

WYCKOFF-EAGLE HARBOR SUPERFUND SITE

Five-Year Review Public Meeting
August 16, 2007 6:30 – 8:30
Bainbridge Island Commons



US Army Corps
of Engineers®



Agenda

6:30 – 7:15

Overview of 5-year review process and status of cleanup in four operable units (MJ Nearman, EPA)

7:15 – 7:30

Agency for Toxic Substances Disease Registry Health Consultation (Richard Kauffman, ATSDR)

7:30 – 8:30

Questions and Open Discussion

Overview of Five-Year Review Process

- **Review required by Superfund law when contamination is left in place.**
- **Evaluates implementation and performance of a remedy to determine if remedy is or will be protective of human health and the environment.**
- **Last five-year review conducted in 2002.**

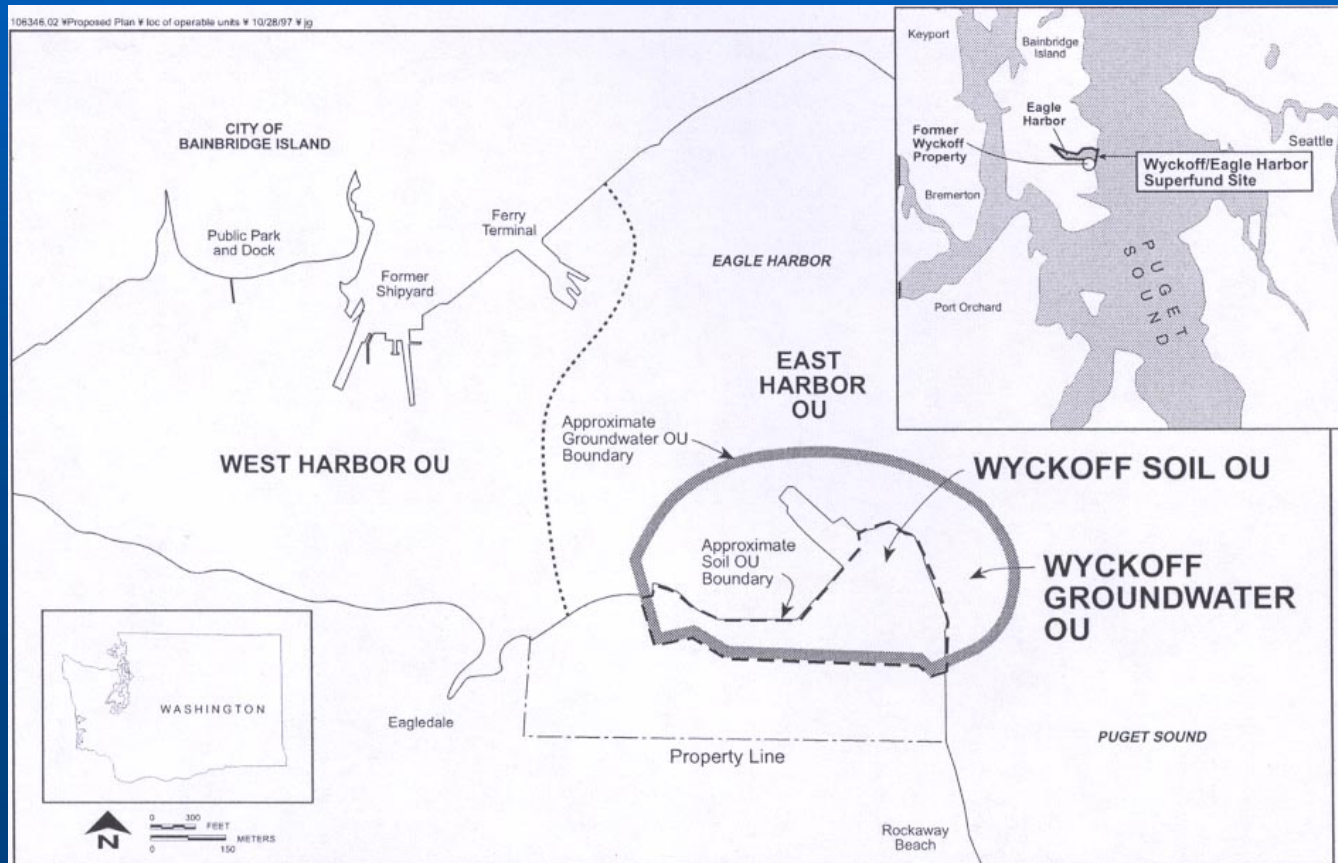
Superfund Listing

- **March 1984, the National Oceanic and Atmospheric Administration notified the EPA of finding tumors on fish in Eagle Harbor**
- **In 1985, a public health advisory was issued on shellfish and fishing in the harbor**
- **July 1987, the site was added to the National Priorities List by the EPA**

Operable Units

- **Four major areas or operable units (OUs) at Wyckoff/Eagle Harbor site:**
 - **West Harbor (currently ferry maintenance facility)**
 - **Eagle Harbor**
 - **Soil at Wyckoff facility**
 - **Groundwater at Wyckoff facility**

Operable Unit Location Map



West Harbor Operable Unit

West Harbor OU Background

- **Contamination primarily result of historic shipyard activities, not from ferry maintenance operations**
- **Contaminants include polycyclic aromatic hydrocarbons (PAHs) and metals (mercury, zinc, and copper) in marine sediments and upland soils**

Components of West Harbor OU cleanup

- **Record of Decision September 1992, amended in December 1995**
- **Capping of contaminated harbor sediments**
- **Construction of confined disposal facility (CDF) to contain upland soils**
- **Construction of tidal barrier between CDF and adjacent estuary**
- **Institutional controls to protect remedy**
- **Monitoring of cap, groundwater and seeps**

Construction of Additional Tidal Barrier

- Intermittent seeps within tidal barrier exceeded state regulatory standards for copper and zinc.
- WSDOT constructed additional tidal barrier in 2006.
- Monitoring now indicates seeps meet regulatory standards. No further cleanup actions needed.



