is a defined area surrounding the V.C. Summer Nuclear Station. Within the NEZ, SCE&G, as the licensed nuclear plant operator, has responsibility and the authority to control all activities and has the absolute right to exclude or remove persons and property. Public Recreation land includes land within public parks, SCE&G developed recreation areas, and islands.<sup>1</sup> Non-Development Areas are areas protected from development to preserve environmental resources and aesthetic values. Conversely, lands included within the Shoreline Permitting classification are not automatically excluded from development related shoreline use, and hence may be available for permitted shoreline development such as access paths and docks.

Land use prescriptions associated with these land management classifications are discussed in Section 6.0. Prescriptions are administered through the Permitting Handbook.

SCE&G maintains a strong commitment to the management of the waters and shoreline of Monticello Reservoir, focusing on the social, ecological, and economic impacts of activities on and near the shoreline and water, taking into consideration in particular, the environmental, aesthetic, and recreational character of the shoreline and lake. Section 7.0 details the activities and structures on and adjacent to Monticello Reservoir that require SCE&G consultation and/or approval. The permitting procedures for shoreline activities or structures are set out in more detail in Section 8.0 and in the Permitting Handbook.

Section 9.0 details SCE&G's fee structure for the shoreline management program.

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<sup>1</sup> SCE&G owns all land within the Monticello Development, including all islands within Lake Monticello

Periodic surveys of the Monticello Reservoir shoreline are conducted by SCE&G and include, among other things, inventories and inspections of all docks, including those built and permitted throughout the current year. SCE&G also looks for unauthorized structures within the Project property at that time. These represent violations of the SMP. SMP violations will be dealt with as deemed by SCE&G, in its sole discretion, to be appropriate. Consequences of violations may range from dock permit cancellations to fines and/or legal action, and are discussed more fully in Section 10.0.

SCE&G Shoreline Management Practices include actions taken to lessen or mitigate for potential impacts to a particular resource resulting from direct or indirect use. These include but may not be limited to shoreline stabilization and vegetation management, as well as aquatic plant management. Shoreline Management Practices are further described in Section 11.0 of this document.

Public education and outreach on the protection of valuable shoreline resources is integral to the effectiveness of the SMPs. Section 12.0 of this document details specific measures to be undertaken to help educate both adjacent shoreline residents and other Project resource users. Among included objectives will be SMP education and Best Management Practices ("BMP") education.

In its Application for New License, SCE&G is proposing 10 year review periods for the SMP. The 10 year SMP review periods provide reasonable opportunities for SCE&G, in concert with governmental, non-governmental, and individual stakeholders, periodically and deliberately to assess new issues that arise as a result of development around the Reservoir, and allow for analyses of cumulative effects. Concurrently with the FERC SMP review process, SCE&G will review the Permitting Handbook with interested stakeholders periodically to evaluate and improve its effectiveness. SCE&G reserves the right, however to make changes to the permitting process as it deems necessary and appropriate. This is discussed in Section 10.0.



**SHORELINE MANAGEMENT PLAN  
MONTICELLO RESERVOIR**

**PARR HYDROELECTRIC PROJECT  
(FERC No. 1894)**

## **1.0 INTRODUCTION**

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The Parr Hydroelectric Project ("Project") is located on the Broad River in Fairfield and Newberry Counties, South Carolina (Figure 1-1). The Project is located approximately 31 river miles downstream of the Neal Shoals Hydroelectric Project (Federal Energy Regulatory Commission ["FERC"] No. 2315) and 24 river miles upstream of the Columbia Diversion Dam. The Project consists of two developments: the Parr Shoals Development ("Parr Development") and the Fairfield Pumped Storage Development ("Fairfield Development"). Subsequently, two primary reservoirs are included as part of the Project, Monticello Reservoir<sup>2</sup> and Parr Reservoir. The normal maximum water level in Monticello Reservoir is El. 425.0 feet National Geodetic Vertical Datum ("NGVD"), which corresponds to a surface area of approximately 6,600 acres, and a gross storage of 400,000 acre-feet. Monticello Reservoir has approximately 64 miles of shoreline within the Project boundary. Parr Reservoir's normal maximum water level is at El. 266.0 feet NGVD, with a corresponding surface area of approximately 4,250 acres. The gross storage is estimated to be 32,000 acre-feet. Parr Reservoir has approximately 75 miles of shoreline within the Project boundary.

An active storage of up to 29,000 acre-feet is transferred between the two reservoirs by the pumped storage operations of the Fairfield Development. Fairfield Development's alternate cycles of generation and pumping results in daily fluctuations in the water levels of both Monticello and Parr Reservoirs. Monticello, when beginning at normal maximum pool elevation, drops 4.5 to 5 feet over a 10 to 12 hour period during the generating phase of operation. At the same time, the water from Monticello and from the Broad River is flowing into Parr Reservoir, causing it to rise as much as 10 feet. During the pumping cycle, the reverse occurs – the water level rises in Monticello Reservoir and drops in Parr Reservoir.

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<sup>2</sup> The State of South Carolina considers Monticello Reservoir waters of the State and refers to it as "Lake Monticello".

The Project boundary<sup>3</sup> encompasses land around each reservoir. An approximately 300-acre Recreation Sub-impoundment ("Recreation Lake") is situated adjacent to Monticello Reservoir and is included within the FERC Project boundary. This lake was constructed by South Carolina Electric & Gas Company ("SCE&G") solely for recreational use. The Recreation Lake is unaffected by operational reservoir fluctuations on Monticello Reservoir.

SCE&G manages SCE&G-owned lands within the Project boundary ("Project property") to comply with the FERC license for the Project (the "License"). The goal of project land management is to serve the public interest by providing recreational access and opportunities, protecting wildlife habitat and water quality, producing electricity, and protecting and preserving cultural and aesthetic resources. The Shoreline Management Plan ("SMP") provides a set of administrative policies, procedures, and practices by which SCE&G seeks to manage the Project shoreline to achieve these goals. Future proposals for specific shoreline related developments or activities will be reviewed for consistency with the SMP.

A draft of the initial Project SMP was filed with the FERC in 1991. After several years of discussion and revisions, the initial SMP was approved by the FERC on June 4, 2001. The history of the Project's SMP is described in more detail in Section 3.0 (History of the Shoreline Management Plan). The current relicensing<sup>4</sup> of the Project provides a near term impetus and opportunity for SCE&G to review the existing SMP in cooperation with relicensing stakeholders, including federal and state regulatory agencies, interested non-governmental organizations ("NGO"s), and individuals. Through discussions with these parties, it was decided that the existing FERC approved SMP, which encompasses both Monticello and Parr Reservoirs, should be divided into two distinct SMP's, one for each reservoir. Hence, this SMP has been prepared for Monticello Reservoir and is being submitted to FERC as part of SCE&G's Parr Hydroelectric Project comprehensive relicensing package. A SMP for Parr Reservoir is included under separate cover.

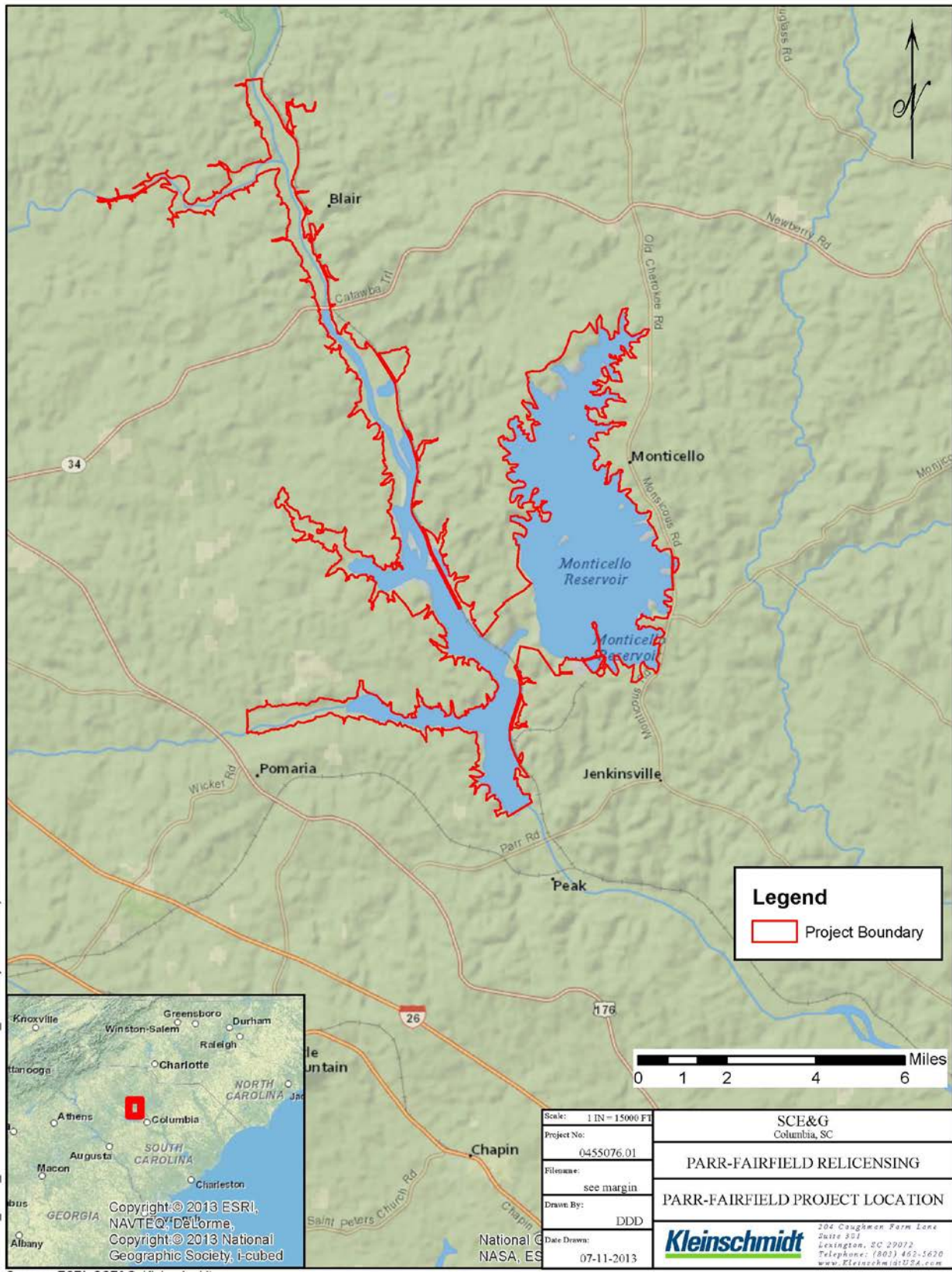
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<sup>3</sup> Standard License Article 5 requires licensees to acquire and retain sufficient property and rights to construct, maintain, and operate their projects, as identified in their specific license, including any property or rights needed to accomplish all designated project purposes. As such, Project lands are those lands within the FERC project boundary owned by SCE&G in fee title and those lands for which SCE&G has acquired or retained an easement.

