# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Nora Mead Brownell, and Suedeen G. Kelly.

Duke Power Project 2232-476

# ORDER APPROVING NON-PROJECT USE OF PROJECT LANDS AND WATERS

(Issued February 21, 2006)

- 1. On September 14, 2004, Duke Power, licensee for the Catawba-Wateree Hydroelectric Project No. 2232, filed an application requesting Commission authorization to lease 0.48 acres of project lands to Sunset Point, LLC (Sunset Point) for the construction of a private residential/commercial marina on Lake James, in McDowell County, North Carolina. The proposed marina, which consists of a cluster of 14 boat slips, would be used by non-waterfront residents in the Sunset Point subdivision, a residential development along the shoreline of Lake James. Sunset Point also proposes to place riprap to stabilize approximately 750 feet of eroding shoreline in an area a short distance from the marina to control erosion and sediment.
- 2. On October 18, 2004, the Lake James Environmental Association (Association) filed a timely motion to intervene, opposing Sunset Point's proposal. On October 28, 2004, the U.S. Department of the Interior (Interior) filed a late motion to intervene, which has been granted. Interior raises general concerns, as discussed below, but does not oppose the proposed marina. This order addresses the intervenors' concerns and approves Duke Power's request with certain conditions.

#### **Background**

3. Lake James, one of eleven reservoirs of the 294.72-megawatt Catawba-Wateree Project, has a surface area of about 6,577 acres and 151.5 miles of shoreline. The reservoir's full pond elevation is 1,200 feet mean sea level, which is also the established

<sup>&</sup>lt;sup>1</sup> See unpublished notice of December 8, 2005.

project boundary.<sup>2</sup> The Sunset Point development, a single-family residential subdivision, consists of 47 lots and includes approximately 2 miles of shoreline.

- 4. Article 39 of the license for the Catawba-Wateree Project authorizes the licensee to grant permission for certain types of non-project use and occupancy of project lands and waters without prior Commission approval.<sup>3</sup> Because the marina facilities proposed by Sunset Point are not within the scope of uses set forth in Article 39, they can only be permitted if the Commission approves an application to allow the facilities and uses in question.
- 5. Duke Power's consideration of requests for permission to use its project shoreline and waters is guided by its shoreline management plan (SMP), which was first approved in 1996, revised in 1998 to include shoreline management classification maps, and updated in 2001. The SMP is intended to assist Duke Power in managing the use and development of the project's shoreline.
- 6. Under the SMP, the entire shoreline is classified according to various existing and future use categories, which are indicated on the SMP classification maps. The maps classify the shoreline where the proposed marina is to be located as future

<sup>&</sup>lt;sup>2</sup> The project boundary for the Catawba-Wateree Project is generally located at the normal high water elevation contour at each of the eleven project reservoirs. 20 FPC 360, 365-67 (1958). For this reason, project lands consist of those lands that lie under the project waters at all times and those lands that lie between the reservoirs' high water marks and minimum pool levels. 67 FERC ¶ 61,061 at 61,170 (1994).

<sup>&</sup>lt;sup>3</sup> See 24 FERC ¶ 61,346 (1983)(order adding the Commission's standard land use article and approving the licensee's requests to lease project lands and waters for private marinas and other shoreline development).

<sup>&</sup>lt;sup>4</sup> 74 FERC ¶ 62,047.

<sup>&</sup>lt;sup>5</sup> The Commission approved the classification maps in 2000. 93 FERC ¶ 62,159.

<sup>&</sup>lt;sup>6</sup> The Commission approved the updated (and current) SMP in 2003. 105 FERC ¶ 62,027. The updated SMP supercedes the earlier SMP. *Id.* at P 2.

<sup>&</sup>lt;sup>7</sup> 105 FERC ¶ 62,027.

commercial/non-residential. Under this classification, commercial marina facilities such as the one proposed here are permitted.<sup>8</sup>

# **Description Of The Proposal**

- 7. Sunset Point proposes to stabilize approximately 750 feet of project shoreline along one side of a point of land using riprap<sup>9</sup> and to construct a dock within a small cove along the other side of the point on Lake James.
- 8. The proposed docking facilities would have 14 boat slips and consist of a 6-footwide by 200-foot-wide backwalk, two 4-foot by 30-foot access ramps, and fifteen 4-foot by 24-foot fingers. These facilities would occupy 0.48 acres of project lands.
- 9. The proposal will require no dredging. Once constructed, the marina would provide the non-waterfront residents of the Sunset Point development with access to Lake James.
- 10. The Commission issued public notice of Duke Power's application on September 29, 2004. In response, Interior and the Association filed motions to intervene. <sup>10</sup>
- 11. Interior expresses general concerns regarding the potential impacts of the proposed facilities on endangered species and on aquatic communities, especially the lake's recreational fishery resources. It is also concerned that the marina may have potential cumulative impacts on water quality and fish and wildlife habitats.
- 12. The Association opposes the marina, arguing that we should prohibit this non-project use of project lands because it does not benefit the general public and could damage threatened or endangered species. In addition, the Association raises concerns regarding boating safety and asks that we consider approval of any marinas at Lake James in the context of the upcoming relicensing proceeding for the project.

<sup>&</sup>lt;sup>8</sup> See Duke Power's SMP, Volume I at 23 (classification matrix chart of suitable future shoreline uses), filed July 30, 2001.

<sup>&</sup>lt;sup>9</sup> Riprap is a permanent, erosion-resistant gravel cover of large, loose, angular stone with filter fabric or granular underlining.

<sup>&</sup>lt;sup>10</sup> Interior and the Association filed identical pleadings in Project No. 2232-475, another proceeding regarding marina facilities on Lake James.

13. The Commission's staff prepared an environmental assessment (EA) analyzing the potential impacts of placing the riprap and constructing and using the proposed marina. The EA, which is attached to this order, addresses the intervenors' comments and recommends approval of Sunset Point's proposal.

#### **Discussion**

#### A. Commission Authorization of Non-Project Uses

- 14. The Association contends that "non-project use of project lands should be allowed only under extreme circumstances," and moreover that this proposal is not in the public interest because the marina would not be public and thus would solely benefit private interests.<sup>11</sup>
- 15. We review proposals for authorization of non-project uses of project lands and waters pursuant to the Federal Power Act's comprehensive development standard, as informed by the SMP, <sup>12</sup> relevant license terms, public and agency comments, and the EA. <sup>13</sup> While public access to project lands and waters for recreation is an important project purpose, it is appropriate for us to authorize licensees to permit private recreation facilities where, as here, there is no dispute that the public has sufficient access to

In a related argument, the Association objects to residential developments around the lake providing access to the waterfront (and related marinas), contending that the sole purpose is to raise the value of the non-waterfront lots. However, residential developments like Sunset Point are not within our jurisdiction. They occur outside the project boundary on non-project lands and are thus subject to local zoning requirements.

<sup>&</sup>lt;sup>11</sup> The Association also argues that non-waterfront residents should not be allowed to have boat docks on the lake. The Association points out that waterfront residences must have 75 feet of water frontage in order to have a dock, and that an exception to this requirement should not be made for non-waterfront residences. However, the SMP guidelines, which were developed with extensive public input and approved by the Commission after public notice and comment, allow for both kinds of non-project uses. *See Duke Power*, 105 FERC ¶ 62,027 (2003) (order modifying and approving revised shoreline management plan).

<sup>&</sup>lt;sup>12</sup> The primary goals of the SMP are to: (1) provide for public and private access without destruction of the project's natural resources or without compromising the project's primary function, which is the production of electricity; and (2) ensure that the existing and future public recreational needs of the project are addressed.

