PUBLIC NOTICE

US Army Corps
Of Engineers
Wilmington District

Issue Date: February 22, 2023
Comment Deadline: March 24, 2023
Corps Action ID Number: SAW-2001-20822

The Wilmington District, Corps of Engineers (Corps) received an application on February 10, 2023, from GFL Environmental seeking Department of the Army authorization to discharge fill and dredged material, associated with Red Rock Disposal Landfill Expansion & Entrance Road in Holly Springs, in Wake 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:
GFL Environmental
Mr. Bryan Wuester
3301 Benson Drive, Suite 601
Raleigh, North Carolina 27609

AGENT (if applicable):
Inver Environmental Consulting, LLC.
Mr. Philip May
105 West 4th Street, Suite 700
Winston-Salem, North Carolina 27101

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:

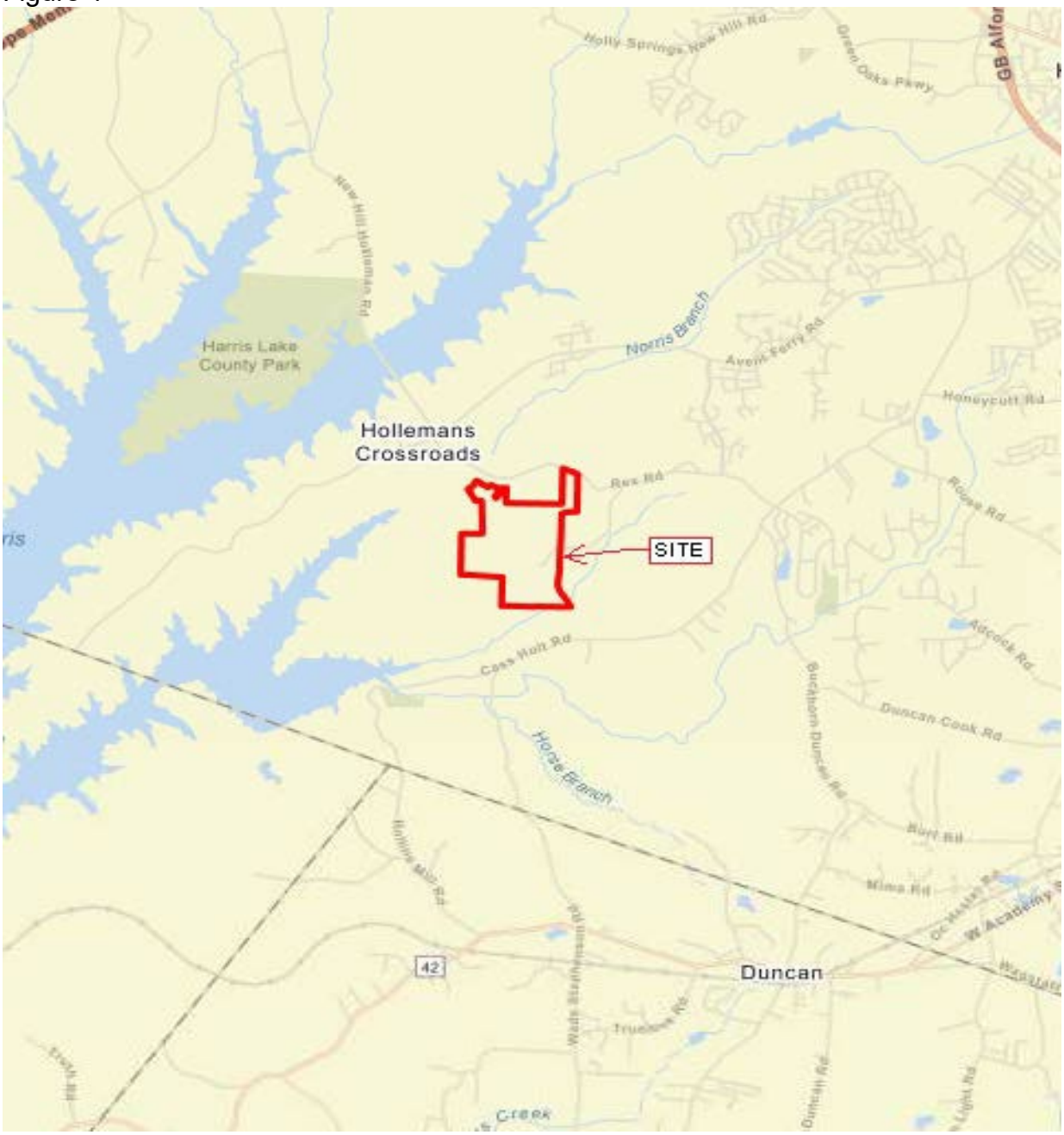
- ☒ Section 404 of the Clean Water Act (33 U.S.C. 1344)
- ☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- ☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

