

Columbia Basin Fish Recovery

SALMON RECOVERY.GOV

January 2011

Location

Hancock Springs, a tributary of the Methow River, Washington

Biological Objective

Increase spawning and rearing habitat for listed fish

Species

- Upper Columbia Spring Chinook Salmon
- Upper Columbia Steelhead

Project Sponsor

- Yakama Nation

Project Partners

- Upper Columbia Salmon Recovery Board
- Methow Conservancy
- USFWS

References

- Federal Columbia River Power System (FCRPS) 2008 Biological Opinion
- Upper Columbia Salmon & Steelhead Recovery Plan

FCRPS RPA #34



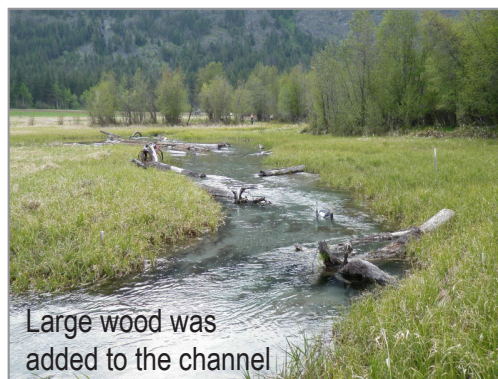
To view spawning salmon & steelhead in Hancock Springs on YouTube: www.youtube.com/watch?v=haplQXYYSj0 and www.youtube.com/watch?v=6rW_84Q9o84

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Hancock Springs Restoration Project

In 2005, the Yakama Nation launched a restoration effort in Hancock Springs, a tributary of the Methow River. Though there is no documentation of salmon and steelhead historically using the tributary, unique ecological conditions associated with the creek, such as a consistent hydrograph and favorable

Upper Hancock Springs before restoration



Large wood was added to the channel

year-round temperatures, imply that Hancock Springs was a major natural production site for salmon and steelhead. Today, the federally listed fish have returned to Hancock Springs.

Project Design

To ensure that restoration methods did not mobilize sediment into the river's mainstem, thereby producing

greater harm to migrating fish than potential project benefits, channel restoration was completed by hand. The project was designed to improve existing conditions by employing low impact methods, such as placing structures and pools manually. Project improvements include channel narrowing, placement of large woody debris, pool and riffle construction and riparian restoration

Ecological Benefits to Salmon & Steelhead

A monitoring plan traces the biological effects of the project over time. Beginning in 2007, the restoration effort showed clear ecological results. For the first recorded time, 50 steelhead spawned throughout the restored areas and the spawning distribution continues to expand throughout the watershed today. There is now record of nearly 100 steelhead redds, or nesting sites, in the restored areas of Hancock Springs. In addition, 60 spawning Chinook were sighted in the creek this September. Building over 20 redds, the spawning salmon used some of the same riffles as steelhead, but their redd construction was more aggressive and distributed over a larger range.

Restoration process



Defining the channel



Channel narrowing

After restoration



Steelhead spawning in constructed V-structure



Chinook spawning in constructed riffle



Counting redds