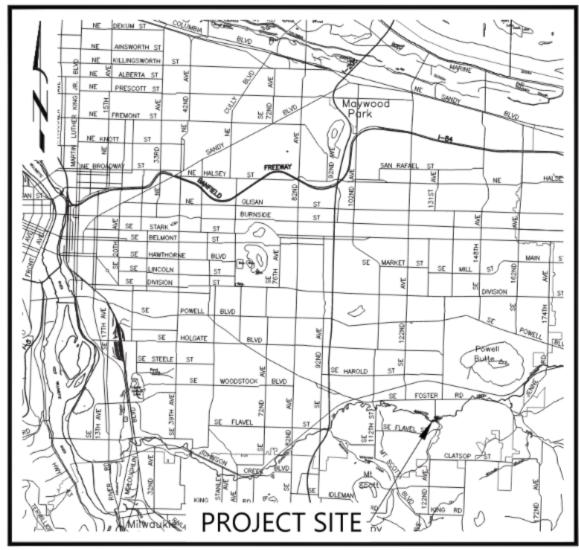


Johnson Creek Watershed Council Science Symposium: October 21, 2025



Cedar Crossing Stream Restoration (City of Portland Bureau of Environmental Services)





VICINITY MAP

SCALE: 1" = 6000"

SCALE: 1" = 400"



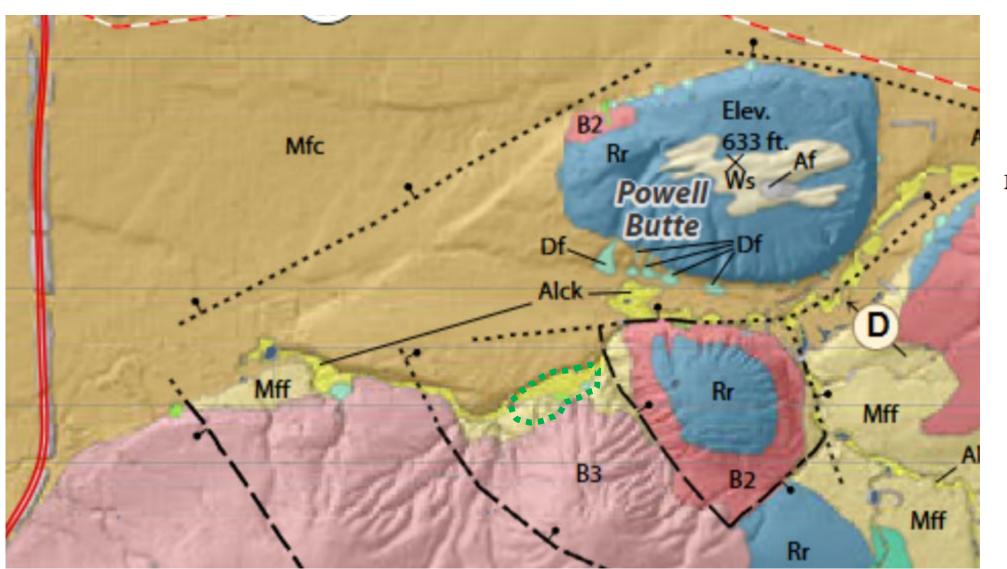


# Where/what is Cedar Crossing?

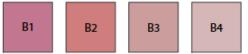




### Geology!



#### **Boring Volcanoes**



Missoula Flood Deposits



Alluvium



# Site History







- Works Progress Administration (WPA)
- Flood ControlProject
- Increase conveyance?



- Channel overwidened
- Confined within rock walls
- Sediment and wood cleaned out by USACE until the 80s
- Bed features in lower 700 feet homogenous

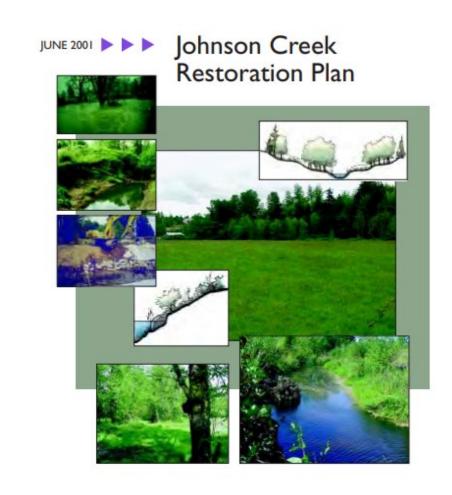


# Project Goals



#### **Project Goals:**

- Reconnect the creek to the historic floodplain
- Enhance native riparian vegetation and add tree canopy
- Create backwater/high flow refuge habitat for ESA species
- Improve, enhance, and create riverine and wetland habitat to benefit a variety of native species and to assist in the recovery of ESAlisted salmonids

