

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-A173

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for Three Threatened Mussels and Eight Endangered Mussels in the Mobile River Basin**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose designation of critical habitat for three threatened (fine-lined pocketbook, orange-nacre mucket, and Alabama moccasinshell) and eight endangered freshwater mussels (Coosa moccasinshell, ovate clubshell, southern clubshell, dark pigtoe, southern pigtoe, triangular kidneyshell, southern acornshell, and upland combshell), listed in 1993 under the Endangered Species Act of 1973, as amended (Act). We propose to designate 26 river and stream segments (units) in the Mobile River Basin as critical habitat for these 11 mussel species. These units encompass a total of approximately 1,760 kilometers (km) (1,093 miles (mi)) of river and stream channels. Proposed critical habitat includes portions of the Tombigbee River drainage in Mississippi and Alabama; portions of the Black Warrior River drainage in Alabama; portions of the Alabama River drainage in Alabama; portions of the Cahaba River drainage in Alabama; portions of the Tallapoosa River drainage in Alabama and Georgia; and portions of the Coosa River drainage in Alabama, Georgia, and Tennessee.

Critical habitat identifies specific areas that are essential to the conservation of a listed species, and that may require special management considerations or protection. If this proposal is made final, section 7(a)(2) of the Act requires that Federal agencies ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat. State or private actions, with no Federal involvement, are not affected.

Section 4 of the Act requires us to consider the economic and other relevant impacts of specifying any area as critical habitat. We hereby solicit data and comments from the public on all aspects of this proposal, including data

on the economic and other impacts of the designation. We will conduct an analysis of the economic impacts of designating these areas as critical habitat prior to a final determination. That economic analysis will be conducted in a manner that is consistent with the ruling of the 10th Circuit Court of Appeals in *N.M. Cattle Growers Ass'n v. USFWS*. When the draft economic analysis is completed, we will announce its availability with a notice in the **Federal Register**. With publication of the notice of availability, a comment period will be opened for a minimum of 30 days to allow for public comments on the draft economic analysis and proposed rule concurrently.

DATES: We will consider comments received by June 24, 2003. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by May 12, 2003.

ADDRESSES: If you wish to submit comments and information, you may submit your comments and information by any one of several methods:

1. You may submit written comments and information to the Field Supervisor, U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Suite A, Jackson, MS 39213.

2. You may hand-deliver written comments and information to our Mississippi Fish and Wildlife Office, at the above address, or fax your comments to 601/965-4340.

3. You may send comments by electronic mail (e-mail) to paul_hartfield@fws.gov. For directions on how to submit electronic filing of comments, see the "Public Comments Solicited" section.

Comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Paul Hartfield at the above address (telephone 601/321-1125, facsimile 601/965-4340).

SUPPLEMENTARY INFORMATION:**Background**

This proposed rule addresses 11 bivalve mollusks or mussels (possessing a soft body enclosed by 2 shells) in the family Unionidae that are native to the Mobile River basin. The mussels addressed in this rule are the threatened fine-lined pocketbook (*Lampsilis altilis*), orange-nacre mucket (*Lampsilis perovalis*), and Alabama moccasinshell (*Medionidus acutissimus*), and the endangered Coosa moccasinshell (*Medionidus parvulus*), southern

clubshell (*Pleurobema decisum*), dark pigtoe (*Pleurobema furvum*), southern pigtoe (*Pleurobema georgianum*), ovate clubshell (*Pleurobema perovatum*), triangular kidneyshell (*Ptychobranthus greeni*), upland combshell (*Epioblasma metastrata*), and southern acornshell (*Epioblasma othcaloogensis*). Unionid mussels, in general, live embedded in the bottom (sand, gravel, and/or cobble substrates) of rivers, streams, and other bodies of water. These mussels siphon water into their shells and across four gills that are specialized for respiration and food collection. Sexes in unionid mussels are usually separate. Males release sperm into the water; the sperm are then taken in by the females through their siphons during feeding and respiration. Eggs are held in the gills of the female where they come into contact with the sperm. Once eggs are fertilized, females retain them in their gills until the larvae (glochidia) fully develop. The change (metamorphosis) of the larvae of most unionid species into juvenile mussels requires that the larvae undergo a stage of parasitism on the fins, gills, or skin of a fish. Mature mussel glochidia are released into the water and they must find and attach to a suitable host fish species in order to develop into a juvenile mussel. Glochidia may be released separately or in masses termed conglutinates. The duration of the parasitic stage varies with water temperature, mussel species, and, perhaps, host fish species. Developed juvenile mussels normally detach from their fish host and sink to the stream bottom, where they continue to develop, provided they land in a suitable substrate with correct water conditions. Because of the dependence on this life stage and transport/dispersal process, unionid mussels usually only parasitize one or a few suitable host fish species that occupy similar habitats as the mussels. Consequently, the presence of suitable host fish species is considered an essential element in the life cycle of unionid mussels.

These 11 mussel species are historically native to portions of the Mobile River Basin (Basin). The Basin is composed of seven major river systems (Mobile, Tombigbee, Black Warrior, Alabama, Cahaba, Coosa, and Tallapoosa) and drains portions of the states of Alabama, Mississippi, Georgia, and Tennessee. Biological factors relevant to these freshwater mussels' habitat requisites are discussed in the Primary Constituent Elements portion of this proposed rule.