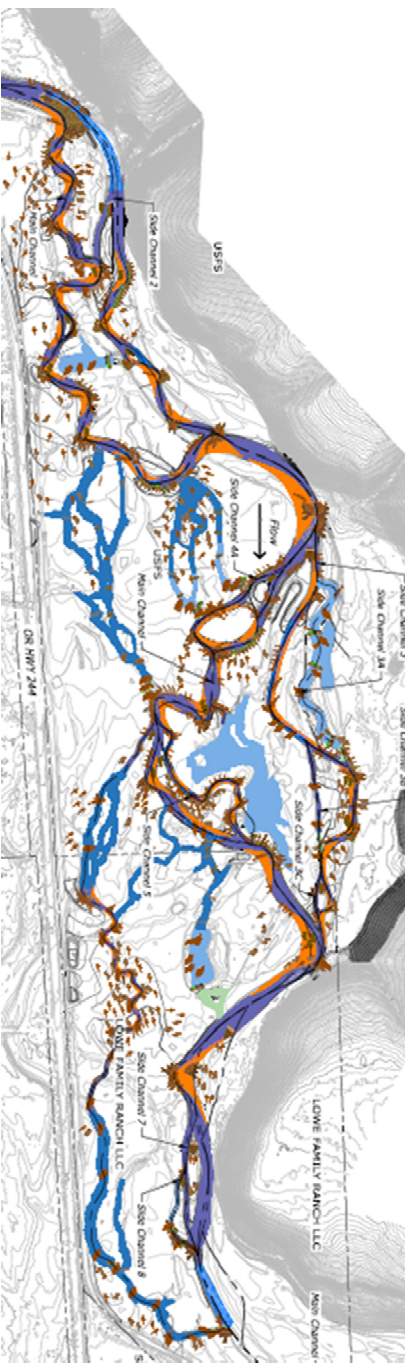


BIRD TRACK SPRING FISH HABITAT & FLOODPLAIN RESTORATION PROJECT (Existing Condition)



PROJECT DESIGN



NOVEMBER 2019 ORTHO IMAGE (95% CONSTRUCTION COMPLETED)



CTUIR's Restoration Goals & River Vision
Restore Floodplain and Increase First Foods for Tribal Use

