

Revised Draft Recovery Plan for the Coterminous U.S. Population of Bull Trout: Questions and Answers

Q. What is a Recovery Plan?

A. Under the Endangered Species Act, the U.S. Fish and Wildlife Service (Service) is required to develop and implement recovery plans for endangered species. A recovery plan is a road map for how to reach species recovery. The revised draft plan released today describes specific recovery goals, objectives and criteria for the recovery of bull trout in the coterminous United States, as well as the process for working with our partners to develop specific implementation plans for each recovery unit and to complete a final bull trout recovery plan in the near future.

Q. Why did the Service revise the earlier draft Recovery Plan(s)?

A. Between 2002 and 2004, three separate draft bull trout recovery plans were completed. In 2002 a draft recovery plan that addressed bull trout populations within the Columbia, St. Mary-Belly, and Klamath River basins was completed and included individual chapters for 24 separate recovery units. In 2004 draft recovery plans were developed for the Coastal-Puget Sound drainages in western Washington, including two recovery unit chapters, and for the Jarbidge River in Nevada. Although these previous draft recovery plans have served to identify recovery actions and provide the framework for implementing numerous recovery actions by our partner agencies, local working groups, and others with an interest in bull trout conservation, they were never finalized.

Based on new information found in numerous reports and studies regarding bull trout life history, ecology, distribution, persistence, etc. since their listing as threatened in 1999, including the benefits from the various conservation actions implemented on behalf of bull trout, along with an improved understanding of how the various threat factors affect bull trout, the Service has developed a revised draft recovery plan intended to work cooperatively with our conservation partners to implement effective conservation actions in those areas that offer the greatest long-term benefit to sustain bull trout and focused where recovery can be achieved.

Q. What is the strategy for recovery of the coterminous U.S. population of bull trout?

A. The primary recovery strategy for recovery of bull trout in the coterminous United States is to: (1) conserve bull trout so that they are geographically widespread across representative habitats and demographically stable, within six recovery units that comprise the coterminous United States population of bull trout; (2) effectively manage and ameliorate the primary threats in each of the six recovery units at the core area scale such that bull trout will persist in the foreseeable future; (3) build upon the numerous and ongoing conservation actions implemented

on behalf of bull trout since their listing in 1999, and improve our understanding of how various threat factors potentially affect the species; (4) use that information to work cooperatively with our partners to design, fund, prioritize, and implement effective conservation actions in those areas that offer the greatest long-term benefit to sustain bull trout and where recovery can be achieved; and (5) apply adaptive management principles to implementing the bull trout recovery program to account for new information. Additionally, we are not intending that all currently occupied core areas identified in this revised draft recovery plan need to be recovered; however, we recognize that recovery at the recovery unit scale **will require improvement** in bull trout local populations relative to the time of listing and their habitats in some core areas, while bull trout and their habitat in other core areas will only need to be **‘maintained’** into the foreseeable future.

The revised draft recovery plan will also include a *Threat Assessment Tool* that will be integral to evaluation of bull trout conservation status at the range wide and recovery unit scales will be based on analyses of threats at the level of the component core areas. Core-area assessments can inform the process of recovery plan development by highlighting conservation actions that should be given locally higher priority, and aiding managers to forecast the results of assessing recovery criteria at the aggregated recovery unit level, thus allowing managers to target those core areas where conservation resources can be most efficiently directed. Furthermore, core area-level assessments will be useful to recovery criteria evaluation and status assessments conducted as part of future five-year reviews and five-factor threats analysis in any future delisting evaluation for bull trout at the recovery unit level.

Q. What are the proposed Recovery Criteria?

A. The revised draft recovery plan proposes that delisting of bull trout can be considered if recovery criteria are met in the six recovery units that collectively comprise the coterminous U.S. population of bull trout. Delisting of an individual recovery unit that meets recovery criteria may also be considered but would require designation of a separate distinct population segment through a formal rule-making process; a recovery plan cannot designate distinct population segments. The following criteria must be met:

Conservation actions have been implemented to ameliorate the primary threats to bull trout in suitable habitats. If the primary threats have been effectively managed in each recovery unit, the long-term persistence of bull trout should be ensured.

