Exp BIOP LIMBER JIM & CHICKEN HABITAT RESTORATION PROJECT

Contract #: 75265

Project #: 1992-026-01

Final Report

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United States Forest Service

Wallowa-Whitman National Forest

LaGrande Ranger District

LaGrande, OR

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Limber Jim & Chicken Cr Restoration Project

The Limber Jim & Chicken Creek Restoration Project is located on Limber Jim, North/South Fork Limber Jim, Chicken &West Chicken Creeks, which are tributaries to the Grande Ronde River & Sheep Creek. The project is located on approximately 8 miles of Limber Jim Creek and tributaries & 5 miles of Chicken/West Chicken Creeks. These streams provide habitat for Snake River Basin chinook salmon, summer steelhead, bull trout & redband trout.

Above: Removing trees with a feller buncher.
Below: Loading trees with a log loader and off road dump truck.

Existing Condition Prior to Project Implementation

Historic timber harvest, grazing, roading & mining reduced the future recruitment of large wood & the amount/types of riparian vegetation. These combined impacts changed pool/riffle ratios, residual pool depth, habitat complexity & floodplain function.

The streams within the project area no longer have livestock grazing within the project area. There are existing mining claims with little activity and dispersed recreation camping areas. Five culverts on Limber Jim Creek, West Chicken Creek and Tributaries did not adequately pass fish at all life stages. Sill logs were placed in the late 1980s/early 1990s to improve pool habitat.

There are three big game exclosures on mainstem Limber Jim Creek that were nonfunctional. Riparian vegetation primarily consists of sedges, rushes, lodgepole pine and alder.