 $<sup>^{13}</sup>$  See Duke Energy Corporation, 109 FERC  $\P$  61,016 at P 8 (2004).

recreation at a project <sup>14</sup> and where the private facilities do not unduly interfere with any other project purposes. <sup>15</sup>

## B. Threatened and Endangered Species and Fishery Resources

- 16. Interior expresses general concerns regarding the potential impacts of the proposed facilities on endangered species and on aquatic communities, especially the lake's recreational fishery resources. The Association argues that the marina could damage threatened or endangered species. Neither intervenor specifies any species of concern.
- 17. As explained in the EA, the federally-listed threatened American bald eagle and two terrestrial plant species, the endangered Schweinitz's sunflower and the threatened dwarf-flowered heartleaf, occur in the Catawba-Wateree Project area. However, neither the bald eagle nor the two plants are found in the area of the proposed marina. Moreover, the proposal would result in very little damage to or clearing of vegetation and the areas that would be disturbed are located below or slightly above the high water mark, which is not typical habitat for these terrestrial plant species. Therefore, the proposed facilities are not expected to have an impact on federally-listed threatened or endangered species. <sup>18</sup>
- 18. With respect to fishery resources, construction of the proposed dock will temporarily affect some shallow fish habitat, but overall, the proposed marina would have only minor adverse impacts on fish and wildlife and their habitat. Under the proposal, any large woody debris, which is critical to aquatic habitats, would not be disturbed; the facilities would be constructed off-site and floated into place; and no dredging would

<sup>&</sup>lt;sup>14</sup> See EA Section 6.5 for a description of public recreation access at Lake James.

<sup>&</sup>lt;sup>15</sup> See Duke Energy Corporation, 111 FERC ¶ 61,197 at P 13 (2005).

<sup>&</sup>lt;sup>16</sup> See EA Section 6.4.

 $<sup>^{17}</sup>Id.$ 

<sup>&</sup>lt;sup>18</sup> See id. . We reject the Association's request that we have the U.S. Environmental Protection Agency (EPA) conduct an environmental impact study of, among other things, the potential impacts that the proposed marina may have on threatened and endangered species in the Lake James area. Requiring the EPA to take an action is beyond the Commission's authority. In any event, staff's EA adequately considers these issues, and there is no need for further analysis.

<sup>&</sup>lt;sup>19</sup> See EA Sections 6.2-6.3.

occur. In addition, while construction of the proposed facilities would cause a temporary disturbance in some shallow water fish habitat, the applicant would plant vegetation under the dock that would provide complex aquatic life habitat.<sup>20</sup>

# C. Cumulative Impacts

- 19. Interior states, without elaboration, that the marina may have potential cumulative impacts on water quality and fish and wildlife habitats.
- 20. The EA evaluates the potential cumulative impacts associated with the proposal and concludes that the minor effects of the proposed marina on water quality and fish and wildlife habitats would incrementally add to the cumulative environmental impacts of other shoreline development activities at the project.<sup>21</sup> Over time, continued shoreline development will result in cumulative fish habitat loss and degradation.<sup>22</sup>
- 21. However, the licensee's SMP is designed to take cumulative development factors into account and to consider the project's environmental resources and the developmental demands at the project reservoirs in a comprehensive manner. The mitigation measures included in the SMP, combined with other local, state, and federal regulations and permitting requirements that Sunset Point must meet, will help to minimize any cumulative effects resulting from the construction of the proposed marina.

# D. Boating Density and Public Safety

22. The Association contends that with the increased shoreline development on Lake James in the past few years, significant increases in boat traffic density are imminent and

<sup>&</sup>lt;sup>20</sup> See EA Section 6.2.

<sup>&</sup>lt;sup>21</sup>EA Section 7.0.

<sup>&</sup>lt;sup>22</sup> The increasing alteration of the shoreline and vegetation cover (including trees, shrubs, and herbaceous plants) is associated with increases in sedimentation and turbidity. In addition, loss of vegetation along the water's edge will reduce the habitat of wildlife species that depend on it.

<sup>&</sup>lt;sup>23</sup> For example, the SMP assigns shoreline segments to various use classifications in order to restrict development in certain areas with environmentally important or sensitive resources and to permit development in other areas that are more appropriate for intensive use.

that the related risks of public safety and public health are not being adequately considered.<sup>24</sup>

23. While these facilities will contribute to an increase in water-related recreation activities on the lake and create additional boating traffic, Lake James is significantly less developed than some of the other larger project reservoirs, such as Lake Norman and Wylie and Wateree Lakes. Given the size and capacity of the proposed dock and canoe launch, these facilities should have an insignificant effect on boating traffic and safety. <sup>26</sup>

#### E. Other Matters

24. The Commission's staff has not identified within the area of the proposed facilities any known cultural or archaeological sites that are listed or eligible for listing on the National Register of Historic Places. The Commission's staff sent letters initiating consultation with the SHPO and Indian Tribes regarding properties that may be affected by the proposed activities, but neither provided a response. To ensure protection of unknown cultural and archaeological resources that may be discovered during construction of the marina, we are requiring Duke Power to include in the lease for the boat slips and canoe launch a condition that, if such materials are discovered during construction, the lessee must halt construction and Duke Power must immediately consult with the SHPO and the appropriate Tribes.

The Association also contends that a new boat traffic density study is needed to properly consider the application in the context of present and future shoreline development, and asks that we consider the proposal in the context of the relicensing proceeding for the project, which is due to commence this year. We deny the requests. There is no evidence to suggest that the information in Duke Power's SMP (last submitted in 2001) is out of date or inaccurate. Furthermore, Duke Power states that it uses the most recent data available, including digital aerial photography, to guide decisions regarding all types of access within the project boundary and to ensure that the SMP is a factually-based document that can be used by the licensee and the Commission for reviewing requests for use of the project and its resources. *See* Duke Power's 2001 revised SMP (filed July 30, 2001), Volume I at 3.

<sup>&</sup>lt;sup>25</sup> EA Section 5.7.

<sup>&</sup>lt;sup>26</sup> The cove is approximately 185 feet wide where the proposed facilities would be located and the dock would extend about 60 feet out from the shore. In addition, the boat slips are sized to accommodate relatively small boats that can be easily maneuvered in and out of the dock, and the developer will install lighting on the dock to ensure visibility and user safety. *See* EA Section 6.5.

#### **Conclusion**

25. We conclude that construction and operation of the proposed docks, as conditioned below, will not constitute a major federal action significantly affecting the quality of the human environment, will not interfere with licensed project purposes and the statutory standards by which we regulate hydroelectric projects, and will be consistent with the public interest. Accordingly, we approve Duke Power's application to permit the proposed use of project lands and waters.

#### The Commission orders:

- (A) Duke Power's application for authorization to permit non-project use of project lands and waters, filed on September 14, 2004, is approved, as modified below.
- (B) The licensee shall include the following condition in its commercial and residential use lease or permit issued to the Sunset Point on Lake James, LLC., as approved in Ordering Paragraph (A) above:

Upon discovery of any previously unidentified archaeological or historic properties during construction of the marina facilities covered by the lease, the lessee shall immediately stop all land-disturbing and land-clearing activities and contact Duke Power, the North Carolina State Historic Preservation Officer (SHPO), and any Native American tribes/groups that may have an interest in the discovery.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713 (2005).

By the Commission.

(SEAL)

Magalie R. Salas, Secretary.