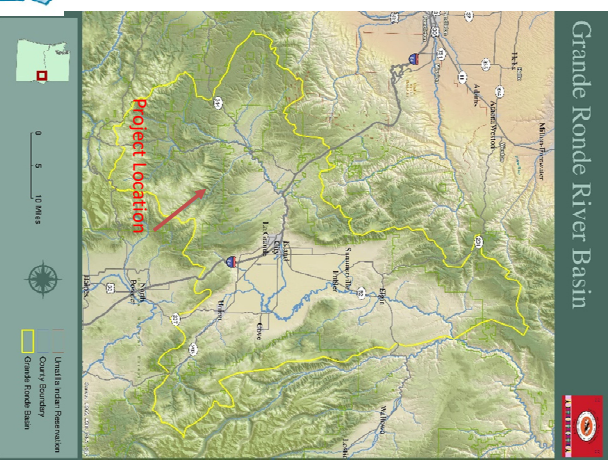


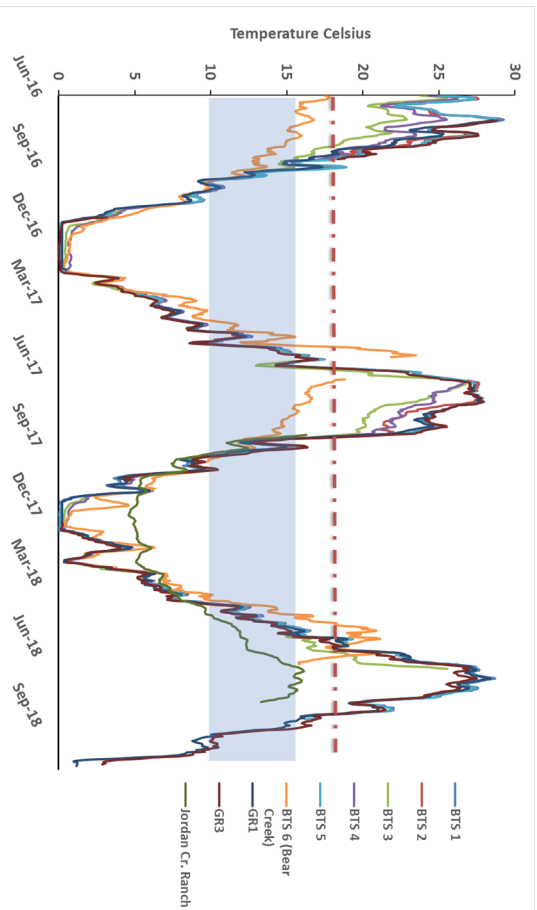
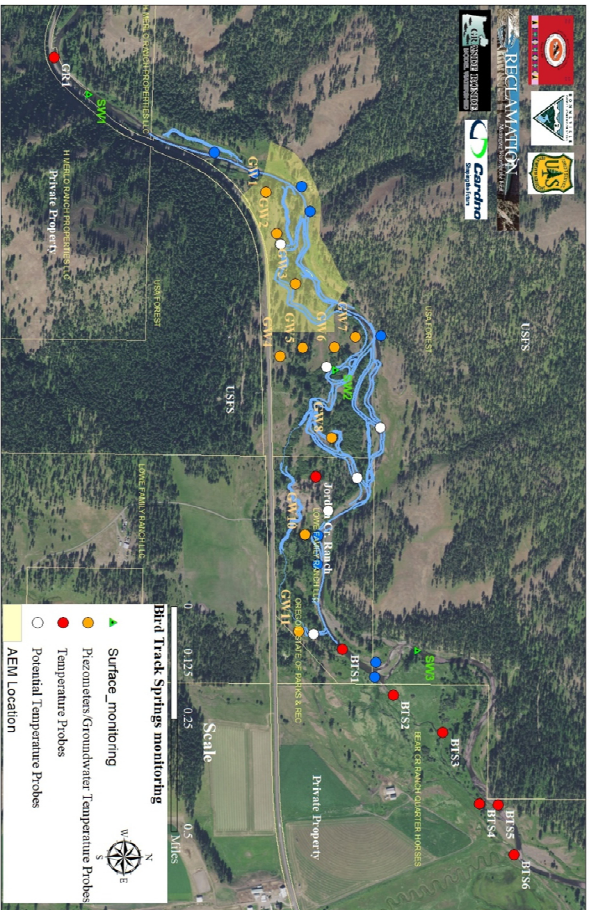
Hydrology	Geomorphology	connectivity	Riparian Vegetation	Aquatic Biota
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"The Grande Ronde Basin includes a healthy river capable of providing first foods that sustain the continuity of the Tribe's culture. This vision requires a river that is dynamic and shaped not only by physical and biological processes, but the interactions and interconnections between those processes."

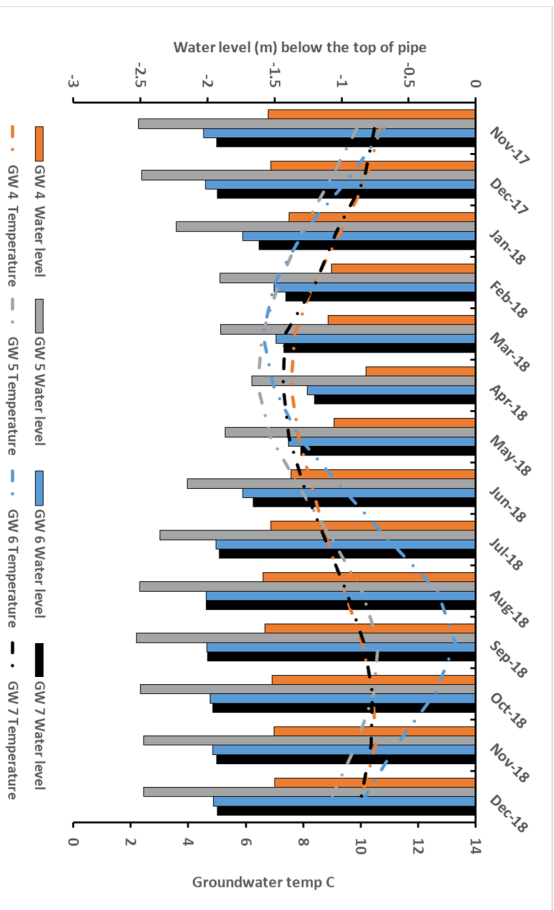
Partnership Roles

- USFS WWNF – Land Mgs, NEPA, Design, Planting
- CTUIR – Project Sponsor, Design, Const. Mgt., Monitoring BOR – Design and Permitting
- GRMW – Funding, Project Review
- BPA – Funding, HIP3 Review (\$3,344,396)
- OWEB – Funding (\$507,016)
- Steve Lindley Construction, LLC (Construction)
- Jordan Creek Ranch, LLC (Private Land Partner)





7 day average daily maximum stream temperatures at select sites within the fish habitat restoration project. blue box represents optimal growth temperatures for juvenile salmonids (10-15.6 C), while the red line represents the upper limit for rearing and migration (17.8



Sample of groundwater well data and temperature from transect on Bird Track Springs

Fish salvage data 2018 & 2019

- 46 Chinook par
- 176 *O. mykiss*
- 957 Pacific lamprey ammocoetes
- 10,594 western Pearlshell mussels
- 8,000+ native freshwater fish species.



Project Metrics

- 9,000 ft. main channel
- 9,500 ft. side channel
- 1,200 ft. alcove
- 2,000 ft. Floodplain Swale
- **17 Large main channel pools (10 pools/mile) - 900% increase**
- **47 Medium side channel pools (26 pools/mile)**
- **101 acres restored floodplain**
- **300+ large wood structures**
- **250+ Floodplain wood roughness features**
- **3,700 ft. streambank bioengineering**

