

ALABAMA POWER COMPANY

COOSA AND WARRIOR RIVER PROJECTS
(FERC NOS. 2146, 82, 618 AND 2165)

PUBLIC EDUCATION AND OUTREACH PROGRAMS

DRAFT
JULY 2005

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

ALABAMA POWER COMPANY

COOSA AND WARRIOR RIVER PROJECTS
(FERC NOS. 2146, 82, 618 AND 2165)

PUBLIC EDUCATION AND OUTREACH PROGRAMS

DRAFT
JULY 2005

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

ALABAMA POWER COMPANY

**COOSA AND WARRIOR RIVER PROJECTS
(FERC NOS. 2146, 82, 618 and 2165)**

PUBLIC EDUCATION AND OUTREACH PROGRAMS

**Draft
July 2005**

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PUBLIC OUTREACH ACTIVITIES.....	2
2.1	APC’s Public Education and Outreach Activities	2
2.2	Other Public Education and Outreach Programs	4
3.0	RESOLUTION OF ISSUES RAISED DURING ISSUE IDENTIFICATION WORKSHOPS	5
4.0	NEW PUBLIC OUTREACH AND EDUCATIONAL PROGRAMS	6
4.1	The Value of Wetlands	6
4.2	Best Management Practices for Shoreline Development.....	7
5.0	WHO TO CALL FOR MORE INFORMATION.....	8

LIST OF APPENDICES

APPENDIX A: ISSUE SUMMARY AND RESOLUTION OF TOPICS RAISED DURING
ISSUE IDENTIFICATION WORKSHOPS

APPENDIX B: WADING THROUGH THE WETLANDS

APPENDIX C: SHORELINE MANAGEMENT PLAN PUBLIC EDUCATION AND
OUTREACH

ALABAMA POWER COMPANY

COOSA AND WARRIOR RIVER PROJECTS (FERC NOS. 2146, 82, 618 and 2165)

PUBLIC EDUCATION AND OUTREACH PROGRAMS

Draft
July 2005

1.0 INTRODUCTION

Alabama Power Company (APC) operates ten hydroelectric developments on the Coosa and Warrior Rivers, Alabama, under five licenses issued by the Federal Energy Regulatory Commission (FERC). Four licenses (nine developments) are the subject of this document, including: the Coosa River Project (FERC No. 2146), located on the Coosa river, which includes the Weiss, Neely Henry, Logan Martin, Lay, and Bouldin developments; the Mitchell (FERC No. 82) and Jordan (FERC No. 618) Projects on the Coosa River; and the Warrior River Project (FERC No. 2165), located on the Warrior River, which includes the Smith and Bankhead developments. Throughout this document, these hydro developments are collectively referred to as the “Projects”.

APC utilized a cooperative approach to relicensing the Projects, promoting the participation of stakeholders in the process to facilitate identification and resolution of resource issues at the local level. A detailed description of the cooperative approach is provided in APC’s Final License Applications and Applicant Prepared Environmental Assessments (APEAs) for the Projects, filed with FERC in July of 2005.

The purpose of this document is:

- 1) to identify existing public outreach and educational activities relating to natural resources management;
- 2) to document how information requests received from public workshops were addressed; and
- 3) to provide detail on two public outreach / educational programs that APC committed to undertake during the new license term for wetland education and shoreline management and permitting.

2.0 PUBLIC OUTREACH ACTIVITIES

Many companies, agencies, universities and organizations engage in public outreach and education activities resulting in large volumes of material and services designed to educate the public on good resource stewardship. While APC's outreach activities typically focus on resources related to the Projects, the programs and services provided by agencies, universities, and associations tend to target larger geographic areas and broader audiences. All provide services or materials that seek to benefit our natural resources, help educate the public about those resources, and to guide the use and management of these resources. The sections below discuss the types of activities that APC and other organizations provide for these purposes.

2.1 APC's Public Education and Outreach Activities

APC has an active public education and outreach program. A few of the ongoing outreach activities and mediums are discussed below.

A primary means of distributing information to the public is APC's website. The website is regularly maintained and provides information regarding its hydroelectric projects, ongoing public activities, educational material, and links to its parent corporation, Southern Company, which provides additional informational and educational resources. Reports, meeting minutes, maps, and other documents produced during relicensing efforts are posted on the website and available for public viewing.

The Shorelines newsletter currently has a circulation of 20,000 and continues to grow. *Shorelines* is used as an outreach tool to describe ongoing activities around the lakes and to provide information to homeowners and the general public of upcoming events. Every issue contains notices to property owners regarding the need to consult with APC for permits relating to shoreline construction and landscaping. *Shorelines* is posted on APC's website and is sent to all shoreline property owners through the mail.

APC participates in the annual Birmingham Sport and Boat Show, distributes educational materials, and talks one on one with interested parties.

APC also educates the public by advertising in local lakeside magazines, newspapers, on the Internet and through the distribution of information to establishments around the lakes.

APC holds annual information meetings with local contractors to ensure they are aware of notification and permit requirements prior to

APC participates in many different outreach activities and provides a large volume of educational materials, including:

- * Presentations at boat shows
- * Habitat for Humanity
- * Earth Cents
- * Energy Outsourcing
- * Christmas Tree Recycling Program
- * Nozoner Program
- * Exceptional Anglers Fishing Tournaments
- * Tallapoosa Trapshoot
- * Catch and Selective Release Program
- * 1-800-LAKES11
- * Hydro 101 Computer Based Training
- * Hydro Video
- * Recreation Maps
- * 101 Energy Saving Ideas
- * Energy Bowl
- * *Shorelines*
- * Our Rivers
- * Clean Water Partnership
- * The Water Course
- * Science Suitcase
- * Energizers
- * New Teacher Assistance Grants
- * Alabama Power Service Organization
- * Urban and Community Tree Assistance Program
- * Black Belt Youth Initiative

starting any construction work and makes presentations to local organizations on an as-requested basis. APC also participates in many ad hoc meetings to discuss notification and permit requirements for various homeowner and boat owner groups, boards of realtors, and home builders associations, just to name a few.

The Reservoir Information System (1-800-LAKES11) also provides a source of information about APC's Lake Shore Use Permitting Program, the Renew Our Rivers Program, Generation Schedules, River Stages, NPDES Permits, Aquatic Weed Control, and Sail Boat Safety.

The Alabama Power Foundation (Foundation) is an arm of APC that provides support and funding for literally thousands of worthy projects throughout the state. The Foundation was created to provide a meaningful way to invest in the future of Alabama and its citizens. It is now one of the largest corporate foundations in the nation. Its mission is to improve the quality of life of Alabamians and to strengthen the communities in which they live. Some of the areas the Foundation supports include:

Education

Every year APC seeks new ways to help improve education in Alabama by supporting innovative programs and assisting teachers in their crucial responsibilities.

Communities

APC believes that an informed and active population is key to a vibrant community. The Alabama Power Foundation prepares communities for economic development through its support of museums, neighborhood revitalization projects and historic restorations — projects that can spur additional private investment in underserved and underutilized communities. APC encourages the diversity of our communities by supporting a wide range of programs that represent the multicultural population of our state.

Arts and culture

Lives are enriched through arts and humanities. The Foundation partners with local leaders to make visual and performing arts more accessible, to support libraries and to encourage greater understanding about the importance of culture to communities.

Environment

Protecting and expanding awareness about Alabama's unique and fragile environment is a major component of the Foundation's mission. APC supports a variety of environmental and educational initiatives involving schools, organizations and communities.

The Water Course in Clanton, Alabama uses hands-on exhibits and displays to make learning fun. The purpose of the Water Course is to increase understanding of water-related environmental issues and teach visitors of all ages what they can do to protect the environment. Interactive exhibits and displays feature, hydroelectric generation, Alabama's river systems, water quality and environmental issues, water conservation, fish and plant life in Alabama's rivers, recreational opportunities and water safety and, timber management.

