



# American Fisheries Society Oregon Chapter

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December 2, 2014

Mr. Michael Carrier  
State Supervisor  
U.S. Fish and Wildlife Service  
Bull Trout Recovery  
Idaho Fish and Wildlife Office  
1387 S. Vinnell Way, Room 368  
Boise, Idaho 83709

Dear Mr. Carrier,

The Oregon Chapter of the American Fisheries Society (ORAFS, Chapter) is composed of more than 400 fisheries and aquatic science professionals from federal, state, and tribal agencies, colleges and universities, nongovernmental organizations, private companies, and individuals. Our mission is to improve the conservation and sustainability of Oregon fisheries and their aquatic ecosystems for long-term public benefit by advancing science, education, and public discourse concerning fisheries and aquatic science, and by promoting the development of fisheries professionals. One of the Chapter's goals is to advocate policies and laws that benefit conservation and sustainability of Oregon fisheries resources. Native fish, including bull trout, are highly valued by the Chapter. The U.S. Fish and Wildlife Service's (USFWS) Revised Draft Recovery Plan for the Coterminous United States Population of Bull Trout is an important developing policy. The intent of this letter is to share our suggestions to improve the plan's effectiveness.

We appreciate the efforts of the USFWS to revise a recovery plan for bull trout. While considerable recovery progress has been made since the previous draft plans were issued in 2002-2004, we believe a finalized plan will help rekindle needed interest and actions to recover this species. Our comments on the Revised Draft Recovery Plan include thoughts on recovery criteria, the status assessment tool, staff needs, distinct population segments (DPS) and recovery units (RU), implementation plans, and migratory life histories.

## Recovery Criteria

The plan states “the primary 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 in six RUs...” It defines demographic stability as: “A ‘recovered’ bull trout population described in terms of size, age structure, and density. It also implies that bull trout populations, at the local population, core area or RU scale, interact with their surrounding environment so that their population scale status is stable or increasing based on measurements and calculations of population size, density, and age structure. (i.e. ecologically viable).”

Our concern is that there are no criteria addressing demographic stability. The threats assessment tool only addresses it vaguely by stating: “Because small population size constitutes a threat under Factor E due to demographic stochasticity and loss of genetic diversity, low populations in a core area could be incompatible with a determination that threats are being effectively managed.”

We agree that abundance targets specific to individual populations in previous drafts were in some cases speculative, lacked population data on which to base them, and may be difficult to monitor. However, there are other population characteristics that could be used to evaluate demographic stability (e.g., trends in abundance (stable, increasing, decreasing) rather than absolute abundance, effective population size, distribution, presence of multiple life history forms).

Recovery criteria are required to be objective and measurable. While the numbers of core areas and populations specified in the criteria (revised plan, Table 2) (e.g., “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...”) are objective and measurable, what constitutes “effectively managed” is highly subjective. For example, the proposed threat assessment tool defines “partially effective” as “Management of the threat is being done with moderate effectiveness ...”. With the assessment tool, the effectiveness values estimated by the participants are tallied “to express the range of expert opinion.” As stated in the draft, “the effectiveness of many of the recovery actions described in this revised draft recovery plan, as well as current and future climate effects to all populations, are not completely understood.” We would argue that not only is the effectiveness not completely understood, in many cases, it is highly uncertain.

Besides the uncertainty and subjectivity associated with determining the reduction of threats, no rationale is provided for how the 75% of the core areas/populations specified in the criteria was derived. The plan states that bull trout have been extirpated from approximately 60% of their historical range, and a third of the extant core areas consist of a single population. What is the basis for an additional 25% reduction in most RUs being consistent with recovery of the species? The bull trout genetic studies referred to in the plan (e.g., Spruell et al. (2003))

indicate that the genetic variation within populations is low, while variation between populations is high. This poses a challenge to conserving the genetic diversity of the species. Since there are no “representative” populations, continuing loss of populations is a further loss of genetic diversity. There is also no consideration of distribution in the recovery criteria. For example, all five core areas in Oregon in the Coastal RU could be extirpated and the RU would still meet the proposed criteria for delisting.

### Status Assessment Tool

This draft recovery plan and the prior 2008 status review used the NatureServe status assessment tool to evaluate bull trout status. However, the plan states, “Inputs to the NatureServe status assessment tool are sufficiently subjective and non-specific such that we do not rely on these calculations to set recovery criteria.” While we believe there are aspects of the NatureServe tool that could be tailored more specifically to bull trout and that it alone is not sufficient for determining listing/delisting, the threats assessment tool proposed to more directly inform delisting evaluations appears to also be highly subjective and furthermore lacks the biological and demographic factors considered in the NatureServe assessment.