<sup>4</sup> The current operating license for the Project is due to expire on June 30, 2020. As such, SCE&G will file for a new license with FERC on or before June 30, 2018.

The management guidelines set forth in this SMP are applicable to all lands within the Project boundary surrounding Monticello Reservoir. Among other things, the current document includes the following components:

- Detailed descriptions, management prescriptions and mapping of land classifications;
- Summary information on the Permitting Handbook and fee policies;
- Best management practices ("BMP"s);
- Public education and outreach;
- Reservoir monitoring; and,
- A proposed review process.



**FIGURE 1-1 PROJECT LOCATION AND BOUNDARY MAP**

## **2.0 PURPOSE AND SCOPE OF THE SHORELINE MANAGEMENT PLAN**

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The Project has served as a major source of power generation for SCE&G's customers and recreation for local residents and visitors to South Carolina for several decades. Consistent with FERC's Standard Land Use Article, a licensee may authorize specific non-project uses and occupancies of a project's shoreline. Examples of non-project uses at Monticello Reservoir include residential boat docks, access paths across Project property, and erosion control structures. SCE&G has a responsibility to ensure that non-Project uses remain consistent with Project purposes, including protection and enhancement of the Project's scenic, recreational, and environmental values.

As development increases in areas surrounding the Project, so too does stress placed upon Project reservoirs and the surrounding watershed. Thus, a comprehensive SMP for each reservoir that recognizes and addresses sources of potential environmental impact is essential to managing each reservoir for the benefit of all interests and to ensure that non-Project uses remain consistent with the License.

The implementation of the SMP by SCE&G will help to maintain and conserve the area's natural and man-made resources. The SMP will comply with the terms of the License, as well as the regulations and orders of FERC, and is intended to assist in providing a balance between recreational use and development, environmental protection, and energy production.

### **3.0 HISTORY OF THE SHORELINE MANAGEMENT PLAN**

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On August 28, 1974, the Federal Power Commission (FPC), predecessor to the FERC, issued SCE&G a new License for the Parr Hydroelectric Project. In addition to relicensing the existing 14.88 megawatt (MW) Parr Shoals Development, the new License authorized the construction of the 511.2 MW Fairfield Pumped Storage Development. This resulted in the creation of the Fairfield Development's upper pool, Monticello Reservoir. The new License also authorized the enlargement of the existing Parr Reservoir to serve as the lower pool to the Fairfield Development. This involved raising the height of Parr Dam approximately 9 feet, thereby nearly doubling Parr Reservoir's surface area. The construction of newly licensed facilities was completed in 1978, with the facilities beginning commercial operation that same year.

Article 48 of the Project License issued in 1974 required that SCE&G purchase in fee and include within the project boundary all lands necessary or appropriate for project operations, including lands for recreational use and shoreline control. The lands encompassed by the project boundary shall include, but not be limited to: the islands in the Parr and Monticello Reservoirs formed by the 266-foot and 425-foot contour intervals, respectively; shoreline lands up to the 270-foot contour, or 50 feet (measured horizontally) from the Parr Reservoir's 266-foot contour, whichever is greater; and, shoreline lands up to the 430-foot contour interval, or 50 feet (measured horizontally) from Monticello Reservoir's 425-foot contour, whichever is greater. Provided that the Project boundary, except with respect to land necessary or appropriate for recreational purposes, shall not exceed 200 feet, horizontally measured, from the 266-foot or the 425-foot contour, unless satisfactory reasons to the contrary are given. The FPC determined that acquiring these lands would provide SCE&G with adequate shoreline control around the reservoirs, in addition to serving the purposes of Project operation and recreation.

Furthermore, Article 20 of the Project License orders that SCE&G allow public access, to a reasonable extent to Project waters and adjacent Project lands (with the exception of lands necessary for the protection of life, health, and property) for navigation and outdoor recreational purposes. This Article also allows SCE&G to grant permits for public access to the reservoirs subject to FERC approval.

In 1991, SCE&G recognized that appropriate policies and procedures should be in place to govern shoreline activities at the Project. Utilizing experience gained at their Saluda

Hydroelectric Project (FERC No. 516), SCE&G filed a proposed SMP with the FERC to regulate the use of Project shorelines. After extensive stakeholder consultation, an amended SMP was filed with the FERC. It was approved on June 4, 2001. The SMP was included as part of the Project's Exhibit R.

The SMP approved in 2001 primarily covered activities associated with Monticello Reservoir. It dealt with the following matters: water quality management; forest management; waterfowl management; nuclear exclusion zone restrictions for the operation of SCE&G's V.C. Summer Nuclear Station; fishing, boating, and hunting; public access and recreation; private boat docks and access; vegetation removal; water withdrawal; erosion control; and prohibited activities.

In 2006, SCE&G amended the SMP's policy regarding common docks. The original policy allowed for two to five adjacent property owners to share a single common dock if the shoreline frontage requirement of 200 feet was met. The policy was amended to allow no more than two individual, adjacent single family residential lots to share a common dock. The shoreline frontage requirement of 200 feet was retained.

### **3.1 CURRENT SMP DOCUMENT AND SHORELINE CLASSIFICATIONS**

The SMP serves as a reference document for SCE&G in implementing the Standard Land Use Article, which authorizes SCE&G to permit certain non-project uses of project lands and waters. FERC did not begin including the Standard Land Use Article in new licenses until the early 1980's; thus it was not included in the Project License issued in 1974. However, FERC granted SCE&G the specific authority to permit certain non-Project uses through the approval of the 2001 SMP, and added the Standard Land Use Article to the License (Article 62) in 2011, as revised in 2013 (Article 63). This present document, submitted in conjunction with SCE&G's License application, presents a management plan, covering only Monticello Reservoir (a SMP for Parr Reservoir is included under separate cover), while adhering to the historical management goals agreed to and developed with agencies and stakeholders.

In addition to an updated SMP for each Project reservoir, a Permitting Handbook was developed in consultation with stakeholders and agencies to address activities requiring consultation with and/or permits from SCE&G. These activities include, but are not limited to the following: construction, maintenance, and placement of docks; shoreline stabilization; construction and maintenance of lake access pathways; limited brushing; and other shoreline activities. SCE&G

will review the Permitting Handbook with interested stakeholders periodically to evaluate its effectiveness; however, SCE&G may make changes to the permitting process at any time as it determines in its sole judgment to be necessary and appropriate.

### **3.2 PROJECT BOUNDARY**

SCE&G owns in fee or obtained flowage rights for all lands necessary or appropriate for project operations, including lands for recreational use and shoreline control, as described above in Section 3.0. A Project boundary map is included as Figure 1-1.



## **4.0 SHORELINE MANAGEMENT PLAN GOALS AND OBJECTIVES**

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The overall goal of this SMP is to define, document, and present the processes and criteria that SCE&G will employ to manage and balance private and public access to and uses of Project lands, specifically including Monticello Reservoir's shoreline, consistent with public safety, energy production operations, environmental protection for Project land as well as Project waters, and reasonable recreational opportunities. This SMP will help to ensure the protection and enhancement of the Project's scenic, environmental, recreational, natural and cultural resources over the term of the License.

This SMP represents a consensus-based, updated management plan intended for submittal with the Project No. 1894 License Application. Specific goals relative to the SCE&G relicensing process that are discussed under this SMP include the following:

1. Provide for reasonable current and future public access;
2. Provide for current and future recreational needs within the Project;
3. Protect fish and wildlife habitat;
4. Protect cultural resources;
5. Protect the ability to meet operational needs;
6. Facilitate compliance with License articles;
7. Minimize adverse impacts to water quality;
8. Monitor and address erosion;
9. Protect scenic values;
10. Monitor and permit shoreline activities;
11. Provide a summary catalogue of the types and locations of existing recreational opportunities;
12. Establish Land Management Classifications and Land Use Prescriptions to help in the management of non-Project uses of the Monticello Reservoir shoreline lands within the Project boundary;
13. Describe the SMP amendment and monitoring process; and
14. Educate and encourage property owners who own property adjacent to or adjoining Project Property (herein referred to as "adjacent property owners") on the use of voluntary BMPs.