APC supports the Alabama Black Belt Environmental Art and Science Youth Initiative, which is affiliated with the national Library of Congress Center for the Book affiliated River of Words environmental art and poetry pilot program at Black Freedmen's Living Historical Farm for Children, with Wilcox County, AL, schools. The project's goal is to make a strong and

meaningful connection between people, community, and natural resources in Alabama's Black Belt, beginning with a pilot program in Wilcox County schools (other Black Belt sites will be developed as the project is expanded beyond the pilot program year). It will deepen knowledge, appreciation, and understanding of the cultural and natural resources of this disadvantaged region of the state by 1) utilizing a unique living historical facility, the Black Freedmen's Living Historical Farm for Children, Inc., and 2) broadening appreciation of the natural environment by using visual and literary arts to learn about and explore the environment, with special focus on forests and watershed awareness.

Finally, and importantly, APC staff are all members of the local community and many participate in community outreach activities, such as the annual Renew Our Rivers program.

2.2 Other Public Education and Outreach Programs

Many different agencies, universities and organizations support public education and outreach activities to support good decision-making in resource utilization and management. APC has compiled a list below that identifies some of the various agencies and organizations that provide outreach and educational materials and services, and in some cases, grant monies. *This list is far from complete* – many other sources exist, including in neighboring states and across the country that may provide useful information and/or educational materials. It is impracticable to try and list them all, and sources are continually changing; however, the information below is sufficient to get a person started in learning more about management of our natural resources.

Topic areas addressed by these organizations include a broad range of subjects such as: boating safety for adults and children; community development and best management practices; landscaping and agricultural best management practices; watershed and wetland management and protection; lesson plans and materials for the classroom; fishing; nonpoint source pollution and water quality management. Persons interested in additional information from these sources are encouraged to contact the following agencies and browse their websites. The information and resources provided by these agencies and organizations are frequently free and downloadable from their websites. Information available is also continually evolving – sources should be consulted frequently in order to remain current.

Alabama Department of Conservation and
Natural Resources – Wildlife and
Freshwater Fisheries
Alabama Department of Conservation and
Natural Resources – Marine Police
Division
Alabama Department of Environmental
Management
Alabama Marine Police
USDA Forest Service
USDA Natural Resources Conservation
Service
National Weather Service
Environmental Protection Agency
US Coast Guard Office of Boating Safety

US Army Corps of Engineers National
Water Safety Program
US Fish and Wildlife Service
American Red Cross
Alabama Cooperative Extension Service
Alabama Legacy
Recreational Boating and Fishing
Foundation
National Water Safety Congress
National Safe Boating Council
Safe Boating Campaign
North American Lake Management Society

3.0 RESOLUTION OF ISSUES RAISED DURING ISSUE IDENTIFICATION WORKSHOPS

In 2000 as part of the relicensing efforts, APC conducted Issue Identification Workshops to identify issues of interest and/or concern to the public. Results of the workshops and subsequent relicensing activities revealed that while there are many members of the public who are well informed and educated about the Projects, their operations and management of associated natural resources, there are also people who desire additional information and have a perception that APC should undertake efforts to educate them. In some cases, additional information was provided during the course or studies conducted during relicensing and subsequent proposal development. In other cases, it was determined that information about the requested topic existed, either from APC or from another source, but that some direction was needed to show people where to obtain additional information. In two cases, APC offered to provide long term public outreach and educational programs.

All information requests were grouped in like categories and were addressed by APC. Stakeholders requested that APC provide information on its management of the project and the natural resources associated with the Projects, as well as to provide the public with information regarding its role in management and where the public can obtain additional information. Information requests were categorized into eleven different resource areas:

- 1) Aquatic Vegetation
- 2) Fisheries
- 3) Invasive Species
- 4) Recreation and Public Safety
- 5) Shoreline and Land Use Management
- 6) Threatened and Endangered Species
- 7) Water Quality
- 8) Wetlands
- 9) Project Operations
- 10) Water Withdrawals and Toxins
- 11) Miscellaneous

The requests submitted during the Issue Identification Workshops, and a description of how they were resolved is summarized in Appendix A.

4.0 NEW PUBLIC OUTREACH AND EDUCATIONAL PROGRAMS

Stakeholders requested that APC participate in public education and outreach programs addressing the value of wetlands and best management practices for shoreline development.

Wetlands are unique land types that are considered separately by most shoreland zoning and permitting programs, and this is the case for wetlands on APC properties or those associated with APC's projects. Although an outline of each new outreach program is presented here, there is much overlap between the two with respect to understanding the values of wetlands and the need to manage their use, development, and nearby disturbances.

4.1 The Value of Wetlands

There are thousands of acres of wetlands located at or adjacent to the Coosa and Warrior developments. There are several wetlands identification and classification systems that are used by natural resource managers; however the systems most predominantly used by hydroelectric licensees are those administered by the USACE and the USFWS. In support of relicensing, APC prepared the Warrior / Coosa Relicensing Project E-12 Wetlands Issue Report, which describes these classification systems and the various regulations that pertain to wetland management. The report also explains the functional value of wetlands, including the role they serve as water storage basins, as purification systems, wildlife habitat, and as areas of recreational and educational opportunities. This report and the Coosa and the Coosa and Warrior Projects' APEAs provide detailed descriptions of the types of wetlands found at the projects.

APC reviewed and collected wetlands data from various sources and consolidated the information into a database. The database has been shared with Alabama's Department of Environmental Management's Clean Water Partnership program, and will be used in the future as a tool for administering APC's Shoreline Management Plans. Areas that are mapped as wetlands in the database have been designated as Sensitive Resource Lands: proposed development within this designation will require an environmental review by APC's Environmental Affairs Department before a permit may be issued.

In addition to these actions, APC has developed a wetlands outreach program, which it has titled **Wading Through the Wetlands**. The program was designed in cooperation with interested stakeholders to target shoreline property owners. It is designed as an ongoing program, with the permanent goals being:

- 1) To generate public awareness about the importance of wetlands at APC projects;
- 2) To increase involvement of shoreline residents in protecting, preserving and restoring wetlands.

The program was designed following the EPA's guide for conducting watershed outreach campaigns. Details for **Wading Through the Wetlands** are provided in Appendix B. The program will be managed by APC in cooperation with interested stakeholders for the life of the Projects' licenses.

Wetlands are valued by many different people and in many different ways. Some people focus on scientific values, while others may focus on aesthetics. Still others may focus on the recreational values they offer for bird watching, canoeing or even waterfowl hunting. This

program strives to provide a reasonably well-rounded approach to educating shoreline residents to all the various values of wetlands in a non technical manner in order to better make the message reach the target audience.

Program objectives that were identified to help achieve the goals of the program are revisited periodically and revised as necessary to grow the program and ensure that the work of the program is still serving the primary goals outlined above. Information regarding the program and its activities will be maintained on APC's website for public use.

4.2 Best Management Practices for Shoreline Development

APC is charged by FERC with the management of approximately 1,750 miles of shoreline and 82,700 acres of land on the Coosa River Project, and another 500 miles of shoreline and 5,750 acres of land on the Warrior River Project. This includes a responsibility to oversee, manage and permit development, construction, and landscaping activities occurring on all project lands within the FERC boundaries of these projects. This includes lands owned by APC in fee title and those lands for which APC holds flood easements.

During relicensing, APC was asked to educate shoreline residents regarding permitting needs and best management practices. To do this, APC has developed Shoreline Management Plans (SMPs) for both the Coosa and Warrior River Projects. The SMPs will be available for public use on APC's website, and will also be provided at APC offices for public viewing.

APC has also developed a public outreach and education program as a companion piece to implementing the SMPs and promoting its shoreline management practices. The public outreach and education function provides detailed information on permit guidelines, best management practices, sample permit applications, contact information and other useful links and related information. This program is designed to target homeowners, contractors, realtors and state and federal resource agencies. This program is included in the SMPs for both Projects, and is replicated here in Appendix C.

