

June 2001

## **Coosa Project Issue Sheet**

**CR6 Shoreline Development** – Management and enforcement of shoreline development to protect public safety, access, aesthetics, terrestrial and aquatic habitats, and other resource values.

### Description of the Issue:

Shoreline development such as docks, boat houses, and seawalls is allowed within the project boundary in accordance with APC's shoreline permitting program. In addition, there is private development that occurs directly adjacent to the project boundary that may be adversely affecting water quality due to erosion and non-point source run-off (see issue CE1 and CE2). There is particular concern about recreational lot developments that may not have adequate septic systems and may be discharging into the lake. Concern has been expressed about the enforcement of APC's permit program, including removal and/or repair of boathouses, as well as state enforcement of water quality violations. Concern has also been expressed that some permittees have already restricted public access to project lands and waters through construction of physical barriers (also see CR1). Finally, interest has been expressed in opportunities for increased land conservation to protect sensitive resources in the project study area.

### Specific issues or requests identified include:

- Private development of adjacent lands may be adversely impacting the shoreline.
- Buildings/boathouses in disrepair along the shoreline.
- Need a shoreline management plan to protect fisheries, wildlife, and other resources, including mitigation for the impact of seawalls on fish habitat.
- Need to identify environmentally sensitive project lands and ensure they are not developed.
- Illegal recreational lot development and water quality impacts.
- Impact of increased development on water quality.
- Need to maintain the flexibility to manage project lands in a manner that optimizes the value of the land for recreation, fish and wildlife resources, timber production and development (multiple uses).

### Specific questions and suggestions identified include:

- Define what we want in 50 years – shoreline management plan needed - need more than just permitting program - look at TVA program - help educate public on construction site erosion and shoreline management.
- Address land management plans for islands – what will happen with these lands?
- Acquire/protect islands.
- What are long-range plans for APC properties? - Sale/development?
- Can APC regulate buffer zones, increase the size of buffer zones, and provide landowners monetary incentives for improvements?
- Can APC help control maintenance of boathouses, piers, etc.?
- Can APC have final say in any major construction around lake? - If not what can APC do about construction permits, pollution inputs, and water withdrawals?
- Mitigation areas should include both on-site and off-site areas

## Warrior Project Issue Sheet

**WR6 Shoreline Development** – Management and enforcement of shoreline development to protect public safety, access, aesthetics, terrestrial and aquatic habitats, and other resource values.

### Description of Issue:

Shoreline development such as docks, boat houses, and seawalls is allowed within the project boundary in accordance with APC's shoreline permitting program. However, there is concern about the potential visual and access impacts of some current and potential future permitted uses. In addition, there is private development that occurs directly adjacent to the project boundary that may be adversely affecting water quality due to erosion and non-point source run-off (see issue WE1 and WE2). There is also concern that continued private development may preclude future public access to the shoreline. Concern has also been expressed that some permittees have already restricted public access to project lands and waters through construction of physical barriers (also see WR1). The USFS has also expressed concern about demands for private access easements across Public Lands and the impact on personnel resources (also see WR8). Interest has been expressed in opportunities for increased land conservation to protect sensitive resources in the project study area.

### Specific issues or requests identified include:

- Development may foreclose public opportunities.
- Lack of public access on lower lake due to private development.
- Increase shoreline survey and consistency of survey.
- Decline in scenic quality overall due to development
- Impacts of development on visual resources and the quality of recreation opportunities/experiences.
- Visual impact and access impacts due to increased number of structures on the water including docks and boathouses.
- Shoreline development causing excessive erosion.
- Need to maintain the flexibility to manage project lands in a manner that optimizes the value of the land for recreation, fish and wildlife resources, timber production and development (multiple uses).

### Specific questions and suggestions identified include:

- Concern for impact of new development on water quality
- Need for more shoreline surveillance to keep up with development - reduce siltation
- Implement BMPs on development ADEM and APC interaction
- What is APC's permitting program regarding new development?
- How are other state/local agencies involved in relicensing process relative to shoreline development?

## **What is a Shoreline Management Plan**

According to the Federal Energy Regulatory Commission's (FERC) *Guidance for Shoreline Management Planning at Hydropower Projects* a Shoreline Management Plan (SMP) is a "comprehensive plan to manage the multiple resources and uses of the project's shorelines in a manner that is consistent with license requirements and project purposes and addresses the needs of the public." An SMP typically provides guidance on how lands within the project boundary immediately adjacent to the shoreline should be managed to ensure protection of natural resources and continued operation of the project.

