

LAKE SECESSION

Shoreline Management Plan (SMP) And Land Management Plan

**FERC ARTICLE 414
Approved June 19, 2002**

**The Abbeville Hydroelectric Project
(FERC Project No. 11286)**

**City of Abbeville
South Carolina**

January 18, 2002

1. Introduction

Lake Secession is the reservoir formed by the damming of the Rocky River to generate power for the City of Abbeville, South Carolina. Lake Secession covers 1,425 acres at normal pool level and has a storage capacity of 25,650 acre-feet. The lake has a maximum length of 6 miles and a maximum width of 5,000 feet. The area downstream of the Lake Secession Dam is a backwater reach created by the U. S. Army Corps of Engineers' Richard B. Russell Dam on the Savannah River. Situated approximately 14 miles upstream from the Lake Secession Dam is the Lake Broadway impoundment. Lake Secession is situated in both Anderson and Abbeville Counties.

Residents and visitors to Lake Secession are familiar with its fluctuating water levels. Lake Secession lies within the Piedmont Physiographic region and the Rocky River /Lake Secession Watershed. The normal lake level is EL 547 with the full level at EL 548. Monthly draw down targets are as follows:

Month	Target Draw down (Feet)
Jan-April	2 to 7
May-Aug	2 to 3
Aug-Dec	3 to 8

Recent drought conditions, however, have led to much lower water levels.

Lake Secession is owned by the City of Abbeville. The City has owned and operated the lake since its original completion is 1940. Maintaining its original construction, the project contains two turbine-generator units rated at 1,800 kilowatt (kW) and 800 kW, respectively.

In the early 1990s a rapid change in the population and rate of development of the lake began to take place.

As development increases, the very values that attract residents, families, and visitors in the first Place could be destroyed unless the potential for environmental degradation is recognized by all parties and kept to a minimum.

The City of Abbeville, S.C. , as owner and Licensee of Federal Energy Regulatory Commission Project No. 11286, realizes the need for rules and regulations to promote and enhance the recreational potential of Lake Secession and protect its environmental quality while continuing to use Lake Secession as part of the City of Abbeville's power production capabilities. All lake management policies are consistent with the regulations and requirements of the Federal Energy Regulatory Commission (FERC) under whose authority the City of Abbeville, S.C. owns and operates Lake Secession for the generation of power.

The Rocky River Dam Superintendent is responsible for enforcing FERC Directives regarding unauthorized use of Lake Secession waters and land below the 548 foot contour elevation.

FERC directives require the City of Abbeville, S.C. to prevent or halt unauthorized actions by taking measures to stop such actions.

The City of Abbeville, S.C. has implemented a Shoreline Management Permitting Program (described in this booklet) to permit, upgrade, and properly maintain structures, facilities and the environment below the high water contour of 548 feet. These regulations and inspection program serve to maintain an environment at Lake Secession which has something to offer everyone.

2. Environmental Policies

2.1 General Policy and Purpose

- a. The implementation by the City of Abbeville, S.C. of the Lake Secession Shoreline Management Program is aimed at managing the project shoreline to enhance wildlife, aesthetic, and recreational resources of the impoundment.
- b. The purpose of the policy is to comply with the terms of the Project No. 11286 License and the regulations and orders of FERC and to assist in providing a balance between recreation and environmental control.

2.2 Water Quality Standards

The City of Abbeville, S.C. along with the South Carolina Department Of Health and Environmental Control (DHEC) will conduct a continuing water quality monitoring program to ensure that the waters of Lake Secession continue to be of an "A" classification suitable for swimming, fishing, and other water-related recreational activities.

2.3 Undeveloped Areas

The City of Abbeville, S.C. undeveloped land around the lake will be maintained through a sound forest management program to ensure the health of the forest. Timber will be managed in a multiple use manner in compliance with the S.C. Best Management Practices to maintain a balance of quality watershed conditions, recreational opportunities, wildlife habitat and promotion of new timber growth.