#### 4.1 CONSULTATION

The Project relicensing provides an opportunity for SCE&G to seek input on Project-related shoreline management issues from interested stakeholders. SCE&G recognizes that successfully completing the relicensing process requires identifying and resolving Project issues in consultation with federal and state resource agencies, local and national NGOs, homeowner associations, and individuals who have an interest in the Parr Hydroelectric Project (Table 4-1). SCE&G began public outreach efforts in January 2013 by holding a series of public workshops in Winnsboro, Newberry, Columbia, and Jenkinsville, SC. Since that time, SCE&G has sought active public involvement in the process and fostered commitment to issue resolution among SCE&G and stakeholders.

**TABLE 4-1 PARTICIPATING GROUPS IN PARR HYDROELECTRIC PROJECT RELICENSING**

<b>STAKEHOLDER GROUPS</b>
American Rivers
American Whitewater
Catawba Indian Nation
City of Columbia
Chestnut Hill Plantation HOA
Coastal Conservation League
Congaree Riverkeeper
Environmentalists Inc.
Fairfield County
Gills Creek Watershed
National Marine Fisheries Service
National Park Service
Newberry County
South Carolina Department of Health and Environmental Control
South Carolina Department of Natural Resources
South Carolina Department of Parks, Recreation and Tourism
South Carolina Electric & Gas Company
South Carolina Historic Preservation Office
Town of Winnsboro, SC
Tyger-Enoree River Alliance

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**STAKEHOLDER GROUPS**

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United States Fish and Wildlife Service

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United States Forest Service

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University of South Carolina

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**4.1.1 RECREATION/LAKE AND LAND MANAGEMENT RESOURCE CONSERVATION GROUP**

In support of the relicensing effort, SCE&G formed three Resource Conservation Groups ("RCG"s) to identify, address and resolve Project-related issues by resource area. The RCGs are as follows: the Fish, Wildlife and Water Quality RCG; the Project Operations RCG; and the Lake & Land Management and Recreation RCG. Consideration of potential issues by resource area allows for more focused topic discussion and targeted issue resolution. Some RCGs have established sub-groups, or Technical Working Committees ("TWC"s), for issues requiring special knowledge, education, or experience. Consequently, the Lake & Land Management and Recreation RCG has a Lake and Land Management TWC as well as a Recreation TWC. The Lake and Land Management TWC is discussed further below.

**4.1.2 LAKE AND LAND MANAGEMENT TECHNICAL WORKING COMMITTEE**

The primary mission of the Lake and Land Management TWC is to revise the existing Parr Hydroelectric Project SMP to provide a management framework within which Project resources can be effectively protected while assuring appropriate public and private access to the Project resources and the recreational opportunities they present. Another important focus of the TWC is to allow interested parties an effective opportunity to provide input on resource issues and the overall future management of shoreline resources. The resulting collaboration has resulted in the contribution of valuable information by entities and individuals familiar with the Project. The forum was instrumental in addressing important issues relevant to the operation and management of the Project over the term of the new License. In working collaboratively, the members of the TWC (Table 4-2) aimed to blend the objectives of the state and federal resource agencies with other stakeholder interests.

**TABLE 4-2 ORGANIZATIONS PARTICIPATING ON THE LAKE AND LAND MANAGEMENT TWC**

<b>STAKEHOLDER GROUPS</b>
American Rivers
American Whitewater
Coastal Conservation League
Congaree Riverkeeper
Fairfield County
Gills Creek Watershed
Adjacent Property Owners
National Marine Fisheries Service
National Park Service
South Carolina Department of Health and Environmental Control
South Carolina Department of Natural Resources
South Carolina Department of Parks, Recreation and Tourism
South Carolina Electric & Gas Company
Tyger-Enoree River Alliance
United States Fish and Wildlife Service
United States Forest Service

#### **4.1.3 MEETING SCHEDULES**

Between October of 2013 and January of 2018, SCE&G has held numerous meetings of the Lake and Land Management and Recreation RCG and Lake and Land Management TWC to discuss the details of the Project SMPs. The efforts of the TWC are reflected herein.

## 5.0 LAND USE CLASSIFICATIONS

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Five distinct land management classifications have been developed for the shorelines surrounding Monticello Reservoir. These land management classifications are as follows: Project Operations; Nuclear Exclusion Zone; Shoreline Permitting; Public Recreation; and, Non-Development Areas. The Public Recreation Classification includes designated public recreation areas, the Recreation Lake, and all islands on Monticello Reservoir. Although SCE&G intends to manage its lands according to this classification system, the public generally will not be precluded from access to SCE&G-owned lands regardless of classification, with the exception of lands reserved and used for Project operations, lands/areas within the Nuclear Exclusion Zone, or other areas specifically protected from public access and posted as such. The sections below explain/define the land management classifications. The acreages and parcels for each of the classifications are provided in Table 5-1. Figure 5-1 depicts their distribution around Monticello Reservoir.

**TABLE 5-1 SHORELINE MILES AND ACREAGES BY LAND USE CLASSIFICATION<sup>5</sup>**

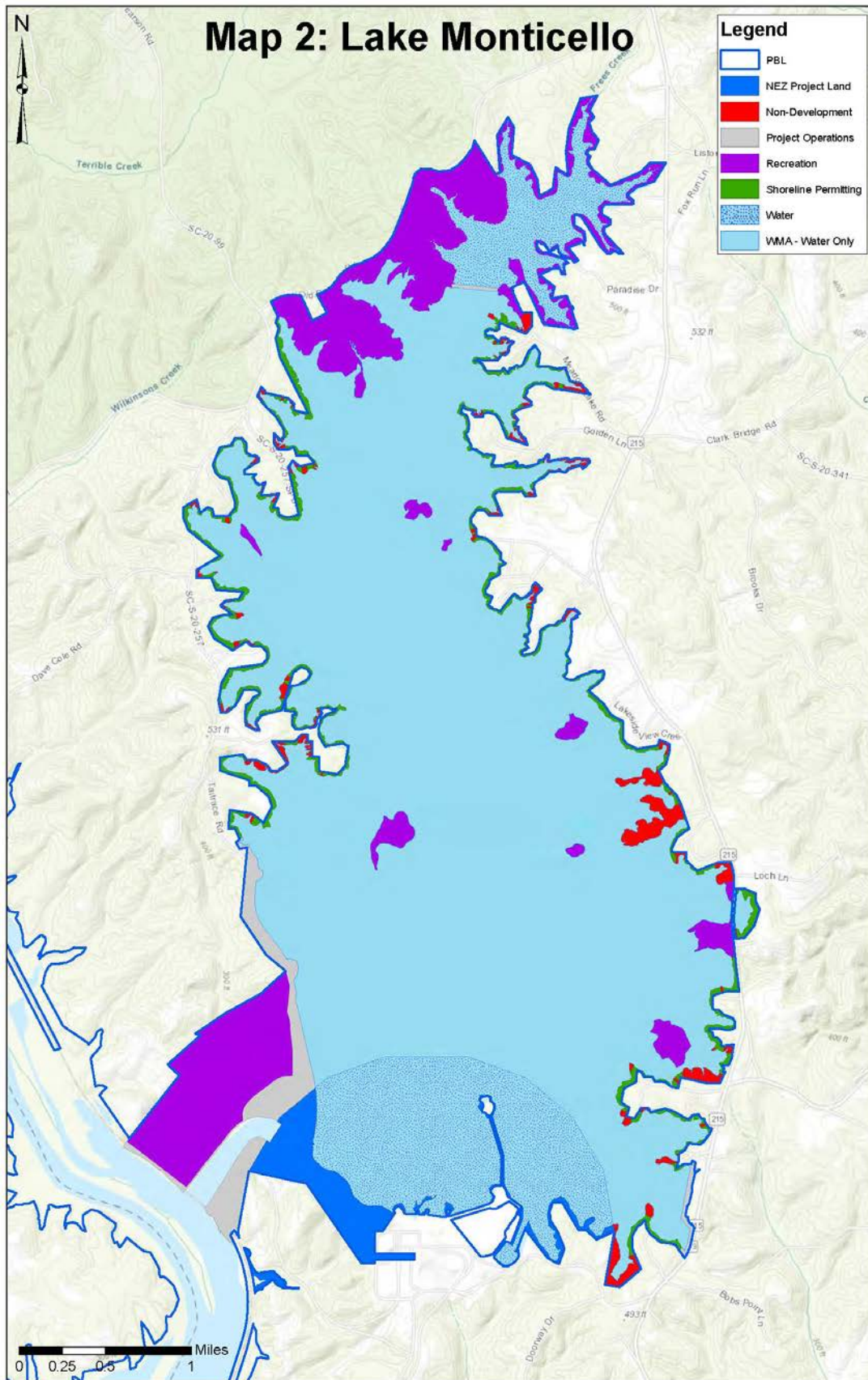
<b>CLASSIFICATION</b>	<b>SHORELINE MILES</b>	<b>ACRES</b>
Project Operations*	4.90	186
Nuclear Exclusion Zone *	6.43	203
Shoreline Permitting	22.36	235
Public Recreation*	19.49**	927**
Non-Development*	10.72	151
<b>TOTAL</b>	<b>63.90</b>	<b>1,701</b>

\*No docks allowed

\*\* Includes the shoreline surrounding the Recreation Lake and all islands

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<sup>5</sup> Preliminary information; final data will be provided in the final SMP



**FIGURE 5-1 SHORELINE CLASSIFICATIONS MAP FOR MONTICELLO RESERVOIR**

## **5.1 PROJECT OPERATIONS**

Areas under this classification include SCE&G-owned and managed lands required for operation of the Fairfield Development. Public access to these lands is restricted to ensure public safety or to assure the security of the infrastructure system.