Location

Location Description: The proposed project (Project) is south of Rex Road, north of Cass Holt Road and west of New Landfill Drive, located at 7130 New Landfill Drive in Holly Springs, in Wake County, North Carolina.

Project Area (acres): ~259 acres
Nearest Town: Holly Springs
Nearest Waterway: Buckhorn Creek (Harris Lake)
River Basin: Cape Fear
Latitude and Longitude: 35.605157 N, -78.900688 W

Figure 1



Existing Site Conditions

The project area (Site) consists of an existing landfill bound completely by undeveloped woodlands. Shearon Harris Reservoir is located west of the Site and an existing quarry is located east of the Site.

The Site consists primarily of the existing landfill and operational support facilities, including scales and an office on the east side, and sediment basins in locations surrounding the operational areas. Active borrow for soil cover is ongoing in the southwest portion of the Site and soil stockpiles from off-site sources exist in the northeast portion of the Site. Currently, construction and demolition (C&D) waste hauling vehicles enter the Site from Rex Road via New Landfill Road, which is shared with Hanson Aggregates. The trucks are weighed at the scales on the east side of the Site before depositing C&D waste in the active landfill cell. Active waste areas are covered on a daily basis with a temporary cover or soil, and areas that are brought up to final proposed grades are capped with a two-foot soil cover and vegetated. At the time of the application, there are no landfill cells at final grade, but a geosynthetic rain cover is being used in the southeast portion of the Site to reduce stormwater infiltration into the waste mass. Existing conditions are shown in detail in Exhibit A-1.

The Site is within the Buckhorn Creek-Cape Fear River sub-watershed in the Cape Fear River Basin (Hydrologic Unit Code [HUC] 03030004). The Site is situated between Jim Branch (Stream Index 18-7-4) and Cary Branch (Stream Index 18-7-5), which are designated as Class C waters (Aquatic Life, Secondary Contact Recreation, Fresh Water) by the North Carolina Department of Environmental Quality.

Based on information obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey for Wake County, soils within the Site are mapped as six soil series summarized below in Table 1.

Table 1

Map Unit Symbol	Map Unit Name
ChA	Chewacla and Wehadkee soils, 0 to 2 % slopes, frequently flooded
CrB	Creedmoor-Green Level complex, 2 to 6 % slopes
CrC	Creedmoor-Green Level complex, 6 to 10 % slopes
CrD	Creedmoor-Green Level complex, 10 to 15 % slopes
PkD	Pinoka gravelly fine sandy loam, 4 to 15 % slopes
PkF	Pinoka gravelly fine sandy loam, 15 to 30 % slopes

Vegetation is limited to the periphery of the Site and the northern and southern undeveloped portions. Wooded areas have been timbered in the past, prior to the landfill development but within the last 30 years. Current forested areas are dominated by younger stands of loblolly pine (*Pinus taeda*) and mixed hardwood forest with loblolly pine, tulip poplar (*Liriodendron tulipifera*), red maple (*Acer rubrum*), and eastern red cedar (*Juniperus virginiana*). The understory consists of a mix of loblolly pine, tulip

poplar, red maple and eastern red cedar. Areas with ground cover consist of Japanese stilt grass (*Microstegium vimineum*) and greenbrier (*Smilax rotundifolia*).

An entrance road and sediment basin impacting waters were permitted and constructed at the Site in 1998, under Nationwide Permits (NWPs) 14 and 26 (SAW-1998-20776). An approved jurisdictional determination (SAW-2001-20822) was issued on May 10, 2001. A NWP 18 verification (SAW-2001-20822) for impacts from landfill expansion was issued on February 8, 2002, and re-issued on August 26, 2002. A summary of the permitting history for the Site is provided in Table 2.

