PARR HYDROELECTRIC PROJECT (FERC No. 1894)

South Carolina Electric & Gas Company Cayce, South Carolina

June 2018

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PARR HYDROELECTRIC PROJECT (FERC No. 1894)

EXECUTIVE SUMMARY

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 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 Parr Reservoir. A SMP to address Monticello Reservoir is included under separate cover and is 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 on Monticello Reservoir, shoreline stabilization, lake access pathways and other shoreline activities.

The classification of Project lands surrounding Parr Reservoir is described in Section 5.0 and includes three management classifications. These classifications are as follows: Project Operations; 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. Public Recreation land includes land within SCE&G developed recreation areas and islands that are owned by SCE&G. Undeveloped areas are areas protected from development to preserve the environmental resources and aesthetic values. Land use prescriptions associated with these land management classifications are discussed in further detail 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 Parr 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 Parr 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. Such fees can be one-time or periodic.

Periodic surveys of the Parr Reservoir shoreline are conducted by SCE&G and include, among other things, inventories of unauthorized structures. 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 required removal of unauthorized structure, 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 its direct or indirect use. These include but may

not be limited to landowner Best Management Practices ("BMP"). 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 SMP. 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 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 ensure its effectiveness; however, changes to the permitting process may be made as it deems necessary and appropriate. This is discussed in Section 13.0.

PARR HYDROELECTRIC PROJECT (FERC No. 1894)

1.0 INTRODUCTION

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 reservoirs are included as part of the Project, Monticello Reservoir¹ 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 boundary². 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,

¹ The State of South Carolina considers Monticello Reservoir waters of the State and refers to it as "Lake Monticello".

² 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.

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.

The Project boundary encompasses land around each reservoir. South Carolina Electric & Gas Company ("SCE&G") manages SCE&G-owned lands within the Project boundary ("Project property") to comply with the FERC License for the Project (the "Licensee"). 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 relicensing³ 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 Parr and Monticello Reservoirs, should be divided into two distinct SMP's, one for each reservoir. Hence, this SMP has been prepared for Parr Reservoir and is being submitted to FERC as part of SCE&G's Parr Hydroelectric Project comprehensive relicensing package. A SMP for Monticello Reservoir is included under separate cover.

The management guidelines set forth in this SMP are applicable to all lands within the Project boundary surrounding Parr 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;

³ 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.

- Best management practices ("BMP"s);
- Public education and outreach;
- Reservoir monitoring; and
- A proposed review process.

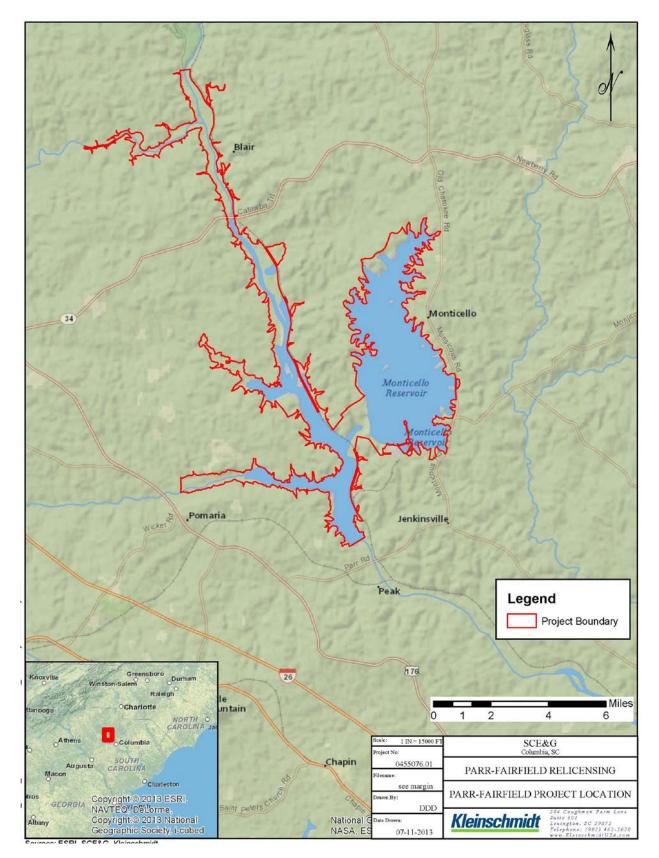


FIGURE 1-1 PROJECT LOCATION AND BOUNDARY MAP

2.0 PURPOSE AND SCOPE OF THE SHORELINE MANAGEMENT PLAN

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 Parr Reservoir include access paths across SCE&G property, and water withdrawal. 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

