

Pelton Round Butte Fish Committee

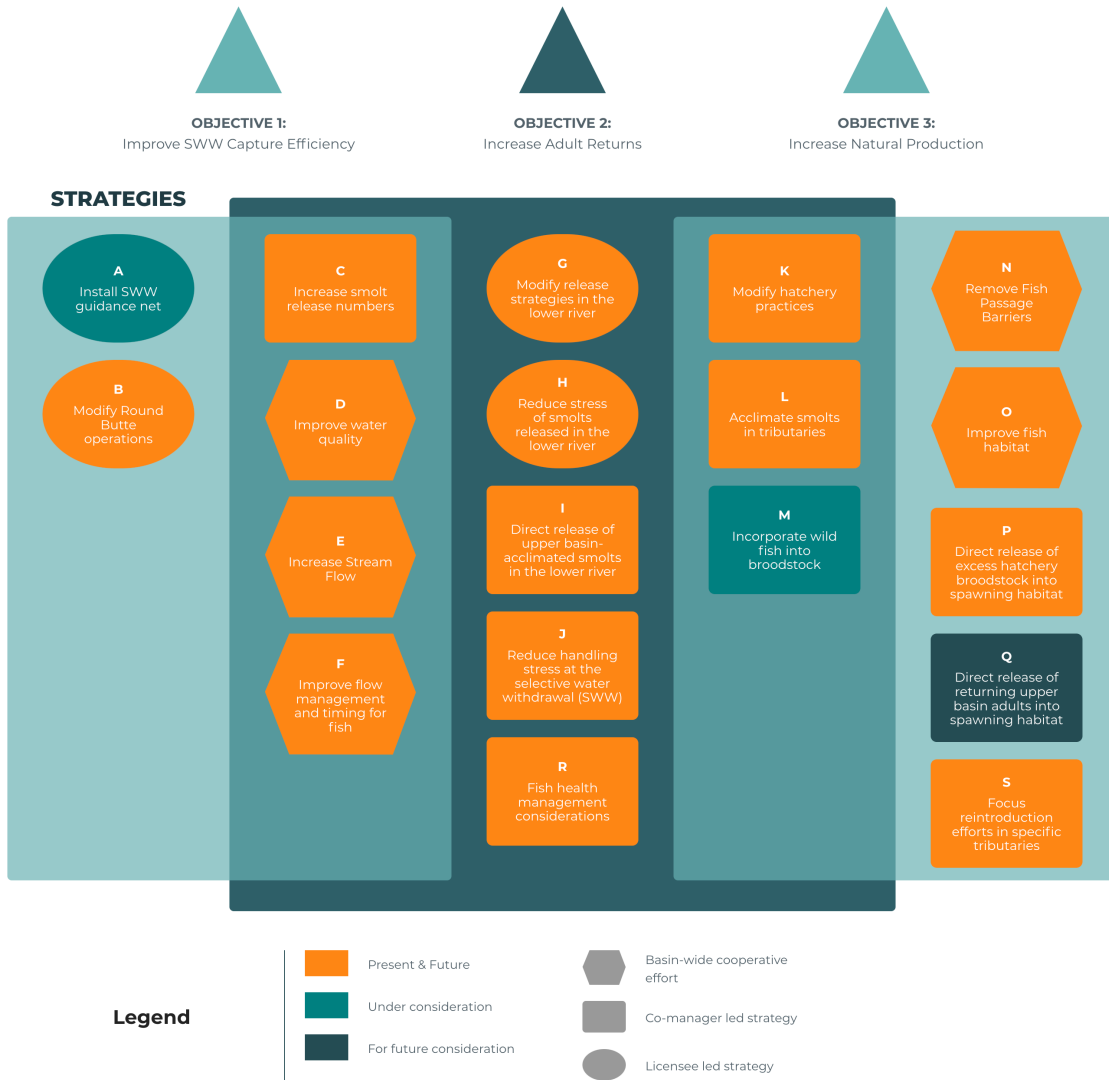
Reintroduction Road Map

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 [Executive Summary](#).

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.



K

Modify Hatchery Practices

STRATEGY

K: Modify Hatchery Practices

Description: In 2020, a major adaptive management change occurred to the reintroduction program. Fry stocking was terminated and the number of both spring Chinook and summer steelhead smolts released increased from 50,000 to 100,000. After comparing the current hatchery practices for the rearing of the reintroduction smolts at Wizard Falls and Fall River hatcheries with those at Round Butte Hatchery, changes were made to the rearing practices to increase efficiency and smolt quality. Summer steelhead are now graded into three different size classes prior to ponding and fish will be fed accordingly, per individual raceway, to meet target release size. A more natural feed protocol for spring Chinook was implemented; smolts will be fed heavily in the spring and fall but receive a reduced feed ration in the winter months. This feeding protocol mimics how a smolt would feed in a natural environment and has shown to have success in a study currently being conducted by National Marine Fisheries Service (NOAA Fisheries). Eight weeks prior to release, all smolts will have a change in feed type to one that has been shown to help increase smoltification. Size at release goals have also been changed to five fish per pound (fpp) for summer steelhead and 18 fpp for spring Chinook.

Anticipated Outcome: Production of higher quality, more uniform smolts should increase the number of fish that outmigrate through the reservoir and are captured at the Selective Water Withdrawal (SWW).

Evaluation Method: A condition factor measurement will be used to evaluate smolt quality at the hatchery prior to release. Also, a random sample will be taken to look at size at release of the entire release group. This will occur in order to analyze for size uniformity and compare fish to the established target size at release. Once these changes are

implemented, a comparison of previous rearing practices will be made looking at the numbers of smolts collected at the SWW with the new rearing practices. These strategies will need to be evaluated at each hatchery for each species.

Timeline: Present and Future – Changes to the rearing practices at Wizard Falls and Fall River hatcheries have been instituted. Changes will be studied and adaptive management changes will be made accordingly to continue to improve the smolt quality.

Lead Organization/Agency: Oregon Department of Fish and Wildlife (ODFW).

Fish Committee Role: The Fish Committee will be informed but does not have a decision-making role.

Related Studies/Actions/Decisions:

2017 - ongoing – Ongoing NOAA Fisheries/ODFW Spring Chinook Pelton Ladder Study.