Ultimately, the effectiveness of bull trout recovery is most objectively and measurably determined by the response of the populations, not speculation on what the effects of recovery actions may be. This underscores the need for incorporating biological population characteristics in the criteria. As the draft points out, evaluating the effectiveness of specific recovery actions in terms of population response can be difficult. However, delisting decisions are informed by the overall status of the species and RU, not the population response to individual or a set of similar recovery actions.

### Staffing Reduction Effects on Bull Trout Recovery

One indirect threat not acknowledged in the plan is the decline in budgets and staff of agencies administering and implementing bull trout recovery. This has resulted in reductions of activities to reduce threats (protection and restoration), monitor populations at regional (e.g., RMEG) and local levels, and perform research to support recovery. While the effects of these declines may be reflected in the outcomes of threats and status assessments, we feel it is important to explicitly recognize these declines to inform decision makers and the public regarding factors affecting the status of the species and limiting recovery.

### DPS and RUs

The discussion of DPSs and RUs is somewhat circular and contradictory. For example, recovery plan guidance states “every recovery unit must be recovered, before the species can be delisted” and that “DPSs can only be designated through a rule-making process, a recovery plan cannot designate a DPS or treat a recovery unit as one” (NMFS and USFWS 2010) (underline emphasis ours). However, the recovery plan proposes “recovery criteria in this revised draft recovery plan to be applied at the recovery unit scale to facilitate independent management

and achievement of recovery goals which, when achieved, may lead to delisting at the recovery unit (i.e., DPS) scale.” (p. 49). “In the future we may determine, in coordination with our partners, whether pursuing the potential reclassification of the listed coterminous United States population of bull trout into multiple DPSs is a practical approach to delisting bull trout once recovery has been achieved.” (p. 47) (underline emphasis ours). If according to the guidance, bull trout must be recovered in all RUs before delisting can occur, then why would separate DPSs be identified and delisted later? If the recovery plan is setting the stage for possible reclassification and delisting of individual RUs, isn’t this essentially treating the RU as a DPS prior to designation? How is this consistent with the ESA in terms of “use [DPS designation] sparingly”?

### Implementation Plans

We believe the Recovery Unit Implementation Plans (RUIP) can be a useful addition to the recovery plan. They will provide an opportunity to revisit and hopefully reinvigorate needed recovery actions. They could also be valuable for setting priorities rather than simply identifying long lists of recovery actions. Recovery actions must be both strategic and opportunistic: strategic in the sense of addressing the threats most limiting populations and recovery and where limited funding can be spent most effectively for population recovery;” but also opportunistic in the sense of taking advantage of situations and willing partners to undertake recovery actions that may not be the highest priorities. There has been several recovery plans previously developed for bull trout at various geographic scales. There has also been recovery plans for other native species with which bull trout have shared habitat and, if implemented, would also benefit bull trout. As you have noted, it is important to incorporate these plans, when valuable, into the RUIPs to maximize planning efficiencies with other existing recovery plans.

### Migratory Life Histories

Complex core areas (CA) are defined as containing “multiple local populations...often occupied by bull trout of both the migratory life history form and the resident form, and include a diverse pattern of connected spawning and rearing (SR) habitats and foraging, migratory, and overwintering (FMO) habitats.” While this defines a fully functional or “recovered” complex core area, a number of the complex core areas identified in the plan (e.g., Powder, Pine, Malheur) have migratory life histories that have been lost or significantly reduced and FMO habitats substantially altered and reduced. In some cases (e.g., Powder), the core area consists of multiple, small, fragmented resident populations.

While small population size is recognized as a demographic threat, so is loss of migratory life histories. In appendix B, p. 92, small population size (and distribution) and the loss of migratory life history are serious threats to all of the populations in the Powder CA and greatly increase the threat from brook trout (P. Howell, USFS, 2013, 2014, unpublished data).

Thank you for the opportunity to comment on the Draft Bull Trout Recovery Plan. We support the USFWS' effort to finalize a recovery plan for bull trout and hope these comments will assist in USFWS' rehabilitation and eventual recovery of the species. If you have questions, please contact ORAFS President Michael Gauvin (503-947-6214, [President@orafs.org](mailto:President@orafs.org)).

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Gauvin', with a long horizontal flourish extending to the right.

Michael Gauvin  
President  
Oregon Chapter of the American Fisheries Society

Cc: Steve Duke, Paul Henson, Rollie White, Chris Allen