

The Act, requires the development of recovery plans for listed species unless such a plan would not promote the conservation of a particular species. Section 4(f) of the Act requires that public notice and an opportunity for public review and comment be provided during recovery plan development. We will consider all information presented during a public comment period prior to approval of each new or revised recovery plan. We, along with other Federal agencies, will also take these comments into account in the course of implementing approved recovery plans. Individual responses to comments will not be provided.

Bull trout are native to the Pacific northwest and western Canada. We identified five distinct population segments of bull trout in five states, and issued a final rule listing the Columbia River (Idaho, Montana, Oregon, and Washington) and Klamath River (Oregon) population segments of bull trout as threatened species on June 10, 1998 (63 FR 31647). The Jarbidge River population segment (Idaho and Nevada) was listed as threatened on April 8, 1999 (64 FR 17110). The Coastal-Puget Sound (Washington) and St. Mary-Belly River (Montana) population segments were listed as threatened on November 1, 1999 (64 FR 58910), which resulted in all bull trout in the coterminous United States being listed as threatened.

Bull trout have more specific habitat requirements than most other salmonid fish. Habitat components that influence bull trout distribution and abundance include water temperature, cover, channel form and stability, spawning and rearing substrate conditions, and migratory corridors. Bull trout require colder water than most other salmonids for incubation, juvenile rearing, and spawning. All life-history stages of bull trout are associated with complex forms of cover, including large woody debris, undercut banks, boulders, and pools. Alterations in channel form and reductions in channel stability influence bull trout due to habitat degradation and negative effects on early life-history stages. Channel alterations may reduce the abundance and quality of side channels, stream margins, and pools, which are areas bull trout frequently inhabit. Because bull trout have a relatively long incubation and development period within spawning gravel (greater than 200 days), bedload transport in unstable channels may kill young bull trout. Spawning and rearing areas are often associated with cold-water springs, groundwater infiltration, and the coldest streams in a watershed. Bull trout require loose, clean gravel relatively free of fine sediments for

spawning and early rearing. Bull trout use migratory corridors to move from spawning and rearing habitats to foraging and overwintering habitats and back. Different habitats provide bull trout with diverse resources, and migratory corridors allow local populations to connect, which may increase the potential for gene flow and support or refounding of populations.

Bull trout distribution, abundance, and habitat quality have declined range wide. These declines are the results of combined effects of habitat degradation and fragmentation; the blockage of migratory corridors; poor water quality; angler harvest and poaching; diversion structures that cause injuries or fatalities; and introduced nonnative species. Specific land and water management activities that have degraded and continue to depress bull trout populations and degrade habitat include dams and other diversion structures, forest management practices, livestock grazing, agriculture, road construction and maintenance, mining, and urban and rural development.

Because the threatened bull trout population segments are widely distributed over a large area, and population segments were subject to listing at different times, we adopted a two-tiered approach to develop the draft recovery plan for bull trout. The first tier addresses broad aspects of bull trout recovery that apply at the level of population segments. The second tier addresses bull trout recovery in smaller areas, such as specific river basin areas or collections of river basins within population segments, termed "recovery units." We relied on two types of teams to assist in developing the draft recovery plan.

To address "big-picture" issues, such as identifying an overall recovery strategy, designating recovery units, and providing guidance in developing the recovery plan, we convened a recovery oversight team. Membership on the recovery oversight team consisted of our biologists, a representative from State fish and wildlife resource agencies in each of four northwestern States (Idaho, Montana, Oregon, and Washington), and a representative from the Upper Columbia United Tribes (Confederated Tribes of the Colville Reservation, Coeur d'Alene Tribe, Kalispel Tribe, Kootenai Tribe of Idaho, and Spokane Tribe).

To develop local recovery strategies at the recovery unit level, we enlisted the assistance of recovery unit teams, one for each recovery unit or recovery subunit. Membership on the recovery unit teams consisted of persons with technical expertise in various aspects of bull trout biology within each recovery

unit, typically representing Federal and State agencies, Tribes, and industry and interest groups. Major tasks of recovery unit teams include: Defining recovery for recovery units, including recovery unit-specific objectives and recovery criteria; reviewing factors affecting bull trout; estimating recovery costs; and identifying site-specific recovery actions. Members of the recovery oversight team coordinated the recovery unit teams to ensure consistency among recovery units.

The draft bull trout recovery plan that is currently available for public comment differs from many recovery plans in that it is organized into multiple chapters. The introductory chapter (Chapter 1) discusses programmatic issues that broadly apply to bull trout in the coterminous United States. This chapter describes our recovery strategy for bull trout, defines recovery, and identifies recovery tasks applicable to bull trout in general. Each following chapter (Chapters 2 through 28) addresses a specific recovery unit, and describes conditions, defines recovery objectives and criteria, identifies specific recovery tasks, and estimates time and cost required to achieve recovery for a particular recovery unit.

The general goal of all recovery plans is to describe courses of actions necessary for the ultimate delisting of a species. The specific goal of the draft bull trout recovery plan is to ensure the long-term persistence of self-sustaining, complex interacting groups of bull trout distributed across the species' native range in the United States. Recovery of bull trout will require reducing threats to the long-term persistence of populations, maintaining multiple interconnected populations of bull trout across the diverse habitats of their native range, and preserving the diversity of bull trout life-history strategies (e.g., resident or migratory forms, emigration age, spawning frequency, local habitat adaptations). To accomplish this goal throughout the coterminous United States, the draft recovery plan recommends the following four objectives: (1) Maintain current distribution of bull trout within core areas in all recovery units as described in recovery unit chapters and restore distribution where recommended in recovery unit chapters; (2) maintain stable or increasing trends in abundance of bull trout in all recovery units; (3) restore and maintain suitable habitat conditions for all bull trout life history stages and strategies; and (4) conserve genetic diversity and provide opportunity for genetic exchange. These objectives would apply