## **5.2 NUCLEAR EXCLUSION ZONE**

In addition to its use as part of the Fairfield Development, Monticello Reservoir provides cooling water for the V.C. Summer Nuclear Station located on its shore (authorized under 52 F.P.C. 537 [1974]). The Nuclear Exclusion Zone consists of the area surrounding the V.C. Summer Nuclear Station between the Project boundary line and shoreline and a specified area within Monticello Reservoir where SCE&G as the reactor licensee has the authority to determine all activities, including exclusion or removal of personnel and property. This area is designated by warning signs on the landward side and by buoys on the lakeward side. Admittance to this area is restricted in order to comply with licensing requirements administered by the Nuclear Regulatory Commission.

## **5.3 SHORELINE PERMITTING**

It is the policy of SCE&G to authorize certain private uses of and/or acts on Project property by permit when such uses or acts are consistent with the public interest and comply with the requirements of the Project License. Areas within the Shoreline Permitting Classification may be eligible for certain private residential uses upon approval by SCE&G. This does not include commercial activities (other than commercial water withdrawals).

## **5.4 PUBLIC RECREATION**

Project lands under this classification serve as recreational resources for the public and include areas managed expressly for recreation as well as those with recreation as a secondary usage. This classification also includes properties set aside for recreational development. Public recreation lands include the following sub-classifications:

- Recreation Lake
- Public Access Areas
- Islands on Monticello Reservoir

#### **5.4.1 RECREATION LAKE**

The Recreation Lake is located at the north end of Monticello Reservoir and is approximately 300 acres and 10 miles of shoreline. The Recreation Lake was constructed to provide stable water for fisheries and recreation opportunities.

#### **5.4.2 PUBLIC ACCESS AREAS**

There are five public parks on Monticello Reservoir. All recreation facilities at Monticello Reservoir are open year-round, except the Recreation Lake Beach Area, which is closed October 1 through March 31. For a list of authorized activities, please see the Permitting Handbook.

#### **5.4.3 ISLANDS**

There are 8 islands within Monticello Reservoir, all of which are available for public recreational use in accordance with authorized activities (see Permitting Handbook for authorized activities).

#### **5.5 NON-DEVELOPMENT AREAS**

Lands under this classification warrant special protection because they may provide important habitat, aesthetic values, or other significant Project characteristics.



## **6.0 LAND USE PRESCRIPTIONS**

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Land use prescriptions are based upon and reflect the guiding principles regarding the management of the SCE&G-owned lands within each classification. SCE&G publishes a detailed Permitting Handbook (included under separate cover) that contains descriptions of the permitting processes and specifications for various shoreline developments. Activities that require consultation with and/or permits from SCE&G include the following: construction, maintenance and placement of docks, shoreline stabilization; construction and maintenance of shoreline pathways, and other shoreline activities. Persons interested in shoreline development must contact SCE&G's Lake Management Department (803) 217-9221 to obtain permitting guidance and a copy of the Permitting Handbook. Section 8.0 of this document discusses the Permitting Handbook in greater depth. General information regarding permitting requirements is included where applicable within the scope of each management prescription below.

### **6.1 PROJECT OPERATIONS**

Properties classified as Project Operation contain project works critical to the operation of the Fairfield Development. Public access and recreation activities on these lands are restricted for reasons of safety and security.

### **6.2 NUCLEAR EXCLUSION ZONE**

Properties and waters classified as Nuclear Exclusion Zone contain project works/areas critical to the operation of the V.C. Summer Nuclear Station. Public access and recreation activities on these lands are restricted for reasons of safety and security.

### **6.3 SHORELINE PERMITTING**

Residential landowners whose property adjoins lands within the Shoreline Permitting classification may be eligible for certain permitted structures only upon written consent from Lake Management. SCE&G strictly regulates the placement and construction of permitted structures. To address aspects of shoreline structures, SCE&G has developed permitting application procedures and associated dock specification guidelines. These guidelines are detailed in SCE&G's Permitting Handbook.

## **6.4 PUBLIC RECREATION**

Project lands devoted to public recreation include developed park sites, properties set aside for future recreational development, and islands on Monticello Reservoir owned by SCE&G<sup>6</sup>. With the exception of the islands, which are maintained in their natural condition, SCE&G manages the areas based on the specific, designated recreational activities for each, including fishing, picnicking, and boat launching<sup>7</sup>. SCE&G developed and maintained access areas on Monticello Reservoir are depicted in Figure 12-1. Private permitted activities, other than those noted under the Recreation Lake (Section 6.4.1) are excluded.

### **6.4.1 RECREATION LAKE**

The park area at the Recreation Lake offers fishing, a beach area and picnic facilities. Regulations for its use are posted at the park site. The beach area is closed October through March. The boat launch area is open every day, all year long. No private docks or boat ramps will be permitted on the shoreline of the Recreation Lake. Meandering paths and water withdrawals, for residential irrigation only, may be considered on a case-by-case basis.

### **6.4.2 ISLANDS**

SCE&G owns all of the islands on Monticello Reservoir and they are available for public recreational use, which includes activities such as fishing, walking and bird watching. Hunting is permitted on the islands in accordance with state hunting regulations.

## **6.5 NON-DEVELOPMENT AREAS**

Lands under this classification warrant special protection because they may provide important habitat or aesthetic values. Non-development Areas are available for passive<sup>8</sup> public recreational use. SCE&G will not permit private shoreline development for Project lands under this classification.

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<sup>6</sup> SCE&G also manages some of the lands classified as public recreation for timber. Information on SCE&G's forest management practices is included in Section 11.0.

<sup>7</sup> The waters of Monticello Reservoir, excluding the Recreation Lake, and Monticello Reservoir islands are available for public waterfowl hunting as discussed under Section 12.0.

<sup>8</sup> Passive recreation use can be defined as those recreation activities that are generally non-consumptive in nature, require a minimum of facilities, and/or have a minimal environmental impact.

## **7.0 SHORELINE ACTIVITIES REQUIRING SCE&G APPROVAL**

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SCE&G maintains a strong commitment to managing the shoreline of Monticello Reservoir for multiple resources by considering the impact of various activities on the environmental, aesthetic, and recreational character of the lands. SCE&G owns and manages the Project lands around the entire periphery of Monticello Reservoir and the Recreation Lake. Thus, any activity occurring on the "shoreline" is occurring on SCE&G property. Any activity not in compliance with the shoreline activity parameters outlined in this SMP and in the Permitting Handbook constitutes a trespass which SCE&G may elect to prosecute.

### **7.1 AUTHORIZED ACTIVITIES REQUIRING APPROVAL THROUGH THE PERMITTING HANDBOOK**

Only the following activities and structures may be permitted on Monticello Reservoir:

- Construction or modification to private docks;
- Construction of a meandering access path and associated vegetation removal;
- Shoreline stabilization methods (including rip-rap and bio-engineering); and
- Water withdrawal.

### **7.2 PROHIBITED STRUCTURES AND ACTIVITIES**

Activities and structures that SCE&G does not allow include, but are not limited to, the following:

#### Prohibited Structures:

- Roofs or covers over docks;
- Boat lifts;
- Boat slips;
- Boathouses;
- Fueling facilities on a dock;
- Private boat ramps;
- Houseboats;
- Watercraft exceeding 30 feet in length;
- Watercraft with marine sanitation devices ("MSD");

- Commercial marinas;
- Marine rails;
- Sea walls;
- Fences;
- Electrical service;
- Permanent structures other than permitted docks;
- Land-based structures, storage buildings, shelters, patios, gazebos, fences, swimming pools, satellite dishes, signs, storage of boats, camper trailers, canoes or other watercraft, motor homes or automobiles; and
- Septic tanks and/or drain fields.

Prohibited Activities:

- Water skiing;
- Jet Skiing;
- Parasailing;
- Paragliding;
- Mooring;
- Excavations/dredging (except commercial operations permitted by the regulatory authorities);
- Effluent discharges;
- Planting of grass except as a permitted bioengineering erosion control measure;
- Storage or stockpiling of construction material;
- Livestock access to reservoir<sup>9</sup>
- Primitive or overnight camping on all Project property, except at Highway 99 West Recreation Site and islands<sup>10</sup>;
- Vegetation removal of any type except in a permitted access path to the shoreline;
- Use of herbicides; and,
- Limbing or trimming of vegetation on Project property to create views or visual corridors.

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<sup>9</sup> Unless grandfathered through deed reservations.

<sup>10</sup> Camping must be in accordance with the policies outlined in the Permitting Handbook.