The following is a description of what is typically covered in an SMP:

1. An SMP generally begins with a project description and an outline of the planning process. This introduction includes background information on FERC's requirements, a brief history of a licensee's relevant policies and procedures, opportunities for public involvement as well as specific information related to the proposed planning process.
2. The specific goals and objectives of the SMP are usually highlighted in a separate section to emphasize their importance to the overall plan, public outreach, and planning processes.
3. The most important element of an SMP is the overarching and project specific baseline review of shoreline resources including a summary of any studies and assessments, the management of those resources, and a description of existing and proposed shoreline management policies. This resource discussion includes, but is not limited to, land classifications, vegetation management, erosion control measures, and permitting processes.
4. An SMP usually concludes with a review of the plan's main points as well as an implementation structure and schedule. Often appended to the SMP are detailed projects maps as well as definitions and specific descriptions to guarantee clarity in the plan's text.

## **Draft Shoreline Management Plan Outline (annotated)**

*It is assumed that one Shoreline Management Plan would be developed for the Coosa Project (covering all six reservoirs) and one for the Warrior Project (covering Smith reservoir). The following outline was developed to reflect the Coosa system (largely to show how multiple reservoirs could be addressed in one plan). A similar outline would apply to the Warrior Project except that Section 4 would only need to address issues specific to Smith reservoir.*

### **1.0 Introduction**

*Introduce the plan, purpose and contents.*

#### **1.1 Project Description**

*Briefly describe the project, reservoirs covered, basic development patterns, etc.*

#### **1.2 Purpose and Content of the Shoreline Management Plan**

*Briefly state the purpose of the SMP and what it covers, and doesn't cover.*

*Purpose: To guide protection and enhancement of the environmental, scenic, and recreational values, while ensuring the continued safe and reliable production of hydroelectric power at the project.*

*The shoreline management plan will assist in the protection of endangered species, wetlands, aquatic emergent vegetation, naturally vegetated buffers, and other important fish and wildlife habitats within the project boundary. The plan will also assist in the prevention of shoreline erosion, maintenance of water quality, maintenance of fisheries habitat, maintenance of the natural character and aesthetics of the reservoirs.*

*APC manages these lands to serve the greater public interest, providing for recreational access, development of residential and commercial areas, preservation of important wildlife habitat, production of power needs, protection of cultural resources contained within the project boundary, and consideration of the aesthetic resources.*

#### **1.3 Planning Process**

*Describe how the plan was developed, who was involved, etc.*

#### **1.4 Plan Organization**

*Describe the organization of the plan.*

## **2.0 Goals and Objectives**

*List goals and objectives for shoreline management.*

*Overall goal: To balance shoreline development, recreation use, and resource conservation.*

*Objectives:*

- 1. Provide for public access*
- 2. Protect sensitive fish and wildlife habitat*
- 3. Balance private and public use of the shoreline*
- 4. Protect cultural resources*
- 5. Protect operational needs*

## **3.0 Shoreline Management Policies**

*Characterize existing conditions and outline overarching policies affecting shoreline management of all project reservoirs.*

*Lands within the FERC project boundary (i.e. Project Lands) consist of lands owned by APC in fee title and lands for which APC has acquired a flood easement (but does not own title). APC manages project lands in a very similar manner whether they own the property outright or only own an easement.*

*Project reservoirs consist of storage reservoirs (Smith, Weiss, Neely Henry, Logan Martin) and run-of-river reservoirs (Lay, Mitchell, Jordan). In the case of storage reservoirs, project lands are underwater at full pool and exposed over the season as reservoir water elevations decline. At winter pool levels (typically the lowest water levels) there can be considerable shoreline lands exposed. In the case of run-of-river reservoirs, water elevations may fluctuate daily, but not seasonally and project lands typically consist of a very narrow strip of property around the reservoir.*

### **3.1 Land Classification System**

*Describe classification system and provide definitions*

#### ***Draft Land Management Use Classification Zones and Definitions***

***Zone 1) APC Project Operations: All APC project lands used for APC operations. This includes land used for APC generation facilities, switchyards, transmission facilities, right-of-way areas, and other associated activities.***

**Zone 2) Developed Recreation:** Project lands managed for concentrated, active recreational activities. This includes land that is currently developed for commercial recreation, public recreation, open space, and water access, as well as lands that may be reserved for future developed recreation.

**Zone 3) Industrial/Commercial:** Project lands that are managed for economic development purposes. This includes industrial facilities, business parks and industrial water access (intakes, discharges, barge terminals, etc.).

**Zone 4) Residential:** Project lands where private waterfront residential property exists. This includes residential docks, piers, ramps, boathouses, water intakes, marine rails, etc., paths, steps, picnic areas, utility lines, areas with shoreline stabilization.