# **Environmental Assessment**

# **Application for Non-Project Use of Project Lands and Waters**

# <u>Duke Power, A Division of Duke Energy Corporation</u> <u>McDowell County, North Carolina</u>

# Catawba-Wa<u>teree Hydroelectric Project</u> FERC No. 2232-476



Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Administration and Compliance
888 First Street, N.E.
Washington, D.C. 20426

February 2006

#### ENVIRONMENTAL ASSESSMENT

# FEDERAL ENERGY REGULATORY COMMISSION OFFICE OF ENERGY PROJECTS DIVISION OF HYDROPOWER ADMINISTRATION AND COMPLIANCE

Project Name: Catawba-Wateree Project

FERC No.: 2232-476

#### 1.0 APPLICATION

**Application type:** Non-Project Use of Project Lands and Waters

**Date Filed:** September 14, 2004 **Applicant:** Duke Power Company

Water body: Lake James

County and State: McDowell County, North Carolina

## **Purpose and Need for Action:**

Duke Power (licensee), a division of Duke Energy Corporation and licensee for the Catawba-Wateree Hydroelectric Project (FERC No. 2232), filed an application to grant a lease to Sunset Point, LLC (applicant), of 0.480 acres of project lands for the purpose of constructing a commercial/residential marina on Lake James. The docking facility would consist of one cluster dock with 14 boat slips. Additionally, the applicant proposes to install 750 feet of riprap and create a small trench to provide electric power to the pier. The riprap will not be installed by the boat slips. It will be located in an area opposite of the Sunset Point common area, facing west into the main channel.

The proposed facilities would provide access to Lake James for the residents of the Sunset Point development, located in McDowell County, North Carolina. No dredging will occur during construction and the cluster dock will be floated into place to minimize shoreline disturbance. No changes in project operations are expected to result from the proposed construction.

<sup>&</sup>lt;sup>1</sup> 20,912 square feet.

<sup>&</sup>lt;sup>2</sup> The general permit granted to the applicant by the Army Corps of Engineers allows for the excavation of 0.25 acre of open water in association with the stabilization of approximately 750 linear feet of eroding shoreline.

This EA considers the environmental effects of the proposal.

#### 2.0 PROPOSED ACTION AND ALTERNATIVES

#### 2.1 Description of the Proposed Action

The licensee proposes to allow the applicant to construct one cluster dock with 14 boat slips for use by property owners in the Sunset Point subdivision. These facilities would occupy a total of 0.480 acre of project lands.

The docking facility would be made of high quality, heavy-duty, 14-gauge aluminum and an encapsulated foam flotation system. The dock will measure approximately 200-foot long and will consist of one 6-foot by 200-foot backwalk, fifteen 4-foot by 24-foot fingers, two 4-foot by 30-foot access ramps, and 200 feet of underwater bracing.

The dock will be constructed off-site and floated into place during a time of low recreation usage to minimize the impact to boating traffic. In addition, riprap will be installed within 0.05 acres of water along 750 feet of the shoreline; specifically, the west-facing bank of Sunset Point development's "common area." No waste disposal or fueling facilities are proposed to be installed at the marina.

A 50-foot buffer will be established from the 1,200 foot elevation around the shoreline. All trees with a diameter at breast height (DBH) of 6-inches or greater shall not be removed unless replaced. Two rows of silt fence between the construction site and the shoreline will be installed. Extensive sedimentation and erosion control structures will be in place prior to beginning any land-disturbing activities.

The proposal includes provisions for a small trench that will be dug in order to provide electric power to the pier. This will be done with a small trenching machine. No trees will be disturbed, as the power will run along the foot paths.

#### 2.2 Action Alternatives

No alternative actions have been identified.

#### 2.3 No-Action Alternative

Under the no-action alternative the Commission would deny the licensee's application. The applicant would be precluded from constructing the proposed docking facility.

#### 3.0 CATAWBA-WATEREE PROJECT DESCRIPTION AND OPERATION

# 3.1 Catawba-Wateree Project

The Federal Energy Regulatory Commission (Commission) issued a license for the Catawba-Wateree Hydroelectric Project, FERC No. 2232, to Duke Power Company on September 17, 1958. The project includes a series of 13 hydroelectric developments and 11 reservoirs on the Catawba River in North Carolina and the Catawba and Wateree rivers in South Carolina. (See Figure 1.) The developments and reservoirs occupy lands in 14 counties in two states, spreading over approximately a 200-mile reach of river.

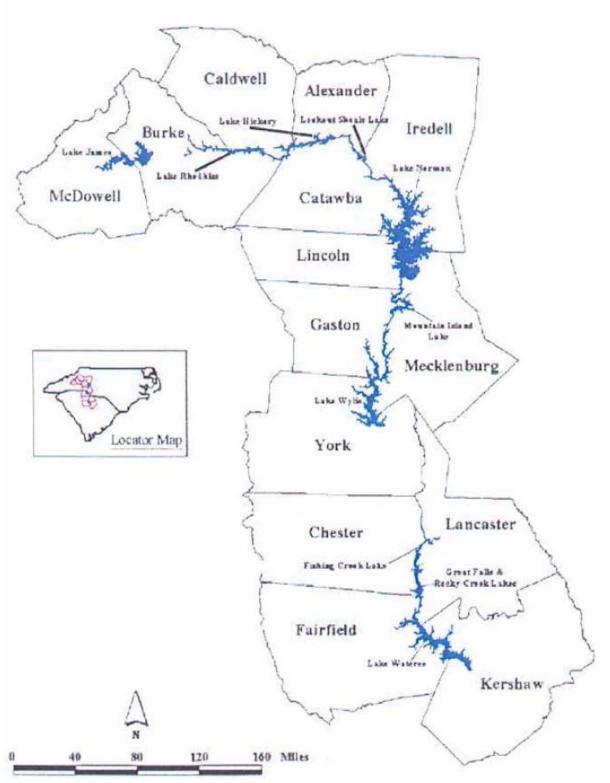
The hydropower developments were constructed between 1905 and 1925, except for the Lake Norman Development which was completed in 1963. Several of the reservoirs are near the metropolitan areas of Charlotte, North Carolina and Columbia, South Carolina. The project boundary established in the license is generally the normal high water elevation contour at each of the 11 reservoirs.

## 3.2 Development and Reservoir

The Lake James Reservoir (also referred to as the Bridgewater Development) is the northernmost reservoir in the Catawba-Wateree system. Lake James has a surface area of about 6,577 acres and 151.5 shoreline miles at a full pond elevation of 1,200 feet mean sea level (MSL), which is also the established project boundary.

<sup>&</sup>lt;sup>3</sup>20 FPC 360-373 (1958).

Figure 1: Catawba-Wateree Project Reservoirs



Source: Volume 1 of Duke Power's Final Shoreline Management Plan Update Filed July 30, 2001.

#### 4.0 CONSULTATION AND COMMENTS

# 4.1 Comments Received by the Applicant

Prior to the licensee filing the application with the Commission, the applicant consulted with the following local, state, and federal agencies: 1) US Army Corps of Engineers (ACE); 2) US Fish and Wildlife Service (FWS); 3) North Carolina Department of Cultural Resources, Division of Archives and History (State Historic Preservation Officer, SHPO); 4) North Carolina Department of Environment and Natural Resources (NCDENR), Division of Parks and Recreations (DPR); 5) NCDENR, Division of Water Quality (DWQ); 6) North Carolina Wildlife Resources Commission (NCWRC); 7) NCDENR, Division of Environmental Health (DEH); and 8) McDowell County (County). Pursuant to the applicant's request for consultation, it received the following responses:

Table 1: Agency Responses Received by Applicant

Agency Name	File Date	Response Type	
ACE	December 12, 2003	General Permit verification	
	May 3, 2004	General Permit verification	
NCWRC	November 25, 2003	Comments and concerns	
	February 27, 2004	Concurrence with stabilization activities	
	May 4, 2004	Comments and conditions	
SHPO	November 19, 2003	No comments	
	February 18, 2004	No comments	
DPR	October 30, 2003	No objections	
DWQ	May 14, 2004	Concurrence with Water Quality Certificate	
NCDENR	November 3, 2003	Comments and questions	
County	August 18, 2003	Issuance of Shoreline Protection Permit	

No response was received from the FWS.