3. Public Fishing, Boating And Hunting

3.1. Fisheries Management

The City of Abbeville, S.C. restricts the draw down of the lake levels in April and May to promote the spawning of fish. In addition, we are building fish habitats to promote the lake Fish population. State fishing and safety regulations are enforced by the South Carolina Department of Natural Resources.

3.2 Boating Safety

The boating laws of South Carolina are enforced by the South Carolina Department of Natural Resources on Lake Secession.

3.3 Public Hunting

Public hunting areas are shown on Game Management Area Maps available through the South Carolina Department of Natural Resources.

4. Public Landings

4.1 City of Abbeville, S.C. Park Facilities

The City of Abbeville, S. C. presently operates 1 handicap fishing pier and park; 1 boating pier and ramp operated jointly with Abbeville County; and 1 bank fishing area. All these facilities are free to the public and open year round.

4.2 Commercial Facilities

Public access to the lake is also provided at privately-owned facilities. Boat launching and other recreational activities are available.

5. Docks

5.1 General

The City of Abbeville, S.C. requires that all docks, fixed, floating or combination, be inspected by the City of Abbeville agents to comply with Section 5, Paragraph 6, and that they be registered with the City and a current inspection decal be prominently displayed on the approved dock.

5.2 Policy

The City of Abbeville, S.C. requires that anyone desiring to repair, replace, add to, or construct a dock must secure a permit prior to the start of construction. Docks, whether fixed or floating, must not interfere with surface water activities or navigation and must be compatible with scenic values in the vicinity. Use of common docks is encouraged where practical.

5.3 General Requirements

A minimum lot width of 100 feet along the 548 foot contour is required before an individual residential dock application will be considered.

Lots measuring less than 100 feet in width along the 548 contour requesting a dock , will be required to construct a common docks with adjacent property owner(s). It is an applicant's responsibility to make arrangements with his neighbor (s) for common dock facilities. Common docks may accommodate up to five (5) individual lake front property owners. A minimum distance of 100 feet is required between common docks and/or a common dock and existing individual dock.

Lots measuring less than 100 feet in width in subdivisions established prior to 1990, where the adjacent lots have existing docks, may be considered for limited size docks.

If an existing lot having a permitted dock is subdivided, that dock permit will be canceled. A new permit will be issued only if the shoreline width requirement is met or if a common dock for all resulting lots is requested.

5.4 Watercraft Limitations

No watercraft exceeding 30 feet in length will be permitted to be permanently docked at a residential or common area dock. Watercraft exceeding 30 feet must be docked at a multi-use docking facility.

It is against both federal and state laws to discharge sewage from any description of watercraft into the waters of South Carolina which includes Lake Secession.

5.5 Application Procedure For New Construction, Additions or Replacements

The applicant will be required to apply to the City of Abbeville, S.C. in writing and submit the following:

- a. Sketch showing location design and dimensions of the proposed structure.
- b. Permitting fee.
- c. Specific directions by land to applicant's property on Lake Secession.
- d. Plat of applicant's property.

5.6 Dock Specifications

- a. Private docks, whether (permanent or floating) may generally be up to 600 square feet in overall size (surface area) and 75 feet in length provided they do not interfere with navigation, to adjoining property. In some locations, such as narrow coves, the maximum size may not be permitted or docks may not be permitted at all. Floating docks attached to permanent docks may be moved out as the water level recedes, provided they do not interfere with adjacent property owner's access.
- b. Docks may be longer where conformity with existing structures would be practical and in cases where exceptions would be desirable due to curvature of slope of the shoreline. However, the effects on navigation and the aesthetic values of the surrounding area will control; issuance of any variance.
- c. All permanent docks must be built horizontally between the elevation of 548 and 550 foot contour.