## **8.0 PERMITTING PROCESS FOR SHORELINE ACTIVITIES OR STRUCTURES**

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### **8.1 SHORELINE PERMITTING PROCEDURES**

Applicants must obtain the proper permit(s), per the SCE&G's Permitting Handbook, prior to the initiation of any construction or activity on Project property. As noted above, some activities may also require local, state, and/or federal permits

Whether a non-Project use is approved under the Standard Land Use article or through Project-specific FERC approval, SCE&G is responsible for ensuring that the use is consistent with the purposes of protecting or enhancing the scenic, recreational, and other environmental values of the Project. To assist applicants in the permitting process, the staff at the SCE&G Lake Management Department is available to answer questions regarding documentation, permits, and specification requirements for their particular project. Permits from SCE&G are required for the following activities:

- Construction of a meandering access path;
- Water withdrawal;
- Installation/application of shoreline stabilization; and
- Installation of private docks.

It is highly advisable to begin the consultation process with SCE&G Lake Management staff at the planning stage of a project. SCE&G staff will be available to discuss specific permitting requirements with the property owner. Depending on the proposed new facility or activity, local, state and federal resource agencies may impose requirements on construction start/stop dates, the placement of erosion control devices, treatment plans, remedial measures, submittal of start construction notifications, and/or BMPs. Any permit applicant should be aware of such conditions, as violations may nullify a permit.

An overview of permitted activities is included below. Detailed information on SCE&G's permitting process, guidelines, and specifications, is provided in SCE&G's Permitting Handbook available by calling (803) 217-9221, or by writing:

### **8.1.1 DOCKS**

A permit must be obtained from SCE&G Lake Management Department for the construction, installation, replacement of, or addition to any dock prior to the start of the activity. The configuration and location of a dock will be determined during a site visit by an SCE&G representative. At a minimum, dock construction and location must not create a nuisance, or otherwise be incompatible with overall Project recreation use. Impact on navigation or an adjoining property owner will be a strong determining factor. Size, length, or orientation may be restricted, or a permit may be denied if the dock would interfere with navigation or unreasonably impact an adjoining property owner. Dock length may vary depending on curvature or slope of the shoreline or lot line configuration. Any variance (i.e. increase in size or length) from guidelines included in the Permitting Handbook will be evaluated as to the effects on navigation, aesthetic value, or impact on adjacent properties and may be denied if in SCE&G's sole judgment the effects and impacts warrant denial. No dock will be permitted in narrow cove areas, which are defined to be areas where the distance across the water from one shoreline to the other at the 425-foot contour (normal high water level) is less than 200 feet. Only one dock will be permitted on a single-family lot<sup>11</sup>. Please see the Permitting Handbook for additional requirements.

General boat dock design may involve either fixed or a combination of fixed and floating structures. Common docks are encouraged and may be mandated for all adjacent property owners as an alternative to individual docks and will be required on property with inadequate property line frontage (property line frontage requirements included in Permitting Handbook), or in such other circumstances that SCE&G deems appropriate. Dock layout specifications are included in the Permitting Handbook.

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<sup>11</sup> SCE&G does not guarantee usable water access to the waters of Monticello Reservoir at any time. Each lot along the shoreline will have different slopes and contours that will determine water depth in front of the lot. The Monticello Reservoir is a pumped storage project that can fluctuate vertically up to 4.5 feet over a 10 to 12 hour period during generation and pumping phases. The fluctuation of the reservoir will, at times, limit or restrict the use of most docks on the Monticello shoreline.

Docks generally will not be permitted on shoreline affected by significant erosion or steep slopes. Applicants may submit a request for approval accompanied by a plan to address shoreline erosion that can be accomplished without the clearing of vegetation or disturbance of shallow water habitat. However, SCE&G reserves the right, in its sole discretion, to deny a permit.

The types of docks permitted include private individual and private common docks. See Permitting Handbook for more details describing dock permitting policies.

### **8.1.2 SHORELINE VEGETATION MANAGEMENT**

In general, SCE&G maintains a policy of non-disturbance of any vegetation within the Project boundary without approval from SCE&G. Permission to remove vegetation within a permitted access path will only be granted by SCE&G Lake Management after a site visit with the applicant. Once clearing of the access path is completed according to the permit, the applicant may maintain the path in the permitted condition utilizing hand held tools and without the use of herbicides. Any unauthorized removal of shoreline vegetation may result in the cancellation of the dock and other permits issued by SCE&G as well as legal action. Violators may be required to replant and restore the disturbed area with such plantings and/or shoreline manipulation as SCE&G determines is necessary to mitigate and correct the situation.

### **8.1.3 ACCESS PATH**

A single access path may be cleared with hand held tools and without the use of herbicides from the adjacent property owner's land upon approval of SCE&G. The access path must follow a meandering route to prevent erosion and to protect the aesthetics of the shoreline. No trees larger than 10-inches in diameter at breast height may be removed within the access path. A SCE&G Lake Management representative will identify and designate the location of all access paths. Access path restrictions are included in the Permitting Handbook.

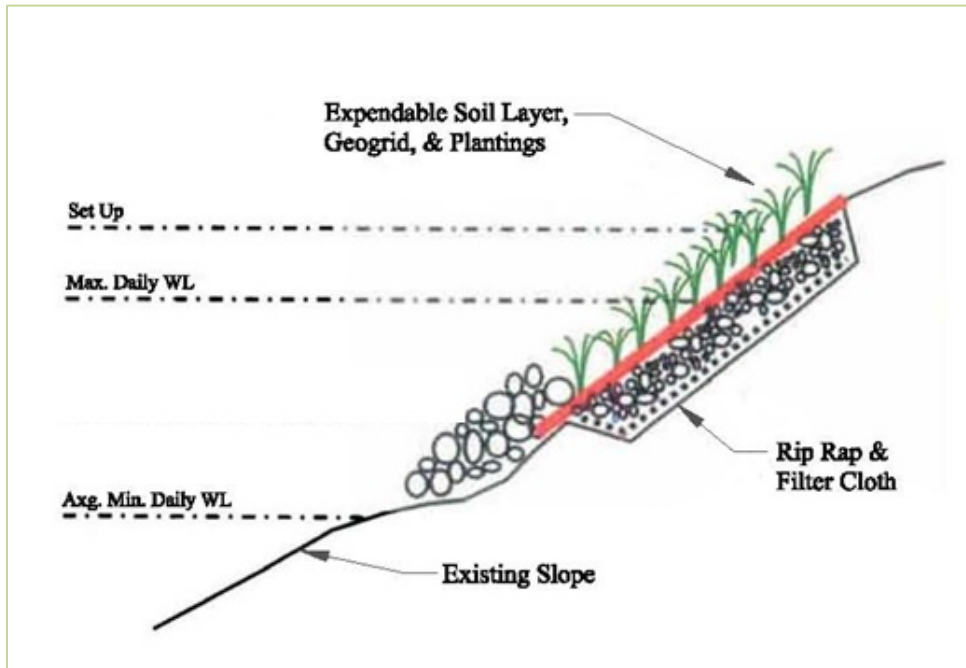
### **8.1.4 SHORELINE STABILIZATION**

Shoreline erosion occurs in some areas where the reservoir shoreline is exposed to prolonged or recurrent wind and wave action. Such erosion, if significant enough, can lead to sedimentation in those areas of the reservoir, affecting aquatic habitats and drainage channels, stream channels, water intakes, and affecting the character of the reservoir in general. Provided it conforms to good engineering standards, as judged by SCE&G, SCE&G supports voluntary efforts to address shoreline erosion in the immediate area of docks or access path for adjacent property owners. To ensure that appropriate, effective techniques and materials are used, SCE&G monitors and controls erosion control projects on or directly affecting Project Property as detailed in the Permitting Handbook. Owners of property adjoining Project Property who wish to employ erosion control measures on or affecting Project Property must use SCE&G shoreline stabilization practices appropriate for the specific situation.

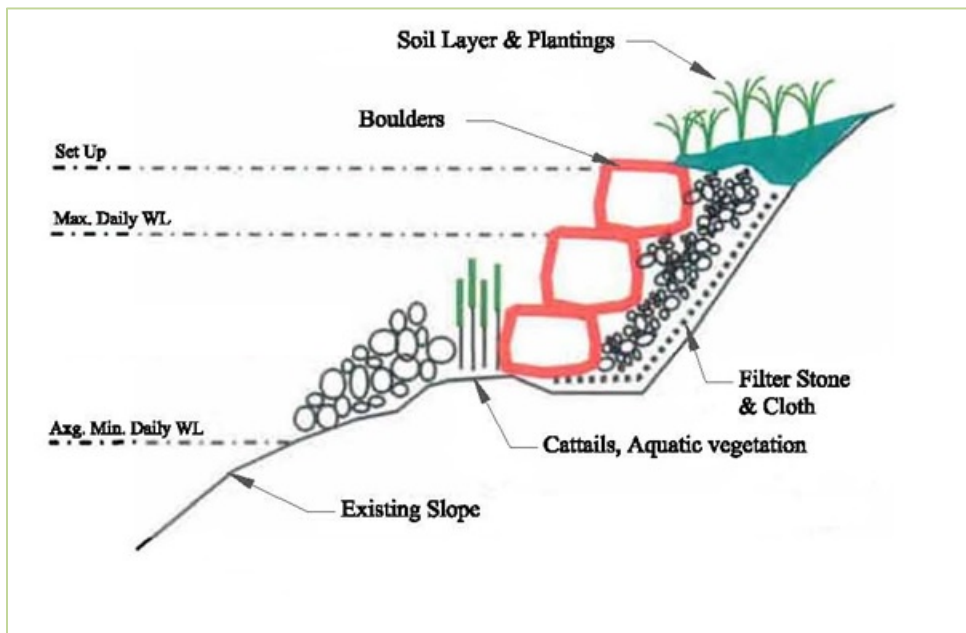
Because shoreline vegetation serves several important functions (i.e., soil integrity, wildlife habitat, water cleansing functions, and aesthetic value) SCE&G prefers to see employment of vegetative shoreline stabilization techniques to address soil erosion problems, whenever possible. These techniques may be referred to as bioengineering, and consist of installing living plant material as a main component in controlling problems of land instability. Plants used should consist of native species that, ideally, have been collected in the immediate vicinity of a project site to ensure that they are well-adapted to site conditions. The ultimate goal in using bioengineering techniques is to establish diverse plant communities to stabilize erosion prone areas through development of a vegetative cover and a reinforcing root matrix.



