

US EPA ARCHIVE DOCUMENT

**EPA Region 10 Dive Team  
Duwamish River Upland Source Control Criminal Investigation, Seattle, WA  
October-November 2009**

**What:** EPA Criminal Investigation Division requested dive unit support of data collection of possible illegal discharges to the Duwamish River.

**Why:** Diver survey objectives were to retrieve data on the water quality of materials being discharged to the Duwamish River from an upland facility. Possible contaminants from the outfall effluent include; cement manufacturing components (lye, sand, silt, lime, aggregate, turbid water, oils, etc.), lead, zinc, cooper, and PCBs in low to moderate concentrations. Control of sources being discharged to the river is very important to avoid recontamination of the cleanup work ongoing in the Superfund Site.

**Where:** Duwamish River, within the Superfund investigation area.

**When:** Dive placement and retrievals were conducted in October and November, 2009.

**How:** Divers utilized tethered SCUBA [insert equipment page link] to place and retrieve the instruments. Hydrolab instruments were used to log the type of material being discharged by continuously recording temperature, pH, salinity, and dissolved oxygen data. One instrument was placed inside of the pipe discharge itself and one was placed on a piling nearby in a housing to collect data from the water surface within the river itself.

**Results:** The data instruments (Hydrolabs) were successfully deployed on October 14, 2009 and retrieved on November 10, 2009. Digital video and still photographs were also collected during the retrieval dive. The Hydrolabs analyzed pH, conductivity, Temperature, Salinity, DO and other basic parameters as specified in the QAPP for this project. According to CID, the hydrolabs functioned as planned and recorded a good quantity water quality data.

**For more information about the Lower Duwamish Superfund Site:**

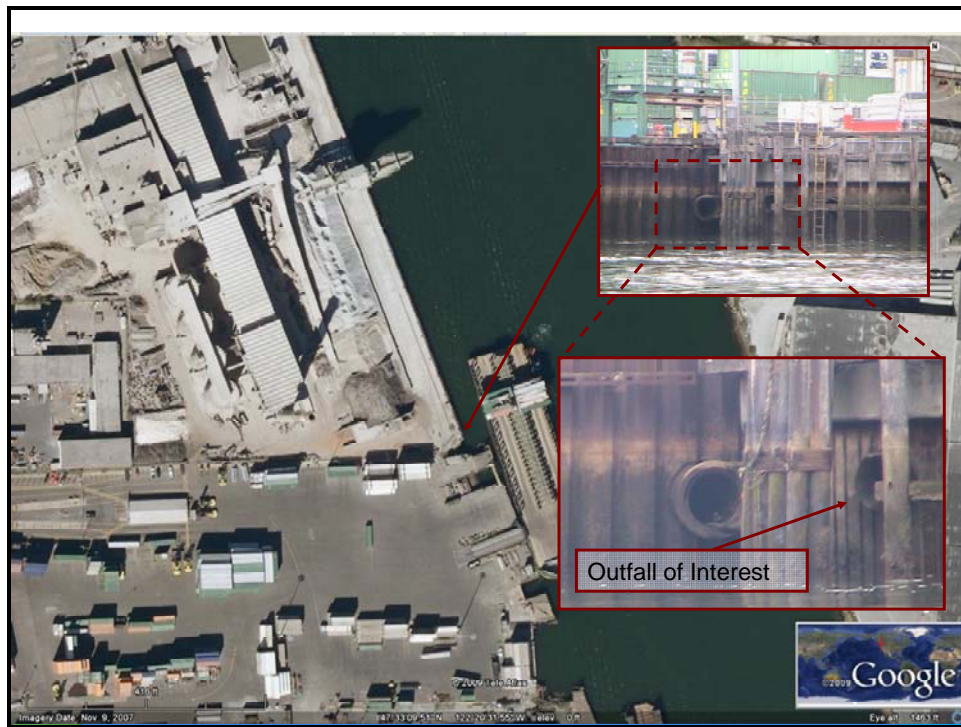
<http://yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish>