Parr Reservoir is formed by the Parr Shoals Dam ("Dam"), which was originally constructed between 1912 and 1914. The Dam is situated across the Broad River and houses a 14.88 megawatt (MW) hydroelectric facility, located in an integral powerhouse. On August 28, 1974, the Federal Power Commission (FPC), predecessor to the FERC, issued SCE&G a new operating License for the Parr Shoals Development. In addition to relicensing the existing facilities, 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 the 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. The newly developed Project, including both Parr and Fairfield Developments, was subsequently referred to as the Parr Hydroelectric Project.

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 FERC to regulate the use of Project shorelines. After extensive stakeholder consultation, an amended SMP was filed with 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; erosion control; and, prohibited activities.

In 2006, SCE&G amended the SMP's policy regarding common docks on Monticello Reservoir. The original policy allowed for two to five 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.

As noted, the previous SMP included very little pertaining to Parr Reservoir. As such, the need for a new SMP specifically pertaining to Parr Reservoir was identified.

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 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 Parr Reservoir (a SMP for Monticello 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: shoreline stabilization, access path development, 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. A Project boundary map is included as Figure 1-1.

4.0 SHORELINE MANAGEMENT PLAN GOALS AND OBJECTIVES

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 Parr 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. Protect scenic values;
- 9. Monitor and permit shoreline activities;
- 10. Provide a summary catalogue of the types and locations of existing recreational opportunities;
- 11. Establish Land Management Classifications and Land Use Prescriptions to help in the management of non-Project uses of the Parr Reservoir shoreline lands within the Project boundary;
- 12. Describe the SMP amendment and monitoring process; and
- 13. 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.

| STAKEHOLDER GROUPS |
|---|
| 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 |

TABLE 4-1 PARTICIPATING GROUPS IN PARR HYDROELECTRIC PROJECT RELICENSING

STAKEHOLDER GROUPS

United States Fish and Wildlife Service

United States Forest Service

University of South Carolina

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

| STAKEHOLDER GROUPS |
|---|
| 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 SCHEDULE

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

Three distinct land management classifications have been developed for the shorelines surrounding Parr Reservoir. These land management classifications are as follows: Project Operations; Public Recreation; and, Non-Development Areas. The Public Recreation Classification includes designated public recreation areas, WMA and some islands within Parr 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 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 Parr Reservoir.

| CLASSIFICATION | SHORELINE MILES | ACRES |
|----------------------------------|--------------------|-------|
| Project Operations* | 0.90 | 10 |
| Public Recreation ⁵ * | 6.97 | 857 |
| Non-Development Areas* | 67.05 | 2,131 |
| TOTAL | 74.91 | 2,998 |

*No docks allowed

⁴ Preliminary information; final data will be provided in the final SMP.

⁵ Includes recreation lands and SCDNR-managed waterfowl areas.

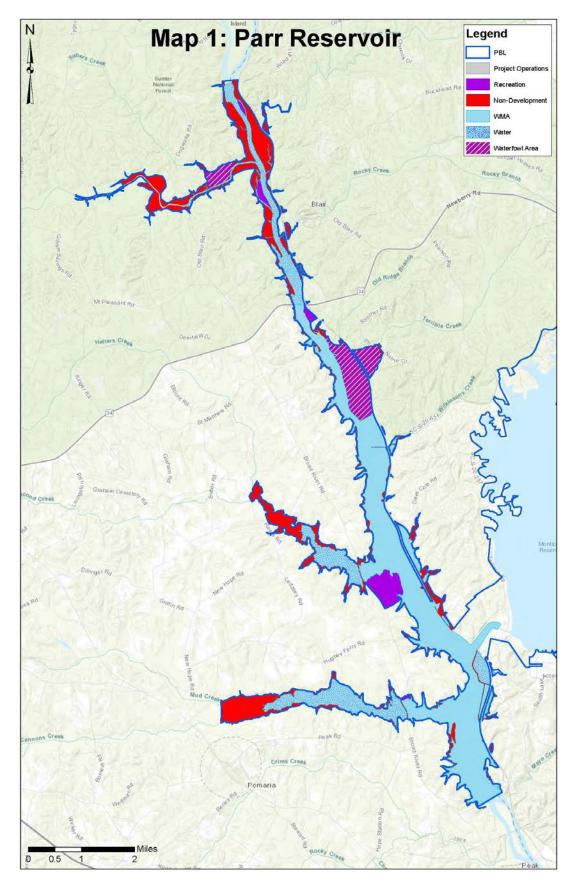


FIGURE 5-1 SHORELINE CLASSIFICATIONS MAP FOR PARR RESERVOIR

5.1 **PROJECT OPERATIONS**

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

5.2 **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 includes South Carolina Department of Natural Resources (SCDNR)managed waterfowl areas located on Project lands. This classification also includes properties set aside for recreational development. Public Recreation lands include the following subclassifications:

- Public Access Areas
- Islands owned by SCE&G

5.2.1 PUBLIC ACCESS AREAS

This sub-classification includes public boat launches, and other areas currently being managed for public access. SCE&G has developed and maintains four public access areas and one canoe portage on Parr Reservoir. These include the following:

- Cannon's Creek Recreation Site
- Heller's Creek Recreation Site
- Highway 34 Recreation Site
- Enoree River Bridge Recreation Site
- Parr Shoals Dam Canoe Portage

Each Project recreation site provides facilities for boat launching, courtesy dock(s), and/or picnic facilities for public use.

5.2.2 ISLANDS AND SHOALS

SCE&G-owned islands located within Parr Reservoir are available for public recreational use in accordance with authorized activities (See the Permitting Handbook for authorized activities).

5.3 NON-DEVELOPMENT AREAS

Project lands under this classification are protected from private development. This is done for the protection of the environmental and aesthetic integrity of the shoreline.

6.0 LAND USE PRESCRIPTIONS

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 and boat lifts, 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 Parr Shoals Development. Public access to, or activities upon, these lands is restricted for reasons of safety and security.

6.2 **PUBLIC RECREATION**

Project lands devoted to public recreation include developed park sites, properties set aside for recreational development and islands and shoals. SCE&G manages the areas based on the specific, designated recreational activities including fishing, picnicking, and boat launching⁶. Primitive overnight camping is allowed on Public Recreation lands surrounding Parr Reservoir in accordance with the policies outlined in the Permitting Handbook. Public hunting may be allowed on specific Public Recreation lands in accordance with state hunting regulations, as expressly discussed under each subsection below. See SCDNR's website for state hunting regulations (http://dnr.sc.gov).

⁶ SCE&G manages some of the lands classified for public recreation for timber. Information on SCE&G's forest management practices is included in Section 11.1.1.

6.2.1 PUBLIC ACCESS AREAS

SCE&G maintains four public access areas and one canoe portage on Parr Reservoir. These areas are depicted in Figure 12-1. Primitive overnight camping is allowed at Parr Reservoir Public Access Areas in accordance with the policies outlined in the Permitting Handbook. Private permitted activities are excluded under this classification. Public hunting and shooting are not allowed at SCE&G Public Access Areas.

6.2.2 ISLANDS AND SHOALS

Islands and shoals are located on Parr Reservoir and are open for public recreational use, such as bank fishing, walking, and bird watching. Overnight camping is not allowed on islands and shoals within Parr Reservoir. Hunting is allowed on islands and shoals in accordance with state hunting regulations.

6.3 NON-DEVELOPMENT AREAS

Lands under this classification warrant special protection because they may provide important habitat or aesthetic values. Meandering paths and water withdrawals on lands under this classification may be considered on a case-by-case basis by SCE&G. Primitive overnight camping is allowed on non-development property surrounding Parr Reservoir in accordance with the policies outlined in the Permitting Handbook. Unless otherwise posted, hunting is allowed in non-development areas in accordance with state hunting regulations.

7.0 SHORELINE ACTIVITIES REQUIRING SCE&G APPROVAL

SCE&G maintains a strong commitment to managing the shoreline of Parr 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 property around the entire periphery of Parr Reservoir. Thus, any activity occurring on the "shoreline" is occurring on SCE&G property. Activities not in compliance with the shoreline activity parameters outlined in this SMP and in the Permitting Handbook may constitute 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 Parr Reservoir:

- Construction of a meandering access path; and
- Water withdrawal for non-commercial agricultural/landscaping irrigation purposes.