In its December 12, 2003, letter, the ACE stated that the work proposed did not require a Department of the Army permit, provided there is no discharge of dredge and/or fill material into waters or wetlands. However, in its May 3, 2004, letter the ACE issued the applicant Nationwide Permit 13, pursuant to section 404 of the Clean Water Act.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Clean Water Act, 33 U.S.C. 1344.

The SHPO issued two letters, one in 2003 and another in 2004. In both letters the SHPO stated that it has no comment on the proposed construction. In its letter, dated October 30, 2003, the DPR responded to the applicant's request for consultation and asserted that it too had no comments regarding the facilities.

The applicant received three letters from the NCWRC. In one letter, dated November 25, 2003, the NCWRC stated that it would like to meet with the licensee to better evaluate the proposed project. The NCWRC also questioned the need for providing private access to subdivision residents not living adjacent to the lakefront properties, citing that this is a privilege the general public does not enjoy. The NCWRC stated that one of its major concerns was the impact to fish and wildlife habitat, and specifically, the constant leakage of petroleum products from boats and loss of public access. In the letter, the NCWRC made the following recommendations:

- 1. The applicant should install suitable trees and brush under the fixed portion of the project to provide complex aquatic life habitat. These should be constructed and perpetually maintained (for the life of the pier) in a manner as to be "fish-friendly."
- 2. An in-water work moratorium should take place beginning on April 1 and continuing through June 1, to minimize the impacts to spawning fish and survival rate of the young fish.
- 3. The use of pesticides, herbicides, fertilizers, and cleaners near or over the water should be avoided.
- 4. State erosion and sedimentation control measures, and the licensee's Shoreline Management Plan (SMP) should be strictly adhered to.

In its February 27, 2004 letter, the NCWRC stated that after visiting the site on February 24, 2004, and viewing the location where riprap is proposed to be installed, it concurred with the applicant's stabilization activities. The NCWRC asserted that it would likely provide recommendations on the subsequent permit application for the stabilization work.

In its May 4, 2004, letter, the NCWRC stated that although it remains concerned with the elimination of productive aquatic habitats from shoreline stabilization projects, it will concur with the issuance of a Water Quality Certificate if the permit includes the following conditions to reduce adverse effects on resources:

1. If practical, the shoreline stabilization work should be completed by barge while the lake is drawn down to minimize shoreline vegetation disturbance. Only those areas that are actively eroding should be stabilized.

- 2. Adequate sedimentation and erosion control measures must be implemented as needed prior to any ground-disturbing activities to minimize impacts to aquatic resources. Temporary or permanent herbaceous vegetation should be planted on all bare soil within 15 days of ground disturbing activities to provide long-term erosion control measures.
- 3. Excavation of soils from the lakebed is not authorized under this permit. Excavation should be limited to the area in proximity of the actively eroding shoreline for the explicit purpose of placement and anchoring of the rock into the substrate. This permit does not authorize disturbance of the shoreline or the lakebed outside of the stabilization limits for access or staging materials.
- 4. Large woody debris that extends into the water along the path of the stabilization project or within the lake pool should be replaced and secured to the shoreline at the completion of the project. Stumps, rocks or woody debris within the lakebed should not be disturbed or removed.
- 5. Filter fabric should be installed behind and under the rock to minimize sedimentation of the soils into the lake.
- 6. The rock should be clean or sediment and other contaminates.
- 7. The spaces between the rock should not be filled with concrete or other types of grout, but should be left open to allow colonization with native plants and to provide habitat for fish and wildlife. Uncured concrete is toxic to fish and other aquatic life and is not authorized by this permit.
- 8. This permit does not authorize removal of woody vegetation on the bank or the crossing or disturbance of Duke Power property to gain access to the construction site. If Duke Power permits removal of shrubs or trees for temporary access, the vegetation should be cut off at the ground and the roots left in tack to sprout or the area should be replanted with native vegetation specified by Duke Power to provide long-term shoreline stability and riparian habitat.
- 9. The rock stabilization or wall should extend only as high as necessary to stabilize the bank but no higher than a few inches above the high water mark. If a stacked wall is used, the rock should be set slightly lakeward to minimize disturbance of vegetation on the bank. Voids around trees with exposed roots should be backfilled with soil prior to installing filter cloth and rock. Areas without woody vegetation should be planted with native trees (e.g., hemlock, tulip poplar, red maple and sycamore) and shrubs (e.g., silky dogwood, rhododendron, mountain laurel or dog hobble) to provide shoreline cover.

In addition, an undisturbed buffer must be maintained, pursuant to local and state Catawba River buffer requirements. Before any work is initiated, the applicant must: 1) have approval from the project licensee and comply with all FERC requirements; 2) contact McDowell County planning to determine appropriate buffer protection requirements and measures; and 3) obtain any required 401 Water Quality Certification from the DWQ.

The DWQ responded to the applicant's consultation request on May 14, 2004. In its letter, the DWQ stated that the applicant had their approval to install riprap within 0.05 acres of water on 750 feet of shoreline along the west-facing bank of the "common area" in the Sunset Point development. The DWQ reminded the applicant that it should obtain or otherwise comply with all other required federal, state, and local permits (such as erosion and sediment control regulations and permits) before proceeding with the proposed construction. As part of its approval, DWQ required the following conditions:

- 1. Diffuse Flow—all storm water shall be directed as diffuse flow at a non-erosive velocities through the protected stream buffers and will not re-concentrate before discharging into the stream as identified within 15A NCAC 2B .0243(5).
- 2. Riprap—The riprap shall be installed by use of a barge to minimize shoreline disturbance.
- 3. Certificate of Completion—Upon the completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return the attached certificate of completion to the 401/Wetlands Unit, North Caroling Division of Water Quality, 1650 Mail Service Center, Raleigh, NC 27699-1650.

The NCDENR issued its comments to the applicant in a letter dated November 3, 2003. In the letter, the NCDENR asked the following questions concerning the application:

- 1. There is no reference to waste disposal for the marina. Will there be any? If so, how will this be handled?
- 2. Will there be any fueling watercraft? If so, how will the fuel be stored, piped, and contained?

The NCDENR concluded by stating that if the facility included no waste disposal or fuel to be stored or pumped at the marina, then they would have no problems with the proposal. The applicant responded to the NCDENR's questions in a letter dated January 24, 2004, and affirmed that the application does not propose to construct a waste disposal or fuel storage/pumping facilities. The NCDENR commented that the cities of Marion

and Morganton may plan in the future to withdraw water from this lake as a surface water supply source. Therefore, planning should be initiated to construct a recreation plan for the lake as a means of protecting this supply.

The County notified the applicant that it had been granted a Shoreline Protection Permit on August 18, 2003. In the notification letter the County authorized the application to commence the proposed construction, while reminding the applicant of the following conditions: 1) primary structures need to be setback 65 feet from the shoreline; and 2) 15 protected trees<sup>5</sup> exist within the 0 to 50-foot buffer. Prior to any land disturbing activity within 50 feet of the shoreline, any trees that are to be removed will need to be marked. A County representative will need to be contacted to make a site visit and record all necessary measurements before any trees are cut. Trees can be removed within the 50-foot buffer, to clear foot paths and allow access to the marina facility, but they must be replaced with trees totaling an equivalent DBH somewhere within the buffer.