5.0 WHO TO CALL FOR MORE INFORMATION

If you would like more information on any of these topics, please call 1-800-LAKES11 or visit our [website](#).

APPENDIX A

ISSUE SUMMARY AND RESOLUTION OF TOPICS RAISED DURING ISSUE IDENTIFICATION WORKSHOPS

ALABAMA POWER COMPANY

**COOSA AND WARRIOR RIVER PROJECTS
(FERC NOs. 2146, 618, 82 and 2165)**

ISSUE SUMMARY AND RESOLUTION OF TOPICS RAISED DURING ISSUE IDENTIFICATION WORKSHOPS

This list is comprehensive in addressing stakeholder comments received during the Issue Identification Workshops. Requests received during other relicensing forums are not addressed here. Additional information regarding APC proposal may be found in individual study reports and APC’s APEAs for the Coosa and Warrior River Projects.

Summary of the Issue	Existing Information and Outreach Efforts by APC and Others
<p>During the Issue Identification Workshops, APC was asked to provide educational materials and/or opportunities to teach the public about aquatic plant management, and to identify advantages and disadvantages of various aquatic plant species, including exotic invasive species such as the water hyacinth and milfoil.</p>	<p style="text-align: center;">AQUATIC VEGETATION</p> <p>Nuisance aquatic vegetation found at the Coosa and Warrior River Projects is managed by APC in accordance with all applicable local, state, and federal regulations and in cooperation with ADCNR.</p> <p>Aquatic vegetation can provide both positive and negative impacts to a water system and to the recreational use of that system. APC manages aquatic plant species in compliance with all local, state and federal laws and regulations. In general, aquatic plant management is left in its natural state unless the vegetation</p> <ul style="list-style-type: none">○ Creates a potential public health hazard by providing mosquito breeding habitat;○ Poses a threat to power generation facilities or water withdrawal structures;○ Restricts recreational use of the reservoir; and/or○ Poses a threat to the ecological balance of the reservoir. <p>Types of nuisance aquatic vegetation that may be managed includes emergent, submersed, marginal and floating. APC’s aquatic plant management program is directed toward, but not limited to, exotic species listed in the Alabama Nonindigenous Aquatic Plant Control Act.</p> <p>The extent of assistance to homeowners or corrective action initiated by APC is determined by need and whether the vegetation meets the criteria listed above. Questions regarding APC’s aquatic plant management or requests for assistance may be directed to Environmental Affairs, Vector and Aquatic Plant Management at 1-800-Lakes-11.</p>

Summary of the Issue

Comments received during the Issue Identification Workshops included topics related to fisheries management and recreational fishing. Fisheries management issues are addressed in this section; issues related to recreational fishing are addressed under Recreation and Public Safety.

The following fisheries management issues were raised during the Workshops:

Fisheries Habitat

- Will APC continue the Christmas tree program, designed to enhance fish habitat, either by itself or through partnering with others on future efforts? Will the current fish habitat program be enhanced?

Anadromous Fish Passage and Restoration

- Upstream fish passage – how feasible are fish ladders for anadromous fish species?
- How does anadromous fish restoration affect fish species in the reservoirs?

Impacts of Project Operations and Aquatic Vegetation on Trout

- Do the siltation and vegetation issues impact the trout fishery?
- How does vegetation impact the trout fishery?
- Current operations maintain a cold water fishery. Is this natural?

Existing Information and Outreach Efforts by APC and Others

As part of relicensing, APC prepared an issue report that outlines APC's efforts to identify and control undesirable aquatic plant species within the project boundaries. A complete copy of the issue report, titled "[E7 Exotic Species & Aquatic Plant Management Program](#)", is available on APC's relicensing website. APC will continue management of nuisance aquatic vegetation as outlined in E7 Exotic Species & Aquatic Plant Management Program.

A variety of public agencies and nonprofit organizations produce educational material relating to aquatic plants specific to Alabama. Alabama's Department of Conservation and Natural Resources (ACDNR) provides information on its [website](#) as a component of its public education efforts. The ACDNR authors [Outdoor Alabama Magazine](#), through which it publishes educational information, including articles relating to aquatic plant species. Likewise, Alabama's [Cooperative Extension System](#) provides educational material to the public to aid in the identification and management of aquatic plant species.

FISHERIES

Fisheries management issues and studies constitute a significant portion of APC's relicensing activities on the Coosa and Warrior River Projects. Topics included fisheries habitat, fish passage and restoration, and impacts of project operations and aquatic vegetation on trout. Information on other topics discussed can be found at APC's website or in APC's Applicant Prepared Environmental Assessments (APEAs) for the Coosa and Warrior River Projects.

Fisheries Habitat

APC currently participates in a variety of activities designed to enhance fisheries habitat:

[Christmas Tree Program](#). APC partners with ACDNR in a voluntary program of installing Christmas tree clusters in all of its Coosa and Warrior development reservoirs. Under this program, APC collects donated Christmas trees, ties them into bundles with concrete blocks and sinks them in areas of the reservoirs that lack suspended aquatic habitat. The tree bundles provide cover for fish and other organisms and serve as a refuge to protect juvenile fish from predators. These structures can also congregate fish, providing favored fishing areas for anglers.

Since 1993, the company has converted more than 45,000 used Christmas trees into about 2,000 fish habitat sites, where fishermen have an increased chance of finding a school of bass or crappie. The submerged, decomposing trees release nutrients that boost microorganisms at the bottom of the food chain. While small fish hide around the trees to avoid being eaten, they also attract the larger fish that anglers hope to catch. For habitat

locations installed by APC through 2003, see www.alabamapower.com/hydro.

Lake Level Stabilization. APC also works with ACDNR to stabilize lake levels on Weiss and Logan Martin Reservoirs during the spring. At the request of the ACDNR, APC adjusts operations at the lakes to minimize water level fluctuations during the peak spawning period for crappie and black bass. This program potentially increases the spawning and recruitment of these species by guarding against nest desiccation and desertion. APC also proposes to reduce winter draw-downs on three Coosa River developments, thereby providing enhanced fisheries habitat during the summer months.

Seeding Exposed Shoreline. APC currently undertakes a voluntary seeding program on Weiss. Under this program, APC seeds exposed shoreline areas, usually using cereal rye, at a rate of 50 to 100 lbs per acre during the winter drawdown, usually between September and November. The resulting vegetation provides habitat for small aquatic organisms and serves as spawning and nursery habitat for fish when the littoral zone is flooded in the spring.

In addition to the voluntary programs in which APC already participates, APC proposes to undertake new activities that that will enhance fisheries habitat. Proposed activities under the new operating licenses are provided below. Additional details on these proposals are provided in APC's Coosa and Warrior Project's APEAs.

Fisheries Habitat

Through relicensing, APC has proposed to undertake several new measures designed to enhance fish habitat at the Projects, as well as to continue participating in existing activities. The following activities will occur during the period of the new license:

- APC proposes to continue its voluntary participation with the ADCNR in the Christmas tree program and lake stabilization efforts on Weiss and Logan Martin.
- APC proposes to continue its participation in voluntary shoreline seeding program on Weiss.
- Rule curve changes at Weiss, Henry and Logan Martin developments would reduce the amount of the winter drawdowns. This change would result in higher winter pool levels, which have been associated with an increase in crappie spawning success.
- The Adaptive Management Plan was developed for managing and evaluating flows in the Weiss bypass. This plan will be implemented under the new license, and is expected to result in a range of flow velocities and water depths that should support and enhance riverine species of fish, mussels and macroinvertebrates.

