



Wyckoff / Eagle Harbor Superfund Site, Bainbridge Island, Washington

U.S. Environmental Protection Agency, Region 10

July 2007

# Wyckoff/Eagle Harbor Superfund Site West Harbor (Operable Unit 3)

This fact sheet provides an update on the status of the cleanup activities at the site of the current Washington State Department of Transportation (WSDOT) Ferry Maintenance Facility. The site is located approximately 1,000 feet west of the Bainbridge Island ferry terminal. It consists of several piers, maintenance buildings, and a confined disposal facility constructed to contain upland soils and a cap of harbor sediments that are contaminated with heavy metals.

### **History**

The West Harbor operable unit is a former shipyard that was active in Eagle Harbor through the 1950s. Eagle Harbor sediments are contaminated with polycyclic aromatic hydrocarbons (PAHs) and other organic compounds, as well as metals such as mercury, zinc, and copper. The contamination in the West Harbor is primarily the result of the historic shipyard activities.

Cleanup actions for the site were selected in the September 1992 Record of Decision (ROD). The ROD was amended in December 1995 to include construction of nearshore fill and a confined sediment disposal facility on lands owned by WSDOT. The amended 1995 ROD also provided for implementation of contaminant source control measures at the former shipyard property. The confined disposal facility was constructed in an intertidal area adjacent to the former shipyard property. Its purpose is to isolate contaminated sediments and prevent them from entering Eagle Harbor.



Aerial View of the West Harbor (Operable Unit 3)

The selected remedy for the West Harbor operable unit also included placement of a clean sediment cap over contaminated areas of the harbor bottom. Construction of the West Harbor operable unit remedy began in April 1997.

## **Cleanup Actions to Date**

The following actions have been implemented at this site:

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- Contaminated sediments in Eagle Harbor have been capped.
- Construction of the confined disposal facility for upland isolation of the contaminated sediments was completed.
- In 2006, an additional tidal barrier was constructed between the confined disposal facility and the adjacent estuary. See Figure 1 (attached).
- Institutional controls have been implemented to prevent people from collecting and eating contaminated fish and shellfish.
- Regular monitoring is ongoing to ensure the remedy is working to protect human health and the environment.

# Recent Community Questions and Concerns

EPA recently received inquiries about seepage that had been observed moving from the tidal barrier into the estuary, and whether this seepage was releasing metals into the harbor. There were also questions about the attempts to plant eel grass at the mouth of the estuary.

#### Seepage

WSDOT completed construction of the confined disposal facility and initial tidal barrier in December 1997. Intermittent seeps from the intertidal barrier were identified shortly after its placement. These intermittent seeps result from the flooding and saturation of the tidal barrier material at high tide and the subsequent draining of the water at low tide. Quarterly monitoring of the seeps was conducted in accordance with the EPA-approved plan. This sampling determined that the concentrations of copper and zinc in the seep water exceeded the applicable state standards. Based on these data, EPA required WSDOT to propose options for addressing the seepage.



Construction of the Additional Tidal Barrier

The monitoring data initially indicated that the seep volume and metals concentrations may be decreasing over time. Also, sampling of the adjacent estuary indicated that there were no environmental risks to fish. For these reasons, it was decided to continue monitoring the seeps for a limited time to see if the seep volume and metals concentrations would decrease to acceptable levels.

When subsequent monitoring indicated that the seepage was not decreasing to acceptable levels, EPA required WSDOT to construct an additional tidal barrier. WSDOT completed construction of this additional barrier in 2006. Monitoring of the active seeps now indicates that the barrier is effectively isolating the upland contamination sources from Eagle Harbor, and that no further cleanup actions are needed. Monitoring is continuing on a regular basis.

#### **Habitat Mitigation**

The ROD required WSDOT to perform habitat mitigation in accordance with the Clean Water Act. The habitat mitigation included three components: (1) habitat enhancement of the tidal barrier; (2) a 0.6-acre eel grass planting; and (3) restoration of additional habitat in the Schelchelb estuary.

