



Clackamas River Bull Trout Reintroduction

Putting bull trout on the path towards recovery

Bull trout (*Salvelinus confluentus*) were federally listed as threatened throughout their range in the United States in 1999. In early summer 2011, the U.S. Fish and Wildlife Service (Service) and the Oregon Department of Fish and Wildlife (ODFW) initiated the reintroduction of a population of bull trout into the upper Clackamas River, where they were once widely distributed but were extirpated in the early 1960's. Because many of the reasons for their disappearance (e.g., fish passage, habitat management, over-harvest) have been addressed, a feasibility assessment (Shively et al. 2007) deemed the Clackamas to be an appropriate location for a bull trout reintroduction effort.



Credit: C. Allen, USFWS

Pinhead Creek has all the qualities of good bull trout habitat: cool, clean, complex and connected.



Credit: Joel Sartore (National Geographic Stock)

Bull trout, threatened under the Endangered Species Act.

To plan and guide this project, the Service and ODFW are also coordinating with the U.S. Forest Service (Mt. Hood National Forest) and the Confederated Tribes of the Warm Springs Reservation. The Tribes, along with ODFW, manage bull trout in the Metolius River, our donor source for wild bull trout for the project. Other partners include Portland General Electric, NOAA Fisheries, and the U.S. Geological Survey.

Project Implementation

The goal of this project is to reestablish a self-sustaining population of 300-500 spawning adult bull trout in the Clackamas River by 2030. In June and July 2011, 58 subadults/adults and 58 juvenile bull trout were collected from the Metolius basin and translocated to the upper Clackamas Basin. Juveniles were released into headwater tributaries (such as the one pictured above) and the larger fish were released in the mainstem Clackamas River. Following that release regime, in early summer of 2012, another 60 subadult and adult bull trout and over 500 juvenile bull trout were translocated to the Clackamas from the Metolius River.

Monitoring and Evaluation

We identified specific monitoring and evaluation activities to answer three primary questions about bull trout that were translocated from the Metolius River to the Clackamas River (see box on next page):



US Fish and Wildlife Service
Pacific Region
911 NE 11th Avenue
Portland, OR 97232
<http://www.fws.gov>

Oregon Dept. of Fish and Wildlife
Northwest Region
17330 SE Evelyn Street
Clackamas, OR 97015
<http://www.dfw.state.or.us>

Key Monitoring Questions

1. Is the Metolius bull trout population sufficiently large and healthy to provide donors to the Clackamas?
2. Are translocated bull trout surviving and reproducing in the Clackamas River?
3. Are ESA-listed salmon and steelhead affected by reintroduced bull trout in the Clackamas River?

To answer the first key monitoring question, before bull trout are moved from the Metolius, project partners determine annually whether there are enough bull trout in the Metolius to sustain the population safely after the removal of the bull trout needed for the reintroduction. Then, each spring bull trout are screened for pathogens, and once cleared, collections for the Clackamas begin.



Credit: USFWS

In July 2011, subadult and adult bull trout were captured from Lake Billy Chinook, implanted with PIT and radio tags, and then trucked to the Clackamas River to serve as donor stock for the reintroduced bull trout population.

To answer monitoring questions 2 and 3, all bull trout that are translocated to the Clackamas are implanted with PIT tags, which can be detected at underwater antenna arrays, and all subadult and adult bull trout are implanted with radio tags so that their locations can be tracked through mobile and fixed station telemetry. Our monitoring program tracks what habitats fish occupy and helps to determine if they're still alive, and if so, what they might be doing in those locations (e.g., spawning, feeding, etc.).



Credit: M. Koski, USFWS

Brad Malone (ODFW) uses mobile telemetry to track radio-tagged bull trout in the mainstem Clackamas River.

Preliminary Findings

The Metolius continues to maintain a healthy bull trout population suitable for contributing donor stock. In both 2011 and 2012, subadult and adult bull trout largely stayed in the Upper Clackamas, with a few moving downstream into the lower Clackamas River. No bull trout resided for a significant amount of time within areas where migrating juvenile salmon and steelhead are artificially concentrated (i.e., within the PGE Hydroelectric Project). In October of 2011, the first bull trout were observed spawning in a headwater tributary, and five suspected bull trout redds were identified. In 2012, bull trout spawning behavior was detected again, along with the identification of several redds; a very positive finding for the early stages of this important bull trout recovery project. For more information, please visit www.fws.gov/oregonfwo/Species/Data/BullTrout/ReintroductionProject.asp