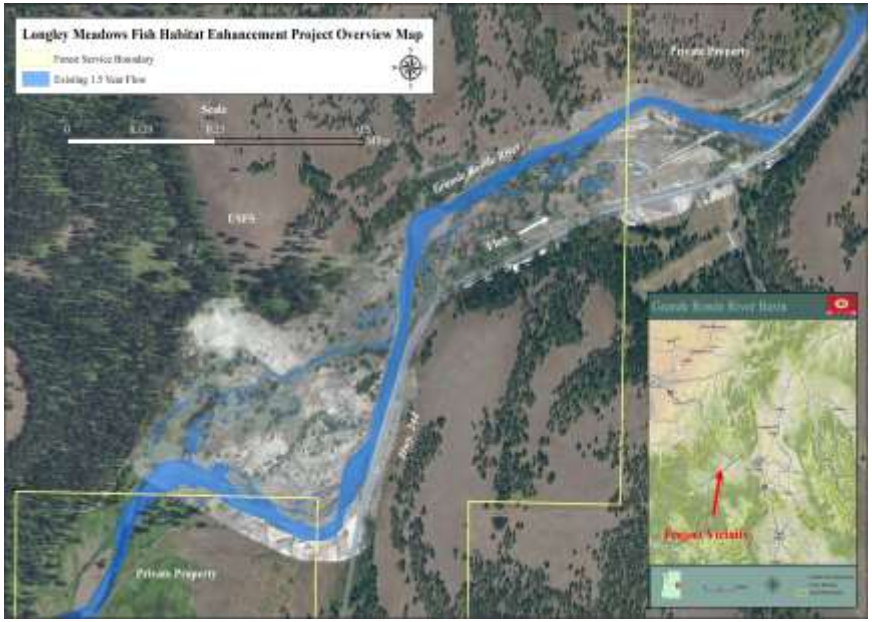
Grande Ronde River Longley Meadows Fish Habitat Enhancement Project

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 Grand Ronde River Longley Meadows Fish Habitat Enhancement Project which was initiated in October 2020. About 30% of the project was completed by December 2020. Construction will continue during summer 2021 with completion by December 2021.

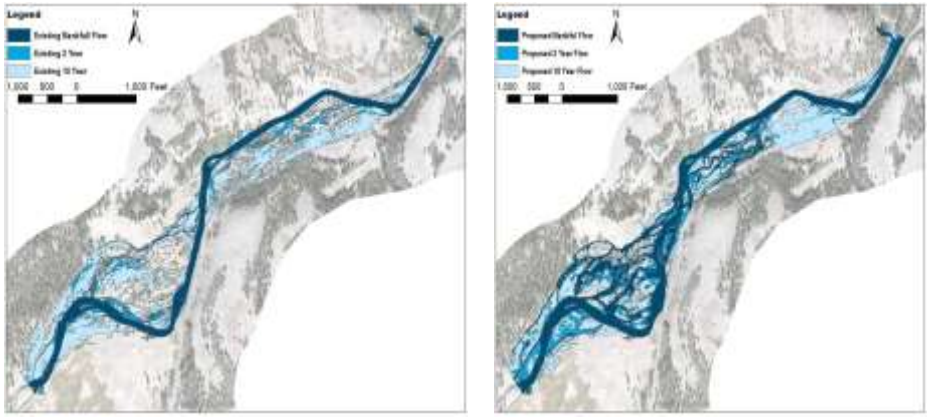
PROJECT LOCATION: The Longley Meadows Project is located approximately 10 air miles west of La Grande, Oregon along approximately 1.9 miles of the Grande Ronde River adjacent to State Highway 244 at river mile 142. The area encompasses nearly 2 river miles on Wallowa-Whitman National Forest (WWNF) system lands. The general legal description is Township 3 south, Range 36 east, sections 15 and 16.



Project overview map

PROJECT BACKGROUND: Historic floodplain and stream channel alterations, including but not limited to, systematic removal of beavers, channelization, historic 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. Water temperature, low stream flows, lack of large pools, 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 Spring Chinook, Upper Grande Ronde Steelhead, and Bull trout.



Existing and Proposed Condition Hydraulics for bankfull, 2 yr. and 10 yr.

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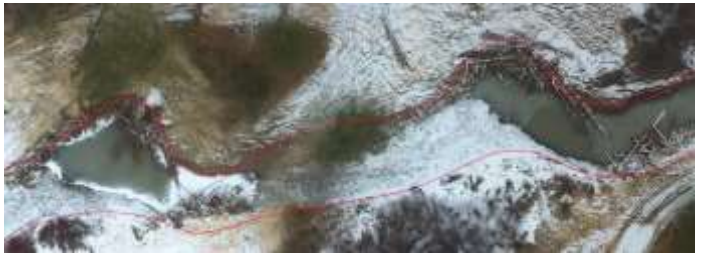
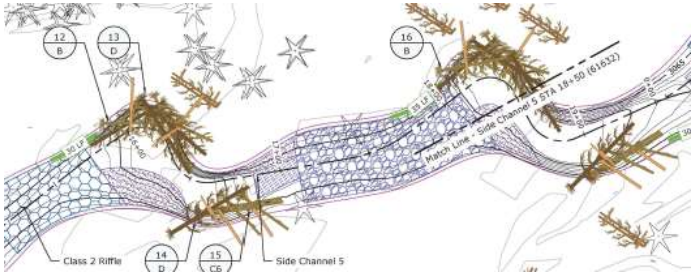
PROJECT OBJECTIVES: Rehabilitate and restore the Reach to achieve immediate and long-term benefits to chinook, steelhead, and bull trout at all life stages. Benefits to salmonids will be achieved through restoration and rehabilitation of the whole floodplain system as defined by CTUIR's River Vision 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.

Large pool wood structure and complexity along mainstem Grande Ronde River

IMPLEMENTATION ACTIONS: Project construction initiation was delayed from the scheduled early summer 2020 start date due to permitting delays, covid restrictions, and fire season. Year 1 construction was initiated in early October and completed late December 2020. Year 2 construction is scheduled for June to November 2021. Year 1 construction included BMP implementation, environmental compliance monitoring, work area isolation, fish salvage, water management, approximately 2,000 linear feet of new side channel construction, 700 feet of mainstem large pool grading, installation of 42 large wood structures, riffle construction, streambank bioengineering, and floodplain wood installation was completed. Year 1 work resulted in approximately 30% of project being completed.



Side Channel 5 Design & As-Built (Dec. 2020 imagery)



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.