- d. Docks must be located a minimum of 15 feet from adjacent property lines and the extension should not cross the imaginary projected lot lines. (The projection of the imaginary property line is a management tool to assist Lake Management Representatives and may be waived under certain circumstance.) Common docks between adjacent property owners are encouraged. The sideline limitation of 15 feet will be waived for common use docks. A copy of the written agreement between participating property owners will be furnished to the City of Abbeville, S.C. Form of agreement is available upon request.
- e. Covers on docks are not permissible unless the covered portion is located within 40 feet of the 548 foot contour. Hand railings on docks are permissible, provided that the sides of the docks are not enclosed so as to obscure vision.
- f. Sinks, toilets, showers, etc., or any type of equipment or construction which will create or cause any liquid or solid waste to be discharged into the waters of the lake will not be permitted.
- g. Effective this date, all new floating docks constructed on Lake Secession are required to use encased or encapsulated flotation. Exposed foam bead flotation billets or metal drums will not be allowed. Foam bead flotation deteriorates, causing shoreline litter. It is subject to destruction by animals and becomes waterlogged. The new regulation applies only to new dock construction. Existing docks will be required to install encapsulated flotation when the old existing flotation needs to be replaced.
- h. Houseboats used for habitation may not be permanently moored at private docks. Permanent mooring must be at marinas with sewer pump-out and treatment facilities.

5.7 Common Dock Policy

Common docks are docks which provide lake access for two to five family residential lots. Common docks are encouraged for all lake property as an alternative to individual docks and will be required on property with poor access and/or limited lake frontage, or in such other circumstances that the City of Abbeville, S.C. deems appropriate. Property owners are encouraged to adopt the common dock concept to reduce the number of docks on the shoreline and limit congestion in heavily developed areas.

The City of Abbeville, S.C. does not guarantee water access. Each lot is affected by the existing contours of the lake bottom and the operation of the Rocky River Hydro Dam Project. It is the applicant's responsibility to review the shoreline area where the dock is to be located and to apply the restrictions outlined in Section 5.6 to ensure the dock will meet the applicant's needs and satisfy the City of Abbeville's shoreline management requirements.

5.8 Commercial Dock Policy

The development and expansion of new or existing commercial docks will be negotiated on a case-by-case basis. The necessary federal, state and local approval permits must be obtained before final approval by the City of Abbeville and FERC.

6. Boat Ramps, Marine Railways & Boat Lifts

6.1 Policy

Boat ramps, marine railways or boatlifts cannot be constructed, replaced or added to without a permit from the City of Abbeville, S.C. The use of boat ramps at public and semi-public facilities shall be encouraged in preference to construction of private ramps. Refer to Section 10-2, concerning boat ramps on fringe land.

6.2 Application Procedure

Applications for permits to construct, add to, or replace boat ramps, marine railways, boat lifts shall be submitted to the City of Abbeville, S.C. in writing and must include the following:

- a. Sketch showing location and dimensions of the proposed ramp, boat lift and /or marine Railway.
- b. Permitting fee
- c. Specific directions, by land, to applicant's property on Lake Secession.

6.3 Boat Ramp, Boat Lift and/or Marine Railway Specifications

- a. Ramps will be constructed of concrete. Asphalt compounds or petroleum base products are prohibited.
- b. All ramps should be located as to not interfere with neighboring property owners. Adjoining property owners are encouraged to agree to common use of the ramp. A copy of the written agreement between participating property owners will be furnished to the City of Abbeville, S.C.
- c. Ramps may generally be up to 15 feet wide and required length to be functional. Public and semi-public ramps may be granted a variance.
- d. Generally, marine railways to be constructed for access to the lake from facilities located above the 548 foot contour are permitted. Railways constructed below the 548 foot contour area are restricted to a two foot elevation above the natural lake basin
- e. Boat lifts should be located so there is no interference with the adjoining property owners' lake view. All boat lifts will be constructed adjacent to the owner's permanent dock and be a minimum of 15 feet from the property line.

7. Moorings

The City of Abbeville's Shoreline Management Program does not permit mooring on the waters of Lake Secession.

8. Erosion Control

8.1 Policy

No rip-rapping, seawalls or retainer walls will be constructed, replaced, repaired or added to without a permit from the City of Abbeville, S.C.