**For more information about the EPA Region 10 Dive Team:**

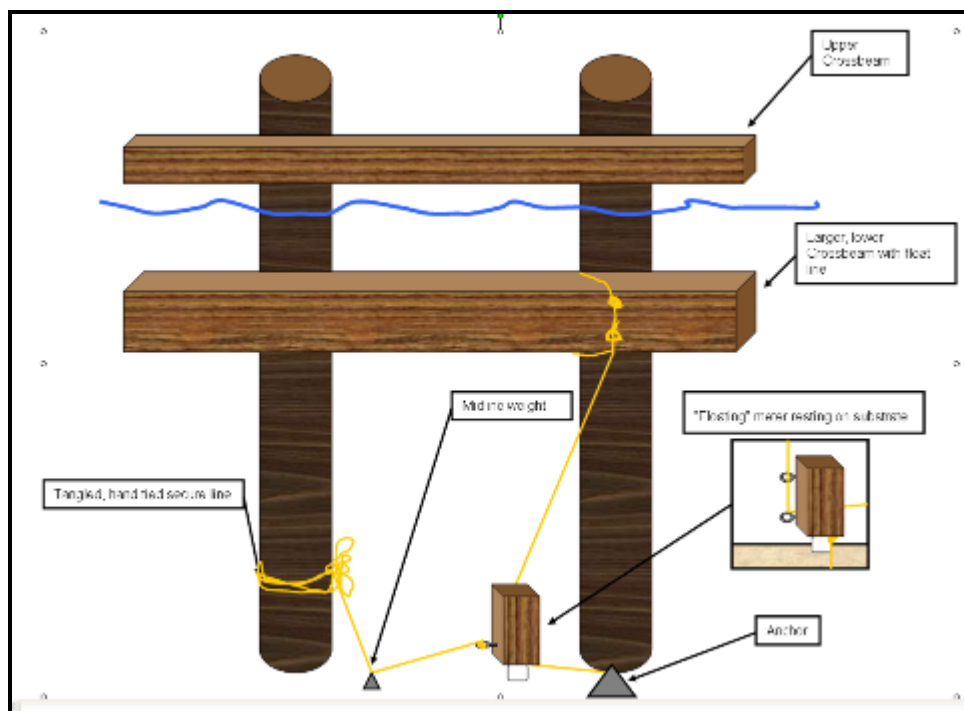
<http://yosemite.epa.gov/r10/OEA.NSF/investigations/dive+team>

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Aerial view of outfall location



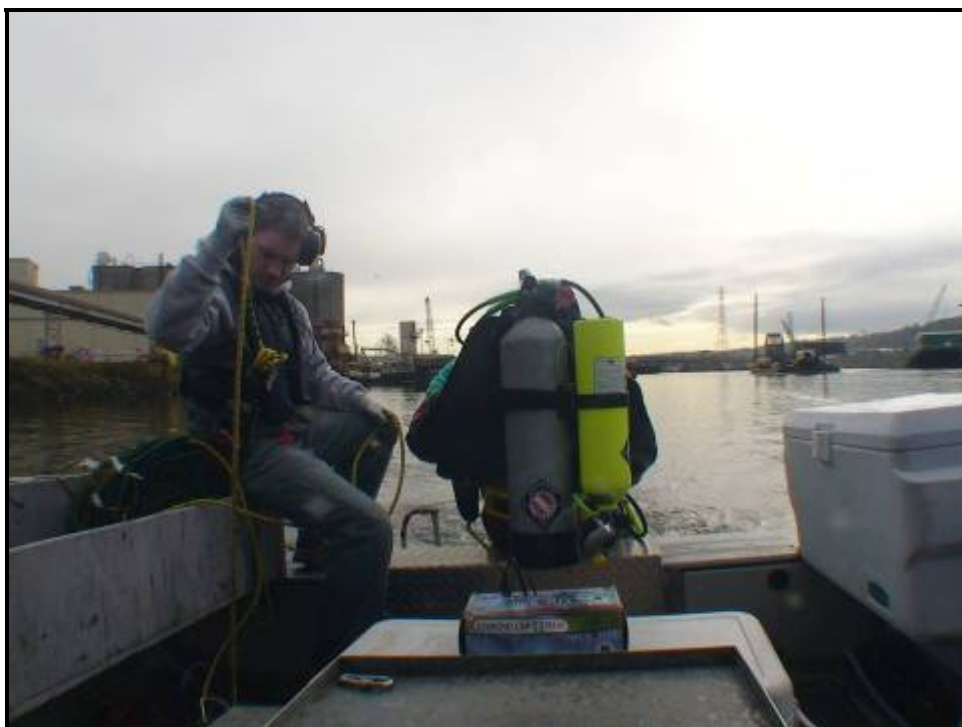
Aerial view of outfall location



“Floating” meter status upon retrieval



Setting up floating meter (10-14-09)



Diver ready to retrieve meters (11-10-09)