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:

- Private boat docks;
- Private shoreline stabilization;
- Boathouses;
- Private boat ramps;
- Commercial marinas;
- Marine rails;
- Sea walls;
- Fences;
- Electrical service;
- Permanent structures;
- Land-based structures, storage buildings, shelters, patios, gazebos, fences, swimming pools, satellite dishes, signs, storage of boats, canoes or other watercraft or automobiles; and

• Septic tanks and/or drain fields;

Prohibited Activities:

- Jet skiing;
- Water skiing;
- Parasailing;
- Paragliding;
- Mooring;
- Excavations/dredging (except commercial operations permitted by the regulatory authorities);
- Effluent discharges;
- Storage or stockpiling of construction material;
- Livestock access to reservoir⁷;
- Vegetation removal of any type except in a permitted access path to the shoreline;
- Primitive or overnight camping on islands and shoals within Parr Reservoir;
- Use of herbicides: and
- Limbing or trimming of vegetation on Project property to create views or visual corridors.

⁷ Unless grandfathered through deed reservations.

8.0 PERMITTING PROCESS FOR SHORELINE ACTIVITIES OR STRUCTURES

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 the Parr Reservoir shoreline, which consists of the lands below the 266-foot contour interval and designated 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 prior 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 for non-commercial agricultural/landscaping irrigation purposes.

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 best management practices. 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:

SCE&G Lake Management Department 6248 Bush River Road Columbia, SC 29212

8.1.1 SHORELINE VEGETATION MANAGEMENT

In general, SCE&G maintains a policy of non-disturbance of any vegetation below the 266-foot contour or on Project property 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 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.

8.1.2 ACCESS PATH

A single pedestrian 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.

8.1.3 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

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, boat lifts, 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. One-time and periodic permit fees for Parr 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

10.1 VIOLATIONS OF SHORELINE MANAGEMENT PLAN

SCE&G conducts periodic surveys of the Parr Reservoir shoreline to inventory and inspect permitted uses throughout the year. 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 below the 266-foot contour, or on designated Project property. 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 will result in the revocation of any SCE&G issued 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

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 current management practices for the Parr Development (which includes Parr Reservoir) are described in this section, but may be reviewed during the period of the FERC license.

11.1.1 FOREST MANAGEMENT/SHORELINE MANAGEMENT PRACTICES

SCE&G manages timber within the Parr 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 PROTECTION OF LANDS KNOWN TO PROVIDE IMPORTANT HABITAT VALUES

Reservoirs are dynamic environments and the important natural and cultural values that Parr 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 Parr 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.

12.0 PUBLIC EDUCATION AND OUTREACH

This SMP is intended to foster management of shoreline use and development to achieve consistency with the FERC License, as well as the 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 Parr 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 on Monticello Reservoir; 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 adjacent 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 Parr 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 Parr 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. 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 Parr 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.

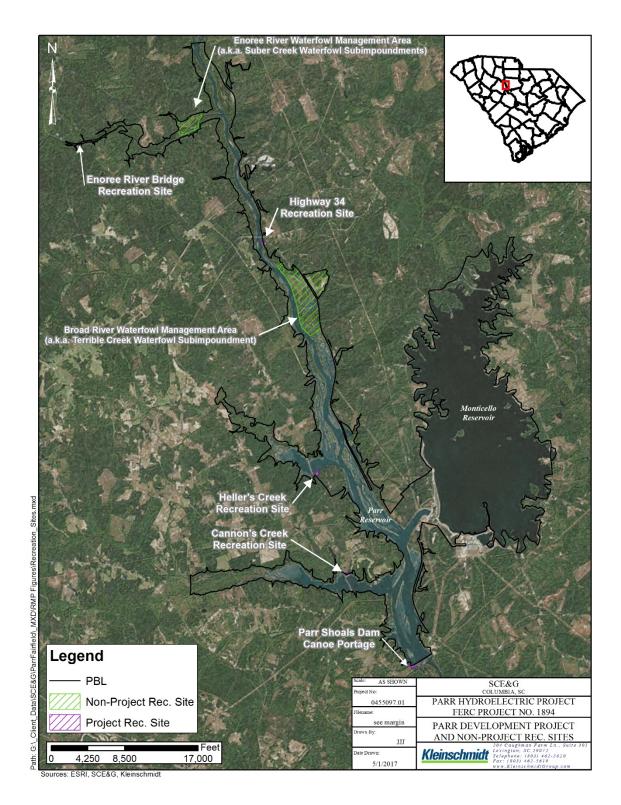


FIGURE 12-1 PARR RESERVOIR PUBLIC ACCESS AREA MAP

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 Parr 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 in addition to filing Form 80 surveys. 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 periodically, as needed, outside of the scheduled review periods.

14.0 REFERENCES

- 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.