#### 4.2 Comments Received by the Commission

On September 22, 2005, the Commission sent letters requesting consultation to the Eastern Band of Cherokee Indians, Catawba Indian Tribe, and the SHPO. The Commission requested that all comments and recommendations be filed with the Commission within 30 days. No responses were received. On September 29, 2004, the Commission issued a Public Notice and requested that all comments, protests, and motions to intervene be filed with the Commission within 21 days. The following responses were received:

Table 2: Agency Responses Received by the Commission

Agency Name	File Date	Response Type
Lake James Environmental	October 15, 2004	Motion to Intervene
Association (Association)		
US Department of the	October 28, 2004	Motion to Intervene
Interior		

In its motion to intervene in opposition, the Association stated that the project licensee is "practicing 'key-holing' for boat slips in the sole interest of increasing off-water land/lot values," and argued that non-project use of project lands should only be permitted under extreme circumstances. The Association asserted that the narrow character of Lake James and its associated coves "restricts and concentrates elevated marina activities to unsafe levels." The Association stated that an imminent increase in

<sup>&</sup>lt;sup>5</sup> These are trees with a DBH of 6-inches or greater.

boating traffic due to increased shoreline development along the lake would directly impact public safety and health. The Association recommended that a new boat traffic density study be performed by an objective third party, and that an environmental impact study assessing the risk of increased development to endangered and threatened species be conducted by the Environmental Protection Agency. The filing concludes by stating that any further cluster dock applications requiring FERC approval should be directly tied to the project relicensing process.

In the DOI's motion to intervene, the DOI stated that it was concerned with the potential impacts of the proposed expanded commercial activities on Lake James. The DOI asserted that the potential adverse affects on the project area's diverse aquatic communities, endangered species, and warm-water fisheries resources needed to be evaluated. In addition, the DOI noted the potential impact of cumulative effects associated with water quality, fish habitat, and wildlife habitat may incrementally add to the cumulative environmental impacts of other shoreline development activities.

In a letter from the applicant to the licensee, dated September 28, 2003, the applicant agreed to comply with all recommendations, requirements, and/or conditions in the consultation letters from the consulted agencies.

#### 5.0 AFFECTED ENVIRONMENT

# 5.1 General Area Description

The Catawba-Wateree Project spans over 200 river miles and transects 9 counties in North Carolina and 5 counties in South Carolina. The Catawba River Basin and the Catawba-Wateree Project area are dominated by forested land and agricultural areas. Remaining terrestrial areas are a mixture of rural transportation corridors and minor development. The area is moderately developed and recreationally attractive.

The Catawba River Basin has a total drainage area of approximately 4,749 square miles. The river arises from the eastern slope of the Blue Ridge Mountains in the Pisgah National Forest, and flows east and south to Lake Wylie, which straddles the North Carolina-South Carolina state line. Below Lake Wylie, the Catawba River flows through

<sup>&</sup>lt;sup>6</sup> No specific threatened or endangered species were identified in the Association's motion to intervene.

<sup>&</sup>lt;sup>7</sup> No specific threatened or endangered species were identified in the DOI's motion to intervene.

Lake Wateree and becomes the Wateree River. The Wateree River joins the Congaree River in central South Carolina, and the Congaree eventually flows to the Santee River and into the Atlantic Ocean.

The Lake James Reservoir is the northernmost reservoir in the Catawba-Wateree system. Lake James has a surface area of about 6,577 acres and 151.5 shoreline miles, at full pond elevation of 1,200 feet MSL. The Sunset Point development contains a total of 10,555 linear feet of shoreline. In its application, the applicant maintains that 7,071 linear feet of shoreline remains useable. The project's approved Shoreline Management Plan (SMP) addresses the allowable uses of Lake James' shoreline miles. Table 3 summarizes the shoreline classification for Lake James (Duke Power Company 2001).

<sup>&</sup>lt;sup>8</sup> This is the established project boundary.

<sup>&</sup>lt;sup>9</sup> In the Sunset Point subdivision 1,448 linear feet of shoreline at Sunset Point is protected as an environmental area, 550 linear feet make up an impact minimization zone, and 1,486 linear feet are commercial.

<sup>&</sup>lt;sup>10</sup> As revised on October 15, 2003.

Table 3: Shoreline Classification for Lake James

<b>Shoreline Classification</b>	Shoreline Miles	Percent of Total
Commercial/Non-Residential	1.6	1.1
Commercial/Residential	4.4	2.9
Residential	12.5	8.3
Business Industrial	0.0	0.0
Public Recreation	0.7	0.0
Public Infrastructure	0.7	0.0
Project Operations	2.3	1.5
Future Commercial/Non-Residential	60.8	40.1
Future Commercial/Residential	4.0	2.6
Future Residential	15.8	10.4
Future Public Recreational	10.0	6.6
Impact Minimization Zones	9.5	6.3
Impact Minimization Zone (Dev)	0.2	0.0
Environmental Area	20.8	13.7
Natural Area	8.1	5.3
TOTAL	151.5 miles	100%

# 5.2 Geology and Soils

The headwaters of the Catawba-Wateree River basin originate in the Blue Ridge Physiographic Province, which quickly transitions toward the southeast into the Piedmont Plateau Physiographic Province. The rocks are generally granites and gneisses which once formed the basement of the Appalachian highlands. This area has the highest peaks of the Appalachian highlands. Other rock types found in the southern portion of the Blue

Ridge Province include thick sedimentary rocks, such as siltstones, sandstones, and conglomerates. Many of these sedimentary rocks have been metamorphoses, but to a lesser degree than is found in the Piedmont Plateau.

Shorelines of the reservoirs within the Catawba-Wateree system are seasonally exposed as water levels are lowered to accommodate anticipated seasonal runoff or to provide additional power generation. During certain periods shorelines may be experiencing erosion because of wave action on exposed sediments or soils.

#### 5.3 Water Quality

Water quality in the Catawba River Basin, especially in its forested upper reaches above the Catawba-Wateree Project, is generally good. Water quality within the project varies from reservoir to reservoir, depending upon factors such as reservoir configuration, water retention time, and nutrient input (FERC 1996). The average stream flow in Lake James is 499 cubic feet per second (cfs) and the tributary area encompasses 380 square miles (FERC 1996). The Catawba-Wateree Project reservoirs are managed for hydropower generation and minimum flow release requirements. Water levels typically fluctuate 2 to 3 feet daily, but may be as high as 10 feet throughout the year. Water levels are lowered in the fall and winter to accommodate runoff. During the summer, these water levels are relatively high and stable for recreation (FERC 2003).

## **5.4** Aquatic Resources and Fisheries

Approximately 13% of Lake James' 151.5 shoreline miles<sup>11</sup> is classified as "environmental." This designation includes vegetated areas or cove heads with stream confluences protected from development. In addition, 5% is classified as "natural area," indicating areas containing shallow waters, significant cultural resources, or significant terrestrial habitat. Development is not allowed in such areas within the project boundary (Duke Power Company 2001; FERC 2003).

The principal sport fishes in most of the project reservoirs are warmwater species, including largemouth bass, crappie, bluegill, other sunfishes, and catfishes. These species frequent shoreline areas with standing timber, submerged woody debris, aquatic vegetation, or other cover. Spawning occurs in spring and early summer over nests constructed in shallow-water habitats, often in areas sheltered by undercut banks, fallen timber, and other overhead cover (Duke Power Company 2001; FERC 2003).

