



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: July 6, 2020  
Comment Deadline: August 7, 2020  
Corps Action ID Number: SAW-2015-00788

The Wilmington District, Corps of Engineers (Corps or USACE) received an application from Mr. Jeff Ferguson of the North Carolina Wildlife Resources Commission (NCWRC or WRC) seeking Department of the Army (DA) authorization for 7.5 acres (ac) of permanent impacts to open waters (dredging and conversion to wetlands); 9.5-ac of temporary impacts to open waters (access and erosion control); 1.1-ac of permanent impacts to wetlands (fill); and 3.0-ac of temporary impacts to wetlands (access and erosion control), associated with dredging of the recreational navigation channel between the Lake Adger public boat access area and the lake's main channel adjacent to the Lake Adger marina in Mill Spring, Polk County, North Carolina.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at:

<https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>

**Applicant:** Mr. Jeff Ferguson  
North Carolina Wildlife Resources Commission  
1701 Mail Service Center  
Raleigh, North Carolina 27699

**AGENT (if applicable):** Mr. Robert Cork  
Anchor QEA of North Carolina, PLLC  
231 Haywood Street  
Asheville, North Carolina 28801

## Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of the following Statutory Authorities:

- Section 404 of the Clean Water Act (33 U.S.C. 1344)
- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

## Location

### Location Description:

The project site is located on an approximately 57 acre tract at the top of Lake Adger, east of Lake Adger Road and south of the public boat access area, in Mill Spring, Polk County, North Carolina. The site is approximately 0.3 miles north of the intersection of Lake Adger Road and N. Highland Road

Project Area (acres): 57  
Nearest Town: Mill Spring  
Nearest Waterway: Green River / Lake Adger  
River Basin: Upper Broad (HUC 03050105)  
Latitude and Longitude: 35.3351 N, -82.23085 W

## Existing Site Conditions

The 57-ac site is in the upper portion of Lake Adger. The lake is a 438-ac impoundment of the Green River and was created in 1925 when the Blue Ridge Power Company built the dam at Turner Shoals on the Green River. The dam is known as the Turner Shoals Dam and Northbrook Hydroelectric (Northbrook) currently operates the hydroelectric power generation facilities at the dam. Lake Adger is a drinking water source for Polk County and provides recreational boating, swimming, and fishing use.

The full pond elevation of Lake Adger is 911.6 feet above mean sea level. The project site is where the Green River enters Lake Adger. Since the creation of the lake, this area has developed a braided channel system with channels separated by in-stream riparian wetlands and low upland islands.

The project area is situated in the Piedmont physiographic province and is in the Southern Inner Piedmont Ecoregion of North Carolina. The Piedmont province lays east of the Appalachian Mountains and extends from Alabama to New Jersey. This province consists of rolling upland with prominent monadnocks or inselbergs that are higher topographically on the landscape.

Waters at the project site are part of the Santee River system and are within the Upper Broad River watershed (HUC 03050105). The Green River and Lake Adger (an impoundment the Green River) are located at the project site. As designated by the North Carolina Department of Environmental Quality (NCDEQ) – Division of Water Resources (DWR), surface waters at the site are classified as critical area (CA), water supply IV highly developed (WS-IV), secondary recreation class C aquatic life fresh water. The proposed project boundary contains the following amounts of jurisdictional waters of the U.S. (WoUS):

### Summary of Jurisdictional Waters

Aquatic Resource	Amount
Wetland	37.44 ac
Open Water	19.69 ac

## **Applicant's Stated Purpose**

Maintenance dredging of the navigation channel is required to maintain adequate water depths in the navigation channel for recreational use and to remove 3,000 cubic yards (cy) of sediment related to the lower Big Hungry dam removal. Performing wetland and upland creation with dredged material will enhance habitat within the lake footprint by extending existing wetland areas. Enhancing natural functions can include serving to reduce frequency and intensity of floods, thereby protecting the area against storm surges; providing critical habitat, breeding grounds, and food resources for organisms; improving water quality; and offering commercial, recreational, and aesthetic benefits.