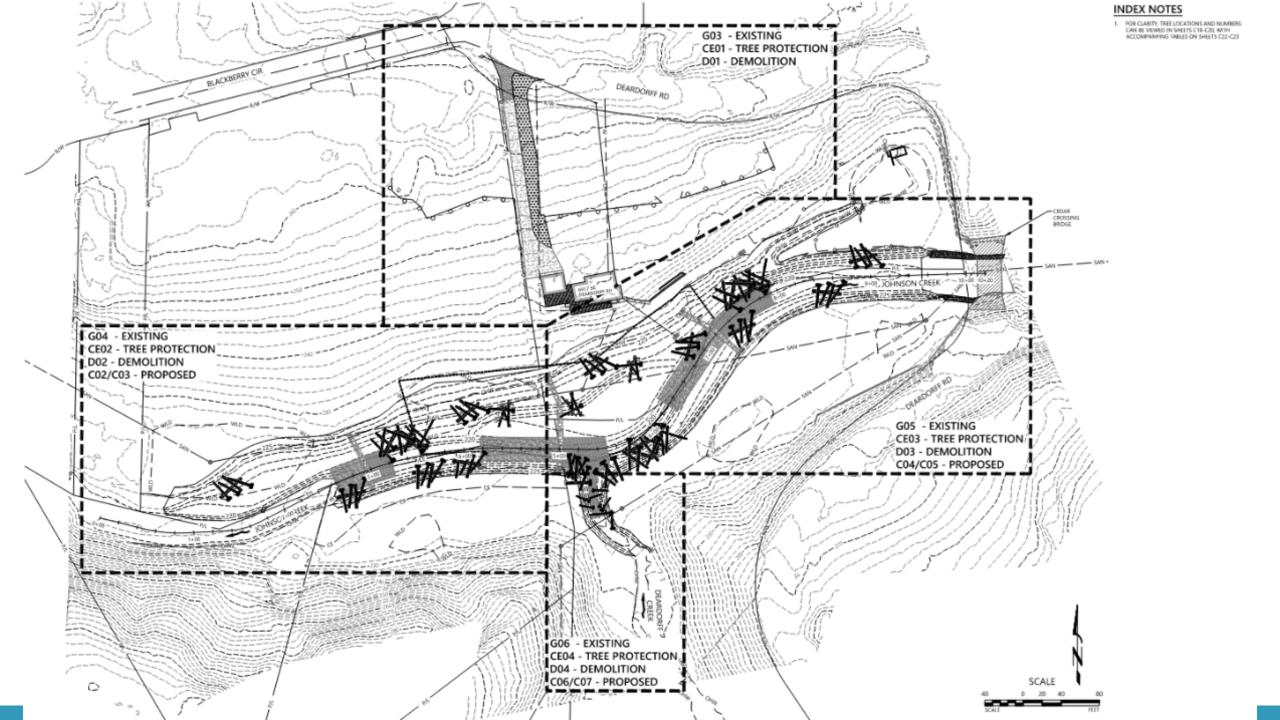






#### **Final Design**

- Add heterogeneity to the creek corridor constructed riffles and pools, large wood installation (> 120 pieces!)
- Reconnect the floodplain constructed riffles and pools + floodplain excavation
- Add salmonid habitat pool depth, large woody material, spawning gravels
- Save as many trees as possible arborist consultation/observation, careful soil lift construction

