



**US Army Corps
Of Engineers**
Wilmington District

PUBLIC NOTICE

Issue Date: April 17, 2023
Comment Deadline: May 17, 2023
Corps Action ID Number: SAW-1997-02095

The Wilmington District, Corps of Engineers (Corps) received an application on March 16, 2023 from Lake Tacoma, Inc. seeking Department of the Army authorization to modify a previously issued permit in order to continue/expand dredging operations to remove accumulated sediment on Lake Tahoma, in Marion, McDowell 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: Lake Tahoma, Inc.
Mr. Paul Coughlin
908 Forest Hill Drive
High Point, NC 27262

AGENT (if applicable): ClearWater, an EnviroScience Company
Mr. Eric Romaniszyn
145 7th Avenue West, Suite B
Hendersonville, NC 28792

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 is located on Lake Tahoma, which is located adjacent to NC Hwy 80, north of Marion in McDowell County, NC. The dredge locations are located on two northern sections of the lake: 1) Buck Creek Dredge Area where Buck Creek enters the lake and 2) Little Buck Dredge Area where Little Buck Creek enters the lake.

Project Area (acres): 212 Nearest Town: Marion
Nearest Waterway: Buck Creek and Little Buck Creek River Basin: Catawba
Latitude and Longitude: 35.723667 N, -82.090139 W

Existing Site Conditions

The site is a private man-made 162-acre lake that sits at an elevation of approximately 1,401 feet above sea level and consists of 51 surrounding residential home sites and 3,500 acres of surrounding forested land. Beyond the immediate vicinity of the project area, land use is a mixture of public lands, residential, and agricultural properties. The vast majority of the Lake Tahoma property is forested. The dominant forest community there is Mixed Mesic Hardwood Forest. Canopy species include tulip poplar, red oak, white oak, red maple, cherry, hickory, birch, hemlock and white pine. The understory includes rhododendron, holly, and ironwood. There are several wetlands located on the site. The majority of these wetlands are riparian wetlands either within the floodplain of channels, or where channels approach the lake. The wetlands in the vicinity of the proposed dredging were identified by hydric soils, wetland vegetation, and a significant source for hydrology. Vegetation in the wetlands areas includes sycamore, willow, Polygonum sp., Carex sp., Ligustrum sp., bamboo, and Microstegium sp. Several fields are present on the property, including the Orchard Creek dredge disposal area. These locations are primarily upland-type habitats and maintained as old-field with abundant grasses. Orchard Creek, Buck Creek, and Little Buck Creek are classified by the NC Division of Water. Buck Creek and Little Buck Creek also carry the Tr classification. Lake Tahoma formed from the impoundment of Buck Creek and Little Buck Creek.

Applicant's Stated Purpose

The purpose of the project as stated by the Applicant is to remove approximately 244,137 cubic yards of sediment from Lake Tahoma that has accumulated where Buck Creek and Little Buck Creek enter the lake. The dredged material will be disposed of on property owned by the Applicant in the southeast corner of the property/project area.

Project Description

This permit application is a modification to the existing US Army Corps of Engineers (Corps) individual permit issued September 17, 2019 (SAW-1997-02095). That 10-year permit covers 2.1 acres to remove approximately 9,000 yds³ from Buck Creek and 3,000 yds³ from Little Buck

Creek behind cofferdams, along with periodic maintenance dredging. This work was completed but sediment monitoring has indicated additional dredging is needed within ten years. Also, a 2020 hydrographic and sediment quantity study of the areas near Buck Creek and Little Buck Creek behind the cofferdams and in deeper water found extensive soft sediments.

