

DRAFT – Altamaha Spiny Mussel – DRAFT
Effects Determination Guidance for Endangered & Threatened Species (EDGES),

**Appling, Ben Hill, Coffee, Jeff Davis, Long, Montgomery, Tattnall, Telfair, Toombs,
Wayne, and Wheeler Counties**

Species Covered by This EDGES: Altamaha spiny mussel (*Elliptio spinosa*) - Endangered

The Altamaha spiny mussel is endemic to the Altamaha River basin. These mussels are found most often in very coarse to fine sand, although they sometimes occur in sloughs that form between an exposed sandbar and the bank. Adults are not as sessile or sedentary as most freshwater mussels. They apparently move about their sandbar habitat, but are often found buried 2 to 4 inches below the sandbar surface. The mussel’s large spines are presumably used to anchor it to the shifting sand of sandbars within swiftly-flowing rivers. Adult mussels are filter feeders and usually feed upon plankton and detritus from their aquatic environment. To reproduce, these mussels release larva, called glochidia, into the water. Glochidia must find and attach to the gills or fins of an appropriate host fish to complete development.



Altamaha spiny mussel (*Elliptio spinosa*) (above)

Despite intensive survey efforts since 2000, few individuals have been found at very few locations, and the mussel may be extirpated from the Oconee River. Currently, the Altamaha spiny mussel is believed to occur only within the extent of its designated Critical Habitat, which is comprised of approximately 70 miles of the Altamaha River, 68 miles of the Ocmulgee River, and 9 miles of the Ohoopsee River occurring in Appling, Ben Hill, Coffee, Jeff Davis, Long, Montgomery, Tattnall, Telfair, Toombs, Wayne, and Wheeler Counties.

Threats to the species include habitat loss or degradation due to sedimentation; water quality degradation due to contamination from industrial and municipal effluents and to nonpoint sources; drought and surface water withdrawals that reduce flow, which may strand the mussels on their sandbars; all-terrain vehicle use on river margins during low flow conditions that degrade mussel habitat; and loss of host fish for larval development.

Endangered Species Act Consultation Checklist:

Applicant:

1. Does IPAC indicates federally-listed aquatic species may occur in the project area.
 - a. No.....No effect. Provide IPaC information to the Savannah District with application/PCN.
 - b. Yes.....Go to #2.

2. Has the Fish and Wildlife Service’s Georgia Field Office (GAES) provided documentation stating project impacts to these species were likely to be minimal.
 - a. No.....Go to #3.
 - b. Yes.....Provide GAES project review documentation to the Savannah District with application/PCN.

3. Were determination key(s) completed in IPaC and a consistency letter auto-generated for the project.
 - a. No..... Provide completed EDGES Applicant Consultation Form and supporting documentation to the Savannah District with 404 application/PCN.
 - b. Yes.....Provide IPaC determination key and consistency letter to the Savannah District with application/PCN.

Savannah District:

4. Does IPaC indicate the Altamaha spiny mussel or designated Critical Habitat may occur in the project area.
 - a. No..... No effect.
 - b. Yes.....Go to #5.

5. Has GA ES reviewed the project and provided information that federally-listed aquatic species will not be impacted by the project.
 - a. No..... Go to #6.
 - b. Yes.....No effect.

6. Has the applicant provided a consistency letter from IPaC indicating the project will have ‘no effect’ on federally listed aquatic species or is ‘not likely to adversely affect’ federally listed species.
 - a. No..... Go to #7.
 - b. Yes.....Verify that the applicant has completed the IPaC determination key properly. No concurrence from GA ES is required. Section 7 consultation complete.

7. Has the Savannah district completed the required determination key in IPaC and generated a concurrence letter.
 - a. No..... Go to #8.
 - b. Yes..... No concurrence from GA ES required. Section 7 consultation complete.

8. Does the project’s area of effect overlap designated Critical Habitat for the Altamaha spiny mussel?
 - a. No..... NLAA. No concurrence from GA ES required. Section 7 consultation complete.
 - b. Yes..... Go to #9.

9. Will this project require an Individual 404 Clean Water Act Permit, involve point source discharges, or result in new surface water withdrawals?
 - a. No..... NLAA. No concurrence from GA ES required. Section 7 consultation complete.
 - Yes..... Go to #10.

10. Is the necessary information provided in the PCN or application to assist the Savannah District and GAES in Section 7 consultation?
 - a. No.....Request the information and, once received, continue with 10b.
 - b. Yes.....Share data with GA ES and continue consultation. Go to #11.

11. If consultation results in a Savannah district determination of:
 - a. NLAA..... Concurrence letter from GA ES required. Section 7 consultation complete
 - b. MALAA.....Initiate formal consultation.

Information to provide to the Savannah District for Endangered Species Act Review

All (where applicable):

- Verification that the project will meet all requirements of the Georgia NPDES General Permits for sediment and erosion, construction stormwater management, and waste disposal.
- A post-construction stormwater management plan that meets at least the current Georgia Blue Book standards.
- A timeline documenting when land clearing, construction, and post-construction actions will be implemented.
- An estimate of total acreage that will be graded at any one time.

Urban development:

- Total acreage of the development and estimate percentage of impervious surface post-construction.
- Data detailing where riparian buffers will be removed or thinned to less than 50 feet wide on both banks.
- Location of new or improved culverts, bridges, dams, stormwater facilities, and utility crossings of streams. Data requirements for these structures, other than location, are listed below.
- The acreage of land that will be graded at any one time.
- Location of any point-source discharges.

New or replacement culverts in perennial stream (in addition to data required in the NWP Regional Conditions).

- Post-construction channel and bank stabilization measures, including revegetation plans.
- A description of grade or velocity controls to be installed, including riprap.

New or widened utility right-of-way (e.g., water main, sewer, pipelines, transmission lines):

- Methodology for each stream excavation (wet cut, dam-pump, flume, bore).
- Amount and source of hydrostatic test water and slurry water (if needed).
- Location where hydrostatic test and slurry water will be discharged (if needed).
- Location of new, replaced, or improved culverts or fords, either permanent or temporary.
- Post-construction channel/bank stabilization measures, including revegetation plans, and ROW maintenance plan.

Stream restoration/stabilization: Stream restoration plan (60% design, and including the proposed longitudinal profile.