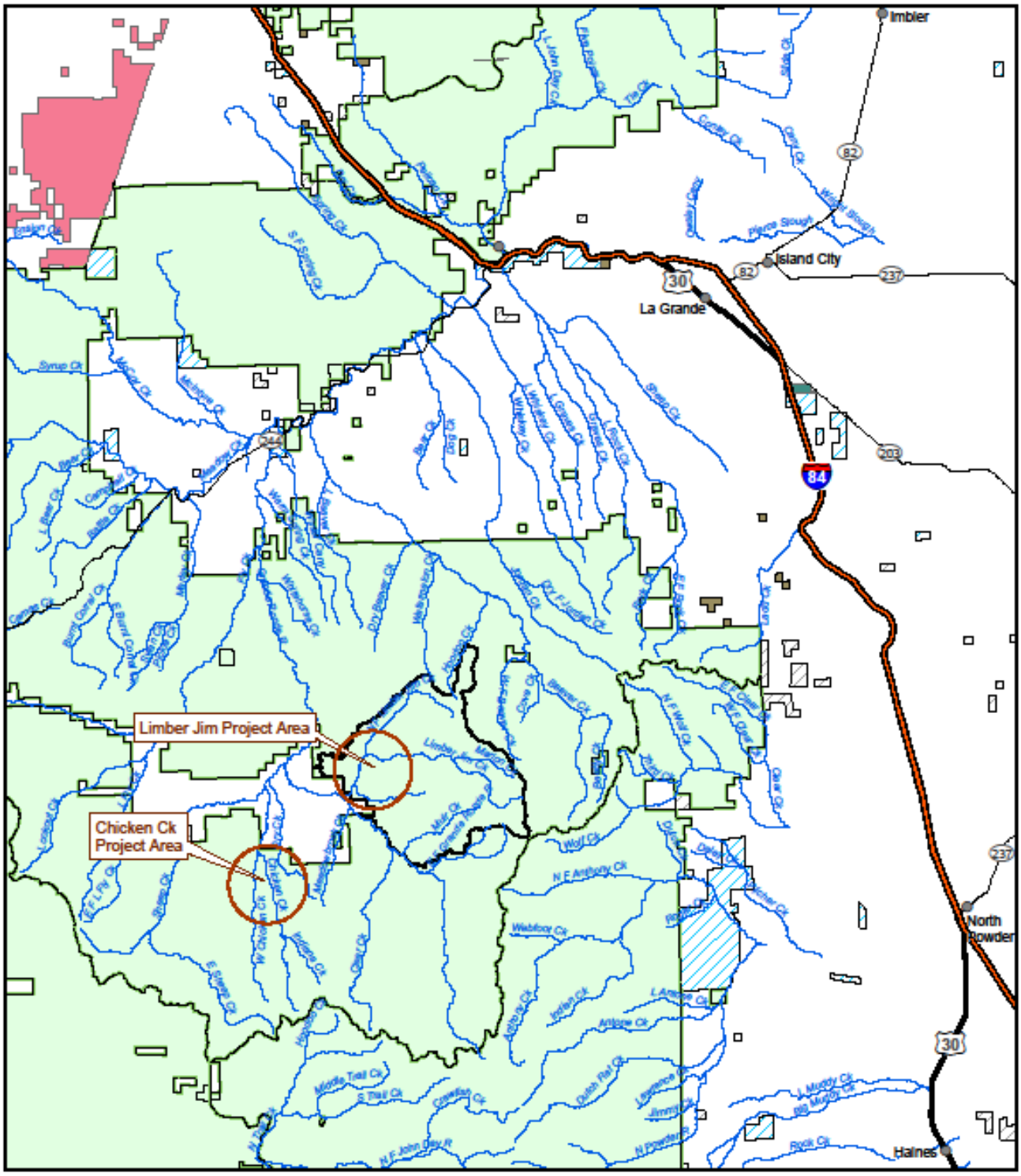
Partners

* Bonneville Power Administration
* US Forest Service
* Confederated Tribes Umatilla Indian Reservation
* Grande Ronde Model Watershed

Objectives

The projects objectives consisted of the following:

- Provide fish passage for all life stages to 11 miles of stream.
- Increase the hydration of laterally confined meadow bottoms.
- LWD placement locations and types were prioritized to add roughness, increase floodplain interaction and habitat complexity, and promote out-of-channel flooding.
- Increase riparian deciduous vegetation.
- Provide longer periods of hydrologic production.
- Decreased stream temperatures.



Date: 3/28/2019

LIMBER JIM & CHICKEN CREEK RESTORATION PROJECTS

Vicinity Map

1:270,000

0 4.5 9 13.5 Miles

Path: T:\FS\NFS\Wallowa\Whitman\Projects\lag\Limber Jim 2012\GIS\Workspace\MEL\JPlatz_Map_Vicinity_082016.mxd

- Interstate
- Highway
- Major Road
- Limber Jim Boundary
- Main Streams
- District Boundary

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Local Government
- Private Land
- State Agency
- U.S. Forest Service
- Undetermined

Limber Jim & Chicken Creek Restoration Project

2017 –2018 Project Completion

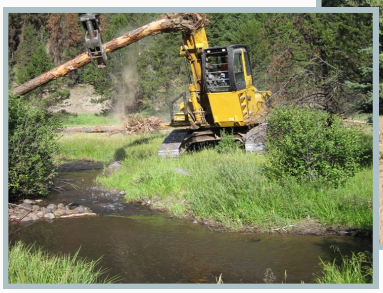
- 11 miles of fish passage opened through diversion barrier removal.
- Large wood structure complexes constructed on over 5.1 miles (2900 large wood pieces).
- 4 miles of stream planted with seedlings and cuttings (9,500 seedlings, & 30,000 cuttings) and native grass/forb seed.
- Defined access @ 6 dispersed recreation areas.
- Reconstructed 3 elk exclosures.
- Constructed 1 mile of livestock exclosure fence.
- Recontoured 1 mile of closed road.
- Approximately, 9,000 conifer seedlings were planted on the recontoured road and tree harvest unit.
- Six signs were placed in the project area, describing project activities.

•Funding

- BPA— $927,288
- USFS— $511,385
- CTUIR—$110,152

TOTAL– $1,548,825

Restoration work completed: (1) Constructed fish structures on 5.1 miles of stream. (2) Removed fish barriers @ 5 culverts. (3) Recontoured 1 mile of closed road. (4) Reconstructed 3 elk exclosures. (5) Constructed 1 mile of livestock exclosure. (6) Defined access @ 6 recreation areas. (7) Planted 49,000 seedlings and cuttings. (8) Seeded all disturbed areas. (9) Installed 6 signs.



Placing wood with a log loader

Recontoured 1 mi of road

Fish structures were largely designed to provide floodplain inundation. Approximately 75% of the structures inundated the floodplain during low streamflows.

Drilled in 10,000 cuttings

Removed culvert & constructed ford

Culvert Replacement

Placing racking material

Log jam & pool on West Chicken Creek

Log jam backed water into old structure on Chicken Creek

LIMBER JIM CREEK

Pre Restoration

Post Restoration

Upstream of log jam

Drone photos of Limber Jim Creek (before/after photos)

Drone photos of Limber Jim Creek one season after construction showing increased floodplain inundation and greenline.