

# Northwest Region

May 29, 2009



## Overview of the Lake Ozette Sockeye Salmon Recovery Plan

### Lake Ozette Sockeye Salmon Recovery Planning

On May 29, 2009, NOAA Fisheries Service adopted an Endangered Species Act (ESA) recovery plan for the protection and restoration of Lake Ozette sockeye salmon. Lake Ozette watershed, its perimeter shore, and most of the Ozette River, which forms the outlet of the lake, are located within the 922,651-acre Olympic National Park. The watershed is home to the only population of Lake Ozette sockeye salmon, a species listed as threatened under the ESA in 1999. This plan includes proposals for voluntary actions that may be taken to stop the downward trend of the species and return it to a healthy, naturally self-sustaining condition.

### ESA- Listed Species Covered:

- Lake Ozette Sockeye Salmon

### Limiting Factors

Technical information about Lake Ozette sockeye recovery is incorporated into a biological research paper, the Limiting Factors Analysis (LFA). The LFA is an exhaustive study of all available published information, field biology, and unpublished or historical records on Lake Ozette sockeye. The LFA details a series of hypotheses based on Lake Ozette sockeye, their life cycle, environment, and information about other fish species and freshwater ecosystems within the Ozette watershed. These hypotheses articulate the limiting factors that are believed to be impeding Lake Ozette sockeye recovery. These hypotheses are intended to be tested, and adapted as needed, to see if in fact an action taken to mitigate a limiting factor does indeed contribute to the recovery of the species.

For example, one hypothesis is that water quality is a limiting factor for the species. It is possible that high water temperature and high sediment concentrations in the tributaries either weaken or kill enough sockeye and their eggs to make a difference in their rate of production. The evidence that water quality is a limiting factor for the species can be found in Chapter 4 of the recovery plan. For more information about the hypotheses and limiting factors, see both Chapter 4 of the recovery plan and the Limiting Factors Analysis.

### Recovery Goals & Actions

Generally speaking, the goal for this recovery plan is for Lake Ozette sockeye population to reach the point that it no longer needs the protection of the ESA and can be delisted. The delisting decision must be based on the best available science and information that threats to the species have been addressed. Biological recovery for Lake Ozette sockeye means that it is naturally self-sustaining--enough fish spawn in the wild and return year after year so they are likely to persist into the future, defined as the next 100 years. The species also has to be resilient enough to survive catastrophic changes in the environment.

To reach these goals, the plan proposes a series of voluntary actions to be taken to restore this species. Actions fall in to two broad categories--short and long-term. Within each of these categories a number of actions can be taken, including fisheries management actions and habitat related actions, among others.

These actions may, for instance, articulate the need to reduce the catch of Lake Ozette sockeye in recreational fisheries, manage predation, or describe the need to place large wood in a channel. For full detail of the recovery actions, see Chapter 7 of the recovery plan.

To develop these goals and actions, NOAA Fisheries Service relied on the work of the Puget Sound Technical Recovery Team (TRT). The TRT produced scientific reports describing the population structure and the biological viability criteria necessary to recover Lake Ozette sockeye salmon. These two reports are entitled Independent Population of Sockeye Salmon in Lake Ozette and Viability Criteria for the Lake Ozette Sockeye Salmon ESU.

### **Recovery Planning Partnerships**

NOAA Fisheries Service prepared this recovery plan with the active participation of the Lake Ozette Steering Committee, a group made up of several county, state, tribal and federal entities. The steering committee met 18 times over the last three and a half years to discuss and comment on all aspects of this recovery plan. NOAA Fisheries also met with various groups and agencies with interests in the recovery planning effort, including the Lake Ozette basin property owners, timber companies, tribal representatives, Clallam County Commissioners and staff, and Olympic National Park. Input and comments from all of these entities and meetings were considered, evaluated, and where appropriate, incorporated into the recovery plan. See Appendix A for a full list of active participants.

For more information, see the Fisheries Northwest Region Lake Ozette sockeye Web page at:  
[www.nwr.noaa.gov/Salmon-Recovery-Planning/Recovery-Domains/Puget-Sound/Lake-Ozette-Plan.cfm](http://www.nwr.noaa.gov/Salmon-Recovery-Planning/Recovery-Domains/Puget-Sound/Lake-Ozette-Plan.cfm)