

PUBLIC NOTICE

US Army Corps Of Engineers Wilmington District

> Issue Date: May 5, 2017 Comment Deadline: June 5, 2017 Corps Action ID Number: SAW-2014-00189

The Wilmington District, Corps of Engineers (Corps) received an application from Mr. Wayne Smith of Duke Energy Progress, LLC (Duke Energy) seeking Department of the Army authorization for 972.5 linear feet of permanent stream impacts, 0.38 acres of permanent wetland impacts, and 0.87 acres of permanent open water impacts, associated with the Asheville Combined Cycle (CC) Project Construction Laydown Areas in Arden, Buncombe 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 <u>http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx</u>

Applicant:	Mr. Wayne Smith Duke Energy Progress, LLC 400 South Tryon Street Charlotte, North Carolina, 28202
AGENT (if applicable):	Mr. Steve Cahoon Duke Energy Progress, LLC 411 Fayetteville Street, Mail Code NC14 Raleigh, North Carolina 27601

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

Directions to Site: From I-26 in the Arden area, take exit number 37 onto NC Highway 146 (Long Shoals Road). Go east on NC Highway 146 approximately 1.2 miles to CP and L Drive. Turn right on CP and L Drive and follow this road to a guard shack at the facility. Project area is in southwest portion of the Duke Energy Asheville Plant facility.

Project Area (acres):	12.19 (Construction Laydown Area 3)
Nearest Town:	Arden
Nearest Waterway:	Unnamed Tributary (UT) of the French Broad River
River Basin:	Upper French Broad (06010105)
Latitude and Longitude:	35.462006 N, 82.542633 W

Existing Site Conditions

Construction Laydown Area 3 is associated with Duke Energy Progress's (DEP) Asheville CC Project at DEP's existing Asheville Plant in Arden, North Carolina (see Site Location Map, USGS Topographic Map, and Site Aerial Map of Proposed Construction Areas). There are four laydown areas on-site providing approximately 16.9 acres of laydown area (Laydown areas 1, 2, 4, and 5). There is a need for additional construction laydown area(s) to support construction activities and delivery of materials/equipment required early in project schedule. Development of Laydown Area 3 will provide 5.9 acres of additional workable laydown area.

As part of DEP's Western Carolinas Modernization Project (WCMP), the combined Asheville Plant 1 and 2 coal units are to be retired no later than January 31, 2020. The WCMP is required to allow DEP to reliably serve the energy needs of the Western Carolinas and is an economically viable alternative to continuing to run the Asheville coal units and constructing fast start combustion turbines (CT) in the region. The simple cycle CT differs from a CC operation in that it has only one power cycle (i.e., no provision for waste heat recovery). The WCMP at the Asheville Plant will consist of two new 280 megawatt (MW) CC natural gas-fueled electric generating units, with fuel oil backup, and related transmission facilities.

DEP filed an Integrated Resource Plan (IRP) Update Report with the North Carolina Utilities Commission (NCUC) on September 1, 2015, demonstrating the need for new generation in the DEP-Western Region. Based on this IRP, and the subsequent decision to cancel the proposed Foothills Transmission Line project in response to extensive community concerns, an application for NCUC Certificate of Public Convenience and Necessity for the WCMP was filed with the NCUC in January 2016. This application included the nominal 560 MW Asheville CC Project, for which a certificate was approved in February 2016 by NCUC.

Five construction laydown areas, providing approximately 25 acres of laydown area, are needed during the construction phase of the Asheville CC Project. Laydown area is space of ground or pavement located near or at the construction site that is for the receipt, storage, or partial assembly of project equipment and materials to be installed or constructed. Laydown area is

constructed in a manner that will ensure accessibility and safe maneuverability for transport, and for loading and unloading. For the Asheville CC Project, laydown areas would be established to support construction operations, including office trailer(s), shed(s), and space for storage of construction materials and equipment.

Four construction laydown areas are to be located in portions of the existing DEP Asheville Plant facility which contain no jurisdictional waters of the U.S. (WoUS) under Department of Army (DA) authority per Section 404 of the Clean Water Act (CWA).

Laydown Area 3 consists of approximately 12.2 acres and would be established south of the exiting plant site and south of Laydown Area 2. However, due to steep topography and geology only 5.9 acres of usable laydown space can be obtained through impacts to wetlands, a pond, and streams within the proposed laydown area. Laydown Area 3 consists of partially developed properties acquired by DEP. The area is largely a mix of undeveloped forested and cleared areas, and includes three houses and a pond. The area is bordered by I-26 to the west and residential areas to the east and south along Aberdeen Drive and New Rockwood Road, respectively. The area contains jurisdictional WoUS under DA authority per Section 404 of the CWA. These features are wetlands, three streams, and an open water area (pond).

