

# **Decision Notice and Finding of No Significant Impact for the Lake Powhatan Dredging Environmental Assessment**

USDA Forest Service, Pisgah National Forest  
Pisgah Ranger District  
Buncombe County, North Carolina  
July 2006

## **1. Decision and Reasons for the Decision**

### **1.1 Background**

In the fall of 2004, the remnants of three hurricanes severely damaged western North Carolina. The hurricanes generated heavy rains resulting in mudslides, flooding, and severe erosion. Due to these storms, Lake Powhatan was the recipient of unusually heavy amounts of runoff water laden with high concentrations of sediment from the Bent Creek Watershed. The sediment from these storm events exacerbated the long-term problem of reservoir sediment deposition caused by erosion from unstable stream banks, eroding trails and eroding roads in the Bent Creek watershed. Previous sediment problems required dredging of the reservoir in 1993. However, the problem continued because there was inadequate erosion control for the sources of sediment (roads, trails and unstable streams banks). These sediment sources are being addressed in separate projects, which should help the long-term success of this proposed dredging.

### **1.2 Decision**

I have selected Alternative 2 (Selected Alternative) for implementation. The Selected Alternative best responds to the purpose and need as stated on page 2 of the environmental assessment (EA) because it will help meet the desired future condition outlined in the *Nantahala and Pisgah National Forests Land and Resource Management Plan, Amendment 5* (Forest Plan).

With the Selected Alternative, the Forest Service will contract with the Tennessee Valley Authority to draw down Lake Powhatan, mechanically dredge approximately 11,000 cubic yards of sediment, dispose of the sediment on a three-acre site immediately north of the lake, allow the lake to refill to capacity, and rehabilitate the disposal site. During draw down, fish will be collected and moved to nearby ponds as appropriate; after the lake has refilled, new fish will be restocked. The Selected Alternative is described in greater detail on EA pages 7 to 12.

Internal and public scoping were undertaken to identify potential issues associated with this project (EA pages 3 to 4).

To reach my decision, I weighed and balanced the long-term benefits versus the short-term costs of implementing the Selected Alternative. Long-term benefits include the reduction of sediment in the lake; the improvement of water quality; the improvement of aquatic habitat; and the improvement of recreational opportunities such as swimming and fishing. Short-term impacts include a disruption of off-season recreation during dredging activities; damage to roads along the haul route; and a shortened camping season at the Lake Powhatan campground.

My decision takes into account the short-term effects on individuals that will be impacted by the dredging operations:

- The campground concessionaires and campers will be impacted due to early closure of the campground. Since the dredging will occur in the non-peak season, starting shortly before the traditional closing dated, it is anticipated that the impacts will be minimal.
- Trail users will be impacted during dredging as portions of Trails 333 and 335 will be closed. Trails may be open on weekends if weekend work is not planned and the work site does not pose an increased safety hazard. Visitors may continue parking at the Hardtimes Trailhead and using Hardtimes Road and Trail 333 from the parking lot, around the east and south side of lake, to connect in with the system at Small Creek Trail, 334. Other similar alternative trail opportunities exist in the immediate area so the affect would be more inconvenience than temporary elimination of a recreation opportunity.
- During the dredging operation, the lake fishery would not be available to the public for several weeks. The fishery would have to be restocked when the reservoir was refilled. Several trout fishing opportunities exist nearby so the effect on anglers is expected to be minimal. The disabled anglers would be affected more than others as there are very few nearby angling opportunities for them that are similar to Lake Powhatan. However, in the off-season this area is inaccessible behind a locked gate so the net effect will only be 2 to 3 weekends, where traditional access will be unavailable.

I considered these impacts but felt the long-term benefit outweighed the short-term impacts. I made this decision based on the fact that the dredging operations are planned for the non-peak use season, the area may be open on weekends if the work site does not pose an increased safety hazard, and there are similar sites for these recreation opportunities in the vicinity.

The Selected Alternative incorporates the project design features described in detail on EA pages 12 to 14. These features will be applied during project implementation to protect aquatic resources, reduce erosion and sedimentation, and provide for public safety. In addition, my decision was guided by all applicable laws, regulations, and policies (see section 3 below). One project was left out of EA Table 3, replacing the wooden bridge damaged by the September 2004 tropical storms that accessed the azalea repository across Bent Creek with a concrete and steel bridge. This action was excluded from documentation in an environmental impact statement (EIS) or environmental assessment (EA) because there were no extraordinary circumstances as listed in Chapter 30.3 that exist, which might cause the action to have significant effects. In making my decision, I considered the cumulative effects from all of the projects listed in EA Table 3 and the Azalea Bridge replacement.