Summary of the Issue **Existing Information and Outreach Efforts by APC and Others**

- APC proposes to establish a Habitat Enhancement Restoration Fund that will provide funding for a culture facility to propagate threatened and endangered species and species of concern in Alabama, and will provide funding for fishery habitat enhancements within the Coosa Basin. Habitat enhancements will be identified and implemented by the ADCNR to provide the most beneficial enhancements for the resource.
- APC proposes to supplement leakage at the Smith Development to provide a minimum continuous flow to enhance the downstream trout fishery. In addition, instream habitat enhancements (such as log bundles, rock gabions, etc.) will be installed downstream to serve as a refuge for trout during periods of high velocity flows. APC will also assist ACDNR with its trout stocking program at the Smith Development.

INVASIVE SPECIES

Only one issue regarding APC’s approach to managing invasive species was raised during the Issue Identification Workshops. Stakeholders requested APC to identify actions that they (APC) could take to control invasive species.

The term “invasive species” may include both native and exotic species as well as both plants and animals; they may be aquatic and terrestrial. APC actively works to manage and control aquatic plants, mosquitoes, and zebra mussels that are considered “nuisance” species within the project boundaries, according to the public health laws of Alabama, the regulations of the Federal Energy Regulatory Commission, and APC’s commitment to the public health and welfare of Alabama. For additional information regarding aquatic plant management, please refer to the Section on Aquatic Vegetation. Additional information regarding management of zebra mussels and mosquitoes is provided in [E7 Exotic Species & Aquatic Plant Management Program](#), which is available on APC’s relicensing website.

Questions regarding APC’s invasive species management or requests for assistance may be directed to Environmental Affairs, Vector and Aquatic Plant Management at 1-800-Lakes-11.

APC proposes to continue managing nuisance species within the project boundaries as outlined in the management plans, described in [E7 Exotic Species & Aquatic Plant Management Program](#).

RECREATION AND PUBLIC SAFETY

Several issues regarding recreation and public safety were identified in the Issue Identification Workshops. All of the public safety topics that were raised related in some manner to recreation activities, enforcement of regulations, or provision of information. As a result, these two categories of information needs are combined

Signage and public information

APC maintains signage at many of its public recreation sites to alert users of the opportunities available. In addition, APC maintains maps of all recreation areas on its

Summary of the Issue

here and addressed collectively.

Comments from the Issue Identification Workshops related to recreational fishing at the Project are addressed in this section; issues related to fisheries management are addressed under Fisheries.

Recreation and public safety issues and/or requests that were raised during the workshops included:

Signage and public information

- Provide educational signage and/or bulletin boards at all shoreline access sites, regardless of site ownership. Signage should be used to disseminate information regarding safety, GPS coordinates and other pertinent on-site information.
- Post all public access areas with current fish consumption advisories.
- Provide better directional signs for public areas, and should coordinate these efforts with the Department of Conservation's new signage program.
- Revise existing maps of recreation sites to identify pump-out stations.

Boater and boating management

- Establish and enforce boater speed limits.
- Establish a dynamic means of managing boating traffic and future increases in boating traffic.
- Establish a means of managing boater behavior (rather than the number of boats) through education of boaters.
- Support Coast Guard Auxiliary volunteer groups to help with public safety on the water.
- Establish a training program and operational guidelines for minors operating personal watercraft.
- Address issues relating to conflicts between personal watercraft users and others.
- Enforce existing boating regulations.

Fishing

- Partner with ADCNR to change jug fishing regulations such that they

Existing Information and Outreach Efforts by APC and Others

projects on the relicensing [website](#) and a toll free telephone number that can be used to obtain information of recreation sites and opportunities available at the projects. The telephone number, 1-800-Lakes-11, is also posted on the [website](#). Due to repeated instances of vandalism in some areas, APC does not support signage at all locations. Some signage is posted by the State.

Public fish consumption advisories in Alabama are established by the [Alabama Department of Public Health](#), which issues fish consumption advisories annually. All public postings of advisories are done by the Department of Public Health. APC works with the Department of Public Health to post fish consumption advisories annually at its public boat launches and shoreline fishing areas.

Boater and boating management

Although APC offers water safety tips and a key for identification of lake markers on its website, it is the State of Alabama that has statutory authority to provide public safety on Alabama's waterways. Water safety is administered by the Alabama Department of Conservation and Natural Resources, through the Marine Police Division. This includes issues of boater behavior (speed, safe boating practices, etc, as well as posting buoys, and safety-related signage. The Roberson/Archer Act passed by the Alabama Legislature in 1994 requires boater certification for all operators of motorized vessels in Alabama. The Marine Police offer several different boating courses to support boater knowledge and certification, all of which are described on their website. Additional information on boater certification for Alabama residents is provided by the Marine Police Division on the [website](#) or by calling 1-800-272-7930. They also recommend the following publications for more advanced reading:

- [U. S. Coast Guard's "Navigation Rules"](#)
- Chapman Piloting Seamanship and Boat Handling by Elbert S. Maloney
- [The Annapolis Book of Seamanship](#) by Mark Smith and John Rousmaniere
- [The Wheelhouse Companion](#).

For additional information on boater courses offered by other organizations, please contact any of the following organizations:

- [U. S. Coast Guard Auxiliary](#)
- [U. S. Power Squadrons](#)
- [American Sailing Association](#)
- [U. S. Sailing Association](#)
- [American Red Cross](#)

Summary of the Issue

include the use of tagged jugs.

- Provide fish habitat maps to the public.
- Establish a program of managing fishing tournaments to minimize conflicts between tournament participants and other recreationists, especially with respect to parking, which is monopolized by tournament participants on tournament days. APC could partner with the HOBOS to regulate the number of tournaments scheduled at the Projects, similar to the way the ACOE does.

Public access

- Identify where additional access and/or support facilities are needed and develop cooperative agreements with agencies and organizations to maintain the new development.

Existing Information and Outreach Efforts by APC and Others

Boating rules, regulations and certification information is available from the [ACDNR](#), as are the state fishing regulations. ACDNR also offers community outreach programs by sponsoring fishing events, the outdoor Alabama expo, becoming an outdoors woman workshops, and other activities.

Numerous other agencies and nonprofit organizations support boater and angler training at all age levels. Most of this information can be obtained over the internet. For additional information on educational and outreach efforts targeting safety on the water, please refer to any of the following organizations, all of which sponsor websites with additional information:

- Alabama Conservation and Department of Natural Resources
- Alabama Marine Police
- Recreational Boating and Fishing Foundation
- American Red Cross
- National Water Safety Congress
- Safe Boating Council
- American Canoe Association
- [Army Corps of Engineers](#)
- United States Coast Guard

APC encourages the public to utilize these excellent resources.

Fishing

APC participates in fishing events on a voluntary basis. Fishing regulations are established by ADCNR to comply with its management goals and objectives; APC does not have anything to do with establishing fishing regulations.

Fishing tournaments are typically scheduled by a sponsor in coordination with the ADCNR. Most of the recreation sites that are located on APC property are actually managed by others.

However, fish habitat maps are provided on APC's website – shows where Christmas tree bundles are positions (see Fisheries). Additional fishing programs and/or tournaments are sponsored by the ADCNR, specifically for children, and the USDA sponsors kids fishing derbies.

Public Access

Currently, APC provides numerous recreation sites on the Coosa and Warrior River developments. Maps of all public recreation sites are available on-line, at APC's website. Additional information about recreation opportunities at APC's toll free number 1-800-Lakes 11.

Signage and public information

APC has entered into an agreement with the State to augment the State's capabilities for enhancing boating and recreational safety by administering safety programs and projects on APC's 12 hydroelectric developments in Alabama. The specific programs and projects to be implemented are determined by the Marine Police. APC and the State have entered into this agreement through the year 2007, and have agreed to consider extending it in the future.

In addition, APC will provide appropriate signage at all its recreation sites, in accordance with 18 CFR §8.2 requirements, which require licensees to post all points of public access which they maintain.

APC also proposes to develop recreation plans for each of the Coosa and Warrior developments, which will identify public access sites at each development, and will describe available activities and management prescriptions.