The CC Project site, construction parking, and laydown areas are predominantly used for current Asheville Plant operations. These areas are surrounded by the greater Asheville Plant site and property, with the exception of a small residential area to the south along Aberdeen Drive. Other land use and cover types within the Asheville Plant property include tracts of undeveloped forested land, Lake Julian, utility right-of-way (ROW), existing roadways, construction areas, forested wetlands, creeks, and smaller stream channels. As noted above Laydown Area 3 is a former partially developed property acquired by DEP. Although it is primarily categorized as residential land use it is largely a mix of undeveloped forested and cleared areas.

The laydown areas are located in the Broad Basin USEPA Level IV Ecoregion of the Blue Ridge USEPA Level III Ecoregion. Blue Ridge terrain occurs primarily on metamorphic rocks with minor areas of igneous and sedimentary geology, though the Broad Basin has lower elevations, less relief, less boulder colluvium, and more saprolite than the surrounding mountainous Blue Ridge regions (USEPA 2017). The geologic surfaces of site are Muscovite-biotite gneiss, a part of the Ashe Metamorphic Suite and Tallulah Falls Formation within the Blue Ridge Belt (North Carolina Geologic Survey [NCGS] 1985). This geologic layer is locally sulfidic and is interlayered and gradational with mica schist, minor amphibolite and hornblende gneiss (NCGS 1985).

Laydown Area 3 comprises undeveloped forested land. The terrestrial plant communities include upland hardwood forest and mixed pine-hardwood upland forest. The dominant terrestrial communities on DEP's Asheville Plant site comprise pine forest, upland hardwood forest, and mixed pine-hardwood upland forest. Shrub and brushland and open maintained (grassed) areas also occur on the plant property. These latter areas encompass disturbed/altered land within the plant property which may have been forested in the past. The pine forest community comprises

stands of Virginia pine (*Pinus virginiana*) or eastern white pine (*Pinus strobus*). The upland hardwood forest community consists of a mixture of oaks, hickories and other hardwoods. The species mix includes white oak, northern red oak (*Quercus rubra* var. *rubra*), southern red oak (*Quercus falcata*), black oak (*Quercus velutina*), post oak (*Quercus stellata*), mockernut hickory (*Carya alba*), sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), tulip tree (*Liriodendron tulipifera*), black gum (*Nyssa sylvatica*), black cherry (*Prunus serotina*), American hornbeam (*Carpinus caroliniana* var. *virginiana*), and sourwood (*Oxydendrum arboreum*). The understory includes grasses, forbs, vines, persimmon (*Diospyros virginiana*), flowering dogwood (*Cornus florida*), American holly (*Ilex opaca*), and saplings and seedlings of the aforementioned hardwoods. Botanical taxonomic nomenclature is in accordance with Weakley (Weakley 2015).

Certain plant and animal species are protected by federal regulations under the Endangered Species Act (ESA) of 1973, which is administered and enforced by the U.S. Fish and Wildlife Service (USFWS). Amec Foster Wheeler (DEP's environmental consultant for the project) conducted a records search to identify documented federally protected species threatened or endangered, and federal Species of Concern which have elemental occurrences within Buncombe County and/or the vicinity of the Laydown Area 3. As specifically related to the NC Natural Heritage Program (NCNHP) database search, the queries of elemental occurrences encompassed a one-mile radius of Laydown Area 3. Both federal and state databases were reviewed:

- NCNHP database (NCNHP 2017)
- USFWS Information for Planning and Conservation (IPaC) database (USFWS 2016a)
- USFWS Environmental Conservation Online System (ECOS) (USFWS 2016b)
- Asheville Ecological Services Field Office website (USFWS 2016c)

The purpose of the records search was to determine whether federally listed plant and animal species or designated critical habitat may be near the laydown area. The following table presents the results of the records search for Buncombe County. Known habitats used by the species listed in the table were compared with the habitats found within Laydown Area 3 to determine the potential for occurrence for each species. The potential, or likelihood, of occurrence, as listed in the table, was based on the following factors:

- A comparison of the known habitats used by these species
- The habitats (if present) within each alternative site
- The quantity, quality, and proximity of these habitats
- Observations of these species or their sign during field reconnaissance

The likelihood of occurrence for listed species was rated as high, moderate, low, or unlikely based on the above criteria.