## **1.3 Alternatives Considered**

### **1.3.1 Other Alternatives Considered**

In addition to the Selected Alternative, I considered Alternative 1 (the No Action Alternative), which is described on EA page 7. Under Alternative 1, current management of the area would continue and no dredging would occur. I did not select Alternative 1 because it would not move the existing condition of Lake Powhatan toward the desired future condition outlined in the Forest Plan, including improving water quality and aquatic habitat, as well as providing the opportunities to experience quality fishing and swimming.

Hydraulic dredging and six other sediment disposal sites were considered but eliminated from detailed study. This method and these sites, as well as the rationale for not carrying them through the analysis process, are described on EA pages 14 and 15.

### **1.3.2 Mitigation Measures, Management Requirements, and Monitoring Provisions**

My decision incorporates any mitigation included in the State of North Carolina's Water Quality Certification and Erosion and Sedimentation Control Plan and U.S. Army Corps of Engineers permits, which will be on file at the National Forests of North Carolina Supervisor's Office prior to implementation of the project. In addition to the monitoring as described on EA pages 15 and 16, this decision also incorporates an emergency response plan that calls for participation by North Carolina Department of Environment and Natural Resources, Divisions of Land & Water Quality personnel when responding to rain events that threaten to exceed bypass pipe design capacities. In the event of emergency, the Forest Service will take action to protect the dam structure, as agreed upon by the multi-agency response team. A series of check dams equipped with filter fabric have been added to the design features to mitigate risk of washout sediments reaching the gate valve.

### **1.4 Public Involvement**

The Proposed Action was listed in the April 2006 quarterly Schedule of Proposed Actions posted on the NFsNC website (<http://www.cs.unca.edu/nfsnc/>). A 20-day scoping period for the project was initiated with an April 7, 2006 letter requesting comments on the Proposed Action. In addition, as part of the public involvement process, the agency provided those who responded to the initial scoping copies of the environmental assessment and asked for comments within a 30-day period. Approval to dredge during the State trout moratorium, October 15 to April 15, was sought from the state of North Carolina.

A number of letters and emails were received, generally supporting the need for the project and the proposed action. Some commented that they would like to be kept apprised of actions that are taken to carry out the proposal and that surveys of species present and monitoring should be done in conjunction with the proposal. One comment suggested that the Forest Service recognize that the sediment that has been filling in Lake Powhatan does not all come from the 2004 storms. Using these comments from the public and other agencies the interdisciplinary team developed a list of issues (EA page 4). A list of the comments received and the Forest Service responses may be found in EA Appendix A

Public comment on the EA was requested in a May 26 letter that was mailed to individuals, agencies, and organizations. The EA and letter requesting comment were also posted on the National Forests in North Carolina web site listed above. Official notification of the availability of the EA for review was made via a legal notice in the ranger district's newspaper of record, *The Asheville Citizen-Times* of Buncombe County, North Carolina, on June 5. The 30-day comment period for the EA ended on July 5. Comments were received from 2 people, and 2 agencies. The comments to the EA, along with the Forest Service responses, are listed in Appendix A of this document.

## 2. Finding of No Significant Impact

After considering the environmental impacts described in the EA and after examining supporting documentation found in the project record, I find that implementing the Selected Alternative will not have a significant impact on the quality of the human environment, considering the context and intensity of impacts<sup>1</sup>, and therefore an environmental impact statement for this project will not be prepared. I base my decision on the items listed below.

1. My finding of no significant impact is not biased by the beneficial impacts of the Selected Alternative. The long-term beneficial impacts are that sediment in Lake Powhatan will be reduced and water quality in and below the reservoir, aquatic habitat, and recreational opportunities will be improved (EA pages 23 to 31).
2. No significant impacts on public health and safety will occur due to the location of the project, the size of the affected portion of the project area, and design features incorporated into the project. The Selected Alternative is expected to improve public health and safety by reducing bacterial colonies near the beach area of Lake Powhatan during the swimming season (EA pages 14 and 29 to 31).
3. No significant impacts on unique characteristics of the area will occur due to the small geographical extent of the project and its restoration nature.
4. The impacts on the quality of the human environment are not likely to be highly controversial because there is no known scientific controversy over the impacts of the project (EA Chapter 3).
5. The Forest Service has considerable experience with the types of activities to be implemented. Past analyses for similar projects, including previous dredging of Lake Powhatan to remove sediment; analysis contained in the EA; and supporting documentation contained in the project record indicate that the impacts are not uncertain and do not involve unique or unknown risks.
6. The action is not likely to establish a precedent for future actions with significant impacts because the purpose and need for the project will be met by the Selected Alternative and this project has no significant impacts. Currently, there are several upstream projects (EA Table 3) that will reduce the sediment load entering the Bent Creek system and Lake Powhatan, which should result in a reduced need to repeat dredging.
7. The cumulative impacts associated with the Selected Alternative are not significant (EA Chapter 3).
8. The Selected Alternative will have no significant impact on districts, sites, highways, structures, or objects either listed or eligible to be listed in the National Register of Historic Places. Heritage resource specialists surveyed the project area. Heritage sites found in the project area will be avoided and no negative impacts are expected (EA pages 15, 49, and 50).
9. The Selected Alternative will not adversely impact any endangered or threatened species, or habitat that has been determined to be critical under the Endangered Species Act of 1973. A survey of the project area has been conducted by a Forest Service