8.2 Application Procedure

Application for permits for erosion control shall be submitted to the City of Abbeville, S.C. in writing and must include the following:

- a. A copy of applicant's deed and plat to the property.
- b. Area on plat where located and type of erosion control proposed.
- c. Permitting fee.
- d. Specific directions by land to applicant's property on Lake Secession.

8.3 Specifications

- a. **Rip-rapping.** Rip-rapping for erosion control at the 548 foot contour and below will generally be permitted provided it is aesthetically acceptable and materials used have prior approval by the City of Abbeville, S.C. (No concrete blocks, bricks, or building materials may be used as rip-rap below the 548 foot contour).
- b. **Seawalls or retainer walls.** Seawalls or retainer walls for erosion control will be permitted provided they are constructed on the 548 foot contour, earth fills below the 548 foot contour are prohibited.

8.4 Limited Brushing

Trees and vegetation growing below the 548 contour on the shoreline of Lake Secession play an important role in the overall environmental condition of the lake. The ecological impact the vegetation has on the fish and wildlife habitat is necessary to ensure a sound, healthy lake environment. The City of Abbeville's Shore Line Management Plan permits limited removal of the shoreline vegetation for the construction and installation of docks. Please be advised that unauthorized removal of shoreline vegetation (button bushes, willow trees, hardwoods etc.) will result in the cancellation of the dock permit and revegetation of the shoreline will be required. Removal of merchantable timber may require reimbursement subject to valuation by the City of Abbeville, S.C. Property owners must contact the Rocky River Dam Superintendent prior to any removal of shoreline vegetation below the 548 foot contour.

9. EXCAVATIONS

9.1 Policy

Excavation below the 548 foot contour is not permitted without authorization from the City of Abbeville, S.C. All authorized excavations must be in accordance with the City's specifications and requirements which may include an environmental assessment plan or report.

9.2 Application Procedure

Applications for permits to excavate shall be submitted to the City in writing and will include the following:

- a. A copy of applicant's deed and plat of property.
- b. Specific directions, by land, to applicant's property on Lake Secession.
- c. Scaled drawing of area to be excavated.
- d. Required local, state and federal permits. The Rocky River Dam Superintendent will assist in the preparation of required local, state and federal permits.
- e. An application for an excavation not exceeding 150 cubic yards can be processed by City personnel. Any commercial excavation exceeding 150 cubic yards must be processed through the U.S. Army Corps of Engineers and state agencies.
- f. Permitting fee.

9.3 Excavation Specifications

- a. All excavating must be done directly in front of the permittee's lot.
- b. No excavation will be permitted when the excavation site is covered with water.
- c. All displaced soil must be moved above the 548 foot contour and must be stabilized and top seeded to prevent erosion.
- d. A 4 to 1 slope is the maximum slope allowed without rip-rap. A 2 to 1 slope is permitted if rip-rap is installed.
- e. Excavation of wooded or vegetated areas located below the 548 foot contour is prohibited.
- f. No excavation will be permitted to alter the existing 548 foot contour.
- g. Excavation activities will be allowed only between October 1 of the current year and January 15 of the next year. Permits expire January 15 following the date of issuance.

10. LAND USE

10.1 Encroachments

Earth fills below the 548 foot contour are prohibited. Any that occurred prior to January 1, 1990, will be handled on a case by case basis.

10.2 Fringe land

There are no fringe lands in the Abbeville Hydroelectric Project. The FERC Project Boundary Line follows the 548 contour line. All property beyond the 548 foot contour is owned by individuals.

11. WATER REMOVAL FROM THE LAKE

11.1 Application for a Permit

Applications for a commercial permit to remove water may be submitted to the City of Abbeville, S.C.. The City will deny the application if it appears to conflict with public interest. If not, it will be forwarded to FERC for approval if required. The City will not endorse such applications. The City will impose limits in granting permits for approved applications. The applicant will be required to compensate the City of Abbeville, S.C. for water withdrawn and to bear the expenses of filing the application. Water removal for residential property must be for irrigation purposes only.