Potential for Occurrence of Federally Listed Species Within Laydown Area 3

Common Name (Scientific Name)	Federal Status	General Habitat Description	Potential for Occurrence
Carolina northern flying squirrel (Glaucomys sabrinus coloratus)	E	Prefers coniferous and mixed forest, will use deciduous woods, riparian woods. Optimal conditions: cool, moist mature forest in high mountainous areas with abundant standing and down snags.	Unlikely
Northern long-eared bat (Myotis septentrionalis) (NLEB)	Т	Summer habitat includes deciduous forests and mixed evergreen-deciduous forests, with bats roosting singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Specifically, dead, or partially dead, hardwood trees with exfoliating bark are preferred (suitable roost trees). Winter hibernating habitat (hibernacula) includes caves and mines, typically with large passages and entrances, constant temperatures, and high humidity with no air currents.	Low
Gray bat (Myotis grisescens)	E	In the summer, maternity colonies prefer caves that act as warm air traps or that provide restricted rooms or domed ceilings that are capable of trapping the combined body heat from thousands of clustered individuals. Summer caves are nearly always located within 1 kilometer of a river or reservoir over which the bats forage. Forested areas along the banks of streams and lakes provide important protection for adults and young. Young often feed and take shelter in forest areas near the entrance to cave roosts. Does not feed in areas along rivers or reservoirs where the forest has been cleared.	Low
Bald eagle (Haliaeetus leucocephalus)	BGEPA	Forested habitats for nesting and roosting, and expanses of shallow fresh or salt water for foraging. Nesting habitat generally consists of densely forested areas of mature trees that are isolated from human disturbance.	Low
Appalachian elktoe (Alasmidonta raveneliana)	E	Found in gravelly substrate, often mixed with cobble and boulder, or in cracks in bedrock. Water depths typically have been shallow, and current velocities have varied from moderate to fast. Reported from shallow, medium- sized creeks and rivers with cool, clean, well-oxygenated, and moderate to fast flowing water. Most often in riffles, runs, and shallow flowing pools with stable, relatively silt-free, coarse sand and gravel substrate with cobble, boulders, and/or bedrock.	Unlikely
Spruce-fir moss spider (<i>Microhexura</i> <i>montivaga</i>)	E	High-elevation spruce-fir forest communities on moist but well-drained moss mats growing on rocks and boulders in well-shaded locations.	Unlikely
Blueridge goldenrod (Solidago spitamaea)	Т	Bare rock, talus, barrens, and cliffs. This species has close affinities with goldenrods in more northern areas. This species is thought to be relict in nature, persisting on mountain tops.	Unlikely

Common Name (Scientific Name)	Federal Status	General Habitat Description	Potential for Occurrence
Bunched arrowhead (Sagittaria fasciculata)	E	Typically is found in very gently sloping areas with slow, continuous seepage of cool, clear water. The continuous seepage appears to be the most important factor in the ecology of the species. Canopy closure may differ greatly in different populations but the slow continuous seepage is one factor that is always present.	Unlikely
Mountain sweet pitcherplant (Sarracenia rubra ssp. jonesii)	Е	Bogs and stream sides on granite rock faces along the Blue Ridge Divide.	Unlikely
Small-whorled pogonia (Isotria medeoloides)	Т	Mature hardwood stands of beech, birch, maple, oak, and hickory that have an open understory. Occasionally grows in stands of softwoods such as hemlock. Preferred habitat consists of acidic soils with a thick layer of dead leaves, often on slopes near small streams.	NA
Spreading avens (Geum radiatum)	Е	High-elevation cliffs, outcrops, steep slopes that are exposed to full sun.	Unlikely
Swamp pink (<i>Helonias bullata</i>)	Т	Mountain bogs, swampy forested wetlands bordering smalls streams, wet meadows, and spring seepage areas.	NA
Virginia spiraea (Spiraea virginiana)	Т	Periodically flood-scoured banks of high-gradient mountain streams, bare rock, talus.	Unlikely
White irisette (Sisyrinchium dichotomum)	Е	Rich, basic soils in clearings and near the edges of upland woods where the canopy cover is thin. In the past, the thin canopy cover (and possibly the thin litter layer as well) was maintained by periodic fires and by native grazing animals. Now, most populations are in artificially disturbed areas, such as power line and road ROWs.	NA
Rock gnome lichen (<i>Gymnoderma</i> <i>lineare</i>)	Е	On rocks in areas of high humidity, either at high elevations or on boulders and large rock outcrops in deep river gorges.	Unlikely

Notes: NCNHP List of Rare Plant Species of North Carolina; USFWS IPaC; USFWS Environmental Conservation Online System - Species Profiles; County list (USFWS Asheville Ecological Services); NatureServe Explorer. BGEPA = Bald and Golden Eagle Protection Act; E = Endangered; T = Threatened

NA = Not Applicable; i.e., species not identified (not included) in IPaC as potentially occurring at alternative site location.