The Service may initiate an assessment of whether recovery has been achieved and delisting is warranted when the following has been achieved in each recovery unit:

- For the Coastal, Mid-Columbia, Upper Snake, and Columbia Headwaters Recovery Units: Primary threats are effectively managed in at least 75 percent of all core areas, representing 75 percent or more of bull trout local populations within each of these four recovery units.

- For the Klamath and St. Mary Recovery Units: All primary threats are effectively managed in all existing core areas, representing all existing local populations. In addition, seven new local populations are located or reintroduced in the Klamath Recovery Unit.
- In recovery units where shared foraging/migratory/overwintering (FMO) habitat outside core areas has been identified, connectivity and habitat in shared FMO areas should be maintained in a condition sufficient for regular bull trout use and successful dispersal among the connecting core areas for those core areas to meet the criterion.

If threats are effectively “managed” at the thresholds described above, we expect that bull trout populations in each recovery unit will respond accordingly, reflecting the biodiversity principles of resiliency, redundancy and representativeness. Specifically, achieving the proposed recovery criteria in each recovery unit would result in geographically widespread and demographically stable local bull trout populations within the range of natural variation, with their essential cold water habitat connected to allow their diverse life history forms to persist into the foreseeable future; and therefore would bring the species to the point where the protections of the Act are no longer necessary.

Q. How do the proposed recovery criteria differ from the 2002 and 2004 draft recovery plans?

A. The current revised draft recovery plan revises the recovery criteria proposed in the 2002 and 2004 draft recovery plans to focus on effective management of threats to bull trout at the core area level, and de-emphasizes achieving targeted point estimates of abundance of adult bull trout (demographics) in each core area.

In the previous 2002 and 2004 draft Plans, adult abundance levels (demographics) were proposed as recovery targets for each identified bull trout core area, considering theoretical estimates of effective population size, historic census information, and the professional judgment of recovery unit team members. In developing this revised draft recovery plan, we recognize that bull trout continue to be found in suitable habitats and generally remain geographically widespread across 110 core areas in numerous major river basins in five states. While the revised draft recovery plan identifies conservation needs for all remaining 110 core areas where bull trout reside, we acknowledge that despite our best future conservation efforts, it is likely that some existing bull trout core areas will become extirpated within the foreseeable future due to unforeseen factors; including the effects of existing small populations, climate change, and isolation (35 of 110 extant core areas comprise a single local population). Moreover, the availability of survey data for accurate population estimates is problematic in some regions, and in certain core areas the geographic limitations on available habitat may inherently constrain the ability of bull trout populations to achieve the earlier demographic targets. Therefore, we are proposing a revised recovery approach that focuses on the identification and effective management of known threat factors to bull trout in currently occupied core areas in each of six

recovery units; establishes recovery criteria thresholds that acknowledge some extant bull trout core area habitats will likely change (and may be lost) over time; and prioritizes and implements recovery actions in those areas where success is likely. We do identify a number of core areas where small population size is a significant threat factor that should be addressed, because population levels are particularly low considering the spatial extent of habitat. Achieving the proposed recovery criteria in each recovery unit would result in geographically widespread and demographically stable local bull trout populations within the range of natural variation (not necessarily at some theoretical level of effective population size), with their essential cold water habitats connected to allow their diverse life history forms to persist into the foreseeable future; and therefore would bring the species to the point where the protections of the Act are no longer necessary.

Another difference between the current revised draft plan and the 2002/2004 draft plans is that **all** recovery criteria would have needed to be achieved in each of 27 recovery units in the 2002/2004 plans; while the threshold for determining whether recovery has been achieved and delisting may be warranted proposed in the revised draft recovery plan is 'primary threats are effectively managed in at least 75 percent of all core areas, representing 75 percent or more of bull trout local populations in the Coastal, Mid-Columbia, Upper Snake and Columbia Headwaters Recovery Units, and 100 percent of primary threats are effectively managed in all extant core areas in the Klamath and St. Mary Recovery Units (these two recovery units have only 3 and 4 core areas, respectively).