## **Project Description**

NCWRC is proposing maintenance dredging within the Lake Adger navigation channel to remove accumulated sediment. The navigation channel provides public boat access from the boat ramp at the western end of the project area to the main lake and is adjacent to the Lake Adger marina. During the initial dredging activities in 2020/2021 an estimated 6,800 cy of sediment will be dredged from the navigation channel and placed for beneficial use within the Lake Adger footprint for habitat creation, specifically wetland creation and enhancement, or creation of upland areas. Anticipated disturbance for the project area will be approximately 21.2 acres, which includes the following:

- Navigation channel dredging disturbance area: 4.5 acres
- Material placement disturbance area: 16.7 acres, including 4.1 acres of dredged material placement areas, allowance for sedimentation control, and access

Bathymetric and topographic surveys; delineations of jurisdictional waters; assessments of a reference wetland and upland; sediment sampling study; geotechnical investigations; and hydraulic modeling have been conducted as part of the pre-design investigation.

The proposed staging area for the project will be placed on the southwestern extent of the existing public parking lot, adjacent to the public access boat ramp. The contractor will access the lake from the public access boat ramp or a floating dock. Following dredging activities, the parking lot will be restored to its current condition or developed for an alternative use, as approved by applicable stakeholders.

The navigation channel dredging area is approximately 1,500 feet long, with a base width of 20 feet, slope of 1 (vertical) to 3 (horizontal), and elevation of 6 feet below the full pool elevation of 911.6 feet. The navigation channel will be widened in strategic locations to improve navigation by removing 3,000 cy of sediment related to the lower Big Hungry dam removal. Hydraulic dredging techniques are proposed, which will facilitate pumping of the dredged material over a distance of approximately 1,500 feet directly to the material placement area. During operation of the Turner Shoals Dam for power generation by Northbrook, the lake's surface elevation can vary by 2 to 3 feet. Additionally, the lake can be drawn down and held at 5 feet below the normal level. Northbrook will be consulted during the design stages to discuss managing the lake's surface elevation during dredging and construction of the placement area.

Throughout the project, the dredged material will be placed within the Lake Adger footprint as beneficial use for habitat creation, specifically wetland creation and enhancement, or creation of upland areas. Placing the material using hydraulic dredging discharge will allow placement of dredged sediment within approximate depth and finished level ranges so that the design will include areas of wetland and upland, channels and inlets, and various elevations to enhance hydraulic connectivity to the lake to ensure frequent and prolonged presence of water at or near the sediment surface, intermittent flooding, and diverse vegetation establishment. The proposed design defined four areas for dredged material placement (A1 and A2, B1, and C1) with a total estimated capacity for approximately 12,000 cy of sediment placement, up to full pool elevation. During material placement, these cells will be bordered by up to three separate structures (as shown in Sheet C5 of the design set):

- An initial structure designed to hold the sediment in place will be constructed of biodegradable and/or temporary containment materials. Containment materials may include haybales stacked up to two layers high with a base width of two haybales, coir fiber biologs, or an equally effective alternative. Containment materials will be secured in place with biodegradable stakes, or an equally effective alternative method.
- A second structure constructed similarly to the first will create a secondary dewatering barrier to reduce sediment in discharged water.
- After the two initial structures a silt curtain will be placed downgradient to assist with sedimentation control.

Based on the submitted design, it is anticipated that the initially dredged 6,800 cy will be placed in cells A1 and A2. These two cells will allow improved management of the dewatering process by allowing the discharge to be alternated between the two cells. For construction of cells A1 and A2, it is estimated that 840 feet of initial containment structures will be required, followed by 700 feet of secondary containment structures, and up to 900 feet of silt curtain.

Following the initial dredging effort of 6,800 cy, additional capacity will remain in areas A1 and A2, B1, and C1 for future maintenance dredging events. These areas will only be delineated with containment structures when needed for dredged material placement.