The NCNHP database query (January 5, 2017) identified one documented occurrence of the NLEB within one mile of Laydown Area 3. This occurrence was further classified by NCNHP personnel as a "specimen brought in by an unknown person to a lab in the county and tested for rabies in 2001; location of capture not known" (Suzanne Mason personal communication 2016 NCNHP). Furthermore, according to the USFWS, Asheville office, "there are no northern long-eared bat records within one-quarter mile of the Asheville Plant" (Allen Ratzlaff personal communication 2016 USFWS). Site reconnaissance was conducted on March 24, 2017, to confirm presence/absence of NLEB and/or gray bat activity within two residential structures remaining in Laydown Area 3. No bats were observed and no physical evidence was found indicating bats are using or have used the two houses.

Based on the level of review requested by the USFWS for the houses during the February 23, 2017, permit pre-application meeting, the results of the review, and the above noted site March 2017 site reconnaissance, the potential for the NLEB to occur within the laydown area is presumed to be low.

Maternity colonies of the gray bat (*Myotis grisescens*) are typically in caves that act as warm air traps or that provide restricted rooms or domed ceilings that can trap the combined body heat from thousands of clustered individuals. Summer caves are nearly always located within approximately 0.62 miles of a river or reservoir over which the bats forage (USFWS 1982). Forested areas along the banks of streams and lakes provide important protection for adults and young. Young often feed and take shelter in forest areas near the entrance to cave roosts. There are no known caves within 0.62 mile of Laydown Area 3. In addition, is not contiguous to the French Broad River (foraging area), as I-26 occurs between the river and the site. Though it should be noted that gray bats are known to be roosting under the Blue Ridge Parkway bridge over the French Broad River (Bryan Tompkins personal communication 2017 USFWS). With the above considerations, the potential for the gray bat to occur within the Laydown Area is presumed to be low.

Although no longer afforded protection by the ESA as of June 29, 2007, the bald eagle (*Haliaeetus leucocephalus*) is still protected under the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act (MBTA), both of which protect bald eagles by prohibiting killing, selling or otherwise harming eagles, their nests, or eggs. Habitats include riparian areas along the coast and near major rivers, wetlands, and reservoirs. Bald eagles typically nest in large, tall, open-topped pines near open waters. They feed primarily on fish, but will also take a variety of birds, mammals and turtles. The pond on Laydown Area 3 is presumed to not be of sufficient size to provide suitable foraging habitat (i.e., a significant fishery source) for eagles. No eagle nests are known to occur within this alternative site. Furthermore, no bald eagles were observed during site reconnaissance on November 29, 2016. Based on these considerations, the potential for occurrence is presumed to be low.

The Appalachian elktoe (*Alasmidonta raveneliana*) is a riverine mussel species. The laydown area is not located within the limited portions of the upper French Broad River system (i.e., Mills River and Little River) where the species has been reported. A perennial stream occurs within the western portion of the site (downstream of the pond). A visual inspection of the streambed of this perennial water on November 29, 2016, revealed no observations of the Appalachian elktoe. The potential for occurrence of this species on the site is unlikely.

Bunched arrowhead (*Sagittaria fasciculata*) is typically found in very gently sloping areas with slow, continuous seepage of cool, clear water. The continuous seepage appears to be the most important factor in the ecology of the species. Canopy closure may differ greatly in different populations, but the slow continuous seepage is one factor that is always present. Although a small seepage area was present along the edge of a wetland within the eastern portion of Laydown Area 3, no bunched arrowhead plants were observed during site reconnaissance on November 29, 2016. In addition, somewhat stagnant hydrologic conditions were present in this small seepage area. Based on these observations, this species is unlikely to occur due to the absence of suitable habitat.

Virginia spiraea (*Spiraea virginiana*) occurs on periodically flood-scoured banks of highgradient mountain streams, bare rock or talus. These habitat types do not occur within the laydown area. Therefore, this plant species is unlikely to occur due to the absence of suitable habitat. The Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), spruce-fir moss spider (*Microhexura montivaga*), Blue Ridge goldenrod (*Solidago spitamaea*), mountain sweet pitcherplant (*Sarracenia rubra* ssp. *jonesii*), spreading avens (*Geum radiatum*), and rock gnome lichen (*Gymnoderma lineare*) are all species that occur in high elevation habitats. The elevation of the Asheville Plant, including Laydown Arear 3, is approximately 2,000 to 2,200 feet. (Note: Western North Carolina ranges consist of low [<2,300 feet], moderate [2,300 – 4,000 feet], and high [4,000 – 6,560 feet] peaks). Therefore, these six species are not considered further in this characterization due to the absence of suitable habitat.