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<sup>1</sup> 40 CFR 1508.27

biologist and the results are documented in a project-specific biological evaluation. The Selected Alternative will have no effect on any proposed, endangered, or threatened species (EA pages 5, and 31 to 38).

10. The Selected Alternative will not violate federal, state, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The Selected Alternative is consistent with the Forest Plan (see section 3 below and EA pages 1, 2, 4, 5, and 53).

### **3. Findings Required by Other Laws and Regulations**

My decision to implement the Selected Alternative is consistent with the long-term goals and objectives listed on pages III-1 and III-2 of the Forest Plan. The project was designed in conformance with Forest Plan standards and guidelines for appropriate management areas.

#### **3.1 National Forest Management Act of 1976, as amended**

The Selected Alternative fully complies with the Forest Plan. This project incorporates all applicable Forest Plan forest-wide standards, guidelines, and management area prescriptions as they apply to the project area, and complies with Forest Plan goals and objectives. All required interagency reviews and coordination have been accomplished; new or revised measures resulting from these reviews have been incorporated. The Forest Plan complies with all resource integration and management requirements of 36 CFR 219.14 through 219.27. Application of Forest Plan direction for the project ensures compliance at the project level. The Selected Alternative will meet the purpose and need for the project and move the existing condition toward the desired condition outlined in the Forest Plan (EA pages 2, 3, and 12).

#### **3.2 Endangered Species Act of 1973, as amended**

The project area was surveyed for threatened and endangered species. No such species were observed. A biological evaluation was prepared and is filed in the project record (EA pages 5 and 31 to 38).

#### **3.3 National Historic Preservation Act of 1966, as amended**

Cultural resource surveys have been conducted, following inventory protocols approved by the North Carolina State Historic Preservation Officer. The heritage resource report in the project record contains the results of the cultural resources survey (EA pages 15, 49, and 50). Also, a heritage resource specialist will be present during berm formation and part of the dredging to make sure no heritage resources are impacted.

#### **3.4 Federal Water Pollution Control Act (Clean Water Act) of 1972, as amended**

The design of project activities is in accordance with Forest Plan standards and guidelines, best management practices (North Carolina Department of Environment and Natural Resources and North Carolina Division of Forest Resources – *Forestry BMP Manual*, 2006) and applicable Forest Service Manual and Handbook direction. Monitoring and evaluation of the implementation and effectiveness of Forest Plan standards and guidelines and best management practices will occur (EA pages 2 and 12 to 14). Project activities are expected to meet all applicable state water quality standards.

### **3.5 Executive Order 11988, Clean Water**

Implementation of the Selected Alternative is fully consistent with this executive order (EA pages 2 and 12 to 14).

### **3.6 Executive Order 12898, Environmental Justice**

This executive order requires that, to the greatest extent practicable and permitted by law, all populations are provided the opportunity to comment before decisions are rendered on, are allowed to share in the benefits of, are not excluded from, and are not affected in a disproportionately high and adverse manner by, government programs and activities affecting human health or the environment. Implementation of the Selected Alternative is not anticipated to cause disproportionate adverse human health or environmental impacts to minority or low-income populations (EA pages 3, 4, 12, 14, 29 to 31, Chapter 4 and Appendix A).

### **3.7 Executive Order 13112, Invasive Species**

Implementation of the Selected Alternative is not anticipated to cause or promote the introduction or significant spread of non-native invasive species (EA pages 5 and 45 to 49).

### **3.8 Executive Order 13186, Migratory Birds**

Implementation of the Selected Alternative will meet the management objectives of this executive order. No impacts on migratory bird species are expected (EA pages 36 to 38).

## **4. Administrative Review or Appeal Opportunities**

This decision is subject to appeal pursuant to 36 CFR 215.11. A written appeal, including attachments, must be postmarked or received within 45 days after the date this decision is published in *The Asheville Citizen-Times*. The publication date of this decision is the exclusive means for calculating the time to file an appeal. Persons wishing to file an appeal should not rely on dates or timeframe information provided by any other source.