Establishing habitat including beneficial wetlands and upland, is a common approach in lakes, rivers, and estuaries to stabilize shorelines, restore habitat, and beneficially use of dredged materials. After the dredged sediment is placed in the cells, habitat establishment will include native wetland and/or upland vegetation species dependent on the final elevation of placed sediment. Placed sediment depth and final elevation will vary based on placement of the hydraulic dredging discharge line, variable rates of passive dewatering, and compaction and subsidence. Varied final elevations will promote establishment of plant species that differ in their ability to withstand prolonged inundation or dry periods. The material's final elevation will be determined with a finished level survey.

Native emergent wetland and upland species identified at the nearby reference wetlands will be planted on the dredged material to stabilize the material and provide ecological benefits. In addition to the planting, the site will be seeded with a wetland seed mix containing a variety

obligate and facultative wetland species to provide additional species diversity and ground cover. Non-native and invasive species will not be planted.

Planting will occur in the next suitable planting season following placement of the dredge material to allow for passive dewatering and settlement. Plants will be 2-inch plugs and planted on two-foot centers (i.e.: 10,890 plants per acre). During vegetation establishment, herbivory control measures will be installed as required to reduce predation by wildlife and waterfowl. Herbivory control measures are anticipated to include construction fencing attached to posts around the perimeter of the planted area, and possible covering by a grid of wire/string to which flagging tape is attached. Signage and flagging may be added as appropriate to minimize public access until the plants have established resiliency to foot traffic and seasonal variations (generally for one or two growing seasons).

Emergent wetland vegetation has relatively low tolerance for wave energy and currents because they can break the plants and wash away finer material, making the substrate too coarse. Therefore, the containment structures (such as hay bales or coir fiber biologs) will be left in place until they biodegrade to allow establishment of vegetation. Following habitat establishment and planting activities, the following monitoring activities are anticipated in the areas planted and seeded with vegetation:

- Herbivory controls, signage, and flagging will be inspected biweekly during the growing season and repaired as needed.
- Annual monitoring for 3 years to document vegetation coverage and establishment. The details of the monitoring plan will be developed with input from regulatory agencies.

### **Avoidance and Minimization**

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment. Erosion control measures will include the use of silt curtains to contain impacts to the project area and monitoring. The contractor will be trained in safety and environmental procedures, which includes strict containment protocol to minimize the potential for surface water impacts.

Turbidity will be monitored during the project using hand-held or automated turbidity meters to record nephelometric turbidity units (NTU). Background data will be collected at a station located upstream of the dredging and dredge material placement area. A monitoring location will be established 1,000 feet downstream of dredging and material placement operations. During the first week of operations data will be collected daily at the upstream background location, and twice daily at the downstream monitoring location. The turbidity criteria will be turbidity measured downstream of dredging operations, at the monitoring location are less than 50 NTUs above turbidity measured at the upstream background location.

If turbidity downstream of dredging and dredge material placement operations is more than 100 NTUs above the upstream background location, it will trigger review/evaluation of the activities and response actions. An evaluation will be conducted to assess the cause of the

exceedance and the need for operational changes or other response actions. The evaluation may result in one or more of the following actions, to be determined in the field:

- Increase frequency of monitoring at both background and downstream locations to hourly
- Review work operations and best management practices
- Identify additional best management practices to employ (e.g., additional containment around the placement area)
- Reduce dredging and/or dredge material placement rate(s)

If no issues or exceedances are observed during the first week, data collection at the downstream monitoring location will be reduced to once daily.

### **Compensatory Mitigation**

The proposed project does involve temporary and permanent impacts to jurisdictional WoUS. The temporary impacts to wetlands and open waters and the permanent impacts to open waters will not result in functional losses to the aquatic environment within these jurisdictional resources and will not result in a permanent loss of jurisdictional WoUS.

Upon completion and implementation of practical avoidance and minimization efforts, a total of 1.1 acres of permanent impacts to wetlands associated with dredging activities are unavoidable. These impacts will result in a functional loss to the aquatic environment and result in a permanent loss of jurisdictional WoUS.

The applicant does not propose compensation for the permanent wetland impacts, as the project will result in a gain of wetlands and habitat development. Based upon the submitted design approximately 2.5-3 acres of wetlands will be created in the dredge spoils disposal area.

