

listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR 402.02). "Destruction or adverse modification of designated critical habitat" is defined as a direct or indirect alteration that appreciably diminishes the value of the critical habitat for both the survival and recovery of the species (50 CFR 402.02). Such alterations include, but are not limited to, adverse changes to the physical or biological features, *i.e.*, the primary constituent elements, that were the basis for determining the habitat to be critical.

The relationship between a species' survival and its recovery has been a source of confusion to some in the past. We believe that a species' ability to recover depends on its ability to survive into the future when its recovery can be achieved; thus, the concepts of long-term survival and recovery are intricately linked. However, in a March 15, 2001, decision of the United States Court of Appeals for the Fifth Circuit (*Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434), the Court found our definition of destruction or adverse modification as currently contained in 50 CFR 402.02 to be invalid. In response to this decision, we are reviewing the regulatory definition of adverse modification in relation to the conservation of the species.

#### *Conference for Proposed Critical Habitat*

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to result in the destruction or adverse modification of proposed critical habitat. The regulations for interagency cooperation regarding proposed critical habitat are codified at 50 CFR 402.10. During a conference on the effects of a Federal action on proposed critical habitat, we make non-binding recommendations on ways to minimize or avoid adverse effects of the action. We document these recommendations and any conclusions reached in a conference report provided to the Federal agency and to any applicant involved.

If requested by the Federal agency and deemed appropriate by us, the conference may be conducted in accordance with the procedures for formal consultation under 50 CFR 402.14. We may adopt an opinion issued at the conclusion of the conference as our biological opinion when the critical habitat is designated by final rule, but only if new information or changes to the proposed Federal action would not significantly alter the content of the opinion.

#### *Consultation for Designated Critical Habitat*

If a Federal action may affect a listed species or its designated critical habitat, the action agency must initiate consultation with us (50 CFR 402.14). Through this consultation, we will advise the agency whether the action would likely jeopardize the continued existence of the species or adversely modify its critical habitat, or both. The Services' Consultation Handbook states that the destruction or adverse modification analysis focuses on the entire critical habitat area designated unless the critical habitat rule identifies another basis for the analysis, such as discrete units or groups of units necessary for different life cycle phases or units representing distinctive habitat characteristics or gene pools, or units fulfilling essential geographic distribution requirements. The extent of the 11 mussels' decline, the fragmentation and isolation of their habitats and continuing impacts upon their habitats, and the importance of every unit to the recovery of the species suggests that individual units or groups of units that are used by populations which fulfill essential geographic distribution requirements are the appropriate scale for the analysis. In accordance with the Mobile River Aquatic Ecosystem Recovery Plan (2000), protection of the habitat in these units and their surviving populations is essential to the conservation of these 11 mussel species. An action occurring only within one unit may appreciably reduce the value of the critical habitat for the recovery of the species and therefore trigger an adverse modification determination.

When we issue a biological opinion that concludes that a specific action is likely to result in the destruction or adverse modification of critical habitat, we must provide reasonable and prudent alternatives to the action, if any are identifiable. Reasonable and prudent alternatives are actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the originally proposed action, are consistent with the scope of the action agency's authority and jurisdiction, are economically and technologically feasible, and would likely avoid the destruction or adverse modification of critical habitat (50 CFR 402.02).

#### *Reinitiation of Prior Consultations*

A Federal agency may request a conference with us for any previously reviewed action that is likely to destroy or adversely modify proposed critical

habitat and over which the agency retains discretionary involvement or control, as described above under "Conference for Proposed Critical Habitat." Following designation of critical habitat, regulations at 50 CFR 402.16 require a Federal agency to reinitiate consultation for previously reviewed actions that may affect critical habitat and over which the agency has retained discretionary involvement or control.

#### *Federal Actions That May Destroy or Adversely Modify 11 Mussels Critical Habitat*

Section 4(b)(8) of the Act requires us, in any proposed or final rule designating critical habitat, to briefly describe and evaluate those activities that may adversely modify such habitat, or that may be affected by such designation.

Federal actions that, when carried out, funded or authorized by a Federal agency, may destroy or adversely modify critical habitat for the 11 mussels include, but are not limited to:

(1) Actions that would alter the minimum flow or the existing flow regime to a degree that appreciably reduces the value of the critical habitat for both the long-term survival and recovery of the species. Such activities could include, but are not limited to, impoundment, channelization, water diversion, and hydropower generation.

(2) Actions that would significantly alter water chemistry or temperature to a degree that appreciably reduces the value of the critical habitat for both the long-term survival and recovery of the species. Such activities could include, but are not limited to, release of chemicals, biological pollutants, or heated effluents into the surface water or connected groundwater at a point source or by dispersed release (non-point).

(3) Actions that would significantly increase sediment deposition within the stream channel to a degree that appreciably reduces the value of the critical habitat for both the longterm survival and recovery of the species. Such activities could include, but are not limited to, excessive sedimentation from livestock grazing, road construction, timber harvest, off-road vehicle use, and other watershed and floodplain disturbances.

(4) Actions that would significantly increase the filamentous algal community within the stream channel to a degree that appreciably reduces the value of the critical habitat for both the longterm survival and recovery of the species. Such activities could include, but are not limited to, release of