This project will address several needs of the Lake Tahoma community, including:

- Required sediment maintenance above cofferdams installed in 1997 at the mouths of Buck Creek and Little Buck Creek; the cofferdams capture sediment from sources off property (roads, mining operations, streambanks) but lose effectiveness if sediment is not removed;
- Expanding dredging operations beyond the cofferdams further into the lake;
- Restoring/maintaining stream and lake depth to improve their use for boating and fishing as well as aesthetics;
- Improving aquatic habitat that has been degraded by excess sediment and temperature due to shallow depths; and
- Helping maintain capacity of Lake Tahoma, which is an important drinking water source for the town of Marion.

The applicant is seeking a modification to the previously issued Corps permit in order to:

1. Extend the existing Corps permit for dredging above the cofferdams through December 31, 2063; this permit uses clamshell (mechanical) dredging techniques and the current individual permit expires December 31, 2029;
2. Request a 40-year permit for dredging downstream of the cofferdams using hydro-dredging;
3. Change the dredge spoils disposal area to a new location adjacent to Lake Tahoma; and
4. Permit return water from upland contained disposal areas and temporary stream impacts associated with construction of the dredge disposal area.

The Limits of Disturbance for dredging would be the entire 160 acres of the reservoir, and 17.4 acres for the dredge disposal area. If approved, the conditions outlined in the existing Corps Individual Permit and NC Division of Water Resources (DWR) 401 Certification would be followed, unless otherwise directed by the regulatory agencies.

Two previous individual permits were received in 1997 and 2017 for dredging and managing sediment in Buck Creek and Little Buck Creek, with dredging events occurring in 1997, 2009, 2017, 2019, and 2020. During the most recent dredging, both streams were mechanically dredged but hydro-dredging was used to access harder to reach areas of Little Buck Creek. Hydro-dredging is the preferred method for dredging downstream of the cofferdams because of deeper water and this method typically causes less impact. It is not considered a viable option upstream of the cofferdams because most of these areas are not accessible due to cofferdam location and they collect woody debris and large cobble which obstructs the hydro-dredge operation. Also, if the dredge disposal site is not changed, hydro-dredging would not be viable due to costs and transportation logistics of pumping or hauling spoils the approximately two-mile distance from the dredge area to the currently permitted Miller Farm disposal site. The new proposed disposal location at Orchard Meadow is adjacent to the lake and would be a shorter pumping distance.

Dredging will be conducted in phases and is expected to occur as an ongoing project over 40 years. Phase I is proposed to start in 2023 and will focus on the mouths of Little Buck Creek and Buck Creek upstream and downstream of their cofferdams using mechanical and hydro-

dredging techniques. Area A covers approximately 6.2 acres and Area B covers approximately 10.3 acres for a total area of 16.5 acres proposed to be dredged. These areas contain approximately 32,920 yds³ and 84,959 yds³, respectively, of soft sediments according to the 2020 hydrographic and sediment quantity study. Dredge materials would be disposed of at the Orchard Meadow disposal area, which has a capacity of approximately 244,137 yds³. Both tributaries have sediment retention structures (cofferdams) where they enter the lake, which function to minimize sedimentation into the lake by collecting and storing it as it travels downstream.

These structures, as well as lake dredging to remove sediment, were authorized by permits issued in 1997 and 1998. They require periodic maintenance to remove sediment to ensure storage capacity isn't exceeded, which would result in sediment flowing into the lake. No impacts to wetlands would occur as a result of this continued mechanical dredging activity. The second dredging phase is dependent on the remaining storage capacity at the Orchard Meadow discharge site following the completion of Phase I activities. Phase II will focus on Caretakers Cove (Figure 3) and other portions of the lake that were not dredged during Phase I.

Phase II dredging areas will be selected on a greatest-need basis but will not occur near the dam for safety reasons. Before Phase II begins, a notification and site plan will be submitted to the Corps and DWR. If needed during either dredging phase, a waiver for the NC Wildlife Resource Commission trout moratorium would be requested as trout do not typically reproduce in lakes. The dredging barge carries a hydraulic, horizontal cutter that can reach approximately 30 to 35 feet in depth. The barge will enter the lake via a new gravel drive and boat ramp. The gravel drive and boat ramp will access the lake from Lake Tahoma Road near the Orchard Creek culvert crossing (coordinates 35.723806, -82.089773; Figure 5). The gravel drive will consist of ballast over woven geotextile, the distance will be determined at the time of construction. The ramp will be 60 feet in length and 16 feet wide (Attachment A). It will be constructed as a gabion mattress placed over ballast. The ballast will be placed over woven geotextile.

