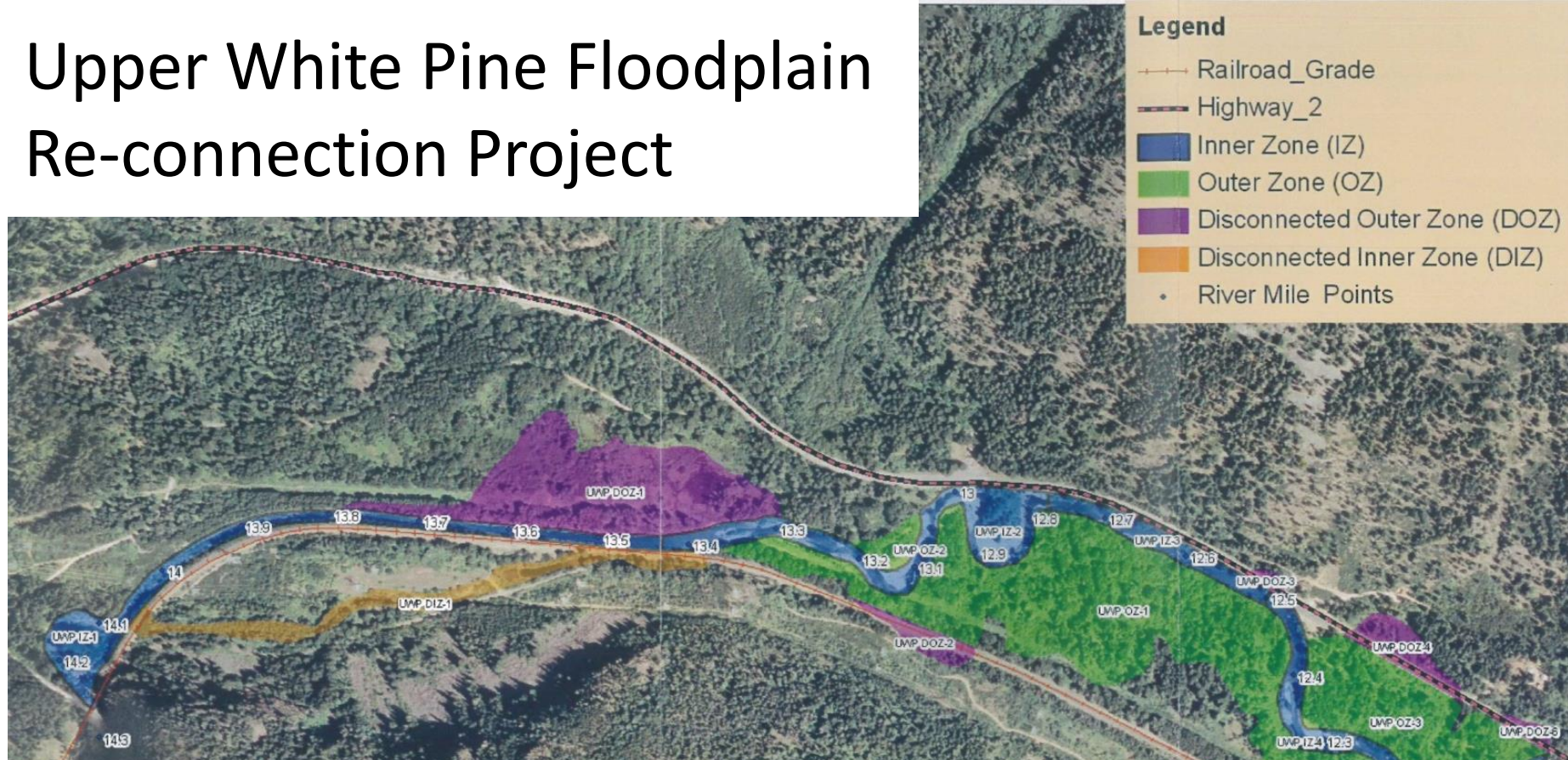


Upper White Pine Floodplain Re-connection Project

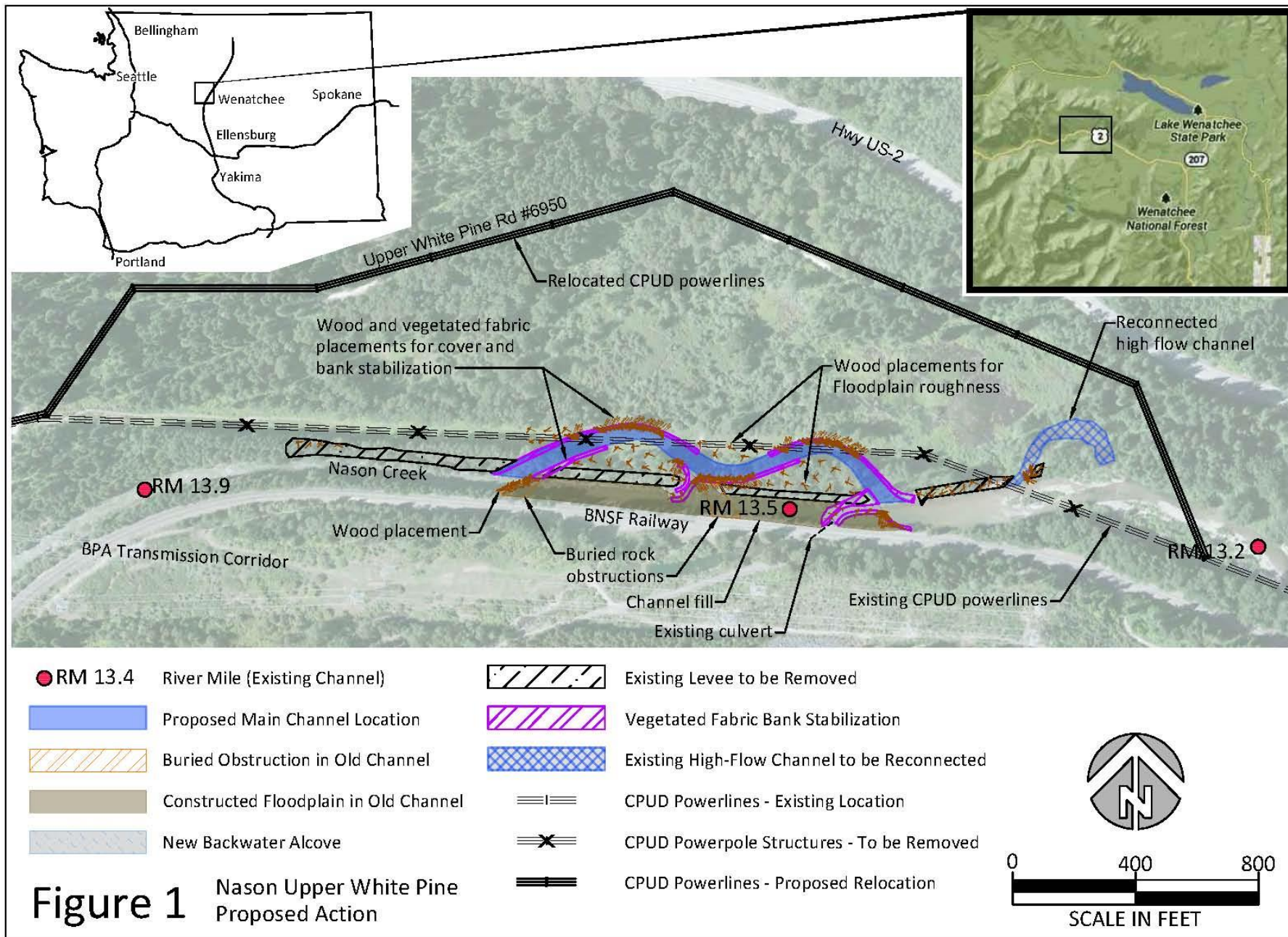


Jennifer Hadersberger and Pete Cruickshank, CCNRD

Landowners = USFS, CPUD, BNSF

Funders = BOR, RCO, DOE, Tributary Committee

Engineering Design = Interfluve



Phase 1: 2016 Tree Clearing



Phase 2: Powerline Re-location



June 2017



Powerline construction and
re-location completed

Photos provided by CPUD

A group of people, some wearing safety vests, are walking through a snowy forest. In the background, there are tall trees and a utility pole. The scene is set in a winter environment with snow on the ground and bare trees.

Phase 3: Stream Restoration

March pre-bid meeting
16 Contractors
7 bids

Goodfellow	\$1,643,050
Pipkin	\$1,659,945
Hurst	\$1,722,065
John Wiley	\$1,960,390
BCI	\$1,998,950
Strider	\$2,241,420
Kiewit	\$4,161,390

2017 Project Overview



~2 mile powerline re-location
1300' channel re-location plus lower levee breach
July 23, 2017 Google earth image