WSDOT first attempted the eelgrass planting site immediately west of the confined disposal facility in 1998. When this planting effort did not succeed, the mitigation plan required WSDOT to

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attempt a second planting. In spite of using best available techniques and expertise, the eel grass did not take hold in this area. The two eelgrass planting efforts met this component of the mitigation requirement.

In addition to the eel grass planting, WSDOT was required to enhance the habitat of the tidal barrier and to restore additional habitat in the Schel-chelb estuary. WSDOT performed the habitat enhancements and successfully restored this 2-acre estuary located at the south end of Bainbridge Island near Lynwood Center.

WSDOT has now met the ROD requirements for habitat mitigation.

#### **Continuing Monitoring**

WSDOT and EPA will continue to closely monitor the groundwater, surface water, and capping elements related to the cleanup actions. The monitoring requirements are specified in the existing site operations, maintenance, and monitoring plan. Any issues that are identified by those monitoring efforts will continue to be addressed in accordance with the provisions of the ROD and its amendment.

#### For More Information

#### **Technical Information:**

Mary Jane Nearman, EPA Region 10 Project Manager 206-553-6642

#### **General Information:**

Jeanne O'Dell, EPA Community Involvement Coordinator 206-553-6919 or toll-free at 1-800-424-4372

#### **EPA Web Site:**

http://yosemite.epa.gov/R10/CLEANUP.NSF /sites/wyckoff

**Documents:** The Administrative Record is a file that contains all information used by EPA to make decisions on the cleanup actions. The Administrative Record can be reviewed at:

EPA Region 10 Superfund Records Center 1200 Sixth Avenue, ECL-076 Seattle, WA 98101 206-553-4494 or toll-free at 1-800-424-4372 Please call for an appointment.

Select documents can be viewed at the Information Repository located at:

Bainbridge Island Public Library

1270 Madison Avenue North If the library does not have the document you need, feel free to call Jeanne O'Dell, EPA Community Involvement Coordinator, at (206) 553-6919.

To request reasonable accommodations:

For people with disabilities: call Jeanne O'Dell at the number above.

For TTY users: call 1-800-877-8339 and give the operator Jeanne O'Dell's phone number.

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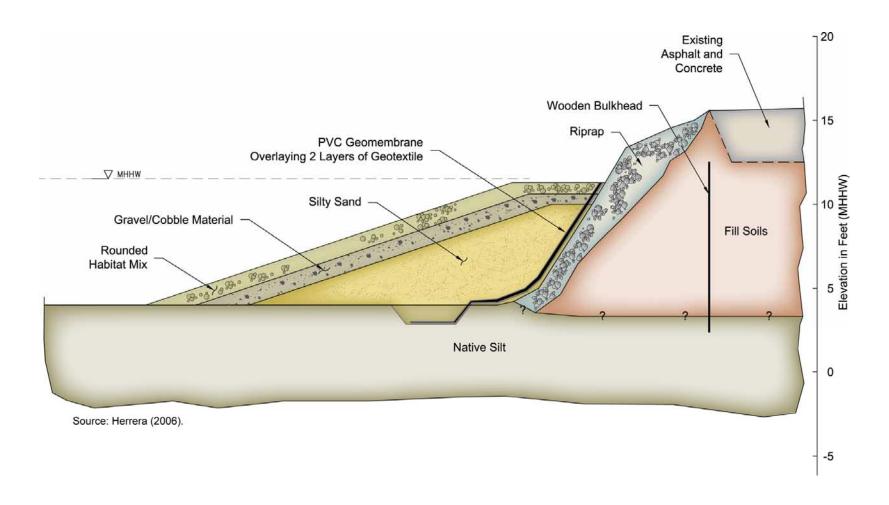


FIGURE 1 Tidal Barrier