LOWER COLUMBIA RIVER GRP OCTOBER 2015

BNSF Rail Yard (WA) CWLZR-1.0

Position - Location: 46° 6.266', -122° 53.475' 46° 6' 15.9", -122° 53' 28.5" 46.10443, -122.89124 Kelso

Strategy Objective: Collection: Collect oil coming downstream on the Cowlitz River to prevent it from entering the Columbia River

Implementation: From BL-CWLZR-1.6, Crew 2 launch workboat to BNSF rail yard. Crew 1 stage 1000ft. boom in BNSF yard and attach line to end of boom.

Crew 1 pass line to Crew 2, and Crew 2 use line to pull boom across to center highway bridge piling. Anchor boom to piling to create steeply angled collection pocket. Anchor every 100-150ft. along boom length to maintain angle. Upstream strategy CWLZR-1.45 will divert oil into collection pocket. Crew 1 anchor boom to shore using shoreside anchor posts at AP-1, approx. (46.104506,-122.891205).

Collect oil with vac truck staged at BNSF rail yard.

Staging Area: Onsite: Stage at BNSF Rail Yard. Contact Longview Yard Master for access.

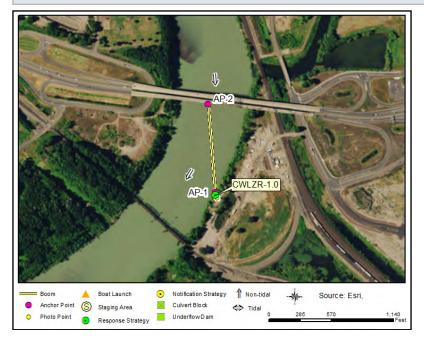
Site Safety: Active railroad track. Slips, trips, and falls. Rail yard with heavy equipment traffic and overhead cranes.

Field Notes: Expect trains on the track at any time/from either direction. Do not allow people/equipment within 25' of tracks. Site is BNSF rail yard at

the confluence of the Cowlitz, Columbia, and Coweeman Rivers.

Watercourse: River - With Tidal Influence - Cowlitz River

Resources at Risk: Downstream Resources



Recommended Equipment

8	Each	Anchor - Danforth (or other appropriate type)
1	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

APPENDIX 4A 163