Pelton Round Butte Fish Committee Reintroduction Road Map

The reintroduction road map is a high level guide to strategies current and future, to impact the goal of returning self-sustaining and harvestable runs of spring Chinook, sockeye and summer steelhead to the Upper Deschutes Basin. Learn more about the history and purpose of our work in the <u>Executive Summary</u>.

The road map is organized by objectives with each strategy represented by a shape that indicates who is responsible and a color to illustrate whether strategies are current or planned.

Overview of Reintroduction Road Map

Goal: self-sustaining and harvestable runs of Chinook, sockeye, and steelhead.



R Fish Health Management Considerations

STRATEGY

R: Fish Health Management Considerations

Description: Fish health management is a term to describe a variety of preventive and therapeutic practices which are designed to prevent and control the spread of disease agents in fish populations. The tools in a disease management program can include vaccines (if available), antibiotics (used to treat bacterial diseases), other therapeutics (which can be applied to the water), treatment of fish with federally approved drugs or food additives (that may stimulate immunity in general), biosecurity, and optimal rearing conditions (good nutrition and husbandry practices) that minimize stress on the fish. To date, current examples of this strategy are: 1) the inoculation of returning upper basin adults with oxytetracycline to reduce bacterial infections resulting from handling/transport stress-induced immunosuppression (in addition to increasing adult survival, this practice works to reduce the spread of bacterial infections in the upper basin); 2) feeding hatchery spring Chinook smolts SLICE feed to reduce incidence of copepod infection during reservoir transit, and 3) feeding hatchery smolts erythromycin to control the prevalence and severity of bacterial kidney disease (BKD) caused by Renibacterium salmoninarum.

Anticipated Outcome: Reducing smolt and adult mortality will increase the number of adults returning and should increase natural production in the tributaries.

Evaluation Method: Evaluating the benefit of certain practices could inherently be easier for some more so than others. For example, the use of SLICE feed demonstrably reduced the severity of copepod infection captured at the SWW, whereas the benefits of inoculation of returning adults with antibiotics to reduce bacterial infections is a good faith effort based on sound fish health management science. ODFW is aware of concerns related to overuse of antibiotics and will periodically review their Present and Future use.

Timeline: Present and Future – This strategy is currently being implemented, but future adaptive actions may present themselves as the reintroduction program progresses.

Lead Organization/Agency: The Oregon Department of Fish and Wildlife and The Confederated Tribes of the Warm Springs Reservation of Oregon are the authorities for fish management decisions in the basin, with the on-site ODFW Fish Pathologist often making most of the decisions, with regards to fish health management.

Fish Committee Role: Where appropriate, information is brought to the Fish Committee for input.

Related Studies/Actions/Decisions:

2021 – ODFW obtains authorization to utilize SLICE feed on hatchery spring Chinook smolts. Initial results suggest a decrease in severity of copepod infection during outmigration to SWW.

2015 – ongoing – ODFW will continue to monitor the annual progression and severity of copepod infection in outmigrating spring Chinook captured at the SWW.

2010 – ODFW began inoculation of returning upper basin adults with oxytetracycline to reduce bacterial infections.

2007 – Licensees fund a full-time ODFW position, stationed at Pelton Round Butte, to evaluate fish health impacts of the Project