

## **Lower South Fork McKenzie River Floodplain Enhancement Project Project Summary**

The Lower South Fork Floodplain Enhancement Project (Project) is a multi-phase effort to improve river function, habitat conditions, and water quality on 4.5 miles and over 600 acres of floodplain in the lower South Fork McKenzie River below Cougar Dam. The Project will enhance habitat for spring Chinook salmon, bull trout, Pacific lamprey, rainbow trout, cutthroat trout, Western pond turtle, and other native species. The Willamette National Forest (WNF) and McKenzie Watershed Alliance (MWA) will co-manage the Project in collaboration with a range of additional partners. (The MWA is the fiscal sponsor of the McKenzie Watershed Council (MWC)). Over the course of multiple phases, Project will:

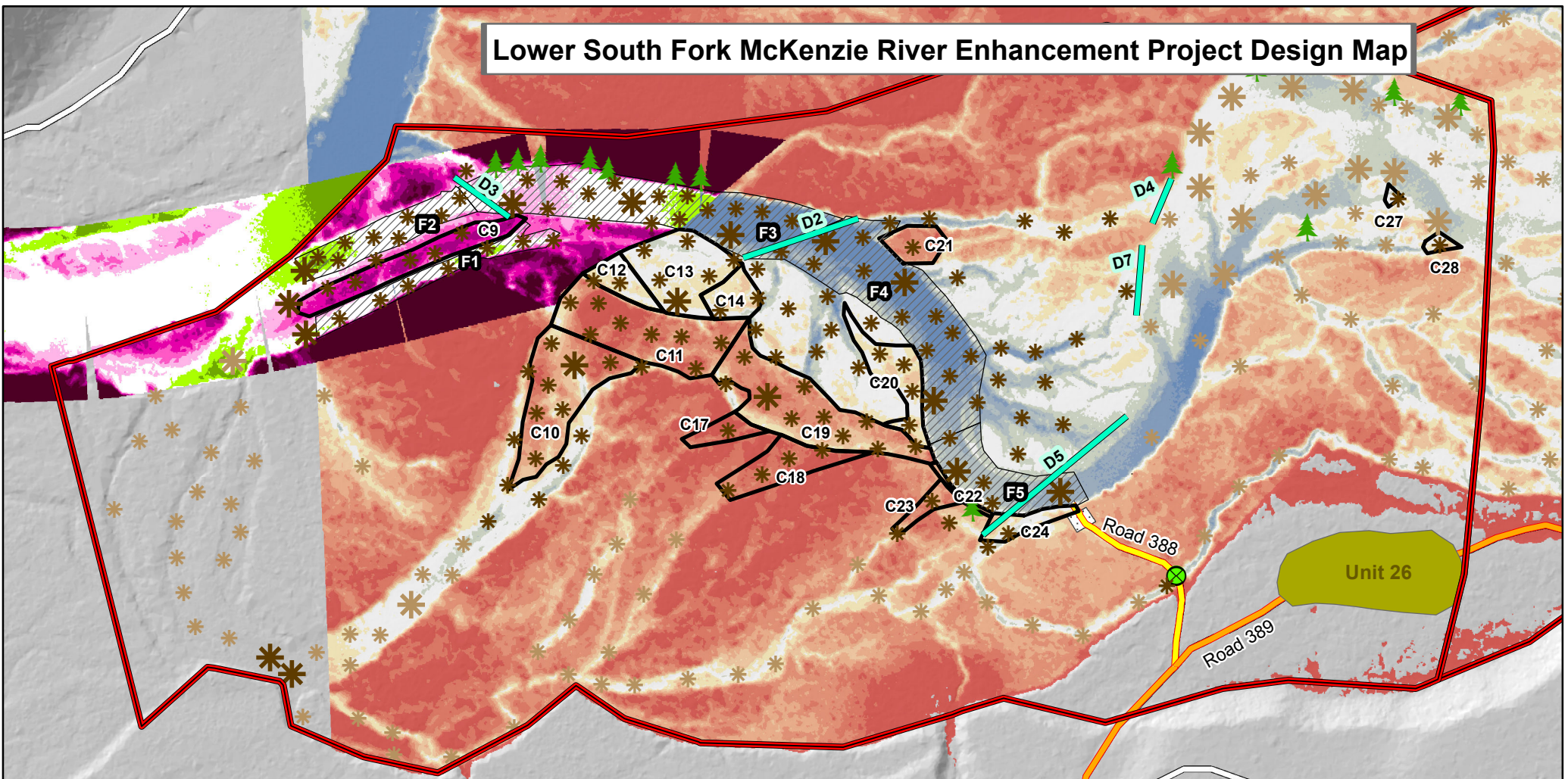
- (1) Remove up to 54 acres of levees/riprap/fill and other sediment deposits,
- (2) Redistribute sediment (up to 500,000 cubic yards) into approximately 49 acres of currently incised channels to raise streambed elevation.
- (3) Add 4,000-5,000 pieces of large wood.
- (4) Reactivate a vast network of channels and wetlands.
- (5) Create up to 2 acres of new pond habitat.
- (6) Replace two culverts, install one new culvert, and clean out 3 existing culverts on Delta Campground Road.
- (7) Decommission approximately 0.8 miles of roads and store approximately 0.1 miles of roads.

