Recovery Plan Revision for the Endangered Southern Clubshell (*Pleurobema decisum*)
https://ecos.fws.gov/docs/recovery_plan/001117.pdf

Original Approved: November 17, 2000
Original Prepared by: Jackson, Mississippi U.S. Fish and Mobile River Basin Coalition Committee

Amendment 1

We have identified the need to amend recovery criteria for the southern clubshell (*Pleurobema decisum*). This proposed modification will utilize the best available information and be published as an addendum that supplements the recovery plan by adding delisting criteria which were not developed at the time the initial recovery plan was completed. The addendum will supplement the Recovery Objective and Criteria section of the *Recovery Plan for Mobile River Basin Aquatic Ecosystem* (USFWS 2000, p. 58). Recovery plans are a non-regulatory document that provides guidance on how best to help recover species.

For
U.S. Fish and Wildlife Service
Atlanta, Georgia

Approved: _____
Acting **Regional Director, U.S. Fish and Wildlife Service**

Date: 9/26/19

METHODOLOGY USED TO COMPLETE THE RECOVERY PLAN AMENDMENT

The proposed amendments to the recovery criteria were developed using the most recent and best available information for the species. The lead biologist gathered the information and notified conservation partners of the Service's process to complete this amendment. Ultimately, biologists and managers in the Alabama Ecological Services Field Office developed the amended recovery criteria for the southern clubshell.

ADEQUACY OF RECOVERY CRITERIA

Section 4(f)(1)(B)(ii) of the Endangered Species Act (Act) requires that each recovery plan

shall incorporate, to the maximum extent practicable, "objective, measurable criteria which, when met, would result in a determination...that the species be removed from the list." Legal challenges to recovery plans (see Fund for Animals v. Babbitt, 903 F. Supp. 96 (D.D.C. 1995)) and a Government Accountability Audit (GAO 2006) also have affirmed the need to frame recovery criteria in terms of threats assessed under the five listing factors.

Recovery Criteria

The current recovery plan (https://ecos.fws.gov/docs/recovery_plan/001117.pdf) (USFWS 2000) does not provide recovery criteria, but it does outline recovery objectives, see page 58.

Synthesis

The southern clubshell was federally listed as endangered in 1993 (58 FR 14330). Currently, the species is threatened by habitat modification, sedimentation, degradation of water quality, impoundment by dams, operation of lock and dams, redirection of flow (Factor A); lack of adequate enforcement of existing Federal or State regulations prohibiting take (Factor D); and fragmentation of populations leading to genetic diversity loss (Factor E).

With the exception of the Mobile-Tensaw River Delta, the southern clubshell was formerly known from every major river system in the Mobile River Basin, including the Alabama, Tombigbee, Black Warrior, Cahaba, Tallapoosa, and Coosa rivers and many of their tributaries in Mississippi, Alabama, Georgia, and Tennessee. This species has disappeared from the main channels of the Tombigbee and Black Warrior rivers, and from a number of tributaries in all of these drainages. Southern clubshell continues to inhabit various tributaries in the following sub-basins: Tombigbee, Alabama, Cahaba, Coosa, and Tallapoosa rivers. For more specific location information refer to the most recent 5-year review (https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=F036).

The status of the southern clubshell has improved substantially from the time of its listing and appears to be far exceeding its initial recovery goals. Regarding numbers of relict populations known and the higher densities noted in certain populations, the range remains highly fragmented and all populations are isolated and vulnerable to nonpoint source pollution, drought, or other stochastic events. The southern clubshell is common to abundant in localized reaches of the Conasauga River, Coosa River (Weiss Bypass), Big Canoe Creek, Cahaba River, Bull Mountain Creek, Bogue Chitto Creek, Buttahatchee River, and Sipsey River. The southern clubshell, at the time of listing, had previously been thought extirpated from the Cahaba River drainage, but now is known to occur within the Cahaba River and its tributary Shultz Creek.

