Determining if a project may affect listed mussels or critical habitat
in streams of Florida

The U.S. Fish and Wildlife Service (USFWS) is providing this guidance to assist project managers in determining if a proposed project may impact federally protected freshwater mussels or streams designated as mussel critical habitat in Florida. Any project funded, authorized, or carried out by a federal agency, that may affect threatened and endangered species or critical habitat must be reviewed by the USFWS for potential effects to the species, in accordance with provisions of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

1) **Determine if the proposed project may impact a stream**

- The project will require instream work.
  Example: the installation/replacement/repair of a dam, culvert, bridge, boat ramp, pier, dock, or retaining wall; dredging, rip-rapping, bank stabilization, gravel mining, pipe/utility line crossing, stream restoration.

- Materials from the project could potentially drop, spill, or wash into a stream.
  Example: bridge maintenance/repair.

- The project could potentially affect a stream’s water quality.
  Example: effluent discharge, stormwater runoff/discharge.

- The project could potentially affect a stream's hydrology.
  Example: activities that divert or withdraw ground or surface water including installation of wells.

- The project is within 300 feet of a stream channel.
  Example: road construction and maintenance, directional boring, gravel mining, forestry activities, pesticide application, commercial or residential development, land clearing.

- If project is more than 300 feet from a stream channel, is there a potential for stormwater runoff from the project site to enter a stream?
  Example is the same as previous.

*If answered NO to all questions, additional project review is not needed.*
*If answered YES to any question, go to 2 to determine if listed mussels are present in the stream.*

2) **Determine if listed mussels are present in the stream**

In Florida, 14 threatened and endangered freshwater mussels occur in portions of river systems from the Escambia River east to the Suwannee River. Listed mussels may be affected by activities in or near streams designated as critical habitat (Figure 1). The species potentially affected by the proposed project must be identified. Use any or all of the following resources to determine if listed mussels are present in the stream.

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The USFWS-Panama City website: [http://www.fws.gov/panamacity/specieslist.html](http://www.fws.gov/panamacity/specieslist.html)

**Species Lists**—provides county lists of Federal Trust species in northwest Florida.

**Critical Habitat**—an interactive map of all critical habitat in northwest Florida.

**Critical Habitat Shapefiles**—provides GIS data layers for all critical habitat in the panhandle.

**IPAC**: [IPaC - Information, Planning, and Conservation System](http://www.fws.gov/)

The Information, Planning, and Conservation system allows you to use an interactive map to determine if T&E species or critical habitat or may be affected by the proposed project and provides you with a preliminary species list.

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![Mussel Critical Habitat - Florida](https://www.fws.gov/panamacity/images/MusselCriticalHabitat-Florida.jpg)

**Figure 1.** An overview of mussel critical habitat streams in Florida.

**Contact a Florida Ecological Services Office for further project review, if:**

- The project may impact a stream designated as critical habitat.
- The impact occurs in a waterbody that flows to a stream designated as critical habitat, up to 1 mile distance (measured following the path of the stream).
- The project includes the installation, replacement, or repair of a dam on a waterbody that flows to a critical habitat stream, regardless of distance.

For projects located in northwest Florida contact:
The Panama City Ecological Services Office at 850-769-0552, [http://www.fws.gov/panamacity/](http://www.fws.gov/panamacity/)

For projects located in Columbia, Union, Bradford, and Alachua Counties contact:

*The user should check the USFWS Panama City web site for the latest version of the guidance at [http://www.fws.gov/panamacity/mussels/](http://www.fws.gov/panamacity/mussels/)*

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