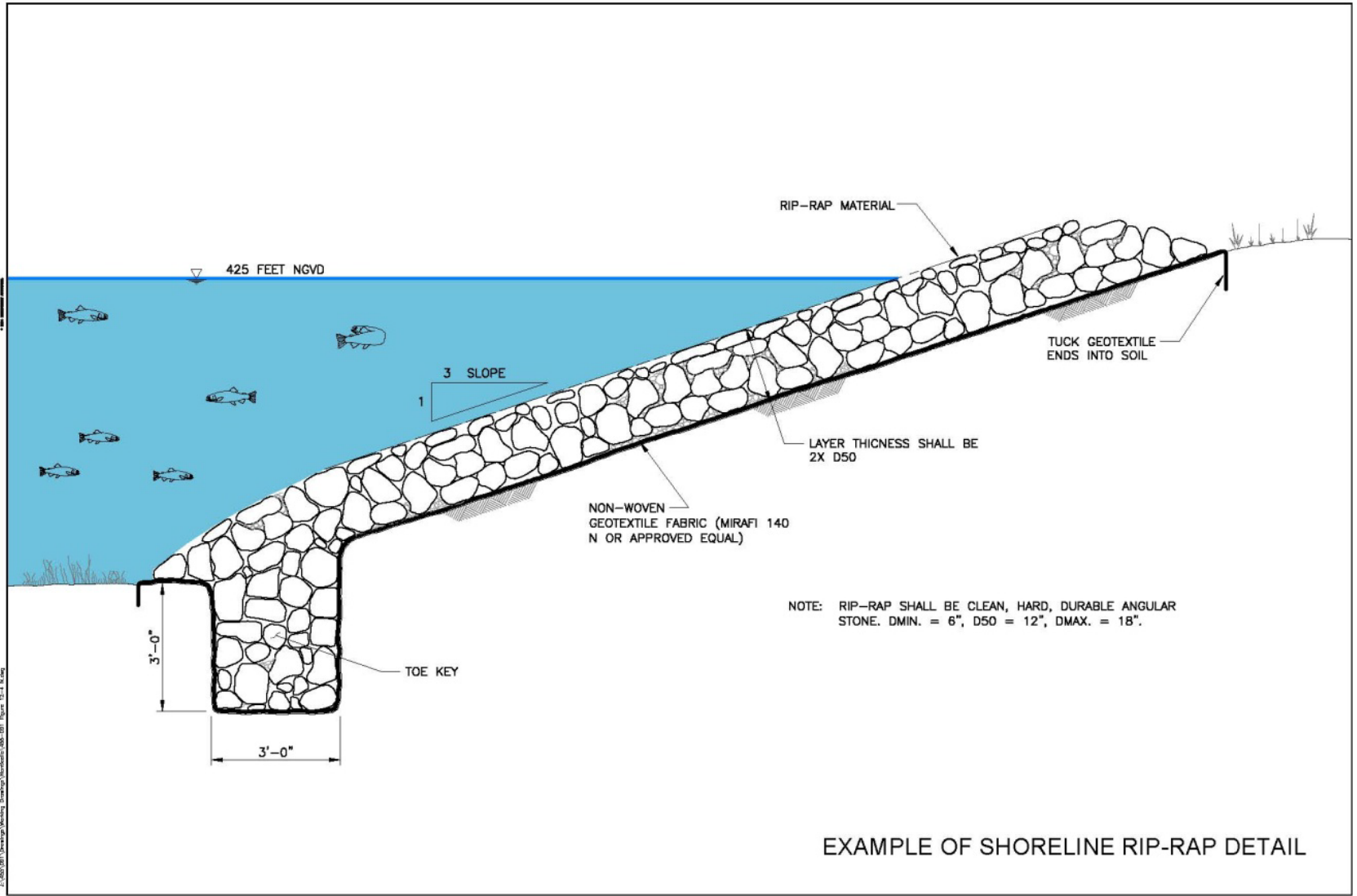
Bioengineering techniques are least effective at sites with significant and prolonged exposure to strong currents or wind-generated waves. Stabilization of areas experiencing strong erosion pressure may also require the use of structural erosion control methods such as rip-rap. Areas with high-gradient banks or those in advanced stages of erosion may also benefit from such structural components. The optimal solution at a given location often involves combinations of techniques providing both structural and environmental benefits to the shoreline. A variety of bioengineering methodologies and devices are available to address erosion. Illustrations of erosion control designs that utilize both vegetation and structural elements are provided in Figure 8-1 and Figure 8-2. As depicted in the figures, rip rap can provide immediate shoreline stability, thereby enabling plantings to become established to add root-based soil integrity. Optimal erosion control designs must account for site specific slope and erosion pressure as well as homeowner/landowner preferences. Figure 8-3 illustrates a site at which SCE&G's general guidance on using rip rap is followed. Bricks, blocks, tires, or materials other than rip-rap are prohibited as alternative shoreline stabilization material. SCE&G's Lake Management Department is available to provide the benefit of its knowledge and experience to help homeowners attempting to select the design right for them and the Reservoir environment.



**FIGURE 8-1** EXAMPLES OF SHORELINE EROSION CONTROL DESIGNS UTILIZING BIOENGINEERING AND STRUCTURAL TECHNOLOGIES (A)



**FIGURE 8-2** EXAMPLES OF SHORELINE EROSION CONTROL DESIGNS UTILIZING BIOENGINEERING AND STRUCTURAL TECHNOLOGIES (B)



**FIGURE 8-3** EXAMPLE OF SHORELINE RIP-RAP DETAIL

### **8.1.5 WATER WITHDRAWAL**

Water withdrawals requiring piping and other transportation/delivery equipment to be placed along the shoreline or in the littoral zone, are managed according to the terms of this SMP. Water withdrawal for residential property must be for irrigation purposes only. Permits are required, and will not be issued for any other purpose. Associated pumps and electrical service must be located outside SCE&G property. SCE&G reserves the right to prohibit withdrawal during times of drought or water drawdown.

Applications for a permit to remove water must be submitted to SCE&G for review. Water withdrawal applications for greater than one million gallons per day (MGD) will be forwarded to the FERC for approval. Requests for withdrawal of one MGD or less may require agency consultation prior to approval. SCE&G may impose limits in granting permits for approved applications (see Permitting Handbook). The applicant may be required to bear the expenses of filing the application and will be required to compensate SCE&G for water withdrawn.

## **9.0 SCE&G PERMITTING FEE POLICIES**

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FERC allows licensees the right to charge reasonable fees to cover the costs of administering shoreline management programs, which add management responsibilities and associated costs to project operations. SCE&G administers its SMP in part through a permitting program, which does include a fee component. This ensures that activities occurring within the Project and in particular on Project land, are consistent with the overall goals for the Project, and that SCE&G's customers are not burdened with the full cost of administering programs that also have significant private, and often non-customer, benefit. Permit fees are due with applications and are required for docks, access paths, water withdrawal, and erosion control projects. Should an application be denied, associated permit fees will be returned. Periodic permit renewal fees may be required depending on the shoreline activity. Permit fees for Monticello Reservoir shoreline activities are detailed in the Permitting Handbook. Failure to comply with this policy may result in, among other things, revocation of existing permits, fines, or legal action, as well as loss of consideration for future permits.

SCE&G will give reasonable public notice through appropriate communication avenues before changing the fee structure.

## **10.0 ENFORCEMENT OF SHORELINE MANAGEMENT PLAN**

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### **10.1 VIOLATIONS OF SHORELINE MANAGEMENT PLAN**

SCE&G conducts periodic surveys of the Monticello Reservoir shoreline to inventory and inspect docks, access paths, and shoreline erosion control structures/projects. Lake Management representatives make note of unauthorized structures that they see, as well as urging residents and Reservoir visitors to report anything they believe to be unauthorized activity within the Project boundary. Anyone believing that an activity violating the SMP is occurring is urged to contact SCE&G Lake Management at (803) 217-9221.

SCE&G Lake Management representatives will issue Stop Work Directives and/or Trespass Notices for any violations detected on SCE&G property. Any unauthorized clearing of trees or underbrush may result in the revocation of responsible parties' dock permits within 30 days if the violation(s) is (are) not corrected or a course of and schedule for corrective action has not been agreed to and approved by SCE&G. SCE&G may also commence legal action, if it deems it necessary, to require re-vegetation of the affected area. Removal of merchantable timber will require reimbursement to SCE&G subject to valuation of the Forestry Operations Department, including legally allowable "penalties." Consequences for violations may also include restrictions of access to SCE&G property, legal actions, fines, and loss of consideration for future permits.