The Appeal shall be sent to National Forests in North Carolina, ATTN: Appeals Deciding Officer, 160-A Zillicoa Street, Asheville, North Carolina, 28801. Appeals may be faxed to (828) 257-4263. Hand-delivered appeals must be received within normal business hours of 8:00 a.m. to 4:30 p.m. Appeals may also be mailed electronically in a common digital format to:

[appeals-southern-north-carolina@fs.fed.us](mailto:appeals-southern-north-carolina@fs.fed.us)

The subject line of the electronically mailed appeal must contain the name of the project that you are appealing. The sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated acknowledgement of receipt of the appeal, the sender has the responsibility of ensuring a timely receipt by other means.

Those who meet requirements of 36 CFR 215.13 may appeal this decision. Appeals must meet content requirements of 36 CFR 215.14:

1. State that the document is a Notice of Appeal filed pursuant to 36 CFR part 215.
2. List the name, address, and telephone number of the appellant.
3. Identify the decision document by title and subject, date of decision, and name and title of the responsible Official.



## Appendix A

### Public comments and Forest Service responses

Comments were received from 2 people, and 2 agencies. These comments are summarized below, followed by the Forest Service responses.

#### Letter 1 – Charles Cordell

**Comment:** “Upon review of your Dredging Assessment, My wife and I agree with Alternative #2. We totally agree with your summary and methods. We feel this project is completely necessary for the future of our lake.”

**Forest Service response:** Thank you for your comment.

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#### Letter 2 – Charles Parris

**Comment:** “Alternative 2, the proposed action for the Lake Powhatan dredging seems to be the best action to be taken. Though more miles will be added to moving the sediment from the site, the power line field does sound like it would be the best solution. Public safety and sanitation should always be a priority. If some action is not taken, the water quality and aquatic life will suffer. I hope this project will get underway soon.”

**Forest Service response:** Thank you for your comment.

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#### Letter 3 – North Carolina Wildlife Commission

**Comment:** “The construction practices described in the EA should protect fish habitat in Bent Creek downstream of the lake. The stream flow bypass should reduce sediment transport from the lake bed, particularly during storm events. Continuous flow downstream of the lake during its refilling is important to maintain water quality and physical habitat.

The dredging may not improve stream temperatures below the lake. An increased residence time in lakes can increase peak temperatures, though the rate of heating, and subsequent cooling, is reduced because of the larger water mass. However, if the lake is prone to stratification, then mixing of surface and bottom waters periodically does not occur. Water quality data would be needed to assess this in Lake Powhatan before and after the project. This data also would be useful for making informed decisions about how to improve water quality and aquatic habitat with future lake projects. For example, where stratification causes poor water quality, outflows that withdraw bottom water can be used to ameliorate those effects, as well as enhance cool water in waters downstream.

The Commission recommends that trout stocking not be discontinued after kid’s fishing day because the lake will not be drawn down until late September and it is a popular fishing area that depends upon frequent trout stocking. Most trout stocked in streams are caught shortly

after release (i.e. within days); this probably occurs in Lake Powhatan as well. Therefore, one more stocking before the end of June and after kid's fishing day, as the Commission routinely does, should not result in appreciably more fish left remaining by the draw-down period than if it had not occurred."

**Forest Service response:** Collecting water quality data to assess whether the lake is prone to stratification is beyond the scope of this project. However, surface abrading of the concrete at the top of the dam resulting from debris flow during the storm events will be repaired during the dredging project and will improve functioning of an existing deep water release pipe. This decision does not include any plans for outflows that withdraw bottom water but the improved functioning of the deep water release pipe would make these types of outflows possible.

The normal number of fish stocked for kid's fishing day was doubled so that a routine quantity of fish went into the lake over the month of June.

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#### **Letter 4 – US Fish & Wildlife Service**

**Comment:** "As stated in our earlier letter, we have no objections to the proposed project. Based on the information provided in the EA and a review of our records, we do not believe the project is likely to adversely affect federally listed endangered or threatened species or critical habitat. Thus, the requirements of section 7(c) of the Act are fulfilled. However, obligations under section 7 of the Act (Endangered Species Act of 1973) must be reconsidered if: (1) new information reveals impacts of this identified action that may affect endangered or threatened species of critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the action."

**Forest Service response:** In the event of new information, modification, or newly listed species or change in critical habitat determination, the Forest Service will reevaluate the action for compliance with the Endangered Species Act of 1973.