Amec Foster Wheeler also reviewed the NCNHP database for state-listed threatened and endangered species with historic and current elements of occurrence in Buncombe County. The stream features within Laydown Area 3 do not offer suitable habitat for the following listed freshwater mussel species: Appalachian elktoe (state endangered), slippershell mussel (*Alasmidonta viridis*) (state endangered), Tennessee heelsplitter (*Lasmigona holstonia*) (state endangered), and creeper (*Strophitus undulatus*) (state threatened). The project activities within this alternative site will not impact the French Broad River; therefore, the paddlefish (*Polyodon spathula*), a state endangered riverine species, will not be affected. Finally, the bog turtle (*Glyptemys muhlenbergii*) (state threatened) is not expected to occur within the site. Bog turtles inhabit open, unpolluted, emergent and scrub/shrub wetlands such as shallow spring-fed fens, sphagnum bogs, swamps, marshy meadows and wet pastures. These types of habitat are not present within the headwater forest wetland in the site.

Amec Foster Wheeler conducted a cultural resource screening to assess the presence/absence of known cultural resources and National Register of Historic Places (NRHP) listed resources within Laydown Area 3 and within a half-mile radius of each of the site. The research included a review of available data from the North Carolina State Historic Preservation Office (NCSHPO) online Web Geographic Information System (GIS) Service (NCSHPO 2017). The investigation did not include field efforts to identify or verify cultural resources, and no formal coordination with the NCSHPO office was included in this review.

No structures or Districts were listed on the NRHP within or within the half-mile radius of Laydown Area 3. According to the North Carolina Office of State Archaeology records, a portion of the search area located along the French Broad River has been previously surveyed for archaeological resources, *The 1978 Archaeological Reconnaissance Survey of the Hominy Valley Interceptor Sewer Project and the South Buncombe Interceptor Sewer Project, Buncombe and Henderson Counties, North Carolina,* by Harvard G. Ayers. This 39-mile Phase I survey looked at a 40-foot wide survey corridor along the floodplain of the French Broad River and its tributaries and resulted in the identification of five significant archaeological sites. However, none of the sites identified within a half-mile of Laydown Area 3.

In addition to the archaeological survey, one historic structure was identified within the search area of Laydown Area 3. Structure BN2495 is a historic bridge that has been surveyed only for the NRHP and is located a half-mile southwest of Laydown Area 3. The results of this review included archival research that verified no recorded archaeological or architectural resources are located within the boundaries of Laydown Area 3.

The laydown areas are in the Tennessee River system and lies within the Upper French Broad River watershed (HUC 06010105), which is a sub-basin of the French Broad River. The French Broad River begins just west of the Eastern Continental Divide. From there it flows northeasterly through the Appalachian Mountains. The river flows for approximately 218 miles draining large portions of the Pisgah National Forest and the Cherokee National Forest. Originating near the town of Rosman, North Carolina, in Transylvania County, and continuing into the state of Tennessee, the French Broad's confluence with the Holston River in Knoxville, Tennessee, forms the Tennessee River. The surface water classification listed for the French Broad River based on the most recent North Carolina Department of Environmental Quality (NCDEQ) surface water data (NCDEQ 2017a) is "B". This classification includes waters protected for uses such as primary recreation, fresh water, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Primary recreational activities include swimming, boating, tubing, fishing and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis. The French Broad River is listed as impaired in the vicinity of the DEP Asheville Plant.

Groundwater refers to subsurface hydrologic resources that are used for domestic, agricultural and industrial purposes. Groundwater is stored in natural geologic formations called aquifers. In the Blue Ridge Physiographic Region of North Carolina, two major aquifer systems exist and usually interact with one another (NCDEQ 2017c). The surficial materials or regolith of the Blue Ridge province forms an unconfined aquifer, while the fractured rock beneath forms an unconfined to semi-confined bedrock aquifer. Usually the surficial aquifer feeds the fractures in the bedrock aquifer. The proposed activities within Laydown Areas 3 will not draw water from groundwater sources.

WoUS, including wetlands, are defined by 33 CFR Part 328.3 *et al.* and other applicable sections of the CWA (33 USC 1344). In North Carolina impacts to these regulated resources are administered and enforced by the U.S. Army Corps of Engineers (USACE), Wilmington District. Amec Foster Wheeler performed an evaluation for the presence of potentially jurisdictional WoUS in DEP's Asheville Plant (including Laydown Area 3) in 2015 and submitted a request for verification of jurisdictional determination (JD) to the USACE for WoUS.

The USACE on-site JD review was conducted on September 18, 2015. The USACE subsequently issued an approved JD for the Asheville Plant on May 19, 2016 (Action ID SAW-2014-00189). The approved JD included Laydown Area 3 and the following table summarizes WoUS this laydown area.