## **11.0 SHORELINE MANAGEMENT PRACTICES**

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### **11.1 SCE&G SHORELINE MANAGEMENT PRACTICES**

SCE&G has established a set of management practices that apply to all of the lands included in the Project boundary. These practices are reflective of each of their developments unique qualities. The management practices for the Fairfield Development (which includes Monticello Reservoir) described herein, may be reviewed and revised periodically during the period of the FERC license.

#### **11.1.1 FOREST MANAGEMENT SHORELINE MANAGEMENT PRACTICES**

SCE&G manages timber within the Monticello Project boundary line in accordance with South Carolina's Best Management Practices for Forestry publication. An online copy of this publication is available at <http://www.state.sc.us/forest/refbmp.htm>.

#### **11.1.2 AQUATIC PLANT MANAGEMENT ACTIVITIES**

Some species of aquatic plants can become significant nuisances to recreation and Project operations should their populations not be controlled. Some of the common problem species that may be found in Monticello Reservoir include hydrilla, water primrose, and several species of pondweed. When managing invasive and exotic aquatic plants it is important to also protect the aquatic ecosystems and fish habitat. This requires the integration and use of specific BMPs appropriate to the regional and local conditions.

SCE&G's Lake Management Department, in cooperation with the South Carolina Aquatic Plant Management Council, manages the Aquatic Weed Program on Monticello Reservoir. Because some aquatic weed control techniques can harm fish and native plant species if improperly used, it is unlawful, per state and federal regulations, for individuals to spray or treat aquatic growth in the waters of Monticello Reservoir. SCE&G joins with SCDNR to ask that any aquatic vegetation problems recognized by Reservoir visitors or adjacent property owners be reported to SCE&G's Lake Management Department and the SCDNR. In addition, to help curb the spread of invasive aquatic species, SCE&G joins with SCDNR to ask that Reservoir visitors examine their boats and trailers and remove all vegetation and visible mud from boats and trailers before placing them into the waters of Monticello Reservoir and after removing them from Monticello Reservoir. This plea and advice also applies to every body of water in the State. Additional

information on aquatic plant management throughout the state, including Monticello Reservoir, is available at SCDNR's website, <http://www.dnr.sc.gov/invasiveweeds/plan>.

### **11.1.3 WOODY DEBRIS & STUMP MANAGEMENT**

Monticello Reservoir does not have a significant source of woody debris. Woody debris and stump management are discussed in the Permitting Handbook.

### **11.1.4 AQUATIC HABITAT ENHANCEMENT**

SCE&G may partner with SCDNR to enhance fisheries habitat. Enhancing aquatic habitat is an important aspect of freshwater fisheries management. SCDNR and/or SCE&G may establish and maintain aquatic habitat enhancements on Monticello Reservoir such as, but not limited to, vegetation plantings, felled trees cabled along shorelines, spawning and fry rearing enhancements, artificial reefs or "fish attractors." Signage or buoys advising anglers and boaters of enhancement structures in the area may be installed. Structures should be designed and constructed so as not to pose hazards to navigation. At an absolute minimum, they must be designed and constructed to maintain adequate navigation clearance at normal low water elevations. All fisheries habitat enhancement activities will be coordinated with SCDNR and SCE&G.

Additional information on the SCDNR Fish Habitat Enhancement Program can be found online at [www.dnr.sc.gov/fish/](http://www.dnr.sc.gov/fish/). For questions regarding an existing fisheries habitat enhancement structure or the notification of a missing buoy/marker, please contact SCDNR at 803-661-4767.

### **11.1.5 PROTECTION OF LANDS KNOWN TO PROVIDE IMPORTANT HABITAT VALUES**

Reservoirs are dynamic environments and the important natural and cultural values that Monticello Reservoir presents may evolve over time. During the upcoming license term, areas along the shoreline may be found to warrant protection against materially negative impacts from development upon one or more of a variety of ecologically important characteristics. Such characteristics may include, but not be limited to the following: areas known to be occupied by rare, threatened or endangered species; rare or exemplary natural communities; species in the State Wildlife Action Plan; significant land forms and geologic features; wetlands and shallow coves; and other areas, such as spawning and nesting habitat, determined to be critical to the continued existence of native species. In the event that one of the aforementioned species is



determined to be present in the Project boundary, SCE&G will consult with SCDNR to determine appropriate management policies.

## **11.2 LANDOWNER RECOMMENDED BMPS**

In addition to development activities, the environment around Monticello Reservoir is susceptible to impacts associated with residential and recreational activities. These include, for example only, improper fertilizer/pesticide use, boat maintenance, and debris disposal. Adjacent property owners can mitigate negative impacts otherwise associated with their property uses and instead make significant positive contributions to the Reservoir environment, and ultimately the watershed, by employing BMPs that preserve bank integrity and minimize non-point sources of pollution and contamination. Adjacent property owners should understand that using BMPs will help to preserve the scenic, environmental, and recreational qualities of the reservoir that they so highly value. Examples of effective BMPs recommended to adjacent property owners are provided in the succeeding section. SCE&G is available to provide more information and to assist landowners in determining effective BMPs for activities on their properties. Also, anyone may contact the Natural Resource Conservation Service or local county extension office (<http://www.sc.nrcs.usda.gov/contact/>).

### **11.2.1 MINIMIZING NON-POINT SOURCE POLLUTION**

Reservoir pollution may result from a variety of activities related to residential development, agriculture, forestry, and construction. Contaminants may enter the reservoir and tributaries via overland flows carrying biological, chemical, and other substances picked up and carried by runoff from rain events. This runoff water may contain sediment, bacteria, oil, grease, detergents pesticides, fungicides, fertilizers, and other pollutants. These pollutants, depending on type, quantities, and concentrations can overwhelm a reservoir's natural ability to filter and process them, thus leading to degraded water quality and aquatic environments.

Although a single point of impact or action may seem insignificant in its effect on the reservoir, the cumulative effects of the resource may be considerable. With this in mind, SCE&G encourages adjacent land owners to be mindful that they are members of a larger community that uses and impacts the reservoir. Employing the following BMPs can go a long way in preserving and improving reservoir water quality:

- Use permeable paving materials and reduce the area of impervious surfaces, particularly driveways, sidewalks, walkways, and parking areas;
- Dispose of vehicle fluids, paints, and/or household chemicals as indicated on their respective labels and do not deposit these products into storm drains, project waters, or onto the ground;
- Use soap sparingly when washing vehicles and wash them on a grassy areas , preferably sloping gently away from the reservoir, so the ground can filter the water naturally;
- Use hose nozzles with triggers to save water and dispose of used soapy water in sinks or other vessels that direct the materials into sewer systems, not in the street;
- Maintain septic tanks and drain fields according to the guidelines and/or regulations established by appropriate regulatory authorities;
- Remove pet waste and dispose of properly in areas that do not drain to the reservoir; and
- Use only low or no phosphorous fertilizer on lawns near the reservoir.

### **11.3 INVASIVE SPECIES MANAGEMENT AND BMPs**

Certain species of aquatic and terrestrial plants and animals can become a significant nuisance to recreation and project operations if their populations are not kept in check. Some of the common aquatic problem species found in the vicinity of the Project include hydrilla and several species of pondweed. Common terrestrial invasive exotic species include kudzu, mimosa, and Japanese honeysuckle. When managing invasive and exotic plants and animals it is important to also protect the ecosystems and habitat for desirable native species. This requires the integration and use of specific BMPs appropriate to the regional and local conditions.

Because weed control techniques can harm fish and native plant species, it is unlawful, per state and federal regulations, for individuals to spray or treat aquatic growth without a permit. Thus, SCE&G asks that any aquatic vegetation problems recognized by lake visitors or back property owners should be reported to SCE&G's Lake Management Department and the SCDNR. In addition, to help curb the spread of invasive species, SCE&G asks that lake visitors and back property owners employ the following BMP's:

- Draining water from boat, motor, bilge, live well and bait containers before leaving a water access site.
- Cleaning and drying boats and fishing equipment using accepted protocols for the prevention of all invasive species before entering any waterbody area.
- Disposing of unwanted bait in trash, including earthworms.

- Avoiding the release of plants and animals into a waterbody unless they originally came from that waterbody.
- Inspect all equipment and vehicles used at the Project for non-native invasive plants and animals.
- Removing visible plants, animals and mud from boat before leaving waterbody.
- Avoid the disturbance of native vegetation.

Individuals may find additional information regarding non-native invasive species at SCDNR's website at: [www.dnr.sc.gov](http://www.dnr.sc.gov).

## **12.0 PUBLIC EDUCATION AND OUTREACH**

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This SMP is intended to foster management of shoreline use and development to achieve consistency with the FERC License, as well as to promote protection of public safety and environmental quality (water quality, natural habitat, aesthetics, etc.). To garner support and compliance from the public and lake users, it is key to educate them to the need and means to protect shoreline resources. Additionally, the public must be aware of the management and permitting programs put in place to provide this protection. To accomplish the task of increasing public awareness of the goals and objectives of this SMP SCE&G has developed an education and outreach program that includes the components described below.

