

Chapter: 11

States: Oregon and Washington

Recovery Unit Name: Grande Ronde River

Region 1

U.S. Fish and Wildlife Service

Portland, Oregon

DISCLAIMER

Recovery plans delineate reasonable actions that are believed necessary to recover and/or protect the species. Recovery plans are prepared by the U.S. Fish and Wildlife Service and, in this case, with the assistance of recovery unit teams, State and Tribal agencies, and others. Objectives will be attained and any necessary funds made available subject to budgetary and other constraints affecting the parties involved, as well as the need to address other priorities. Recovery plans do not necessarily represent the views or the official positions or indicate the approval of any individuals or agencies involved in the plan formulation, other than the U.S. Fish and Wildlife Service. Recovery plans represent the official position of the U.S. Fish and Wildlife Service *only* after they have been signed by the Director or Regional Director as *approved*. Approved recovery plans are subject to modification as dictated by new findings, changes in species status, and the completion of recovery tasks.

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GRANDE RONDE RECOVERY UNIT CHAPTER OF THE BULL TROUT RECOVERY PLAN

EXECUTIVE SUMMARY

Current Species Status

The U.S. Fish and Wildlife Service issued a final rule listing the Columbia River population of bull trout as a threatened species on June 10, 1998 (63 FR 31647). To facilitate the recovery planning process and avoid duplication of effort, the recovery unit team considered the frameworks put forth in Kostow (1995) and Buchanan *et al.* (1997) to develop recovery units in Oregon. The Grande Ronde River subbasin was identified as one of 22 recovery units for bull trout within the Columbia River Distinct Population Segment. Use of these existing frameworks will allow for better coordination during both salmon and bull trout recovery planning and implementation.

The Grande Ronde River Recovery Unit Team identified two core areas, the Grande Ronde and the Little Minam. Wenatchee Creek (also referred to as Menatchee Creek) is potentially a core area but lacks sufficient survey data to include it as a core area at this time. Inclusion of other areas within the Grande Ronde River Recovery Unit (*e.g.*, the Wallowa River upstream of the dam at Wallowa Lake) have been identified as research needs. Research needs apply to areas where the recovery unit team feels more information is needed to accurately plan and implement recovery actions.

Based on survey data and professional judgement as well as Kostow (1995) and Buchanan *et al.* (1997), the Grande Ronde River Recovery Unit Team has identified local populations of bull trout within each core area. In the Grande Ronde Core Area, local populations include the Upper Grande Ronde complex, Catherine Creek, Indian Creek, the Minam River/Deer Creek complex, the Lostine River/Deer Creek complex, upper Hurricane Creek, the Wenaha River, and Lookingglass Creek. One local population, the Little Minam complex, was identified in the Little Minam Core Area. The Little Minam Core Area is defined at the lower end by a barrier waterfall. Additional distribution and genetic

information within the Grande Ronde River Recovery Unit will help refine the current classification.

Habitat Requirements and Limiting Factors

A detailed discussion of bull trout biology and habitat requirements is provided in Chapter 1 of this recovery plan. Within the Umatilla-Walla Walla Recovery Unit, historic and current land use activities have impacted bull trout local populations. Historic land use activities that have impacted bull trout local populations include construction and operation of dams and roads, forestry practices, agricultural development, and mining. Some of the historic activities that resulted in passage barriers may have significantly reduced important fluvial populations. Lasting effects from some of these early land use activities still limit bull trout distribution/abundance in the Grande Ronde Recovery Unit. Existing land use activities that contribute to fish habitat problems include operation and maintenance of dams, riparian road construction and use, riparian grazing, agricultural development, residential developments, recreational use of riparian areas, and competition with nonnative species.

Recovery Goal and Objectives

The goal of the bull trout recovery plan is to **ensure the long-term persistence of self-sustaining, complex, interacting groups of bull trout distributed throughout the species' native range, so that the species can be delisted**. To achieve this goal the following objectives have been identified for bull trout in the Grande Ronde River Recovery Unit:

- Maintain current distribution of bull trout and restore distribution in previously occupied areas within the Grande Ronde River Recovery Unit.
- Maintain stable or increasing trends in abundance of bull trout.
- Restore and maintain suitable habitat conditions for all bull trout life history stages and strategies.

- Conserve genetic diversity and provide opportunity for genetic exchange.