Orchard Creek crosses under Lake Tahoma Road via two side-by-side concrete culvert; the dimensions of both are 5 feet wide (12 feet total width with center support), 6 feet high, and 50 feet long. The applicant expects the culvert will be used as a chase for the discharge line. The NC Department of Transportation (DOT) has verbally approved use of the culvert as a chase for the dredge spoils pipe; the applicant is in the process of establishing an agreement with DOT. The discharge area is an upland valley known as Orchard Meadow located at approximately 3339 Lake Tahoma Road, Marion, NC (Figure 3). The previous location was the Miller Farm, as approved in the Corps letter dated October 30, 2020 to Mr. Robert Gregory. The new location provides more storage space to accommodate the additional discharge material and reduces costs due to shorter transport distance and not having to use dump trucks.

The discharge area is composed of an existing meadow covered primarily with grasses, and two recently cleared sections of forest. The discharge site is approximately one mile (by water) from dredge Area A to the northeast and 0.7 miles from Area B to the north (Attachment B). Orchard Creek and several unnamed tributaries flow through the storage areas.

The discharge area will be divided into three storage areas (Attachment A): A (8.13 acres), B (5.53 acres), and C (3.71 acres). Storage areas A and B will be closest to the lake at a distance of approximately 550 feet at their closest point. The total storage capacity will be 244,137 yds³, which is anticipated to provide 40 years of storage capacity.

Storage Area A will be divided into six containment and dewatering cells. The capacity of each cell will be: Cell 1 = 17,447 yds³, Cell 2 = 12,838 yds³, Cell 3 = 7,584 yds³, Cell 4 = 11,664 yds³, Cell 5 = 21,826 yds³, and Cell 6 = 26,439 yds³.

Additional cell details are provided in Table 2 in the engineering plans provided in Attachment A, including elevations and coverage area. The cells will act as two-basin dewatering structures to treat water taken from the lake. Cells 1 and 2 will function as one unit separated by a phase separation dike, as will cells 3 and 4, and cells 5 and 6. Each cell will have two feet of freeboard. Areas B and C are each composed of one cell (7 and 8, respectively), which are designed for greater capacity, Cell 7 at 91,373 yds³ and Cell 8 at 54,966 yds³.

Each of these cells will include a phase separator dike, which will be raised as the basin is filled. Each addition will occur when up to eight feet of discharge material is added, to be determined by engineering oversight. The additions will be ten feet high maximum and include two feet of freeboard. Sloped retaining walls will be used to avoid impacts to wetlands and the trout buffer (Attachment A); three walls will be used in cell 7 and two in cell 8. The maximum height of the retaining walls is four feet. The cells will not be constructed at the same time. They will be constructed when needed as other cells are filled. The dredge discharge line will first extend to cells 5, 6 and 7 due to their close proximity to the reservoir.

Water drained from the dredge spoils will be discharged into Orchard Creek through 18-inch diameter HDPE discharge pipes placed at the bottom of cells 2, 4, 6, 7, and 8. Each pipe will be placed in a concrete cradle for structural support. The pipe inlet will be a 48 in diameter HDPE riser extended to the top of the cell embankment and surrounded by rock filter. The pipe outlet will be protected with a headwall and twelve feet of rip-rap energy dissipator to prevent erosion. The storage areas, including discharge pipes and energy dissipators will be located outside the 25-foot riparian buffer.

