



US Army Corps
of Engineers®

PUBLIC NOTICE

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Wilmington District

Standard Local Operating Procedures for Endangered Species (SLOPES) for Wilmington District, Department of the Army Permits Affecting Ten (10) Listed Aquatic Species in Eastern North Carolina.

The purpose of this public notice is to announce that the Wilmington District, U.S. Army Corps of Engineers (USACE), and the United States Fish and Wildlife Service (Service) have developed a SLOPES agreement concerning potential effects to ten (10) aquatic species in Eastern North Carolina that are federally listed or proposed for listing. The nine (9) listed species are: Atlantic Pigtoe (*Fusconaia masoni*), Dwarf Wedgemussel (*Alasmodonta heterodon*), Tar River Spinemussel (*Parvaspina steinstansana*), Yellow Lance (*Elliptio lanceolata*), James Spinemussel (*Parvaspina collina*), Roanoke Logperch (*Percina rex*), Cape Fear Shiner (*Notropis mekistocholas*), Carolina Madtom (*Noturus furiosus*), Neuse River Waterdog (*Necturus lewisi*). The one proposed species is the Green Floater (*Lasmigona subviridis*).

Section 7(a)(2) of the Endangered Species Act (ESA) requires that federal agencies, in consultation with the Services (both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service), take such actions as necessary to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of such endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary of the Interior or Commerce, as appropriate, to be critical.

This SLOPES details how the U.S. Army Corps of Engineers (USACE), Wilmington District will make determinations of effect to the ten (10) Eastern North Carolina Aquatic Species Group when the USACE is the lead federal agency for a project, and it is applicable to activities regulated pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act in the state of North Carolina. Note that if another federal agency is the lead for a project, procedures for satisfying the requirements of Section 7(a)(2) of the ESA will be dictated by that agency and will not be applicable for consideration under this SLOPES.

Favorable habitat for each of these species includes:

Atlantic Pigtoe: This species needs clean, flowing water characterized by high dissolved oxygen concentrations and it prefers gravel beds and coarse sand habitats

just downstream of riffles (i.e., rocky, or shallow stream areas with swift water currents). It also may be found less commonly in sand, cobble, and mixtures of sand, silt, and Detritus.

Dwarf Wedgemussel: This species appears to be a generalist in terms of its preference for stream size, substrate and flow conditions. It inhabits small streams and is found in a variety of substrate types including clay, sand, gravel, and pebble, and sometimes in silt depositional areas near banks; and it usually inhabits hydrologically stable areas, including very shallow water along streambanks and under root mats. Dwarf Wedgemussels are often patchily distributed in rivers.

Tar River Spiny mussel: This species preferred habitats include relatively fast-flowing, well-oxygenated, perennial waters, though water velocity may fluctuate widely in occupied stream reaches. This species also prefers relatively silt-free, stable, uncompacted coarse sand and gravel substrates. However, the species has been relegated to, and may persist in, degraded habitat conditions compared to its preferred habitats. They have also been detected in small patches of transitional benthic habitat, where cobble/pebble meets sand/gravel substrates.

Yellow Lance: This species is often found buried up to 6 inches deep in clean and stable coarse to medium-grained sand. Additionally, it occasionally is found in gravel or mixed sand and gravel substrates. Yellow Lance mussels often are moved with shifting sand and eventually settle in sand at the downstream end of stable sand and gravel bars. This species is found in medium-sized rivers to smaller streams and is dependent on clean, moderate flowing water with high dissolved oxygen content in riverine or larger creek environments. Historically, the most robust populations existed in creeks and rivers with excellent water quality.

James Spiny mussel: This species prefers free-flowing streams with a variety of flow regimes. The James Spiny mussel is found in a variety of substrates with limited silt content. This freshwater mussel is found in the upper James River and Dan River basins.