**Zone 5) Sensitive Resources:** Project lands managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by APC, include resources protected by the state or federal law or executive order, and other natural features that APC considers important to the area or natural environment. This includes archaeological resources, sites/structures listed on or eligible for listing on the National Register of Historic Places, wetlands, floodplains, Project lands under easement, lease, or license to other agencies/individuals for resource protection purposes, APC land abutting land owned by other agencies/individuals for resource protection reasons, RTE habitat protection areas, significant scenic areas, other sensitive ecological areas.

**Zone 6) National Forest Service Lands:** Project lands that directly abut National Forest Lands or are within the National Forest administrative boundary.

**Zone 7) Forest Management/Undeveloped:** Project lands that are being managed for timber and pulp production.

**Zone 8) Agricultural Land:** Project lands that are being managed for agricultural use

### **3.2 Vegetation Management**

*Present policies regarding vegetation management within the project boundary.*

### **3.3 Erosion Control**

*Present policies regarding control of shoreline erosion within the project boundary, including guidelines on shoreline stabilization structures as applicable.*

### 3.4 Alabama Power Company's Permitting Process

*The FERC is responsible for issuing licenses for the construction, operation, and maintenance of non-federal hydropower projects. Alabama Power Company (APC), as Licensee, is responsible for operating and maintaining its FERC-licensed projects in accordance with the license requirements and project purposes (i.e., power generation, public recreation, environmental protection, aesthetic values, etc.). Consistent with these license responsibilities, a Licensee may authorize specific uses and occupancies of the project reservoir shoreline that are not related to hydroelectric power production or other project purposes. These land and water uses are typically referred to as "non-project uses".*

*An article in our licenses, referred to as the Standard Land Use article, allows APC to grant permission for specific and limited types of use and occupancies of project lands and waters without prior Commission approval, or with certain Commission notification requirements. For any requests for a non-project use that do not meet the specific criteria in the Standard Land Use article, the Licensee must obtain **prior** Commission approval before giving authority for the specific use. Whether the non-project use is approved under the Standard Land Use article or through prior Commission approval, the Licensee 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. The licensee has a continuing responsibility under the license articles to supervise and control the use and occupancies for which it seeks or grants permission and to ensure compliance with the permits and instruments of conveyance that it executed either through Commission approval or under the Standard Land Use article in the license.*

*The Standard Land Use article has three distinct levels of use of project lands that necessitate different degrees of review and processing. Paragraph B uses, as they are referred to, typically involve relatively routine types of activity by individuals, such as non-commercial piers, boat docks, retaining walls and landscape plantings. FERC has delegated the authority to review and approve these types of uses to APC, which is handled by APC's Corporate Real Estate Department and its surveillance contractors on each of the reservoirs.*

*Paragraph C uses involve the conveyance of an easement, right-of-way, or lease and include uses such as replacement or maintenance of bridges and roads, storm drains and water mains, telephone, gas and electric distribution lines, minor access roads and other similar activities. These requests require consultation with the appropriate State and Federal agencies, and can ultimately be approved by APC after its review is complete. FERC requires that APC submit an annual report to the FERC*

*describing each of the conveyances made during the year under this paragraph.*

*Paragraph D uses (known as 45-day letter) involve the conveyance of fee title, easement or right-of-ways and leases and include more substantial activities such as the construction of new roads and bridges, sewer lines that discharge in to project waters, marinas and other similar uses. These requests also require review by APC and consultation with the appropriate State and Federal agencies, but must also be submitted to the FERC. Unless the FERC, within 45 days from the filing date, requires that an application for prior approval be submitted, the use is considered approved and can be conveyed.*

*As stated earlier, for any requests for a non-project use that do not meet the specific criteria in the Standard Land Use article, APC must obtain **prior** FERC approval before giving authority for the specific use.*

#### **4.0 Reservoir Specific Issues**

*Briefly discuss characteristics of each reservoir and any unique shoreline management issues/policies.*

- 4.1 Weiss
- 4.2 Neely Henry
- 4.3 Logan Martin
- 4.4 Lay
- 4.5 Mitchell
- 4.6 Jordan

#### **5.0 Implementation and Review**

*Discuss how the plan will be implemented and describe any relevant review and plan update procedures.*