### **Essential Fish Habitat**

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, this Public Notice initiates the Essential Fish Habitat (EFH) consultation requirements. The Corps' initial determination is that the proposed project would not affect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service

### **Cultural Resources**

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that:

- Should historic properties, or properties eligible for inclusion in the National Register, be present within the Corps' permit area; the proposed activity requiring the DA permit (the undertaking) is a type of activity that will have no potential to cause an effect to an historic property.
- No historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area; therefore, there will be no historic properties affected. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Properties ineligible for inclusion in the National Register are present within the Corps' permit area; there will be no historic properties affected by the proposed work. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; however, the undertaking will have no adverse effect on these historic properties. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; moreover, the undertaking may have an adverse effect on these historic properties. The Corps subsequently initiates consultation with the SHPO (or THPO).
- The proposed work takes place in an area known to have the potential for the presence of prehistoric and historic cultural resources; however, the area has not been formally surveyed for the presence of cultural resources. No sites eligible for inclusion in the National Register of Historic Places are known to be present in the vicinity of the proposed work. Additional work may be necessary to identify and assess any historic or prehistoric resources that may be present.

SHPO and applicable tribal historic preservation offices (THPO) will be notified via Public Notice about the project and will be given the opportunity to comment on the project and its potential effects on cultural resources. The District Engineer's final effect determination will be based upon submitted comments to this public notices from SHPO and/or THPO; and further coordination with the SHPO and/or THPO, as appropriate and required; and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps' permit area.

### **Endangered Species**

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information:

- The Corps determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.

- The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat.
- By copy of this public notice, the Corps initiates consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- The Corps will consult under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- The Corps has initiated consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat. Consultation has been completed for this type of activity and the effects of the proposed activity have been evaluated and/or authorized by the National Marine Fisheries Service (NMFS) in the South Atlantic Regional Biological Opinion or its associated documents, including 7(a)(2) & 7(d) analyses and Critical Habitat assessments. A copy of this public notice will be sent to the NMFS.
- The Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The Corps will make a final determination on the effects of the proposed project upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service (FWS) and/or National Marine Fisheries Service.

FWS will be notified via Public Notice about the project and will be given the opportunity to comment on the project and its potential effects on threatened and endangered species. The District Engineer's final effect determination will be based upon submitted comments to this public notices from FWS; and further coordination with the FWS, as appropriate and required; and with full consideration given to the proposed undertaking's potential direct and indirect effects on federally threatened or endangered listed species and/or their formally designated critical habitat within the Corps' permit area.

### **Wild and Scenic Rivers**

Pursuant to the Wild and Scenic Act of 1968, the Corps will review the proposed project activities for potential impacts to designated Wild and Scenic Rivers. The project area is not located in a component of the National Wild and Scenic River system or in a river officially designated by Congress as a "study river" for possible inclusion in the system.

## Other Required Authorizations

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

**North Carolina Division of Water Resources (NCDWR):** The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. Unless NCDWR is granted a time review extension, a waiver will be deemed to occur if the NCDWR fails to act on this request for certification within sixty days of receipt of a complete application. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, 401 and Buffer Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by August 7, 2020 to:

NCDWR Central Office  
Attention: Mr. Paul Wojoski, 401 and Buffer Permitting Unit  
(USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(Physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604

## **North Carolina Division of Coastal Management (NCDWM):**

- The application did not include a certification that the proposed work complies with and would be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2(b)(2) the Corps cannot issue a Department of Army (DA) permit for the proposed work until the applicant submits such a certification to the Corps and the NCDWM, and the NCDWM notifies the Corps that it concurs with the applicant's consistency certification. As the application did not include the consistency certification, the Corps will request, upon receipt, concurrence or objection from the NCDWM.
- Based upon all available information, the Corps determines that this application for a Department of Army (DA) permit does not involve an activity which would affect the coastal zone, which is defined by the Coastal Zone Management (CZM) Act (16 U.S.C. § 1453).

## Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit

which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

### **Commenting Information**

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, August 7, 2020. Comments should be submitted to:

Mr. David Brown  
USACE Wilmington District  
Asheville Regulatory Field Office  
151 Patton Avenue, Room 208  
Asheville, North Carolina, 28801-5006