At the mouth of Orchard Creek with Lake Tahoma, a Type 3, double floating silt curtain turbidity barrier will be placed approximately 80 feet into the lake to prevent any silt created by dredging discharge or construction operations from flushing into the lake (Attachment A). The curtain will be elevated above the lake bottom no more than two feet.

Area A will be accessed via an existing dirt road used to access the fields. The access road to Areas B and C will be newly constructed on top of an existing soil road in adjacent upland forest. The trees at Areas B and C have already been cleared; additional tree clearing of approximately 0.5 acres will be needed for the access road. The access road to Areas B and C will require one temporary stream crossing. The crossing will be over a HDPE culvert that will impact approximately 40 linear feet of stream (0.003 acres). The culvert will be installed in the dry and embedded per permit conditions (see detail sheet D3). The temporary crossing will be used to construct cell 8. After construction, it will be removed until Cell 8 is needed for dredge materials, at which time the Corps and DWR will be notified of its reinstallation. Once Cell 8 is filled to capacity and no longer used, the temporary crossing will be removed again. Typical earth-moving equipment (i.e. backhoe, dump truck, bulldozer, etc.) will be operated from upland areas to create the dewatering basin structures. When the dewatering basins are full, they will be seeded and planted with native vegetation.

Avoidance and Minimization

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

Only areas with the most accumulated sediments as determined by the hydrographic and sediment quantity study will be targeted to avoid excess dredging. Hydro-dredging minimizes the risk for erosion and sediment control problems when compared to traditional dredging methods. If mechanical dredging methods were used, such as in past dredging events, multiple streamside areas would have to be cleared for equipment access, which would disrupt riparian buffers and potential destabilize banks. Also, a temporary crossing would need installed over Little Buck Creek to transport dredging equipment. Orchard Meadow is an area already impacted by human modifications. Locating the disposal area here will minimize impacts on the natural environment, including wildlife, by avoiding more extensive impacts that would occur if constructed in another less impacted area.

The access road location for storage area A will use an old roadbed and requires minimal grading and tree clearing, and no stream or wetland impacts. The access road location for storage areas B and C will use an existing, unimproved soil road. This road will include a temporary stream crossing between cells 7 and 8. The culvert will be installed and removed in-the-dry using a pump around system. Proper sediment and erosion control procedures will be adhered to during construction of dredge storage areas and any ancillary structures.

Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment: Since the dredging activities and disposal/storage area construction will not cause permanent impacts to waters of the US, no compensatory mitigation is being proposed.

Essential Fish Habitat

The Corps' determination is that the proposed project would not effect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

- This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact (CHOOSE ALL THAT APPLY- marine substrate, estuarine substrate, water columns, emergent wetlands, submerged aquatic vegetation, artificial reefs, hardbottoms) (see project description) utilized by various life stages of the following species: (CHOOSE ALL THAT APPLY – coastal migratory pelagics, corals, golden crab, shrimp, snapper grouper, spiny lobster, Atlantic highly migratory species). Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by Fishery Management Councils and the National Marine Fisheries Service (NMFS). Our

final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

- The Corps will consult under the Magnuson-Stevens Act and will not make a permit decision until the consultation process is complete.
- The Corps has initiated consultation the Magnuson-Stevens Act and will not make a permit decision until the consultation process is complete.

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 properties.
- 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.

The District Engineer's final eligibility and effect determination will be based upon 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-identified 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 and/or National Marine Fisheries Service.

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 applicant did not provide or satisfy all the elements required for a complete 401 certification request. Therefore, the 401 Certification process has not started. 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 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 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 120 days of the date of this public notice. 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 _____ to:

NCDWR Central Office
Attention: Mr. Paul Wojowski, 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 (NCDCM):

- 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 NCDCM, and the NCDCM 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 NCDCM.

- 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, May 17, 2023. Comments should be submitted to Amanda Jones Fuemmeler, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, North Carolina 28801-5006, at (828) 271-7980 extension 4225. Comments may also be submitted to AshevilleNCREG@usace.army.mil