Resource Type	Size of Area
Wetland (acres)	0.38
Stream (linear feet)	972.5
Open Water (acres)	0.87

Applicant's Stated Purpose

The proposed Asheville CC Project associated with the WCMP has a need for approximately 25 acres of construction laydown (five laydown areas) and on-site construction parking beginning in the fall of 2017. There are currently four laydown areas on-site providing approximately 16.9 acres of laydown area (Laydown areas 1, 2, 4, and 5). There is a need for additional construction laydown area(s) to support construction activities and delivery of materials/equipment required early in project schedule. Development of Laydown Area 3 will provide 5.9 acres of additional workable laydown area.

Project Description

During the construction phase for the CC units, five construction laydown areas providing approximately 25 acres of laydown and on-site construction parking will be necessary. The construction and establishment of one of the laydown areas, Laydown Area 3, would require impacts to WoUS. The required groundwork to provide the workable laydown space at Laydown Area 3 will result in 972.5 linear feet of permanent stream impacts, 0.38 acres of permanent wetland impacts, and 0.87 acres of permanent open water impacts. The proposed impacts are necessary for establishing site sediment basin and piping, and site grading is required to provide a suitably sized pad to accommodate laydown material and equipment.

Avoidance and Minimization

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

The engineering and construction company for the Ashville CC project, CB&I Engineering and Construction (CB&I), typically requires approximately 25 acres of on-site laydown space to construct a CC plant. This is due to the delivery of major equipment required early in the construction schedule. Current designed laydown areas, including Laydown Area 3, total approximately 22.8acres for construction laydown. Laydown Area 3 will provide approximately 5.9 acres of usable area and is necessary to achieve workable laydown space.

The ability to avoid and minimize impacts to jurisdictional waters within Laydown Area 3 is limited by steep topography and geologic conditions. The contributory drainage of the laydown space is greater than 5 acres; therefore, construction of a sediment basin is required by the North Carolina Division of Energy, Mineral and Land Resources. The topography in Laydown Area 3 drops from the northeast to the southwest. Placement of the proposed sediment basin is, therefore, optimized at the low point in the westerly corner of Laydown Area 3. The basin could not be constructed at another location within this laydown area as the area is not large enough to accommodate alternate locations, given topography and geology. Jurisdictional streams and wetlands occur within/near the center of Laydown Area 3; therefore, avoidance of these features is problematic with respect to the configuration of construction elements and proximity to jurisdictional waters. The proposed impacts to WoUS within Laydown Area 3 are necessary for establishing the basin and piping, while site grading is required to provide a suitably sized pad to accommodate laydown material and equipment.

The proposed impact to the jurisdictional pond within Laydown Area 3 is also related to the topographic and geologic site conditions effects on site configuration (i.e., optimization of design components). The steep topography pushes the development to the middle of the site where contours are flatter. However, the presence of the pond within the central portion of the laydown area prevents site utilization without impacts to jurisdictional waters. To develop the site for a laydown area of suitable size, which includes the establishment of a sediment basin, the pond must be filled to raise the grade, as excavation of the surrounding steeper slopes is not feasible due to site topography and geologic conditions. The pond could not be used for a sediment basin due to inadequate storage volume from the top of pond water surface to the top of the existing embankment (approximately 1 foot). Even if sediments in the pond bottom were excavated, the pond is not of sufficient size to handle stormwater volume flowing through the system and still meet North Carolina erosion and sedimentation control and Buncombe County stormwater requirements. Given the location of the pond and the existing site contours surrounding the pond, construction stormwater could not be routed through the pond and simultaneously meet stormwater requirements. The upstream contributory drainage area to the pond is approximately 55.0 acres, comprising 39.5 acres on the east side of New Rockwood Road (outside DEP property) and 15 acres on the west side of New Rockwood Road (within DEP property). This runoff has been accounted for in the proposed sediment basin and results in a larger detention basin to meet North Carolina erosion and sedimentation control design standards and Buncombe County peak rate reductions for the 1-year, 24-hour storm event. Therefore, to meet regulatory requirements for stormwater management as related to the existing site conditions and parameters, a sediment basin needs to be constructed. The location of the basin is directed and limited by existing site conditions including steep topography and site geology and the location of the pond within the center of the site. Site optimization is further compounded by the fact that the pond cannot be used as a sediment basin due to inadequate storage volume capacity.

The proposed access to Laydown Area 3 is from Laydown Area 2. Laydown Area 2 abuts the northern edge of Laydown Area 3. Laydown Area 2 is located within the other site construction facility areas, which are all contained inside DEP controlled fencing. If the pond, wetlands, and streams at Laydown Area 3 were to remain post-development, a new driveway access from New Rockwood Road would be required to access Laydown Area 3. This driveway would result in negative impacts to residents near the laydown area resulting from nuisance traffic, noise, dust and safety concerns. Specifically, the transport of material and equipment on a public road that is not controlled by DEP would be problematic.