### **12.1 SHORELINE MANAGEMENT PLAN EDUCATION**

SCE&G's Public Education and Outreach program seeks to educate the public on various aspects of the management of Monticello Reservoir, including the Permitting Handbook, recommended BMP use, relevant Project Operations information, and the Safety Program. To accomplish this, SCE&G uses various public education measures including informational pamphlets, public meetings, newsletters, and an internet webpage.

The Internet, in particular, presents an excellent mechanism for disseminating information and improving awareness. SCE&G maintains a website designed to provide information on the SMP and the Permitting Handbook. Printed copies of the following materials may also be obtained by contacting SCE&G Lake Management at (803) 217-9221. Information and materials that will be available at the website include the following:

- Permitting Handbook;
- Permit application forms;
- Examples and information on BMPs;
- Alternative and example designs for shoreline stabilization; and
- Useful links and other related information.

Additional outreach mechanisms that SCE&G intends to employ in implementing the SMP include the following:

- Provide speakers for homeowner and other organizations' meetings;

- Provide information to realtors and encourage dissemination of this information to all potential Reservoir shoreline back-property buyers; and
- Develop and distribute new, “user friendly” brochures that include general reservoir information, permitting processes, shoreline BMPs, and relevant contact information.

## **12.2 PUBLIC ACCESS AREA MAPS**

A figure depicting Public Access Areas on Monticello Reservoir is included as Figure 12-1.

## **12.3 PUBLIC HUNTING AND FISHING**

The SCDNR maintains hunting and fishery management responsibility and state hunting and fishing regulations enforcement on Monticello Reservoir. Separate regulations apply to hunting in areas included in the Wildlife Management Area (WMA) program and it is imperative that the individual check WMA regulations and maps prior to hunting. The designation for waterfowl management allows hunting on or in the water and on the islands in Monticello Reservoir, but not on adjacent shoreline land. State regulations and maps are available at SCDNR's website at: <http://www.dnr.sc.gov>, or by contacting SCDNR at:

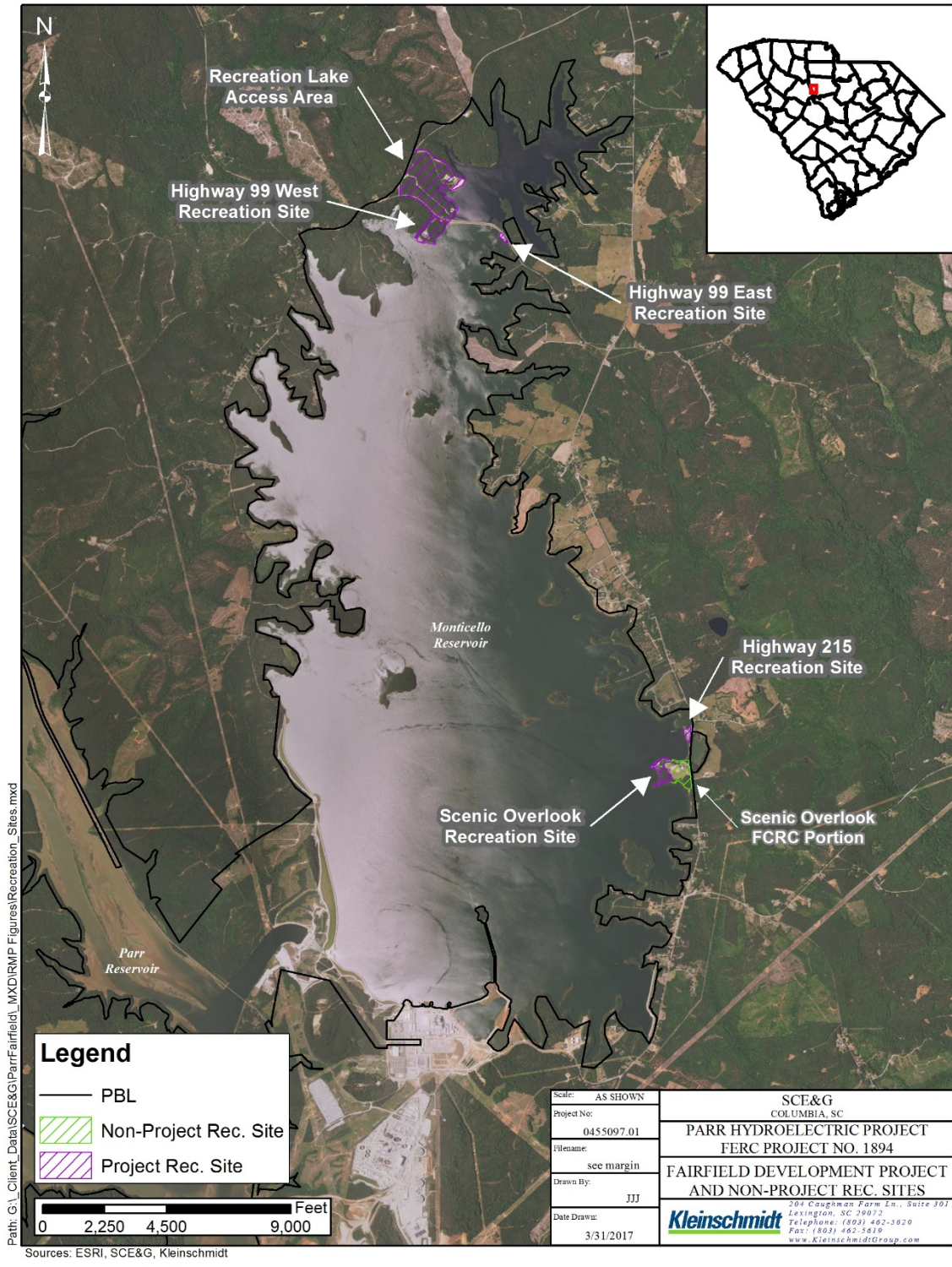
Hunting and Fishing Regulations  
S.C. Department of Natural Resources  
Wildlife and Fresh Water Fisheries  
1000 Assembly Street  
Columbia, South Carolina 29201  
Telephone: 803-734-3886

## **12.4 SAFETY PROGRAMS**

Due to operation of the pumped storage generating plant, the waters of Monticello Reservoir can fluctuate several feet in a matter of a few hours. This rapid fluctuation makes it especially important for boaters and other recreationists to exercise a high degree of care and fully assume personal responsibility for their safety by being especially aware and cautious. For public safety, hazardous areas which are marked should not be entered and any other warnings posted around the reservoir should be observed as well.

SCE&G and SCDNR cooperate to mark shoals and other hazardous areas to increase boating safety. However, boaters should not assume all shoals and hazardous areas have been marked.

SCDNR also enforces the boating laws of South Carolina. Boaters should ensure that watercraft and safety equipment are in good working condition and in compliance with all applicable state laws.



**FIGURE 12-1 MONTICELLO RESERVOIR PUBLIC ACCESS AREA MAP**

## **13.0 MONITORING AND REVIEW PROCESS**

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### **13.1 OVERALL LAND USE MONITORING**

As demographics and user groups change within the Project area, changes in residential and commercial areas may occur. Often this type of use change is incremental and cumulative, occurring over a period of years or decades. To monitor land use around Monticello Reservoir, SCE&G will employ a geographic information system (GIS) to compare new and existing permit applications against GIS data for the land management classifications. Such monitoring will provide long-term data that should be useful in identifying areas experiencing change. Every 10 years, during the SMP review process (see Section 13.2 on Review Process below), SCE&G will report on changes in land use for the various land management classifications. If it is found that material changes within the Project boundary have occurred that are not consistent with the current SMP goals, amendments to the SMP may be warranted. Such situations might include significant changes in land ownership, major commercial upgrades or uses, or new residential uses or pressures.

### **13.2 REVIEW PROCESS**

SCE&G proposes a 10 year SMP review cycle interval. A 10 year SMP review period interval should provide reasonable opportunities for SCE&G, in concert with governmental, non-governmental, and individual stakeholders, periodically and deliberately to assess new issues that arise as a result of development around the Reservoir, and allow for analyses of cumulative effects. The SMP review process will begin sufficiently in advance of the end of each period so that it will be completed within the 10 year time frame. One month prior to the scheduled start of the review process, its occurrence will be advertised in various media formats (e.g., website, newsletter, contact with homeowner associations, etc.). SCE&G will use those same media avenues to issue a report on the outcome of the review process. As in the past, SCE&G will solicit input from interested parties in addressing issues that arise and have a bearing on Reservoir management. This includes keeping lines of communication open during the time between review periods. Concurrently with the FERC SMP review process, SCE&G will review the Permitting Handbook periodically with interested stakeholders to ensure its effectiveness; however, changes to the permitting process may be made, as needed, outside of the scheduled review periods.



## 14.0 REFERENCES

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Federal Power Commission (F.P.C.). 1974. Order Issuing New License for the Parr Hydroelectric Project. August 28, 1974. 52 F.P.C. 537.

Federal Energy Regulatory Commission (FERC). 2012. Guidance for Shoreline Management Planning at Hydropower Projects. Online. [URL]: <http://www.ferc.gov/industries/hydropower/gen-info/guidelines/smpbook.pdf>.

Federal Energy Regulatory Commission (FERC). 2001. Order Approving Land use and Shoreline Management Plan. June 4, 2001. 95 FERC ¶ 61,351.