Table 2

Date	Action ID	Stream Impact (lf)	Stream Impact (ac)
1998	SAW-1998-20776	485	0.05
2002	SAW-2001-20822	1,009	0.08
	Total	1,494	0.13

A preliminary jurisdictional determination request was submitted with this application. The delineation identified 15 potential wetland waters (Wetlands WA-WM and WO-WP) and 14 potential non-wetland waters (Stream SA-SF and SH-SO). Based on the delineation the Site contains 1.324 acres of potential wetland waters and 28,911 linear feet of potential non-wetland waters.

Applicant's Stated Purpose

The applicant's stated purpose of the project is to expand the existing landfill to continue to provide C&D disposal services for the service area, and primarily Wake County, for the foreseeable future, and the relocation of the entrance road and scales to improve traffic circulation.

Project Description

The Project is a proposed expansion of the existing C&D landfill and relocation of the entrance road, office, and scale-house to the northern portion of the property. The landfill expansion would reduce the overall permitted footprint from 120.8 acres to 104.8 acres. The landfill expansion would eliminate 32.6 acres of previously permitted phases that include the existing transmission lines and areas south and adds 17 acres to the northwest. This expansion would be constructed by establishing the base grades and liner by 2027 (Exhibit A-2), then operated over a period of 10 years from 2027 to 2037, based on current rates of disposal at the site. Clearing and implementation of approved sediment and erosion control would be performed initially. The proposed areas of landfill expansion would then be graded to pre-disposal elevations that allow for required 4-foot separation from rock and groundwater, which would include an upper two feet of landfill subgrade, consisting of in-situ or imported soils containing clean well-graded natural material classified as low permeability soils (Exhibit A-4). Each cell would be filled with waste to final build-out elevations and a final cap would be constructed to stabilize the

cell. The cap would consist of two-feet of vegetated cover material on landfill side slopes and a composite cover system consisting of a geomembrane and two feet of protective cover on top slopes to reduce infiltration (Exhibit A-5).

The Project would impact potentially jurisdictional waters for the construction of the new entrance road and landfill expansion. Impacts are shown in detail in Figures 9, 9A, 9B, & 9C and on the attached construction plans (Exhibit A-2 & A-3). The Project would require the permanent discharge of fill material into 0.061 acre (886 linear feet) of stream channel and 0.035 acre of wetlands. The limits of disturbance for the proposed construction were used to generate impact calculations. These limits include a 10-foot offset from fill slopes for clearing, construction access, and the installation and maintenance of erosion control measures; such areas are included in the permanent impact acreage, as they would be mechanically cleared and grubbed, and maintained and monitored for the operational life of the project.

The new entrance road would be constructed from Rex Road to the north along with the scales and office (Exhibit A-3). Road grading and construction would occur, along with the scales and office construction, while the existing scales and office entrance along New Landfill Road remain active. Once the new scales and entrance are operational, the existing road and other infrastructure on the east side of the site would be removed, and the east portion of the landfill would be constructed in that area.

Standard construction equipment would be used to complete the landfill expansion and entrance relocation. Initial activity would involve land clearing and grubbing, along with the installation of erosion control measures, including silt fencing, check dams, and sediment basins approved by the NC Division of Energy, Mineral, and Land Resources (NCDEMLR). This plan would include appropriate sediment and erosion control, a draw down and release schedule for dewatering, sediment removal and disposal, and a grading and stabilization plan for the pond areas.

The entrance road impacts (S1, S2, W1, & W2) are associated with two stream and wetland crossings. The road alignment has been designed to overlap with this existing road crossing as much as possible, given the required 100-foot setbacks from the property line along this segment of the property accessing Rex Road. The proposed culverts would be installed within the channels and embedded per the attached plans.

The relocation of the scales and entrance road to the north would allow for the planned completion of the original permitted landfill cells along the eastern side of the Site. An impact (W3) to wetland WI is proposed in this area. The sediment basin has been redesigned to both meet required discharge standards and avoid all grading in wetland WH. The remaining 0.03-acre impact has been minimized to the maximum extent practicable without loss of capacity due to the required 3:1 slope.