Boater and boating management

As noted above, APC has entered into an agreement with the State to augment the State's capabilities for enhancing boating and recreational safety by administering safety programs and projects on APC's 12 hydroelectric reservoirs in the state. The specific programs and projects to be implemented are determined by the Marine Police. APC and the State have entered into this agreement through the year 2007, and have agreed to consider extending it in the future.

In an effort to keep the public informed, APC will periodically provide articles relating to recreation and safety in Shorelines, a quarterly informational news letter.

Fishing

APC proposes to undertake several programs that relate to recreational fishing, and will also continue to participate in ongoing voluntary programs. APC will undertake several actions to enhance angler opportunities, including enhancing fish habitat creating more public

access sites for bank fishing, and increasing parking capacity and launching capacity at numerous recreation sites in the Projects.

APC is also proposing to change its rule curve on Weiss, Neely Henry and Logan Martin to enhance recreational boating for boaters and anglers.

We recognize that the large participation in fishing tournaments sometimes results in limited parking availability at public boat launches and other access sites on tournament days. APC proposes to expand parking capacity at selected sites. This proposal is based on several factors including tournament-related issues. In addition, recognizing that tournaments can generate a significant economic impact local to a development and the generally positive good will that is promoted, APC has actively decided not to limit access to tournament participants at its recreation sites. However, APC recognizes that this is a growing topic of interest in Alabama and across the country, as use conflicts arise between tournament participants and other recreation site users. APC will continue to communicate with relicensing stakeholders, including the Homeowners Associations, BASS and the Alabama Department of Conservation and Natural Resources to monitor the issue and possible solutions.

Public Access

As part of relicensing efforts, APC undertook extensive studies to identify needs for additional recreation access sites and enhancements. APC will prepare recreation plans for all of its Coosa and Warrior River Project developments, and the plans will identify all new proposals, as well as any cooperating agreements with other agencies or entities for site management.

In addition, APC will post recreation maps on its website, which will be periodically updated. APC will also sponsor the printing of a boater map, and proposes numerous recreation-related enhancements designed to increase public access to project waters, including increases to parking areas to accommodate greater numbers of people.

SHORELINE AND LAND USE MANAGEMENT

Numerous issues relating to shoreline and land use management were raised by participants at the Issue Identification Workshops. These included:

- Educate the public on appropriate means of shoreline erosion control, targeting specifically home owners, public lands, and construction

APC currently manages lands within the Project boundaries within its purview through its shoreline permitting program. In addition, it sponsors a quarterly public newsletter, Shorelines, which is distributed to all shoreline property owners, among others, and which is also posted on its website. The newsletter frequently contains articles on issues pertinent to shoreline management. Each issue contains information on where to go for permitting

Summary of the Issue

activities.

- Explain how other state/local agencies influence or otherwise regulate shoreline development?
- Will APC continue with tree/plant planting to help control erosion around lakes?
- What is APC's permitting program regarding new development?
- Develop a shoreline management plan that is forward thinking, progressive, and long term. The plan should be more expansive than a simple permitting program.
- Implement best management practices (BMPs) on development ADEM and APC interaction
- Address land management plans for islands – what will happen with these lands?
- What are long-range plans for APC properties? Sale? Development?
- Can APC help control maintenance of boathouses, piers, etc?
- Erosion – what is the role of APC?
- Buffer Zones
 - Establish and manage a buffer zone around the projects and educate the public on the importance of the buffer zones.
 - Can APC regulate buffer zones, increase the size of buffer zones, and provide landowners monetary incentives for shoreline improvements?

Existing Information and Outreach Efforts by APC and Others

information relating to new or modified shoreline development.

APC maintains a shoreline permitting program to guide management of properties within boundaries of the Coosa and Warrior Projects' boundaries. The USACE has given APC the authority to manage certain permitting on the lakes that would ordinarily be subject to USACE permitting. This approach ensures that all development is managed comprehensively, and preserves the scenic, recreational, and environmental attributes of the lakes.

Private shoreline property is subject to permitting by APC. The program provides a proactive, ongoing plan for development by property owners, commercial developers, and local, state and federal agencies that want to construct piers, boat ramps, seawalls, boat houses and other structures within the boundaries of the projects. Upon request, APC provides copies of its permitting guidelines and application form. APC schedules on-site meetings to review the placement of structures and specific issues that must be addressed prior to APC approval. Property owners must provide detailed drawings of any proposed structures, a copy of a deed to the property and any other necessary permits or approvals from the appropriate state or local agency.

Upon approval of the application, APC issues a permit and monitors the construction of the project for compliance with the terms of the permit. The construction of the project must be completed within one year of issuance of the permit. After completion APC marks the structures with metal tags depicting the APC permit number. Tags must be displayed for APC's reference during regular field inspections. APC maintains permit records and copies are sent to the USACE where applicable.

Commercial property owners must follow a similar but more detailed procedure that includes review by APC's corporate Real Estate, Hydro Licensing, and Environmental Affairs Departments, as well as state and federal agencies, before final approval by FERC.

APC does not currently monitor or permit vegetation management on private property surrounding the shoreline.

Erosion control due to construction activity is, in part, covered by permitting. APC defers to state and local agencies on this issue and requires that construction occurs in compliance with state and local permits. Ongoing erosion and siltation at the Coosa Project will be addressed by monitoring erosion "hot spots," repairing some sites, modifying the permitting program to better address the issue and modifying project operations. APC will develop a public education plan that will include information related to erosion and Best Management

For erosion “hot spots” identified at the Smith Development on the Warrior River, APC has proposed to monitor and repair the hot spots (see Warrior Erosion Monitoring Plan, 2005) and implement modifications to the shoreline permitting program (see Warrior River Project Shoreline Management Plan). As noted above, to strengthen protection measures of shoreline resources. In addition APC has proposed to provide funding to the USFS for erosion control repairs at Clear Creek day use and campground.

APC proposes to implement a Shoreline Management Plan in conjunction with its relicensing activities. The Plan for the Coosa Project will cover approximately 1,750 miles of shoreline and 82,700 acres of project land. The Plan for the Warrior Project will cover approximately 500 miles of shoreline and 5,750 acres of project land. For both Projects, the Plans will address:

1. guidance for existing and future management actions within the Projects’ FERC boundaries, including long term shoreline management goals;
2. APC’s policies relative to activities that may affect shoreline management (e.g., dredging, bank stabilization, channelization, etc.);
3. establish a shoreline classification system to protect natural resources and guide future shoreline management actions;
4. describe, promote and recommend property owner BMPs relating to (a) buffer zones and vegetation management, (b) water quality, and (c) property development and management;
5. summarize APC’s enhanced shoreline permitting program; and
6. describe an implementation plan and review cycle for the Plans.

Specific to the shoreline permitting system APC proposes the following enhancements to strengthen the effect of the SMP to provide for the protection of shoreline resources. Where physically and economically practicable, APC proposes to require that rip-rap be placed in front of all newly constructed seawalls. On APC owned lands within the project boundary, APC will also require that permit holders maintain a minimum of 15 feet of unmanaged vegetation that will serve as a shoreline buffer zone. Additionally, APC will encourage the use of BMPs by all land owners through a combination of public education and outreach efforts as well as lake shore use permits. To assist and educate stakeholders on the permitting process and the BMPs, APC is planning stakeholder workshops, a website, and educational brochures. Finally, APC is also implementing a fee structure for new permits and modifications to existing permits to partially recover the administrative costs of implementing shoreline management

The new SMP and the permitting program will be posted on APC's website, and copies will be available from APC as well as in community libraries for public use.

THREATENED AND ENDANGERED SPECIES

One information request on the topic or threatened and endangered (T&E) species was received during the Issues Identification Workshops. The request was an inquiry as to whether T&E species had been evaluated and inventoried at the Projects.

