

**EPA Region 10 Dive Team
McCormick and Baxter Cap Survey
October 2010**

What: At the request of the EPA Environmental Cleanup program and Oregon Department of Environmental Quality (ODEQ) the EPA Region 10 Dive Team surveyed the Superfund sediment cap at the McCormick and Baxter (M&B) site. The M&B site is a former creosote manufacturer site.

Why: Diver survey objectives were to: 1) Install solid phase microextraction devices (SPMEs) designed to detect very low levels of polyaromatic hydrocarbons (PAHs) discharging out of the cap, and 2) make any visual observations regarding cap integrity. SPMEs are designed to mimic the uptake of various aquatic organisms living in the cap area over time that might accumulate contaminants seeping at very low levels, if present. SPME results will indicate whether the cap is effective in protecting the bottom of the food chain.

Where: M&B sediment site, Willamette River, Portland, OR

When: Dive surveys were conducted in October, 2010.

How: Diver investigations included several dives to install SPMEs measuring 2 feet in length in 12 locations. Cap inspection was conducted at another 6 locations.

Results: Divers found no visual evidence of cap breakthrough. SPME results are pending to determine the level of cap effectiveness in protecting aquatic life from underlying contaminants.

For more information about the M&B Cleanup:
<http://yosemite.epa.gov/R10/Cleanup.nsf/sites/M&B/>

For more information about the EPA Region 10 Dive Team:
<http://yosemite.epa.gov/r10/OEA.NSF/investigations/dive+team>

Contact: Sean Sheldrake at (206) 553-1220, sheldrake.sean@epa.gov

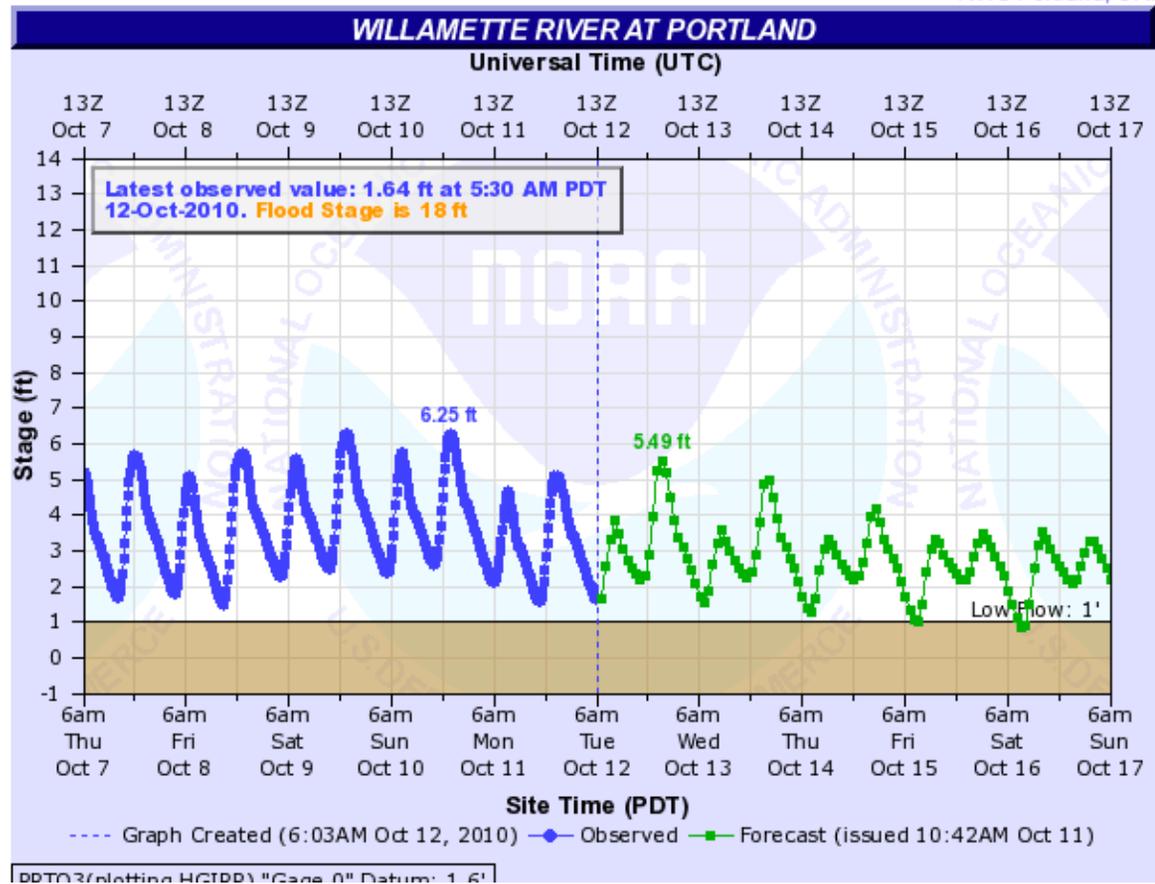
Photos:

Dive Locations





Figure: [NOAA River level actuals/predictions](#)



Hart Crowser and GSI personnel preparing an SPME (below green bar) attached to a concrete block and float for deployment.



Diver inspecting ACB capped areas for “buckling.” The diver found one area during the survey while the surface crew found one other.





Buckle survey, looking towards the main channel and Railroad bridge



Close up of diver Alan Humphrey using LED head mounted lights to illuminate his cap work. Bottom visibilities ranged from 0 to 5 feet during the operation, with very little natural light on the bottom.



Sean Sheldrake tending tethered SCUBA divers. Having the headset loose around the neck allows other deck personnel to hear what the diver is saying during the sampling efforts. If the diver volume is turned up too loud however, this can be uncomfortable to the diver.



Diver at the surface with Nite rider head mount.



Diver Alan Humphrey prepping Sean Sheldrake for dives on October 13, 2010.