Recovery Criteria

Recovery criteria identified for the Grande Ronde River Recovery Unit are as follows.

- 1. Bull trout are distributed among at least nine local populations in the Grande Ronde River Recovery Unit.** In a recovered condition the recovery unit would include at least nine local populations. In the Grande Ronde Core Area local populations would include the Upper Grande Ronde complex, Catherine Creek, Indian Creek, the Minam River/Deer Creek complex, The Lostine River/Bear Creek complex, Hurricane Creek, Lookingglass Creek, and the Wenaha River. In the Little Minam Core Area a local population of resident bull trout would exist in the Little Minam River above the barrier waterfall. Designation of local populations is based upon the professional judgement of Grande Ronde River Recovery Unit Team members. Further genetic studies are needed to more accurately delineate local populations and quantify spawning site fidelity and straying rates.
- 2. Estimated abundance of bull trout among all local populations in the Grande Ronde River Recovery Unit is at least 6,000 adults.** Recovered abundance was derived using the professional judgement of the recovery unit team and estimation of productive capacity of identified local populations. Resident and migratory life history forms are included in this estimate, but the relative proportions of each are considered a research need. As more data is collected, recovered population estimates will be revised to more accurately reflect both the migratory and resident life history components.
- 3. Adult bull trout populations exhibit a stable or increasing trend for at least two generations at or above the recovered abundance level.**

- 4. Specific barriers to bull trout migration in the Grande Ronde River Recovery Unit have been addressed.** Passage barriers within the Grande Ronde Core Area need to be addressed to ensure opportunities for connectivity among local populations within the core area. In the Grande Ronde Core Area this includes evaluating and addressing dams (*e.g.*, Wallowa River Dam and Beaver Creek Dam) and diversions (*e.g.*, Upper Alder Slope/Moonshine ditch in Hurricane Creek, South Fork Catherine Creek, upper Wallowa River near Joseph), as well as culverts which are potential passage barriers to bull trout (*e.g.*, Sage Creek, Sand Pass Creek, and near the Indian Creek hydropower facility). Potential impacts from weirs (*e.g.*, Upper Grande Ronde River, Catherine Creek, Lookingglass Creek, and Lostine River) and hatchery intakes (*e.g.*, Wallowa and Lookingglass fish hatcheries, Big Canyon satellite facility, and satellite facilities in the Lostine River, Upper Grande Ronde River, and Catherine Creek) also need to be addressed. This also includes evaluating possible thermal barriers from warm water temperatures (*e.g.*, Upper Grande Ronde River, Bear Creek watershed, Lostine River, and Hurricane Creek below the upper Alder Slope irrigation ditch). This also includes impact assessments of the Lower Granite and Hells Canyon dams, both in the mainstem Snake River.

Actions Needed

Recovery for bull trout will entail reducing threats to the long-term persistence of populations and their habitats, ensuring the security of multiple interacting groups of bull trout, and providing habitat conditions and access to them that allow for the expression of various life-history forms. Seven categories of actions needed are discussed in Chapter 1; tasks specific to this recovery unit are provided in this chapter.

Estimated Cost of Recovery

Total estimated cost of bull trout recovery in the Grande Ronde River Recovery Unit is estimated at \$17 million spread over a 25 year recovery period. Total costs include estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals. These costs are attributed to bull trout conservation but other aquatic species will also benefit. Cost estimates are not provided for tasks which are normal agency responsibilities under existing authorities. Successful recovery of bull trout in the aforementioned core areas is contingent on removing barriers, improving habitat conditions, and removal of nonnative species within the recovery unit.

Estimated Date of Recovery

Time required to achieve recovery depends on bull trout status, factors affecting bull trout, implementation and effectiveness of recovery tasks, and responses to recovery tasks. A tremendous amount of work will be required to restore impaired habitat, reconnect habitat, and eliminate threats from nonnative species. Three to five bull trout generations (15 to 25 years), or possibly longer, may be necessary before identified threats to the species can be significantly reduced and bull trout can be considered eligible for delisting. In the Grande Ronde River Recovery Unit several local populations are relatively strong, but the majority are at relatively low numbers. Degradation and fragmentation of bull trout habitat have resulted in populations that are at high risk. Ultimately, these threats must be addressed in the near future for recovery to be achieved.