<sup>&</sup>lt;sup>11</sup> This is the equivalent of 6,577 surface acres.

Lake James, by virtue of the Linville River and other high quality cool water tributaries, also supports introduced populations of smallmouth bass (*Micropterus dolomieu*) and walleye (*Stizostedion vitreum*) (Goodreau 1995). Lake James is the deepest project reservoir with a mean depth of 46 feet and a maximum depth of 118 feet (NCDEM 1995). Smallmouth bass spawn in late spring over nests constructed in or near shore habitats. Walleye spawn in early spring by releasing eggs in riffles of tributary streams or over rocky shorelines.

#### 5.5 Terrestrial and Wildlife Resources

Forest vegetation at the project ranges from broadleaf deciduous-dominated systems of the Blue Ridge Mountains in the upper reaches of the watershed, to a wide mixture of pine or oak dominated forests in the Piedmont province in the lower portions of the Catawba-Wateree basin. Much of the forest land in the Piedmont province is managed for pines and has been developed into monocultures.

The principal terrestrial wildlife species in the project area include white-tailed deer, Eastern cottontail, and Eastern gray squirrel. Upland game birds that may be present may include bobwhite, American woodcock, and mourning dove. Great blue heron and other birds associated with aquatic habitats are also found in the project area. A diversity of non-game terrestrial species, including songbirds and many species of amphibians and reptiles, occur in the area. Areas where tributaries meet the project reservoirs may have wetland characteristics and serve as feeding areas for waterfowl and shorebirds, and as habitat for other species. Project reservoir shorelines provide foraging, nesting, and habitat sites for terrestrial wildlife and migratory birds.

# **5.6** Threatened and Endangered Species

The federally-listed endangered Schweinitz's sunflower and the federally-listed threatened dwarf-flowered heartleaf and American bald eagle, occur within the Catawba-Wateree Project area.

The Schweinitz's sunflower's habitat is in clearings and edges of upland oak-pine-hickory woods, in moist to dry sandy loams. It requires the full to partial sunlight of an open habitat. The dwarf-flowered heartleaf is found in the upper piedmont regions of the Carolinas. This plant grows in acidic, sandy loam soils along bluffs and nearby slopes, in boggy areas adjacent to creekheads and streams, and along the slopes of hillsides and ravines. The bald eagle prefers to breed in areas close to bodies of water,

<sup>&</sup>lt;sup>12</sup> NatureServe 2003.

<sup>&</sup>lt;sup>13</sup> U.S. Fish and Wildlife Service. Division of Endangered Species: Species (continued)

such as lakes and reservoirs, and typically roosts in larger conifers and perches in deciduous and conifer trees.<sup>14</sup> Bald eagles tend to avoid areas with nearby human activity (such as boat traffic and pedestrians) and development.

# 5.7 Recreation, Public Access, and Aesthetic Resources

There are 5 developed licensee-owned public recreation access locations<sup>15</sup> on Lake James and 1 state park, as seen in Figure 2. In addition, there are 4 commercial non-residential marinas that provide additional public access to the lake. According to the Form 80 Licensed Hydropower Development Recreation Report (FERC Form 80) filed with the Commission on March 28, 2003, the boat ramps, launching lanes, and marinas are used at 70 to 75% capacity. The licensee provides the general public with 403.6 acres of access areas, which include 32,139 feet of project shoreline. Facilities include 13 public boat ramps, 6 loading piers, 1 fishing pier, and parking for 23 cars and 345 vehicles/trailers. In addition, there are 4 commercial marinas and approximately 285 private piers on the lake. The lake is significantly less developed than some of the other, larger reservoirs within the project, such as Lake Norman upstream and the Wylie and Wateree lakes downstream (Duke Power Company 2001; FERC 2003).

Boating activities on the lake are generally heavier on the weekends and holidays between May and August. Boating traffic at Lake James consists of powerboats, jet skiis, pontoons, fishing boats, limited sailing boats, and water skis. Boating traffic lightens between September and April, during which time more fishing boats appear than general cruising boats. The Black Bear Public Access Area is 2.5 miles from the development. The nearest fueling facility is the Mountain Harbor facility, located approximately 5 miles from Sunset Point.

Accounts. http://endangered.fws.gov/i/q/saq5g.htm. Accessed on May 23, 2005.

<sup>&</sup>lt;sup>14</sup> NatureServe. InfoNutro: Birds, Mammals, and Amphibians. <a href="http://www.nutraserve.org/infonutra/">http://www.nutraserve.org/infonutra/</a>. Accessed on May 23, 2005.

<sup>&</sup>lt;sup>15</sup> Two are leased to the North Carolina Department of Parks and Recreation.

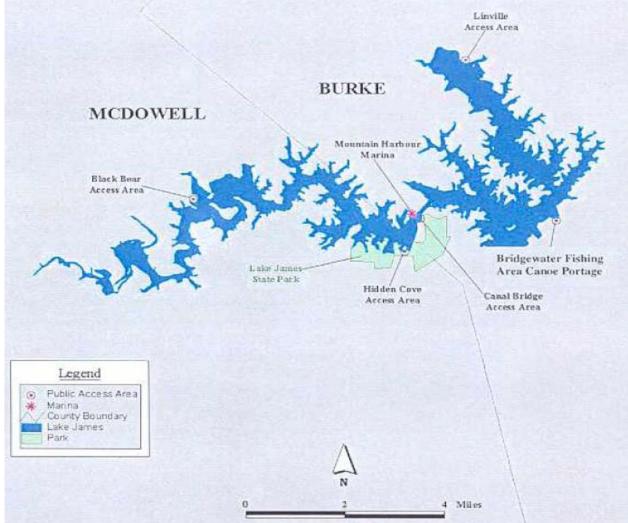


Figure 2: Access Sites at Lake James

Source: Final Shoreline Management Plan Update; filed July 30, 2001.

#### 5.8 Cultural Resources

The Commission, the Advisory Council on Historic Preservation, and the North and South Carolina Historic Preservation officers (SHPOs) developed a Programmatic Agreement (PA) outlining the operating procedures for cultural resource management and protection under the SMP. Under this PA, and in an effort to identify and evaluate historic properties within the Catawba-Wateree Project, the licensee developed a database of all known historic properties previously identified in South and North Carolina survey files located in the immediate vicinity of the project boundary. The licensee also developed a schedule and implementation plan to conduct archaeological surveys of areas within the project boundary determined to have a probability for the presence of archaeological resources (Duke Power, 1997).

The Catawba-Wateree Project area has not been systematically surveyed for historical or archeological resources yet. Although no known structures or prehistoric resources listed or potentially eligible for inclusion in the National Register of Historic Places (NRHP) <sup>16</sup> occur at the location of the proposed cluster dock, the potential exists for unknown historical and archaeological resources to occur in the project area.

#### 6.0 ENVIRONMENTAL IMPACTS

## 6.1 Water Quality

Undisturbed stretches of shoreline are important in filtering non-point source runoff, minimizing shoreline erosion, and providing shoreline cover. The proposed construction would affect the ability of the shoreline to perform these functions on a portion of the project shoreline.

The proposed construction would have a short term impact on the water quality of Lake James. The installation of 200 feet of underwater bracing will cause temporary increases in turbidity and sedimentation. In order to minimize such impacts, the licensee will construct the cluster dock facility off-site and float it into place. In addition, riprap applied to the shoreline will be done using a barge if practical, pursuant to agency recommendations. Filter fabric installed under the rocks will also help to prevent soil sedimentation. In order to minimize the impact to project resources, the agencies also stated that the applicant will be required to diffuse all storm water flows to non-erosive velocities.