T&E species within the Project boundaries have been evaluated and a biological assessment has been submitted to FERC in coordination with the APEAs. APC worked with USFWS and ACDNR in this assessment and has made its database of the locations of T&E species and critical habitats (developed through relicensing) available to state and federal agencies. For a complete listing of species that are federally listed as threatened or endangered and which are known to occur or have the potential to occur within the boundaries of the Coosa and Warrior Projects, please see their respective APEAs.

No public outreach or educational programs are proposed for this topic. There are, however, several proposals designed to enhance habitat conditions for several species.

Minimum Flows. APC proposes to provide a minimum flow to the bypassed reach of the Coosa River below the Weiss spillway. Impacts to terrestrial threatened and endangered species are likely limited to some positive impacts to bald eagles potentially foraging in the area due to enhancement of the local fishery resources.

The proposed Weiss bypass minimum flow would provide a range of conditions that would protect, and should enhance, the federally listed mussel species in the bypass. Additionally, the flow releases would convert the seven-mile upper reach of the bypass (upstream of Terrapin Creek) from its current lacustrine (lake-like) condition to a more riverine condition. This riverine condition would include a range of flow velocities and water depths that should support and enhance riverine species of fish, mussels, and macroinvertebrates. The implementation of an AMP provides an opportunity to ensure the protection of federally listed mussels in the bypass and measure the response of the aquatic community in the bypass to the initial flow releases. The AMP would also provide a mechanism to adjust the flow releases based on a comparison of monitoring results to protection and enhancement of these species.

The continued release of minimum flows below Jordan dam will continue to provide protection for existing populations of threatened and endangered species and will continue to provide aquatic habitat for the introduction of sensitive species to the area.

Research Funding. APC's proposal to provide funding to assist with the establishment of a threatened and endangered propagation facility through the HERF agreement will allow for

Summary of the Issue

Existing Information and Outreach Efforts by APC and Others

the timely reintroduction of endemic species and species of concern to the Coosa basin. The facility would also provide valuable information on the life cycle of mussel species that are part of the restoration effort. Funding for aquatic habitat enhancements would also benefit restoration efforts in the Coosa basin. Similar funding and technical resources will be provided to study, protect, enhance and restore threatened and endangered species at the Warrior River Project.

Dissolved Oxygen. APC proposes to increase the dissolved oxygen (DO) level in the turbine releases to 4 mg/l. Although, distribution of threatened and endangered species in each development tailrace is limited or non-existent, the increase would benefit any aquatic species presently located in the tailrace area of each development.

Rule Curves. APC proposes rule curve changes at Weiss and Logan Martin developments that would reduce the winter drawdown at both reservoirs. Stabilization of the winter pool at these reservoirs would not affect threatened and endangered species. Detailed analyses of the potential impact of APC’s proposed action on threatened and endangered species and their associated critical habitats are presented in the attached Draft Biological Assessment (Appendix T – Draft Biological Assessment).

WATER QUALITY

Several information requests related to water quality were raised during the Issue Identification Workshops. Issues raised included:

Septic Systems Surrounding Project Waters

- Request that APC work with the Health Department to reduce occurrences of leaking septic tanks around the lakes. It was recommended that APC take action, such as withholding electrical service, against the owners of faulty septic systems until the faulty system is approved by the Health Department.
- Are there fecal problems in the reservoir? If so, what is the cause?
- How do leaking septic systems affect the lakes?
- Who do citizens go to with sewage problems and/or complaints about Jordan?
- Where do you report problems with septic tanks and impacts of animal operations?
- What are the effects of nutrient inputs to the lakes on water quality?
- If high e-coli levels are identified, should you contact APC?

APC cannot legally withhold electric service from people due to faulty septic systems. Public health department handles septic issues – county health department has a building inspector to deal with this.

Information is already available to a select group of stakeholders and will be part of the APEA. Technical information generated during relicensing was shared with the CWP.

APC currently participates in Alabama’s Clean Water Partnership (CWP Program on the Coosa and Warrior Rivers) and will continue to do so until the program is completed.

APC does and will continue to work with state agencies to promote good water quality. APC monitors water quality in project waters and administers a water withdrawal policy on Smith Lake. Through relicensing, APC proposes to install an aeration system and provide minimum flow releases at the Smith Development on the Warrior River, as well as at its developments on the Coosa River, to meet state water quality standards, and will monitor the water quality subsequent to installment to assure compliance. Water quality monitoring continues at the Bankhead Development.

Summary of the Issue

Availability of Water Quality Data

- Request that APC should publish or otherwise make available water quality data, including DO and temperature readings, for Project lakes and tailwaters.
- Request that APC identify locations of water quality monitoring stations and coordinate the locations and data collection efforts with appropriate state agencies.
- Request that APC undertake additional water quality monitoring at the Projects and distribute results to the public.
- What is the water quality (DO, temperature, etc.) of all reservoirs and tailwaters?
- What are the effects of evaporation on water quality?

APC's Role in Managing Water Quality

- What are the effects of low DO that occur during project operations?
- How do you minimize impact of economic growth on water quality (homes, roads, septic systems, etc.)?
- What are the effects of erosion and sedimentation on the aquatic life and the overall depth of Weiss Lake?
- Investigate new technology for project operation to improve water quality (DO/temperature).

Working with the Agencies

- Are ADEM and APC working together on water quality on Weiss?
- APC should work with ADEM to take advantage of Clean Water Action Plan money.
- Need communication between ADCNR and ADEM. How would new TMDL levels affect the fishery?

With respect to wetlands, APC was asked to provide educational material and/or opportunities to shoreline property owners to assist them in identifying and maintaining wetlands, and understanding the environmental value of wetlands.

Existing Information and Outreach Efforts by APC and Others

APC will work with ADEM and the Alabama Department of Economic and Community Affairs (ADECA) to cooperate on public education efforts at the state and local levels.

APC will incorporate ADEM and ADECA public education information into their SMP.

WETLANDS

There are thousands of acres of wetlands located at or adjacent to the Coosa and Warrior developments. There are several wetlands identification and classification systems that are used by natural resource managers; however the systems most predominantly used by

Summary of the Issue

Existing Information and Outreach Efforts by APC and Others

hydroelectric licensees are those administered by the USACE and the USFWS. In support of relicensing, APC prepared the Warrior / Coosa Relicensing Project E-12 Wetlands Issue Report, which describes these classification systems and the various regulations that pertain to wetland management. The report also explains the functional value of wetlands, including the role they serve as water storage basins, as purification systems, wildlife habitat, and as areas of recreational and educational opportunities. This report and the Coosa and the Coosa and Warrior Projects' APEAs also provide detailed descriptions of the types of wetlands found at the projects.

APC reviewed and collected wetlands data from various sources and consolidated the information into a database. The database has been shared with Alabama's Department of Environmental Management's Clean Water Partnership program, and will be used in the future as a tool for administering APC's Shoreline Management Plans. Areas that are mapped as wetlands in the database have been designated as Sensitive Resource Lands: proposed development within this designation will require an environmental review by APC's Environmental Affairs Department before a permit may be issued.

APC proposes to develop a public education initiative to educate the public on the value of wetlands. Titled "Wading Through the Wetlands", the initiative will generate public awareness of the value of wetlands and will strive to increase involvement of shoreline residents in protecting, preserving and restoring wetlands.

PROJECT OPERATIONS

Several issues arose during the Issue Identification Workshops that relate to project operations. Listed below, these issues primarily relate to communication of information about how the project operates:

- Distribute or otherwise communicate the plan for project operations under drought conditions.
- Improve the reliability of the information provided on the 1-800-LAKES11 number and increase the accuracy of the flow schedules (including timing of the information – information is needed earlier)
- Provide real time data for project operations
- Provide information on how the dam is operated on a daily basis.
- How would holding the lake level higher on Weiss (and other lakes) affect the other reservoirs on the Coosa?
- What are the effects of low flows and reverse flows during generation in

Project operations are described in the Coosa and Warrior Project License Applications and APEAs.