Downstream levee breach
July 18, 2017 cleared



August 8, 2017
2017 In-water work complete

De-watering photos





New Channel Construction
32,000 cy of excavation and
on-site stockpile

August 8, 2017 Photos

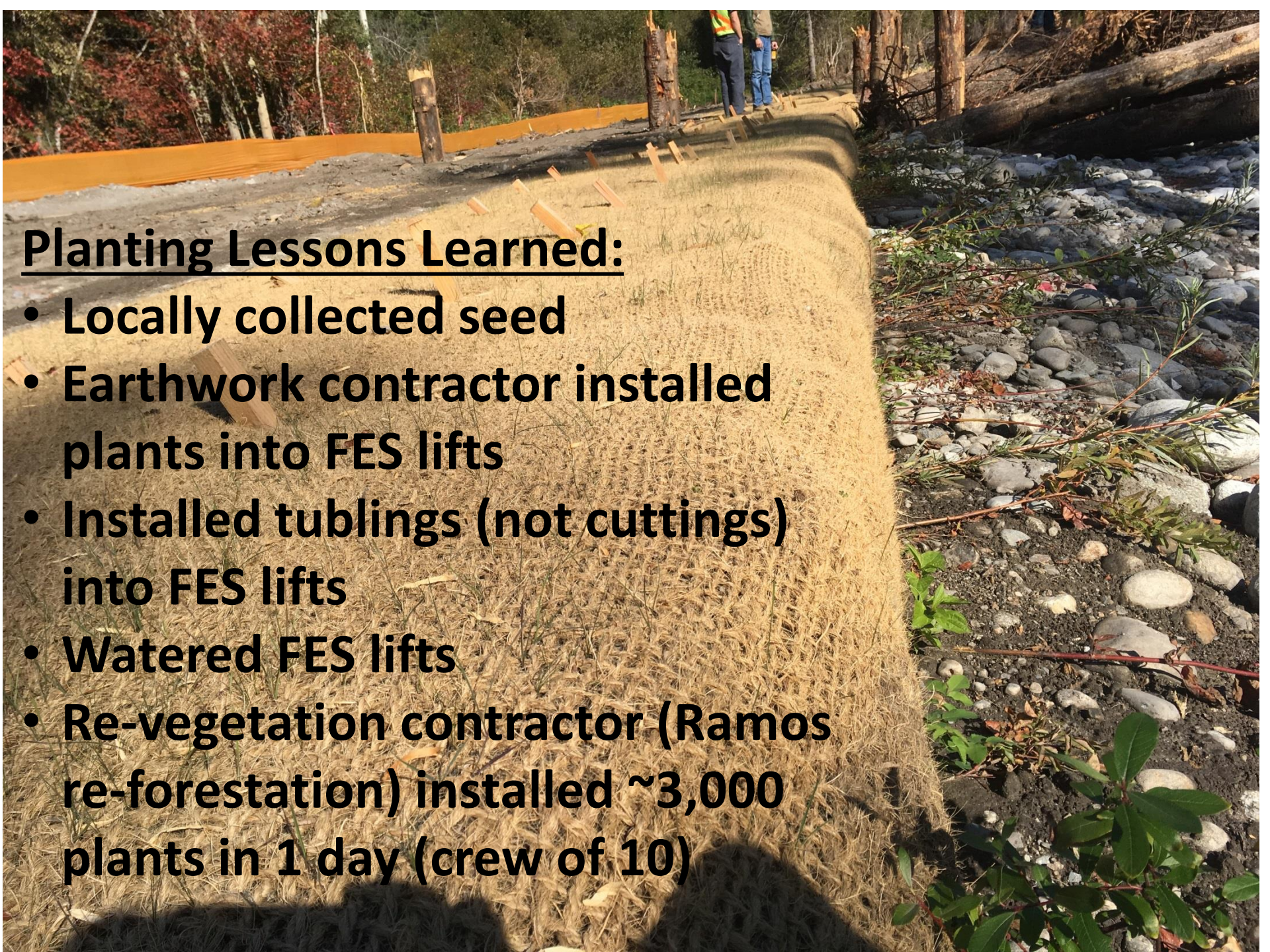


Sorting material for placement in the new stream bed (imported ~5,500 cy and re-used ~5,000 cy) August 22, 2017 Photos



August 22, 2017
Building 2450' of FES Lifts





Planting Lessons Learned:

- **Locally collected seed**
- **Earthwork contractor installed plants into FES lifts**
- **Installed tublings (not cuttings) into FES lifts**
- **Watered FES lifts**
- **Re-vegetation contractor (Ramos re-forestation) installed ~3,000 plants in 1 day (crew of 10)**

Completed log jam and pool



Completed log jam and pool



Next Steps:

- Secure BNSF Agreement for 2018 work in ROW
 - 2018 work
 - Cofferdam mainstem
 - De-fish existing channel
 - Divert flows to new channel
 - Construct 980' FES lifts
 - Remove levee (5,00 cy)
 - Backfill channel (35,000 cy)
 - Install 10,000 plants
 - Construction Budget
- $$447K + 591K + 1,777,780 = 2.8 \text{ million}$$