Green Floater: This species prefers streams with slow to medium flows and good water quality. They are often found in sand or small gravel substrates where they establish a foothold and bury themselves. Their mobility is limited, and fast flowing currents or high-water events can cause them to be washed downstream. When they occur in larger streams and rivers, they are found in quieter pools and eddies, away from strong currents. Green Floaters are often found in similar habitat types to Atlantic Pigtoe, James Spiny mussel, and other listed mussels.

Roanoke Logperch: This species prefers medium-to-large, warm, usually clear streams and small rivers of moderate to low gradient. Adults usually inhabit the main body of stream pools, runs, and riffles, and they select areas with exposed, silt-free gravel substrate. Young are usually found in slow runs and pools with clean sandy bottoms.

Cape Fear Shiner: This species prefers clean river systems with rocky pools, riffles and runs within wide, shallow segments of moderate to fast flowing water with a forest canopy. The substrate is gravel, cobble and/or boulders often with abundant Water Willow (*Justicia*), Riverweed (*Podostemum*), Stream Mosses (*Fontinalis*), and filamentous green algae which may be used as cover or protection from predators (e.g., flathead catfish, bass and crappie) during juvenile and adult life stages.

Carolina Mudtom: This species prefers riffles, runs, and pools of shallow to moderate depth, with leaf packs and sand and gravel substrates, and adequate cover (e.g., boulders or woody debris). They need continuous, perennial flows. The Carolina Mudtom is often found in swift waters and will shift to areas of moderate or slow flow during the breeding season.

Neuse River Waterdog: This species preferred habitats vary with season, temperature, dissolved oxygen content, flow rate, and precipitation; however, waterdogs maintain home retreat areas under rocks, in burrows, or under substantial cover (e.g., leaf litter) in backwater or eddy areas over hard clay, gravel, cobble, or coarse sand. They are not known to occur in reservoirs, ponds, or other impounded water habitats (e.g., established beaver impoundments), and they are unable to persist in Intermittently flowing streams that regularly run dry, or in perennial stream reaches dried by extended droughts.

GEOGRAPHIC AREA COVERED BY THE SLOPES

The geographic area covered by the SLOPES includes the USFWS Raleigh Field Office Work Area (Eastern portion of North Carolina) and the consultation area for each covered species is shown on maps included in Appendix A of the SLOPES.

PURPOSE OF THE SLOPES

This SLOPES formalizes the coordination between the USACE, Wilmington District and the Raleigh Ecological Services field office for effect determinations and the need for further consultation. The SLOPES addresses effects to the ten (10) listed aquatic species found in the Tar, Neuse, Roanoke, Upper Cape Fear, and Yadkin-Pee Dee River basins only. Effects to other federally listed species and/or to federally designated critical habitat will be processed via traditional consultation methods unless separate SLOPES or other agreements with the Service have been reached for those species and/or critical habitat.

TIMEFRAME

The SLOPES was signed and became effective on February 11, 2025. There is not expiration date for the SLOPES; However, it may be modified or amended only by written mutual agreement of the parties. Additionally, it may be terminated, in its entirety, by written mutual agreement of the parties. An individual party to this agreement may withdraw from the agreement after providing 30 days written notice of such intent to withdraw to the other participating signatories.

WHICH ACTIVITIES ARE ADDRESSED IN THE SLOPES?

This SLOPES details how the U.S. Army Corps of Engineers (USACE), Wilmington District will make determinations of effect to the Eastern North Carolina Aquatic Species Group, and it is applicable to activities regulated pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act in the state of North Carolina.

WHAT IF THE USACE IS NOT THE LEAD FEDERAL AGENCY

If another federal agency is the lead for a project, procedures for satisfying the requirements of Section 7(a)(2) of the ESA will be dictated by that agency and will not be applicable for consideration under this SLOPES.

WHO CAN I CALL IF I HAVE QUESTIONS ABOUT THE SLOPES AGREEMENT

The West Indian Manatee SLOPES can be viewed here:

[Ten \(10\) Eastern NC Aquatic Species SLOPES link](#)

Individuals who do not have internet access, or who may have additional questions should contact the USACE at (919) 440-0119.