Q. Next Steps and Completing the Final Recovery Plan?

A. The final bull trout recovery plan will describe the principal actions needed to advance the recovery of bull trout in the six recovery units within the coterminous United States; and will include individual Recovery Unit Implementation Plans (RUIPs) for each recovery unit that will provide site specific detail at the core area scale. The RUIPs for each recovery unit will be developed through an interagency collaboration among interested and knowledgeable Federal, Tribal, State, private and other parties **prior to** completion of the final recovery plan. In many parts of the range of bull trout, local interagency bull trout working groups have previously identified recovery actions necessary for local bull trout core area conservation, and are already implementing conservation actions. Therefore, we anticipate that in these and other areas, developing a RUIP will build upon existing efforts and information. The final recovery plan will also include an Implementation Schedule that outlines core area specific recovery actions and estimated costs for bull trout recovery as set forth in each RUIP.

To allow public review and comment on the draft RUIPs for each Recovery Unit, including the draft Implementation Schedule and total estimated recovery costs, the Service will publish a Notice of Availability (NOA) announcing their availability for review in the Federal Register at least 90 days prior to completing the final bull trout recovery plan.

Q. What is the current status of bull trout?

A. Our most recent status review for bull trout was published as a 5-year status review on April 8, 2008, and concluded that listing the species as “threatened” remained warranted range-wide in the coterminous United States. Based on this status review, in our 2010 recovery report to Congress we reported that bull trout were generally “stable” overall range-wide (species status neither improved nor declined during the reporting year), with some core area populations decreasing, some stable, and some increasing. Since the listing of bull trout, there has been very little change in the general distribution of bull trout in the conterminous United States, and we are not aware that any known, occupied bull trout core areas have been extirpated. Additionally, numerous conservation measures have been and continue to be implemented across its coterminous range. These measures are being undertaken by a wide variety of local and regional partnerships, including State fish and game agencies, State and Federal land management and water resource agencies, Tribal governments, power companies, watershed working groups, water users, ranchers, and landowners.

Q. What about climate change and bull trout recovery?

A. At the time of the listing in 1999, climate change effects were not considered as a factor affecting bull trout. Since that time, recent and projected climate warming trends have prompted interest in assessing climate threats and vulnerability of various cold water fishes, including bull trout. Bull trout depend more on cold water than any other freshwater salmon or trout species in the western United States. Therefore, bull trout may be vulnerable to the effects of warming climates and are considered a useful indicator species of the effects climate change will have on the montane stream ecosystems where they reside.

Recent information regarding future, possible climate change effects to bull trout has informed the development of the revised draft recovery plan. We expect the geographic distribution of cold water habitat to progressively diminish over the next 50 to 100 years as effects of climate change become more intense, likely resulting in a reduction of cold water habitat suitable for bull trout. Additionally, as ambient air temperature increases, occupied stream reaches with viable cold water sources will become increasingly valuable to bull trout and should be targeted early for conservation and management. These considerations suggest that effective long-term conservation and recovery of bull trout will require a decision framework to assess climate change effects to bull trout and allocate conservation resources and funding to ensure that future conservation resources are allocated to those areas with the anticipated future coldest water temperatures that offer the greatest long-term benefit to sustain bull trout and their cold water habitats.

Q. What is the role of critical habitat in recovery planning?

A. Critical habitat was designated for bull trout on October 18, 2010. In the final rule, we identified 32 critical habitat units (CHUs) representing 19,729 river miles and 488,252 surface acres of bull trout habitats. These describe single core areas or groups of core areas that are in close proximity geographically and describing their division into six recovery units. In our 2010 critical habitat designation, we considered the conservation relationship between critical habitat and the bull trout recovery planning process. For example, while recovery plans formulate the recovery strategy for a species, they, unlike critical habitat, are not regulatory documents, and there are no specific protections, prohibitions, or requirements afforded a species based solely on a recovery plan. Information used in the 2010 critical habitat designation has informed, and contributed to, the overall recovery strategy for bull trout described in this revised draft recovery plan, especially as it relates to sub-dividing the coterminous United States population of bull trout into six recovery units.