The excavation of 0.25 acre of open water at Lake James in association with the installation of the shoreline stabilization, will cause additional sedimentation and turbidity; thereby compounding the impact to project aquatic resources. However, these impacts are also temporary. The ACE permit prohibits the applicant from placing dredged materials in wetlands or waters of the US. The NCWRC stated that excavation should be limited to the area in proximity of the actively eroding shoreline for the explicit purpose of placement and anchoring of the rock into the substrate.

Temporary increases in turbidity and total suspended solids will result from the proposed activities. Water quality conditions in the area of the proposed cluster dock and will return to normal levels after construction has been completed.

<sup>&</sup>lt;sup>16</sup> National Park Service. March 18, 2005.

## **6.2** Aquatic and Fish Resources

Undisturbed stretches of shoreline contribute to woody debris, which is important for aquatic habitat. <sup>17</sup>

The licensee's Water Quality Certificate includes a requirement for the licensee to install suitable trees and brush under the fixed portion of the piers to provide complex aquatic life habitat. The proposed cluster docks should be constructed and perpetually maintained (for the life of the pier) in a manner as to be "fish friendly." Under this certificate the licensee is also required to implement adequate sedimentation and erosion control measures prior to any ground-disturbing activities, in order to minimize impacts to aquatic resources.

Construction of the proposed marina would cause a temporary disturbance in some shallow water fish habitat. Fish spawning, rearing, and nursery habitats will be impacted. However, agency conditions require an in-water work moratorium beginning on April 1 and continuing through June 1, to minimize the impacts to spawning fish and the survival rate of the young fish.

In areas where riprap is installed, disturbance to shoreline cover, rooted plants, and overhanging vegetation may reduce the availability of shade and cover and increase the potential for shoreline erosion and sedimentation. The applicant states that no large woody debris would be disturbed. If there is any disturbance to shoreline habitat and other woody debris along the 750 feet of shoreline that would be rip-rapped, the required 75-foot shoreline buffer should retain much of the area's habitat value. No work in the water that is within the 25-foot "trout buffer" will be permitted between October 15 and April 16. In an effort to resolve all matters regarding woody debris and shallow water fish, and as part of the SMP for the Catawba-Wateree Project, the state agencies and licensee have entered into a Memorandum of Agreement Concerning Habitat Enhancement and Woody Debris Management. As part of this agreement, a Habitat Enhancement Program will be established to enhance fish and wildlife habitat at the project reservoirs.

The licensee has agreed to comply with all proposed conditions, recommendations, and requirements pertaining to the proposed construction.

<sup>&</sup>lt;sup>17</sup> U.S. Department of the Interior, Fish and Wildlife Service. Letter, dated February 8, 2005, from USFWS to the Commission concerning Order Modifying and Approving Non–Project Use of Project Lands and Waters and Notice of Environmental Assessment, P-2232-455.

#### **6.3** Terrestrial and Wildlife Resources

The proposed construction will result in a minor loss of shoreline habitat where the proposed riprap and dock would be located. Wildlife species that utilize edge habitat, such as raccoons, muskrats, salamanders, and beavers will be directly impacted.

The application also includes provisions for a small trench, which is necessary to provide electricity to the pier. No trees will be disturbed, as the power will run along the footpaths; however, vegetation will be removed in the immediate area that the trench is dug.

The Sunset Point development has a 50-foot natural buffer already in place; however, some vegetation may be removed or otherwise damaged as a result of the proposed construction activities. The County mandates that no trees with a DBH of 6-inches or greater may be removed from within the buffer zone. The applicant has approximately 15 trees that fall under this category inside the proposed construction area. If any trees with a 6-inch or greater DBH are removed, the applicant must replace the trees removed with trees totaling an equivalent diameter somewhere within the 50 foot buffer. Additionally, the NCWRC permit requires the applicant to: 1) plant temporary or permanent herbaceous vegetation on all soil within 15 days of ground-disturbing activities to provide long-term erosion control measurement; 2) large woody debris shall be replaced and secured to shoreline. State erosion and sedimentation control measurements will also be adhered to.

# **6.4** Threatened and Endangered Species

The following federally-listed threatened and endangered species are known to occur within the project vicinity: 1) American bald eagle (*Halieetus leucocephalus*); 2) Schweinitz's sunflower (*Helianthus schweinitzii*); and 3) dwarf-flowered heartflower (*Hexastylis naniflora*). The Schweinitz's sunflower occurs in a rocky area of a bypass channel below one of the project's spillways. The applicant sent the FWS three letters requesting consultation via mail. No responses were received.

There would be only minimal vegetation clearing during the construction of the facilities. The areas proposed to be disturbed are located below and slightly above the high water mark and are not considered appropriate habitat areas for the aforementioned terrestrial plants. No bald eagles were identified in the proposed construction areas.

<sup>&</sup>lt;sup>18</sup> These letters were dated September 28, 2003, January 29, 2004, and February 22, 2004.

Therefore, no federally-listed threatened or endangered species are expected to be impacted.

#### 6.5 Land Use, Recreation, Public Access, and Aesthetic Resources

The construction of the proposed cluster dock will increase water-related recreational opportunities for residents of the Sunset Point community by improving their access to Lake James. These facilities will contribute to an increase in water-related recreation activities on the lake, and create additional boating traffic. However, given the size and capacity of the proposed dock, it is not likely that these facilities will cause a material increase in boating traffic or significantly impact boating safety.

The dock will not produce additional access for the general public. Lake James currently provides recreationists with 403.6 acres of public access facilities, which includes 32,139 feet of shoreline. There are a total of 6 developed public access areas at the lake, 5 of which are licensee-owned. In addition, the licensee has developed an Access Area Improvement Initiative (AAII), one of the programs included in the SMP. The AAII gives local counties the opportunity to purchase low-cost project land for the purpose of creating public access areas, before the land is available to the general public for sale. The SMP has set aside 10.0 shoreline miles at Lake James (6.0% of the lake's total shoreline miles) for future public recreation. The proposed construction is consistent with the project's SMP.

The Sunset Point development contains a total of 10,555 linear-feet of shoreline and is divided into 50 private lots and 2 common lots. The development also includes 3 "environmental areas" that contain 1,448 linear-feet shoreline and are protected from development. In addition, two "impact minimizations zones" occupy 550 linear-feet of the development's shoreline.

Although the cluster dock will contribute to changing the rural character of the project, these types of recreation and access facilities are typical of other developments on Lake James. The proposed facility is located off the main channel and is not expected to significantly impede boating traffic.

To ensure boating safety in the vicinity of the proposed facility during and after construction activities, a contractor will build the floating marina at its site and then float the docks into the proposed site. Escort boats and appropriate lighting will be provided to ensure safety. The work will be done during the work days while boating traffic is light. The cove is approximately 185 feet wide where the proposed facilities would be located and the proposed docking will extend no further than 60 feet into the cove. Therefore, the dock will not obstruct more than one-third of the cove.

#### 6.6 Soils

Temporary, minor, short-term impacts on soil resources are likely to occur during the installation of the cluster dock. The dock will be constructed off-site and floated into place in order to minimize potential increases in sedimentation and erosion. The NCWRC requires filter fabric to be installed under the riprap to minimize the sedimentation of soils into the lake. In addition, all rocks used to construct the riprap will be clean and free of sediment. By adhering to the licensee's SMP, state erosion and sedimentation control measures, and the permitting requirements, suggestions, and conditions submitted by state and federal agencies, potential impacts from sedimentation and erosion will be minimal.