11.2 Application Procedure

A Commercial application to withdraw water from Lake Secession must include a complete description of the purposes for the removal and processes to be used, the volumes to be withdrawn and ultimately to be returned to the project waters, and copies of all required local, state, and federal permits and reports. A fee will be required.

12. EFFLUENT DISCHARGES

12.1 POLICY

The City of Abbeville, S.C. will continue to notify appropriate governmental officials of any unauthorized effluent discharges which are discovered. Anyone found to have an unauthorized discharge source within the project boundary line will be required to remove it.

12.2 INSTALLATION OF SEWAGE PUMPING STATIONS AT MARINAS

Commercial marinas must have facilities to remove effluent wastes from boats pursuant to South Carolina Department of Health and Environmental Control (DHEC) regulations.

13. GOVERNMENTAL CONSENTS

The South Carolina Department of Natural Resources has jurisdiction over navigation, wildlife, and fisheries on Lake Secession. Applications for construction of new docks, boat ramps, excavations, filling, and other encroachments may require evidence of consent from this agency.

DHEC and the U.S. Environmental Protection Agency have jurisdiction over effluent discharges and activities affecting water quality in Lake Secession. Permits and certificates from these agencies may also be required.

Permits or consents from Abbeville or Anderson County governments with jurisdiction over zoning or other land use laws will be required.

14. GENERAL

It is against both state and federal regulations for individuals to spray or treat aquatic growth in the water of Lake Secession without the necessary permits. Report all unauthorized spraying or aquatic weed problems to the Rocky River Dam Superintendent.

Inspection fees do not constitute a charge for admission to Project Lands

The City of Abbeville, S.C. reserves the right to vary the amount of inspection fees.

No vested right or rights enforceable by third parties are created by the City of Abbeville, S.C.'s Policies or Procedures.

Regulations, Orders and Directives of the FERC will take precedence over any City of Abbeville, S.C. Policies or Procedures governing Lake Secession.

Maps of Lake Secession showing public and commercial landings, parks and fishing piers are available free from the Rocky River Dam Superintendent or the City of Abbeville, S.C. PO Box 40. Abbeville, S.C. 29620.

Inquires concerning policies, procedures, applications or regulations as outlined in this plan should be directed to:

Rocky River Dam Superintendent
PO Box 40
Abbeville, S.C. 29620
(864) 446-2685

S O S

Stewards Of Secession

A Voluntary Guide to Preserve and Protect Lake Secession

Associated With The Abbeville Hydroelectric Project
(FERC Project No. 11286)

City of Abbeville, S.C.

May 16, 2001

1. VOLUNTARY SHORELINE STEWARDSHIP PRACTICES

1.1 GENERAL: As partners with the City of Abbeville and adjoining property owners in the custodial care of Lake Secession, owners property owners can voluntarily do many things to help prevent future degradation of Lake Secession water quality. The less we change the shoreline or introduce substances around the shoreline that could get into the water, the better. By designing and planning natural shoreline landscapes, as well as strategies to manage them, we can all work to protect Lake Secession.

1.2 LAWN MAINTENANCE: For many adjoining property owners, lawn maintenance can be labor intensive and costly. Mowing, fertilizing, watering, and controlling weeds can take hours each week and costs can be significant. Property owners can reduce this burden and help save Lake Secession by considering the landscaping of their property. Unused lawn areas can be converted to shrubs, gardens, trees, or meadows. Lawns can be replaced with attractive shrubs and ground covers which require low maintenance.

1.3 WATER USE: Using water wisely on the lawn and along the lake shoreline is also important. Constant watering can lead to pollutant runoff into the lake. Water only during the coolest part of the day and use soaking hoses or drip irrigation which apply water slowly. Use organic mulches, including shredded bark, leaves and wood chips to retain moisture and reduce runoff. Table 1.3.1 on page 3. Is a Summary of Voluntary Actions Adjoining Property Owners can take to help preserve lake water quality.

