

2016

FRA Rail Program Delivery

Meeting

Environmental Mitigation and Project Design

Chris Dunster

Washington State Department of
Transportation

Kelso Martins Bluff projects

- ▶ Trio of projects
 - ▶ Relieve a major chokepoint
 - ▶ Upgrading existing tracks
 - ▶ Adding third main track
 - ▶ Building a second bridge
 - ▶ Extending sidings

 - ▶ Environmental mitigation
 - ▶ Fish habitat reparation project
 - ▶ Originally planned to enlarge culvert on nearby salmon stream
 - ▶ Ultimately determined it didn't provide the greatest benefits



What else can we do?

▶ Tight timeline

- ▶ Project construction already started
 - ▶ ARRA funding deadlines limited time to design, permit and construct new project
 - ▶ WSDOT and BNSF committed to working together to make it happen

▶ Identified alternative project

- ▶ Worked with Cowlitz Tribe and Washington Department of Fish and Wildlife



Otter Creek Restoration Project

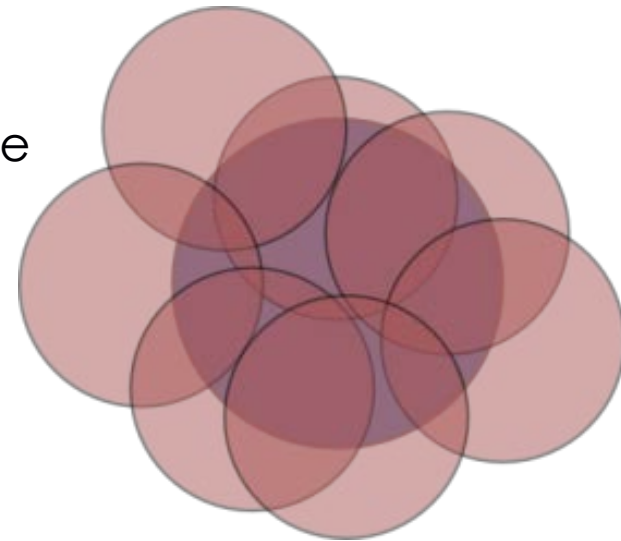
- ▶ Greater benefit and more impact
 - ▶ Already part of Cowlitz Tribe's long-term plan
 - ▶ Design was completed
 - ▶ Lacked funding to make it happen
 - ▶ Permitting process seemed overwhelming



Partnership broadens to meet tight deadlines

▶ Permits and approvals needed from:

- ▶ Washington Department of Fish and Wildlife
- ▶ U.S. Army Corps of Engineers
- ▶ Federal Railroad Administration
- ▶ Washington Department of Ecology
- ▶ National Marine Fisheries Service
- ▶ Tacoma Power



▶ Normal approval process would take two to three years

Commitment from all parties

- ▶ Permits and approvals issued in less than six months
 - ▶ Major victory for WSDOT and BNSF
 - ▶ Solidified relationships fostered throughout ARRA project delivery
 - ▶ Strengthening relationship with Cowlitz tribe
 - ▶ BNSF now working with tribe on other joint projects
- ▶ Partners participated in blessing ceremony in July 2016



Project overview

- ▶ Transforms a small island in the Cowlitz River
 - ▶ Redirects flow of the river
 - ▶ Augments existing shoreline with 25,800 cubic yards of gravel
 - ▶ Creates 20 new pools for fish
 - ▶ Builds complex wood covered habitat
 - ▶ Creates 28 intentional logjams
- ▶ Results in better salmon spawning grounds



Redirecting the water



- ▶ A new channel diverts water through the middle of the island year round, so fish have more back channel rearing area and increased spawning habitat

Additional shoreline



- ▶ Aggregate on the slopes will migrate down the creek to restore spawning beds downstream

Bags help divert water



- ▶ Bags were used to divert water so fill could be placed in slow water areas to allow reshaping of the island.

Driving logs and creating logjams



- ▶ These logs and intentional logjams will facilitate salmon spawning, as the river rises in the fall

2016 Environmental Excellence Award



- ▶ The project recently was honored by WSDOT as one of its best environmental projects of the year

2016

FRA Rail Program Delivery

Meeting

Thank you!

Chris Dunster

Assistant Program Delivery Manager

DunsteC@wsdot.wa.gov

360-705-6947

WSDOT.wa.gov/Rail