Phase I implementation will occur within the lower 200 acres of the project area and cover South Fork river mile 0-1 (Design Map). Associated planting and noxious weed treatment will continue within the Phase I area through 2019. Planning, budget development, and permit acquisition have been underway since 2015. Phase I implementation began in June 2018 and will continue through mid- August 2018. Phase I scope of work and associated timelines are as follows:

- Treating noxious weeds prior to and following implementation (Spring 2018 – Spring 2019)
- Harvest of approx. 1,300 pieces of large wood from sediment removal areas, wood staging sites, and upland units and haul to the Phase I project area. (June – July 2018)
- Removal and redistribution of 12.5 acres (approx. 80,000 cubic yards) of floodplain sediment into the incised mainstem channel using heavy equipment. (June – August 2018)
- Placement of approx. 300 pieces of large wood within large (~20 pieces) and small (~5 pieces) logjams with a helicopter into inaccessible areas of the floodplain. (June 2018)
- Placement of approx. 1000 pieces of large wood within large (~20 pieces) and small (~5 pieces) logjams with an excavator and skidder within the river channel and floodplain disturbance areas. (July-August 2018)
- Decommissioning of 0.1 miles of Road 1900-388 and removal of road fill blocking channel (August 2018)
- Replanting and seeding high priority disturbed areas (Fall 2018 –Spring 2019)

Phase I involves the diversion of the lower 1-mile of the South Fork McKenzie River into a floodplain side channel. A helicopter will place large wood throughout the floodplain channel prior to diversion. Contractors will divert the South Fork McKenzie River with super-sacks filled with locally source sediment. The U.S. Forest Service, Oregon Watershed Enhancement Board, BPA (through the Pacific States Marine Fisheries Commission) provided funding for the Project.

# Lower South Fork McKenzie River Enhancement Project Design Map



Phase I Project Area

Roads

### Large Wood Placement

- Large Logjam (20 pieces), Excavator
- Large Logjam (20 pieces), Helicopter
- Small Logjam (5 pieces), Excavator
- Small Logjam (5 pieces), Helicopter

Cut Zones

Fill Zones

Water Diversion

Bank Trees Utilized

Wood Staging Sites

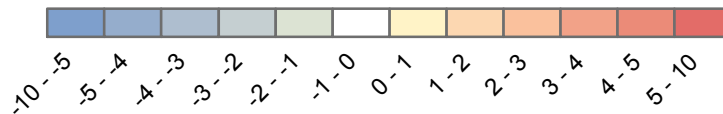
Equipment Staging Sites

Remove Road Fill

Road Decommissioning

Road Storage

### REM in Feet (Target Elevation is 0 to -1)



### Transition REM in Feet (Target Elevation is 0)



### Phase I Wood Numbers

1300 Pieces Total

985 Excavator Placement 2018

315 Helicopter Placement (Below Rd 388) 2018

[400 Heli Placement Above Rd 388 (Phase II)]

0 500 1,000 Feet