- the Coosa River bypass below Weiss?
- How much water do you put in the Coosa River bypass below Weiss Dam? Seasonal flows and quality of water passed into area?
- What was the natural pre dam flow regime? Support for more “natural” flow regime – concerned about low flow augmentation below dam; ecological concerns first.
- What is the impact to project revenue of APC contributing money to Alabama Fish & Wildlife to enhance fisheries.
- How fast is Smith silting up? How is APC addressing siltation? Dredging? Etc.

WATER WITHDRAWALS AND TOXINS

Issues and information requests related to water withdrawals and toxins included:

As part of relicensing, APC prepared a report detailing information on toxins in the Coosa and Warrior Rivers. The report also pointed out sources of public information. The report is located on APC’s website.

Water Withdrawals

- What is the effect of depth of withdrawal on water quality in the lake and the tailrace?
- What are the impacts of potential water quantity changes (from ACT-ACF decisions) on water quality?
- What are the potential effects of granting additional water withdrawals from the system? There should be consistent permitting requirements.
- Changes to Project operation include impacts from water company? Allocation formula.
- Can there be a limit on withdrawals (municipal and industrial)?
- Evaluate how APC assesses charges for water withdrawals (total vs. net)
- Is Birmingham Water Board involved in relicensing effort?

Toxins

- How does lake stratification affect bottom sediments in relation to cycling of PCBs, mercury, and other toxins?
- Does siltation contribute to heavy metals in the reservoirs? Input of pesticides, toxics to reservoirs from siltation, non-point runoff, etc.
- Does using treated wood for structures in or near the water affect water quality and fish?
- Can APC operate the system to help control or reduce fish advisories?
- Are there limits on what pollutants can be put into the system (PCBs, other)?

MISCELLANEOUS

Several issues were mentioned during the Issue Identification Workshops, which fall within separate categories unto themselves. Those issues are consolidated here and are as follows:

- Litter
 - APC should take an active role in reducing litter at the Projects and should assist in educating the public on this issue.
 - APC should regularly remove trash captured behind dams and should prevent it from traveling further downstream.
 - What are the effects of debris and trash in the reservoirs on water quality and fish, especially back in the coves?
- Mosquito control on Weiss is not working
- Partner and/or work with other agencies and organizations
 - To monitor lake conditions
 - To improve BASS and HOBBO cooperation to report litter, etc.
- Post information on the APC website.

For the past ten years APC has taken a significant role in assisting in lake clean-up efforts on the Coosa, Tallapoosa and Warrior Rivers. That assistance has included providing organizational skills, manpower, barges, banners, t-shirts and gloves. That effort is known as “Renew Our Rivers”. Since the beginnings of these initiatives APC has participated as a volunteer corporate citizen acting as a catalyst for the local community to develop and contribute to a program that encourages local stakeholders to join together to improve these reservoirs. APC is very pleased with the success of the clean-ups, its role in the clean-ups and the ever growing community involvement that has become their trademark. APC plans to continue with its role as a volunteer catalyst for this project. By continuing to voluntarily participate in this and many other environmental, recreational and educational initiatives over the years, APC has proven itself to be a corporate citizen with a commitment to its customers and the state of Alabama. The Renew the Coosa program was started by the City of Gadsden and is supported by numerous other contributors, in addition to APC. The lake clean-up programs are a success story that APC is pleased to be a part of. These programs grow yearly because of additional communities and local interests that are joining the spirit of voluntarily contributing to the well-being of their areas. Additional information about these programs can be found at APC’s [website](#)

Woody debris and trash accumulates at APC dams, particularly during high flow events. This material collects on project trash racks and is routinely passed downstream through project spillways to avoid unsafe conditions at the dam, potential damage to project facilities, and potential negative impacts on generation.

Some stakeholders have expressed concern that floating woody debris within the reservoirs is a public safety issue. APC has questioned whether the debris presents a real public safety hazard. Removal of the debris would be dangerous and expensive. Ecological values downstream could be adversely affected. In coordination with Lake Associations and the Marine Police Division, APC will periodically monitor and review the amount, location and origin of woody debris on APC reservoirs. Should an inspection lead the Marine Police Division to conclude that a significant public safety issue might exist because of APC’s practice of releasing woody debris and trash accumulations from its dam trash racks downstream, APC will, at the request of the Marine Police Division, reopen this issue for discussion and resolution. Similarly, should the Alabama Department of Environmental Management conclude that a significant water quality issue might exist for the abovementioned reason, APC will, at the request of the Alabama Department of Environmental Management, reopen this issue for discussion and resolution.

Summary of the Issue

Existing Information and Outreach Efforts by APC and Others

Because of the concern voiced on this issue during relicensing, the Marine Police Division now has a heightened awareness the issue. The Marine Police officers are on the reservoirs on a daily basis and are best suited to determine if and when public safety issues exist. In the normal course of discharging their regular duties, these officers will be requested to monitor the reservoir conditions subsequent to flood events. Should the Marine Police Division conclude that a significant public safety issue might exist because of APC's practice of releasing woody debris and trash accumulations from its dam trash racks downstream, APC will, at the request of the Marine Police Division, meet with the Marine Police to discuss the removal of the debris in question.

APPENDIX B

WADING THROUGH THE WETLANDS

Draft

(To Be Developed Further In Consultation with Stakeholders)

ALABAMA POWER COMPANY

**COOSA AND WARRIOR RIVER PROJECTS
(FERC NOs 2146, 82, 618 and 2165)**

WADING THROUGH THE WETLANDS

Draft

(To Be Developed Further In Consultation with Stakeholders)

TABLE OF CONTENTS

GOALS	1
OBJECTIVES	1
TARGET AUDIENCE	2
THE MESSAGE	3
OPERATING PLAN MATRIX.....	3

WADING THROUGH THE WETLANDS

Comprehensive Public Education Plan

Draft

APC was asked to provide educational material and/or opportunities to assist shoreline residents in identifying and maintaining wetlands and to educate residents on the environmental values of wetlands. APC has agreed to address this request as part of relicensing efforts for the Coosa and Warrior River Projects. Working with interested stakeholders, the following program was developed.

Program goals and objectives are identified below, as is the target audience for this effort. An operating plan to guide program implementation for the first two years is provided, including metrics by which program success can be evaluated.

GOALS

Primary goals of the program are:

- (1) To generate public awareness about the importance of wetlands to residents around the APC project shorelines;
- (2) To increase public involvement by shoreline residents in protecting, preserving and restoring wetlands.

OBJECTIVES

Several objectives have been identified to help guide the goals of the plan. The objectives represent small, specific measurable subtasks that are designed to achieve the primary goals. The objectives are designed to be action-oriented, relevant and time-focused. Objectives include:

- (1.1) Educate the target audience (shoreline residents at the Coosa and Warrior Projects) about the functional values of wetlands through periodic articles presented in Shorelines, information posted on the website, and exhibits at three currently scheduled community events (e.g., Renew Our Rivers, Earth Day, etc.).
- (1.2) Post educational posters at five area schools and five public offices.
- (1.3) Develop and implement a speakers bureau that will include APC employees, local university specialists and others.
- (2.1) Work with area nonprofit organizations (Boy Scouts, Girl Scouts, universities or grade schools) to construct and monitor bird houses, class trips, plantings or informational signs at wetland areas on APC projects. Projects will be designed around the various functional values of wetlands.

- (2.2) Issue press releases and/or work with ADEM to incorporate public service messages with scheduled activities.

Objectives may vary over time as they are realized and as the needs of the program evolve. Objectives are updated periodically, as part of a regularly scheduled review process (every two years).

TARGET AUDIENCE

Most successful educational programs spend considerable time in identifying their target audiences. This knowledge helps program implementers in understanding who they are trying to reach with their message, and the most appropriate and effective ways of reaching them. APC placed considerable thought into identifying the target audience for this program to ensure that the messages that are sent are created, packaged and distributed appropriately to ensure success.