#### **6.7** Cultural Resources

Unearthing archaeological artifacts or disturbing historically significant areas during any construction is a possibility and is considered a potential averse impact. However, the Commission staff has determined that no acreage containing identified cultural properties listed on the NRHP, or eligible for listing, is included in the proposed construction area. Therefore, no adverse effects to any known historic properties within the proposed area are expected. The applicant sent two letters to the SHPO requesting consultation on this matter, and the SHPO responded that it had no comment. An additional request for comments was sent to the SHPO by the Commission on September 22, 2004, but no response was received.

The Commission issued a letter requesting consultation to the appropriate members of the Eastern Band of Cherokee Indians, the Catawba Indian Nation, and the Catawba Indian Tribe on September 22, 2004. No responses were received.

If any historic or archeological remains are discovered during construction, the Commission staff recommends that the applicant halt all further construction activities and contact the SHPO and those Indian Tribes that may attach a religious or cultural significance to the area in which the discovery was made, and/or to the discovered materials. The materials should then be assessed to determine if a recovery effort is warranted, and/or if they may be eligible for listing on the NRHP.

<sup>&</sup>lt;sup>19</sup> National Park Service. <a href="http://www.cr.nps.gov/nr/research/nris.htm">http://www.cr.nps.gov/nr/research/nris.htm</a>. March 18, 2005.

#### 6.8 Socioeconomic

The construction of the proposed facilities will have a beneficial effect on the socioeconomic conditions within the project region. The presence of boat docks may increase the real estate value of the houses within the Sunset Point development. Residents of Sunset Point will contribute to the expansion of the local economy and taxbase. Additional revenues may also be generated for businesses and associated services that cater to these homeowners.

#### **6.9** No-Action Alternative

Under the no-action alternative, the licensee would be denied Commission authority to lease the project lands to the applicant. This alternative would prevent the environmental impacts stated above in this section of the EA.

If the no-action alternative is selected, residents of the Sunset Point community would be denied convenient lake access afforded by the proposed cluster dock and would likely utilize other public access sites at the lake. The real estate value of the homes in the Sunset Point residential community may decrease or may not increase at the rate of other residential communities on the lake, due to the lack of lake access.

#### 7.0 CUMULATIVE IMPACTS

According to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act, an action may cause cumulative impacts on the environment if its impacts overlap in space and/or time with the impacts of other past, present, or reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions.

In the DOI's motion to intervene, the DOI cited concerns with potential cumulative effects associated with water quality, and fish and wildlife habitats. These effects could incrementally add to the cumulative environmental impacts of other shoreline development activities. The licensee's SMP was designed to take such cumulative development factors into account. The SMP is a working document that assumed future construction would follow current development trends when it was submitted in 2001. The document comprehensively addresses the issue of cumulative shoreline development impacts. Specifically, it assigns shoreline segments to various use classifications in order to restrict development in certain areas with environmentally important or sensitive resources, and to permit development in other areas that are more appropriate for intensive use (FERC 2004).

Unavoidable impacts resulting from continued shoreline development include incremental, cumulative fish habitat loss and degradation. The increasing alteration of the shoreline and vegetation cover (including trees, shrubs, and herbaceous plants) is associated with increases in sedimentation and turbidity. In addition, the loss of perimeter vegetation reduces habitat of wildlife species that depend on edge habitat.

Shoreline development trends indicate that residential and commercial developments within the project boundary will continue to increase. In light of the growing number of non-project use developments, state and local buffers identified in the project's SMP are implemented to help maintain the scenic quality of the area, among other things. These buffers restrict shoreline development and required natural or vegetated areas. The project's SMP identifies valuable habitats and has placed restrictions on development. <sup>20</sup>

Although the proposed facility is relatively small in size and capacity, it is still a contributing factor to the growing number of non-project use of project lands and waters at the Catawba-Wateree Project. This shift towards development continues to transform the lake's primarily rural nature into a more residential landscape. The adverse impacts to project resources stated above in this EA will continue to compound as increasing numbers of developments are constructed at the lake.

The project's SMP aims to accommodate the various and sometimes conflicting expectations of people, businesses, natural resource agencies, and environmental groups by allowing controlled and measured development along the shoreline. The SMP also comprehensively addresses the issue of cumulative shoreline development impacts. Specifically, the SMP assigns shoreline segments to various use classifications in order to restrict development in certain areas with environmentally important and sensitive resources, and to permit development in other areas that are more appropriate to intensive use. Therefore, the proposed construction is not outside of the scope of the SMP.

Mitigation measures included in the SMP, combined with other local, state, and federal regulations and permit conditions, will help to minimize the adverse effects resulting from the construction of the proposed docks. These measures include: 1) maintaining a vegetative buffer along the shoreline; 2) complying with the resource-protection conditions of all the required permits; 3) constructing a clustered, multi-slip facility instead of individual docks; 4) not disturbing<sup>21</sup> large woody debris within the

<sup>&</sup>lt;sup>20</sup> FERC. Final Environmental Assessment: Amendment to License—Revised Shoreline Management Plan (P-2232-428).

<sup>&</sup>lt;sup>21</sup> Stumps, rocks or woody debris within the lakebed should not be disturbed or removed. Large woody debris that extends into the water along the path of the (continued)

lakebed;<sup>22</sup> and 5) installing fish-friendly docks.

The revised SMP has been developed for over 10 years with the input of local, state, and federal agencies, private and non-governmental entities, and the general public. The Commission has issued 3 EAs during various stages of the SMP, and numerous EAs for site-specific development proposals. Each revision of the SMP continues to refine and balance the needs of competing interest parties. The project license is due to expire in 2008. During the upcoming relicensing process, project shoreline resources, among other issues, will again require reconsideration. <sup>23</sup>

The proposed dock will be constructed in a manner at to be "fish friendly" and will be floated into place to reduce potential sedimentation and turbidity. Riprap and filter fabric will be installed by barge to curb shoreline erosion and reduce the disturbance to the shoreline. While the proposed facility will increase access to Lake James for the residents of the Sunset Point subdivision, it will also cause an increase in boating traffic. The applicant has agreed to comply with all recommendations, requirements, and conditions provided by the consulted agencies in order to mitigate any negative impacts to project resources.

#### 8.0 RECOMMENDATIONS

If any historic or archeological remains are discovered during construction it is recommended that: 1) all work at the site cease immediately; and 2) the SHPO and any Indian tribes that might attach religious or cultural significance to the discovered materials be consulted to determine if the remains warrant a recovery effort or if the site is eligible for listing on the NRHP.

stabilization project or within the lake pool should be replaced and secured to the shoreline at the completion of the project.

<sup>&</sup>lt;sup>22</sup> Consistent with the Memorandum of Agreement (MOA) Concerning Habitat Enhancement and Woody Debris Management for the Catawba-Wateree Hydro Project; between the licensee, South Carolina Department of Natural Resources, and NCWRC.

<sup>&</sup>lt;sup>23</sup> FERC. 2003. Final Environmental Assessment: Amendment to License-Revised Shoreline Management Plan (P-2232-428).

# 9.0 CONCLUSIONS AND FINDING OF NO SIGNIFICANT IMPACT

This Environmental Assessment, for the Catawba-Wateree Hydroelectric Project, was prepared pursuant to the National Environmental Policy Act of 1969. Based on the above assessment, we conclude that approval of the proposed action would not constitute a major Federal action significantly affecting the quality of the human environment.

#### 10.0 LITERATURE CITED OR USED

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