1.4 WILDLIFE HABITATS: Adjoining property owners can also help to provide and improve wildlife habitats for birds, small mammals, reptiles, amphibians, butterflies and other animals. As development around Lake Secession continues, wildlife habitat is increasing lost. By providing wildlife with its most basic needs, property owners can convert their backyards into small nature preserves. Creating wildlife habitat means providing food, water, shelter, and nesting sites. Many plants produce fruits, nuts, or berries that wildlife need for food. Deciduous and evergreen shrubs and bushes provide excellent cover and nesting sites, and these also create a transition zone between lawns and trees.

2. SHORELINE STABILIZATION

Erosion of the Lake Secession shoreline is a naturally occurring phenomenon resulting from wave action upon the land. All owners of property adjoining the Lake have to expect some amount of shoreline erosion over time and this is consistent with preserving a naturally forested or shrubbed shoreline. Prevention of severe erosion is the responsibility of the owner of the property adjoining the Lake. No shoreline stabilization measures may be placed in the Lake below the 548 foot contour.

3. PROTECTION OF FISH HABITAT

Wetlands and aquatic vegetation are critical for many species of fish and wildlife and are particularly important as a nursery areas for juvenile fish. Protection of aquatic vegetation is one of the most important things that can be done to help maintain a healthy reservoir fishery. Downed trees, lap trees, logs, stumps and brush all create excellent cover for juvenile and adult fish and are places most likely to be inhabited by many important game specifiers.

4. VOLUNTARY FOREST MANAGEMENT PRACTICES.

Lake development, forest management and timber harvesting can have significant impacts on water quality. To Help reduce the potential impacts of timber harvesting and forest management on Lake Secession and its shorelines, the City requests that you consult a representative of the South Carolina Forestry Service when planning any forestry activities. Property owners must abide by all state and federal laws concerning performance standards in Forest Practice Guidelines related to Water Quality (15NCAIJ.0201-.0209) for erosion and sediment control related to logging operations and road construction.

5. IN CONCLUSION.

As a FERC licensee, the City of Abbeville, S.C. manages Lake Secession in accordance with the terms of its license and the applicable rules and regulations of FERC. The City of Abbeville, S.C. takes this stewardship responsibility very seriously and is committed to the protection and enhancement of the lake resources. But the City cannot do it alone. The responsibility for protecting and preserving the Lake must be shared by all who use the Lake and its shorelines. We are all *SOS*, Stewards Of Secession and must work together.

Table 1.3.1

**Voluntary Actions Adjoining Property Owners Can Take
To Help Preserve Lake Water Quality**

Activity	Action
Property Development	Plan your home site to minimize the opportunity of drainage of water from your house, driveway, or lawn directly into the reservoir.
	Establish a building setback and establish or maintain a natural forested buffer between your lawn and the reservoir shoreline, even where not required for eligibility for a private pier or reservoir access.
	Keep clearing of vegetation and creation of lawns to a minimum.
	Install, or be sure that your builder installs, silt fences and other appropriate forms of erosion and sedimentation control on your property to prevent runoff of sediment into the reservoirs.
	Minimize the size of paved driveways and parking areas on your property.
Yard Care	Minimize use of fertilizers, herbicides, and pesticides on your lawn and in your yard.
	Convert unused portions of lawn into gardens, shrubs, trees, or meadows.
	Plant native species and hardy grasses, which require little or no specialized care (see Table 3 in the Shoreline Stewardship Policy).
Boating	Use petroleum products with caution and take steps to prevent them from getting into the water.
	Wash boats away from the water and use biodegradable, non-phosphate detergents.
Household Maintenance	Keep septic systems and drain fields well maintained. Have septic tanks pumped and inspected routinely. Have drain fields inspected, particularly if any odor is observed.
	Wash cars and other vehicles away from the water.
Agricultural Activities	Maintain a forested shoreline buffer.
	Install fencing to keep farm animals out of the reservoirs.
	Institute best-management practices as recommended by the State and USDA for crop and animal production.