The primary target audience was identified by stakeholders in APC's relicensing of the Coosa and Warrior Projects as shoreline property owners. For purposes of this program, that has been refined to be *shoreline residents at the Coosa and Warrior Projects*. This distinction includes both adults and children, allowing APC to consider activities and messages that speak to both parents and their children. It is recognized that the program may reach and/or be utilized by others in the community, beyond the immediate shoreline of APC properties.

Information known about shoreline residents include:

- There are approximately ____ private residences and ____ businesses at the Coosa Project, and ____ private residences and ____ businesses at the Warrior Project.
- In general, shoreline residences have an average family size of _____, education of _____ and age of _____.
- ____% of shoreline residents reside in single family households, while the remainder live in condominiums.
- Businesses range from small, mom and pop marinas to large resort hotels.

No information is available on residents' knowledge, attitudes, beliefs or perceptions of wetlands. Neither is any information available regarding the best means of communicating with them (*e.g.*, Internet web sites, email, television, news letters, etc.). No information is available on commonly used social organizations that may be used to distribute information (*e.g.*, Boy Scouts, Girl Scouts, etc.).

Ideally, an educational message such as this would be designed to reach all shoreline residents. However laudible, such a goal is unrealistic. It is more realistic to reach out to residents who are innovators, or early adopters of new programs and thoughts, and use them to reach the less available residents, who may tend to resist change. APC's program is designed to maximize use of limited resources to try and reach the "low hanging fruit" – those shoreline residents who are considered early adopters of new programs. Typically, these are the individuals who tend to participate in community activities and events, and who will require less effort to educate and incorporate into the program.

THE MESSAGE

Wading Through the Wetlands is designed specifically to raise awareness of the values of wetlands. The term “values” can be used as a technical term to describe the valuable natural resources that, in their natural state, provide many important benefits to people and their environment. These are known as “functional values”. Not all wetlands provide the same value to people or the environment – some provide more than others. Some values that wetlands can provide include:

- Ecological integrity
- Wetland wildlife habitat
- Finfish habitat
- Educational potential
- Visual/aesthetic quality
- Water based recreation
- Flood control potential
- Ground water use potential
- Sediment trapping
- Nutrient attenuation
- Shoreline anchoring and dissipation of erosive forces
- Urban quality of life
- Historical site potential
- Noteworthiness as critical habitat for endangered species or other reasons

The goal of the message is to educate people to the benefits provided by wetlands by discussing what could be lost without wetlands, highlighting potential threats to them, and encouraging nonconsumptive enjoyable uses of wetlands.

- ↳ The message should appeal to a common vision for improvements to and/or protection of wetlands.
- ↳ The message should depict wetlands, their value, and enjoyment of them as cool, sophisticated and desirable.
- ↳ The message should inform and suggest positive behavior.
- ↳ Most important, **the message should be designed to reach the target audience.**

OPERATING PLAN MATRIX

In support of meeting these objectives, APC has prepared an Operating Plan Matrix, which lays out activities, schedules, responsible parties, resources needed and a means of evaluating program success for each of the objectives identified above. The Matrix, which will be revised periodically as program objectives evolve, is provided in Table 1.

Table 1

WADING THROUGH THE WETLANDS

Operating Plan Matrix for 2006

Activity / Product	Evaluation Indicators	Time Frame / Due Date	Responsible Party	Resources Needed		Status / Comments
				Staff Time	Dollars	
Goal #1: To generate public awareness about the importance of wetlands to residents around the Projects' shorelines						
Objective 1.1: Educate the target audience (shoreline residents at the Coosa and Warrior Projects) about the functional values of wetlands through periodic articles presented in Shorelines, information posted on the website, and exhibits at one currently scheduled community event (Renew Our Rivers, Earth Day, and _____).						
Prepare and publish 2 introductory, nontechnical educational articles on wetland values in Shorelines in 2005	Number of comments received on the articles		APC Env. Staff	40 hours	N/A – APC publishes this newsletter regularly	One article should provide information regarding alternate sources (EPA, other agencies).
Post Shorelines on website	Number of hits on the APC website before and after the posting		APC Public Relations	N/A – APC already does this	N/A – APC already does this	
Host wetland exhibit / informational booth at 2 locations during the annual shoreline cleanup	Number of brochures (or trinkets) handed out OR Number of people who visit the booths		APC Public Relations and interested stakeholders	40 hours to set up and implement	Handouts: \$500 Printing: \$1,000	Strategically locate booths in areas with wetlands nearby
Objective 1.2: Post educational posters at five area schools and five public offices.						

Table 1

WADING THROUGH THE WETLANDS

Operating Plan Matrix for 2006

Activity / Product	Evaluation Indicators	Time Frame / Due Date	Responsible Party	Resources Needed		Status / Comments
				Staff Time	Dollars	
Provide educational wetland posters to 5 area grade schools	Number of requests for additional materials	Develop text/theme for posters Develop layout Send to printer Distribute DATE Contact local grade school science teachers and alert them to the availability of these materials DATE Post notice on availability of of material on APC website DATE	APC Public Relations	60 hours	Printing: \$2,000	
Post educational wetland posters at 5 area public offices (libraries, county seats, etc.)		Combine with above	APC Public Relations	N/A, combine with above	N/A, combine with above	
Objective 1.3: Develop and implement a speakers bureau that will include APC employees, local university specialists and others.						

Table 1

WADING THROUGH THE WETLANDS

Operating Plan Matrix for 2006

Activity / Product	Evaluation Indicators	Time Frame / Due Date	Responsible Party	Resources Needed		Status / Comments
				Staff Time	Dollars	
Develop slide show for 3 different levels of knowledge Establish list of speakers	Frequency of bookings	Contact homeowners associations, schools	APC Public Relations	40 hrs to establish	\$4,000	
Goal #2: To increase public involvement by shoreline residents in protecting, preserving and restoring wetlands.						
Objective 2.1: Work with area nonprofit organizations to construct and monitor bird houses, class trips, plantings or informational signs at wetland areas on APC projects. Projects will be designed around the various functional values of wetlands.						
Objective 2.2: Issue press releases and/or work with ADEM to incorporate public services messages with scheduled activities.						

APPENDIX C

**SHORELINE MANAGEMENT PLAN
PUBLIC EDUCATION AND OUTREACH**

ALABAMA POWER COMPANY
COOSA AND WARRIOR RIVER PROJECTS
(FERC Nos. 2146, 618, 82 and 2165)

SHORELINE MANAGEMENT PLAN
PUBLIC EDUCATION AND OUTREACH

**The text below was excerpted from APC's Shoreline Management Plans for the Coosa and Warrior Rivers.
For additional information, please call 1-800-LAKES11 or see [APC's website](#).**

Alabama Power has an active public education and outreach program to assist in implementing its Shoreline Management Plans. The *Shoreline* newsletter currently has a circulation of 20,000, and every issue provides readers information regarding permitting needs. In addition, Alabama Power holds annual information meetings with local contractors to ensure they are aware of permit requirements prior to starting work.

APC has developed a web page that focuses specifically on the Shoreline Management Plan and shoreline permitting program. It includes features such as:

- * Contact information
- * Permit guidelines
- * Best management practices
- * Alternative and example designs (particularly for bank stabilization)
- * Useful links and other related information
- * Sample permit applications

The target audience for the SMP education program is homeowners, contractors, realtors, and state and federal resource agencies. To reach these groups, APC also pursues the following outreach activities:

- * Annual workshops detailing SMP implementation.
- * Annual training workshops at each reservoir for construction contractors.
- * Provides speakers for homeowner meetings as well as for other organizations as requested.
- * Provides information to realtors and encourages its distribution to potential lake shore property buyers..
- * Provides a brochure explaining permitting guidelines, best management practices and other relevant contact information (Attachment A, To Be Developed).