Access to Laydown Area 3 across the westerly embankment for the existing pond would result in additional safety concerns. The westerly embankment is not able to adequately support HS-20 vehicle loading and would require significant improvements resulting in fill impacts to a stream (i.e., a portion of the stream segment would be filled rather than piped). Additionally, there is a significant drop-off from the westerly embankment to this stream which would cause safety issues for vehicle traffic. H-20 loading is an American Association of State Highway Transportation Official bridge design criteria which consists of truck axle loading of 32,000 pounds or wheel loading of 16,000 pounds.

The Asheville CC Project proposes three parking areas to meet the project needs. The total amount of parking required for the project is 4.95 acres, which will accommodate up to 750 parking spaces:

- On-site Construction Parking Area (craft personnel parking), comprising 3.2 acres and 461 parking spaces
- A portion of Laydown Area 1 to be converted in the future for peak overflow parking, comprising 0.8 acre and 100 parking spaces
- A portion of Laydown Area 2 to be converted in the future for peak overflow parking, comprising 0.95 acre and 116 parking spaces

DEP considered using the areas listed above in entirety for laydown instead of a portion for parking. However, using all the above areas for laydown would only provide approximately 5 acres for laydown and not avoid the need to use Laydown Area 3. Off-site construction parking was considered for the project. Specific site locations for off-site construction parking opportunities are limited and would not provide sufficient capacity or duration to accommodate the parking needs of craft workers for the entirety of the Asheville CC Project.

The constraints with respect to the potential availability and use of off-site construction parking are safety, risk, liability, cost, public impact and productivity. The Mountain Energy Act requires that DEP permanently cease operations of all coal-fired generating units at the Asheville Plant no later than January 31, 2020. Productivity and project schedule are crucial as this regulatory deadline cannot be extended. The following points eliminated the off-site parking consideration:

- Reduction in productivity due to bussing workers; that is, loss of work time for workers who are limited by the bussing option to enter and leave the Asheville CC Project work site (Note: this also becomes a density issue, which may prohibit increases to the work force).
- CB&I examined off-site parking opportunities within a 10-mile radius of the Asheville Plant and could not find acceptable sites to accommodate up to 750 vehicles at a single site for the duration of the project. There may be other sites located, but parking would have to be split between several locations in this scenario, again, this would impact productivity.
- The reduction in productivity would affect the opportunity to complete the project by the regulatory deadline (i.e., schedule delays).
- To counteract worker productivity losses resulting from travel time, multi-shift and/or night-time operations may be necessary to maintain the project schedule. This scenario would impact the residential neighborhood via light emissions, dust, traffic and noise.
- Regarding risk and liability, the proposed laydown and parking areas for the project are all located within a secure area with planned design. If laydown and/or parking areas were established outside of the secured plant boundary, risk to public safety resulting from required travel and/or movement of material to/from these areas would increase.
- Liability related to loss or damage to equipment from off-site laydown would increase. The transport of large equipment and large material loads across major roads and highways increases the potential for interactions with power lines and commuter traffic (i.e., safety and liability issues).

- For off-site parking locations with residential neighborhoods occurring between the plant construction site and the off-site parking areas, negative impacts to residents would occur resulting from nuisance traffic, noise related to traffic, fugitive dust and safety concerns.
- It is safer and more efficient to allow for craft personnel to have direct access to the CC Project work site rather than requiring workers to walk/travel through one or more laydown areas to access to the work site. Under the proposed design of the laydown and parking areas, access to the CC Project work site is achieved via one entrance, and craft personnel do not walk or travel through laydown areas. This scenario reduces risk liability and DEP will be able to comply with the regulatory deadline in the Mountain Energy Act.
- A simplified parking plan for craft personnel improves productivity and ensures the completion of the project in a timely manner. Increasing the work force leads to significant inefficiencies resulting from increased wait times between working groups on site due to the congested nature of the power block during construction. The peak craft plans optimize the productivity while accounting for work area size limitations.
- An off-site craft parking scenario is also problematic from density standpoint; i.e., such a scenario would require adding a second shift, thus causing significant community relation issues.

In summary, off-site parking has four principal disadvantages over parking on-site:

- 1. Safety concerns would be elevated.
- 2. Project schedule would be impacted as to meeting the regulatory deadline.
- 3. Worker productivity would be diminished.
- 4. Capital expenditure would be magnified.

With the above considerations, on-site construction parking represents the most feasible, practicable, safe, cost-effective and temporally efficient parking option. Consequently, since approximately 25 acres of on-site laydown space is required to construct the Asheville CC Plant due to the delivery of major equipment required early in the construction schedule, Laydown Area 3, as it is currently designed, is necessary to achieve sufficient laydown space.