AMENDED RECOVERY CRITERIA

Recovery criteria serve as objective, measurable guidelines to assist in determining when an endangered species has recovered to the point that it may be delisted and the protections afforded by the Act are no longer necessary. Delisting is the removal of a species from the Federal Lists of Endangered and Threatened Wildlife and Plants. The term "endangered species" means any species (species, sub-species, or DPS) which is in danger of extinction throughout all or a significant portion of its range. The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Revisions to the Lists, including delisting or downlisting a species, must reflect determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is an endangered species or threatened species (or not) because of threats to the species. Section 4(b) of the Act requires that the determination be made "solely on the basis of the best scientific and commercial data available." Thus, while recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are guidance and not regulatory documents.

Recovery criteria should help indicate when we would anticipate that an analysis of the species' status under section 4(a)(1) would result in a determination that the species is no longer an endangered species or threatened species. A decision to revise the status of or remove a species from the Federal Lists of Endangered and Threatened Wildlife and Plants, however, is ultimately based on an analysis of the best scientific and commercial data then available, regardless of whether that information differs from the recovery plan. When changing the status of a species, we first propose the action in the *Federal Register* to seek public comment and peer review, followed by a final decision announced in the *Federal Register*.

Herein, we provide recovery criteria for the Recovery Plan (USFWS 2000) as the plan did not include measurable criteria.

Amended Recovery Criteria

We are providing recovery criteria for the southern clubshell recovery plan (USFWS 2000). The below recovery criteria describes a recovered species, or a species that should be considered for removal from the List of Endangered and Threatened Wildlife and Plants (50 CFR 17).

1. At least ten (10) populations exhibit a stable or increasing trend, evidenced by natural recruitment, and multiple age classes. (Factor A)

2. At least one population (as defined in Criteria 1) occupies each of the presently occupied sub-basins: Alabama, Cahaba, Coosa, Tallapoosa, and Tombigbee rivers. (Factors A and E)

3. Threats have been addressed and/or managed to the extent that the species will remain viable into the foreseeable future. (Factors A-E)

Justification for Amended Recovery Criteria

Criterion 1: Populations that exhibit a stable or increasing trend, natural recruitment, and multiple age classes demonstrate that the population is secure and will be resilient to stochastic events (Factor A). For the southern clubshell, it is believed that 10 populations exhibiting these traits are necessary to provide sufficient redundancy to ensure the species will no longer require protection under the Act.

Criterion 2: To ensure that the species will not become threatened with extinction in the foreseeable future a sufficient number of populations should be distributed throughout its historical range, therefore we believe it is necessary for the species to occur in multiple sub-basins provided in Criterion 2. Maintaining or expanding the species range in historically occupied river reaches will increase its resiliency, representation, and redundancy, and reduce threats due to curtailment of range (Factor A) and stochastic events (Factor E).

Criterion 3: Abatement of the threats to the southern clubshell will allow populations to become stable and contribute to the viability of the species. A large number of potential threats (Factors A-E) were cited in the initial listing of southern clubshell; however, not all threats are affecting each population equally. Combinations of threats specific to each population are likely to determine the long-term stability of each population. A thorough assessment of persistent threats, along with observation of 10 stable populations prescribed in Criterion 1, will provide confidence that populations of southern clubshell will remain viable into the foreseeable future.

Rationale for Recovery Criteria

The proposed delisting recovery criteria reflect the best available and most up-to-date information for the southern clubshell. The stability of 10 populations reduces the probability of extinction. Due to the large number of threats to each population, the only way to ensure that the

species will not become threatened with extinction in the foreseeable future is to create a sufficient number of populations distributed throughout the Mobile River Basin, such that the loss of any one population does not limit the continued existence of the species. For this reason we believe that a robust and well developed propagation and reintroduction strategy is necessary for the delisting of this species. We suggest that establishing and maintaining 10 viable populations will demonstrate that the combination of threats acknowledged in the initial listing are reduced to a degree that is manageable, and that viable populations can be sustained despite remaining threats.

LITERATURE CITED

Mobile River Basin Mollusk Restoration Committee [MRBMRC]. 2010. Plan for the population restoration and conservation of freshwater mollusks of the Mobile River Basin. IV – 101 pp.

U.S. Fish and Wildlife Service [USFWS]. 2000. Mobile River Basin Aquatic Ecosystem Recovery Plan. Atlanta, GA. 128 pp.