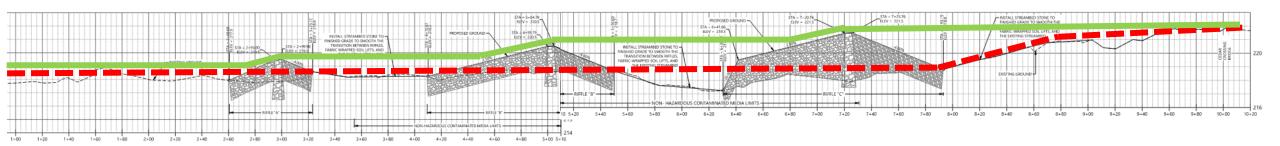


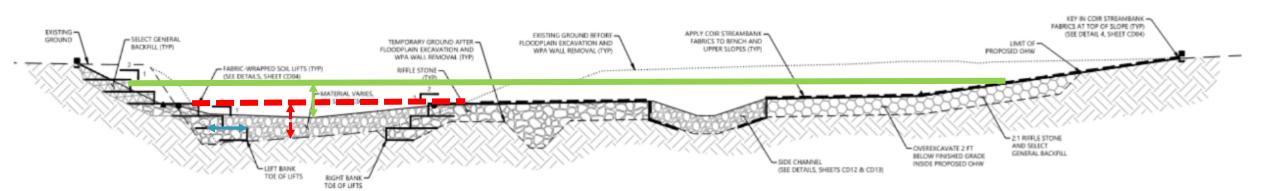


#### **Vertical and Horizontal Complexity**

We Can Do That!

Vertical variability
Deeper, smaller low flow
Much larger high-flow floodplain access









#### Fish Salvage







**Total=1,309** 

Lower Columbia River Coho

Salmon: 3

Reticulate Sculpin: 573

Speckled Dace: 79 Redside Shiner: 179 Western Brook Lamprey: 4

Pacific Lamprey ammocetes: 14

Unidentified lamprey: 9

Steelhead/Rainbow Trout: 7

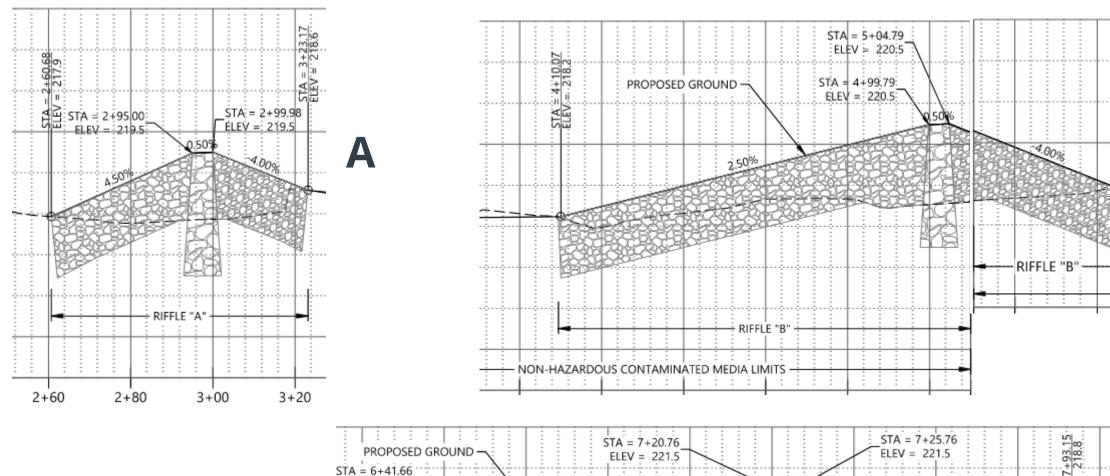
Largescale Sucker: 3

Signal Crayfish: 424

Gambusia: 10 Pumpkinseed: 4







ELEV = 219.5

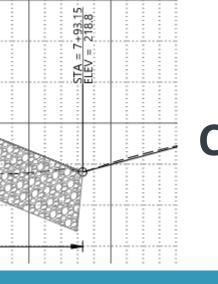
= 6+30.40

STA





STA = 5+50.00 ELEV = 218.7...





### Heterogeneity to the Streambed - Riffle C





#### Heterogeneity to the Streambed – Riffle B





### Heterogeneity to the Streambed - Riffle A





## **Geomorphology -> Habitat**











#### Aquatic



New Fish Counts by BES this year!

Macroinvertebrate survey by City of Gresham this year!





Lower Columbia River Coho

Salmon: 3?

Reticulate Sculpin: 573?

Speckled Dace: 79? Redside Shiner: 179? Western Brook Lamprey: 4?

Pacific Lamprey ammocetes: 14? Gambusia: 10? Unidentified lamprey: 9?

Steelhead/Rainbow Trout: 7?

Largescale Sucker: 3?

Signal Crayfish: 424?

Pumpkinseed: 4?