**Appendix A** - Definition of Terms

**Appendix B** - Reservoir Maps/Classifications

**Appendix C** - Detailed Permit Guidelines

**APPENDIX A  
DEFINITION OF TERMS**

Biostabilization	Use of vegetative planting to control erosion.
Boathouse	A floating, roofed structure with open sides designed for permanent or temporary watercraft storage.
Boatslip	An unroofed structure confined by three sides used for temporary or permanent storage and/or mooring of a watercraft.
Buffer Zone	
Commercial Facilities	Facilities related to the operation of a marina or restaurant such as boat storage, fuel dispensing, and provisions for food services.
Conservation	A process or program designed to increase the efficiency of energy and water use, production, or distribution.
Conservation Easement	Land use conditions used as an alternative to land purchases to provide public benefits.
Cultural resources	Includes items, structures, etc. of historical, archaeological, or architectural significance.
Dock	A facility located on the reservoir which is designed to accommodate the parking and/or in water storage of watercraft.
Drawdown	The distance the water surface of a reservoir is lowered from a given elevation as the result of releasing water.
Dredging	The term "dredged material" means material that is excavated or dredged from waters of the United States as defined by the Code of Federal Regulations [33 CFR 323.2(c) and as permitted by appropriate federal and state agencies.
Easement	A non-possessing interest held by one party in the land of a second party whereby the first party is accorded partial use of the land for a specific purpose with certain specified restrictions.
Emergent aquatic vegetation	Plants rooted in substrate covered by shallow water (of up to 6.6 ft depth), with most of the parts out of the water.
Emergent wetland	Wetlands dominated by erect, rooted herbaceous plants.

Excavation	Removal of soil or rock material from within the FERC boundary.
Fish-habitat improvement structures	Structure such as brush or rock piles, log cribs, spawning benches, stake beds, and/or natural vegetation used to improve fish habitat.
Habitat	The locality or external environment in which a plant or animal normally lives and grows.
License	FERC authorization to construct a new project or continue operating and existing project. The license contains the operating conditions for a term of 30 to 50 years.
Littoral	Associated with shallow (shoreline area) water (e.g., the littoral zone of an impoundment).
Maximum drawdown elevation	The lowest surface elevation to which a reservoir can be lowered and still maintain generation capability. This is usually somewhat lower than the minimum operating elevation.
Maximum normal operating elevation	The maximum surface elevation to which the reservoir can be raised without surcharging or exceeding the license provisions.
Minimum normal operating elevation	The lowest elevation to which a reservoir is normally lowered during power generation operations. Below this point power output and generation efficiency is significantly impacted.
Normal operating elevation	The reservoir elevation approximating an average surface elevation at which a reservoir is kept.
Normal operating elevation range	The elevation difference between the normal maximum and normal minimum operating elevations.
Nutrient loading	The addition of nutrients such as phosphorus or nitrogen from various sources in a watershed.
Palustrine emergent wetland	Contains rooted herbaceous vegetation that extend above the water surface ( <i>i.e.</i> , cattails, sedges)
Palustrine forested wetland	Dominated by woody vegetation less than 20 ft tall ( <i>i.e.</i> , willows, dogwood)
Palustrine scrub/shrub wetlands	Comprised of woody vegetation that is 20 ft tall or greater ( <i>i.e.</i> , American elm, swamp white oak).
Probable Maximum Flood (PMF)	A statistical formula used to calculate a hypothetical flood event that could occur on a particular river basin over a particular duration. This is derived from the probable maximum precipitation over time.

Project area	APC lands and waters within the project boundary.
Project boundary	A line established by the FERC to enclose the lands, waters and structures needed to operate a licensed hydroelectric project.
Project Lands	Lands within the FERC project boundary.
Project vicinity	Lands and waters within which studies were conducted for baseline environmental data. These lands and waters include the Project area.
Riparian area	A specialized form of wetland with characteristic vegetation restricted to areas along, adjacent to or contiguous with rivers and streams. Also, periodically flooded lake and reservoir shore areas, as well as lakes with stable water.
Rip-rap	Large crushed stone (8-10 inches or greater in diameter) used for bank stabilization.
Run-of-river	A term used to describe the operation of a hydroelectric project in which the quantity of water discharged from the project essentially equals the flow in the river.
Slough	Backwater area of a reservoir.
Standard Land Use Article	Standard FERC license article that authorizes a FERC licensee to manage and permit activities occurring on project lands.
Submerged aquatic vegetation	Plants with rigid stems and/or leaves rooted in substrate and generally covered by deep water (greater than 6.6 ft depth), with all of the plant parts covered by water.
Vegetative Buffer	Plant life, such as natural vegetation, in a sufficient amount to prohibit erosion in the designated buffer zone.
Wetlands	Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must have the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes; 2) the substrate is predominantly undrained hydric soil; 3) the substrate is on soil and is saturated with water or covered by shallow water at some time during the growing season of each year.