Bird Track Springs Fish Habitat Enhancement Project

IMPLEMENTERS: The Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Wallowa-Whitman National Forest (WWNF), La Grande Ranger District, Grande Ronde Model Watershed (GRMW), Bureau of Reclamation (BOR), and Bonneville Power Administration (BPA) partnered on the Bird Track Springs Fish Habitat Enhancement Project which was constructed between August 2018 and November 2019.

PROJECT LOCATION: The Bird Track Springs (BTS) Project Area is located approximately 10 air miles west of La Grande, Oregon along approximately 1.9 miles of the Grande Ronde River adjacent to State Highway 244. The area encompasses 1.2 miles of river on Wallowa-Whitman National Forest (WWNF) system lands and 0.7 miles on privately-owned lands along the reach beginning from just upstream of Bird Track Springs Campground (at river mile 146.1) downstream to river mile 144.2. The general legal description is Township 3 south, Range 36 east, sections 15 and 16.

PROJECT BACKGROUND: Historic floodplain and stream channel alterations, including but not limited to, systematic removal of beavers, channelization, historical logging and splash-dams, agriculture, railroad and road construction, livestock grazing and vegetation clearing, and placer mining, have contributed to habitat degradation and loss of habitat suitability and capacity to support recovery of spring Chinook salmon, steelhead and bull trout. Sediment, water temperature, low stream flows, channel morphology, and large wood (habitat quality and quantity) are the most critical limiting factors for these salmonid populations.

ESA ESU or DPS: Grande Ronde/Imnaha - Catherine Creek Sping/Summer Chinook, Upper Grande Ronde Steelhead.



Constructing large wood jam structure



Constructing new channel riffle with imbedded boulders

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PROJECT OBJECTIVES: Rehabilitate and restore the Reach to achieve immediate and long-term benefits to chinook, steelhead, and bull trout at all life stages. Benefits to salmonids will be achieved through restoration and rehabilitation of the whole floodplain system as defined by CTUIR's River Vision touchstones. Targeting of specific limiting factors such as temperature will achieve immediate benefits to salmon. Long term benefits will be achieved through a focus on restoring fluvial and habitat-forming processes, floodplain, groundwater, and hyporheic connectivity, riparian wetland plant communities, and instream complexity and diversity commensurate with the reach's natural potential. An inclusive approach to project implementation which accounts for the interests and needs of stakeholders and the broader community is essential for project success.

IMPLEMENTATION ACTIONS: Construction of approximately 5,000 linear feet of new main channel and 9,500 linear feet of side channels; construction of approximately 1,200 linear feet of alcoves and 2,000 linear feet of floodplain swale connections; construction of 14 riffles in the main channel and 48 riffles in side channels; construction of 300 in-channel wood structures and 605 floodplain roughness features; construction of approximately 3,600 linear feet of edge roughness and 3,700 feet of brush trench; excavation of approximately 85,000 cubic yards of material over the two year construction period.

HABITAT RESPONSE: The restoration plan includes promoting an island braided channel and floodplain system through channel, floodplain, and large pool construction, development of riparian and wetland habitat, and promoting groundwater and hyporheic functions that moderate and improve water quality. A fundamental premise is that self-sustaining, high quality and diverse habitat provides habitat suitability for all life stages of target fishery resources.

FISH RESPONSE: Expect uplift in spawning and rearing habitat, substrate, pool habitat, winter habitat, migration corridors, cover, food, habitat complexity, water quality, thermal and velocity refugia, productivity, and connectivity that will support self-sustaining populations of native resident and anadromous fish.



Project overview map - post-construction Feb 9, 2020



Comparing as-built aerial imagery to planned design