The expansion northwest would replace the loss of capacity south of the onsite power easement. A sediment basin would be constructed to maintain hydrology to the downstream features while also preventing sedimentation.

Avoidance and Minimization

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

Two drainage areas, located in the southeast (stream SD) & southwest (stream SN) of the property, totaling 4,449 linear feet of stream channel and 1.2 acres of wetlands located would be avoided. Impacts to wetlands east of the existing landfill have been reduced from 0.165 acre to 0.035 acre by reconfiguring the proposed sediment basin.

The applicant states that road crossings are designed to the minimum width required for safe passage of two-way heavy truck traffic and are designed to cross the stream channels perpendicularly. Additionally, the fill slopes for the proposed road and landfill are planned to be constructed with a 3:1 slope.

The applicant proposes to implement erosion control devices in the clearing phase of construction and prior to grubbing, to prevent loss of sediment into downstream resources. Sediment and erosion control measures would be implemented, maintained, and inspected on a regular basis, including regular inspections by the North Carolina Division of Waste Management. Wetlands and streams that are not proposed for impact would be clearly marked in the field with orange silt fencing or a highly visible indicator.

As part of long-term maintenance for the site, wetlands and streams that would not be impacted would be preserved via signposting and fencing if necessary. The proposed stormwater control measures would be operated and maintained as sediment basins for the life of the facility. Once final vegetated cover is placed on the closed landfill the basins would be converted to dry detention basins. Post-closure inspections would be carried out for 30 years and the site would be bonded to ensure proper maintenance and a stable final landfill cap. Ground and surface water monitoring would be performed and reported semi-annually to the State for the life of the facility and 30 years post closure. Any release of constituents attributed to the landfill would be addressed and a remediation plan implemented if necessary.

Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

Compensatory mitigation for 0.035 acre of permanent wetland loss and 886 linear feet of permanent stream loss would be provided through purchase of credits from the Daniels Creek Mitigation Site (Middle Cape Fear Umbrella Mitigation Bank) which had available credits at the time of the permit request. The total mitigation proposed is 0.05 wetland credits and 1,121 stream credits. The proposed mitigation ratios are detailed in table 2 below.

The compensatory mitigation is proposed to be paid in two phases. The first phase would involve the entrance road construction and eastern landfill grading, with a second phase for the northwest expansion area.

Table 2

Site	Impact (lf)	Stream Rating*	Proposed Ratio	Proposed Mitigation Credits	Mitigation Phase
S1	134	Low	1:1	134	1
S2	141	Low	1:1	141	1
S3	469	Medium	1.5:1	704	2
S4	142	Low	1:1	142	2
Total	886			1,121	
Site	Impact (acre)	Wetland Rating**	Proposed Ratio		Mitigation Phase
W1	0.001	Low	1:1	0.001	1
W2	0.017	Low	1:1	0.017	1
W3	0.017	High	2:1	0.034	1
Total	0.035			0.052	

*Rating calculated using the North Carolina Stream Assessment Method (NCSAM)
**Rating calculated using the North Carolina Wetland Assessment Method (NCWAM)

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.

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:

☒ 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).

Per the application, there are no sites listed or eligible for listing on the National Register of Historic Places within or in the proximity of the Site based on "HPOWEB" (accessed December 27, 2022).

Additionally, the application states that the majority of the Site was submitted to and reviewed by North Carolina Department of Cultural Resources State Historic Preservation Office (SHPO) during the permitting of the landfill expansion in 2000.

In a letter dated October 27, 2000, the SHPO stated that they have conducted a review of the project and are aware of no properties of architectural, historic or archeological significance which would be affected by the project and therefore had no comment on that project as proposed.

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 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 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 March 15, 2023, to:

NCDWR Central Office
Attention: Supervisor, 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):

☒ 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, March 24, 2023. Comments should be submitted to George Lyle Phillips III, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105 , Wake Forest, North Carolina 27587, at (919) 588-9200. Comments may also be submitted to RaleighNCREG@usace.army.mil.