Off-site alternatives to Laydown Area 3 were considered. Five off-site areas were considered for construction laydown. Based on the conclusions of an initial screening process, two suitable off-sites locations were advanced in an alternatives analysis.

These two alternatives, along with the No Action alternative and Laydown Area 3, were examined with respect to project practicability limits and the need to avoid and/or minimize impacts to WoUS, in addition to a suite of key site development characteristics that would affect the ability and/or opportunity to construct and operate each of the three laydown sites. Specifically, the location of the laydown site must be reasonably unencumbered when examined under this suite of key site development characteristics.

The selection of Laydown Area 3 and not developing one of the off-site alternatives was based on the review of resources and attributes associated with the potential development of each site along with site restraints discussed in the WMP. The following table summarizes alternative offsite laydown areas with Laydown Area 3.

Potential Impacts/Constraints	Laydown Area 3	Site B	Site C
Cultural Resource Impacts	None	None	None
Protected Species Impacts	Low-Unlikely	Unlikely	Unlikely
Dredge/Fill of USACE Waters	Required	None	None
Floodplain Impacts	No	Yes	No
Additional Security Staff Required	No	Yes	Yes
Site Ultimately Controlled by DEP	Yes	Yes	No
Rezoning Required	Yes	Yes	No
Site Accessibility	Good	Difficult	Restricted
Transportation (additional measures)	None	Required	Required
Off-site Construction Parking Required	No	Yes	Yes
Site Preparation (pre-construction)	Required	Required	Required
Site Restoration (post-construction)	None	Required	None
Access Restraints	None	Glenn Bridge Rd., I-40 bridge height, transmission lines	Glenn Bridge Rd., I-40 bridge height

Summary of Potential Laydown Area Impacts and Constraints

Notes: Yellow = potential project encumbrance; Orange = major potential project encumbrance.

Cultural resources and protected species would not be a limiting factor to each of the three sites and would not place one site over another with respect to the magnitude of the potential affect. With regard to water resources, potential construction impacts to wetlands and streams would be greatest on Laydown Area 3. No wetlands or streams occur on Site B, however, potential floodplain impacts would occur with the construction of Site B, but not with Laydown Area 3 or Site C. A culverted stream occurs on Site C. The most restrictive or limiting factor for the construction of the laydown area is related to the assemblage of potential constraints to development of the sites. The expression of all of these site factors is clearly and significantly problematic with respect to the construction and operation of a laydown area at Site B or Site C. In contrast to Laydown Area 3, Sites B and C have additional requirements for off-site security and transportation and have accessibility restraints due to powerlines, public road conditions and the I-40 bridge height over Glenn Bridge Road. In addition, Site C access would not be ultimately subject to the DEP's control. In comparison with Sites B and C, Laydown Area 3 is unencumbered, or minimally limited, under these same factors.

Compensatory Mitigation

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

As proposed, the grading, clearing, and site preparation activities at Laydown Area 3 would result in 972.5 linear feet of permanent stream impacts, 0.38 acres of permanent wetland impacts, and 0.87 acres of permanent open water impacts (see Civil Laydown Area 3 Plan View). These impacts will results in a permanent loss of WoUS. Purchase of stream mitigation credits are proposed to be obtained from an approved private mitigation bank and wetland mitigation credits are proposed to be purchased through the North Carolina Division of Mitigation Services (NCDMS) in-lieu fee program.

A ratio of 2:1 is proposed for the purchase of credits for the impacts to 0.38 acres of wetlands. Based upon results of North Carolina Stream Assessment Methodology (NCSAM) 925.5 linear feet of the impacted stream rated high and 46 linear feet rated medium. The applicant has proposed a 2:1 ratio for the purchase of credits for proposed impacts to 925.5 linear feet of high rated streams and a 1:1 ratio for the purchase of credits for proposed impacts to 46 linear feet of medium rated streams. No mitigation is being offered for the proposed impact of 0.87 acre to the open waters.

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 <u>no potential to cause an effect</u> 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 <u>no historic properties</u> <u>affected</u>. 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 <u>no historic properties affected</u> 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 <u>no adverse</u> <u>effect</u> 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 <u>may have an adverse</u> <u>effect</u> 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-indentified 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
t	threatened species or their formally designated critical habitat. The Corps initiates
C	consultation under Section 7 of the ESA and will not make a permit decision until the
C	consultation process is complete.

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, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. 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 June 5, 2017 to:

NCDWR Central Office Attention: Ms. Karen Higgins, 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 shall 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, June 5, 2017. Comments should be submitted to Mr. David Brown, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, North Carolina 28801-5006 at (828) 271-7980, extension 4232.