Aerial Photographs



1984



1996



2000







Marine Cap





Current View



Eagle Harbor Operable Unit

East Harbor Subtidal/Intertidal Cap

- **Monitoring of cap (bathymetry and through-cap coring) occurred in 2002 and 2003.**
- **Intertidal and subtidal caps are physically stable. Caps are effectively isolating underlying contaminated sediments**
- **Placement of additional cap on West Beach anticipated in October 2007**

North Shoal and East Beach

- **Residual contamination (PAHs) remain outside the sheet pile wall on the north shoal and east beach.**
- **These areas are posted to restrict human access.**
- **ATSDR will review potential human health risks to public in health consultation.**

West Beach Cleanup

Summary of Results

- **Summer 2005, EPA received reports from beach users about odors on West Beach.**
- **Soil and sediment sampling conducted in spring 2006.**
- **Areas of PAH contamination and oily sheen identified.**
- **Exposure Barrier System to be placed in October 2007 to prevent human contact and protect marine waters.**





Eagle Harbor

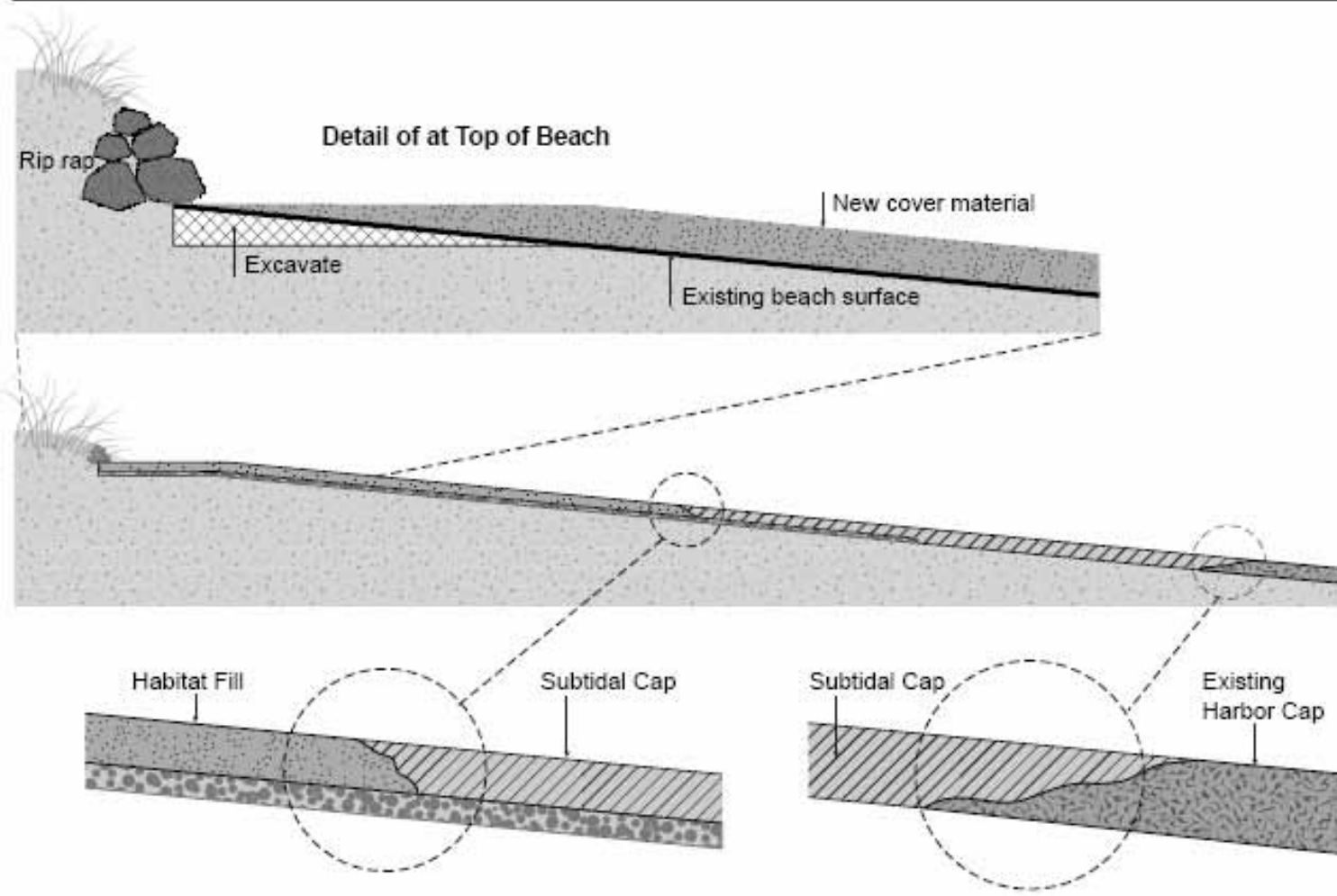
A

Visibly Contaminated
Surface Materials

Area 1B

Area 1A



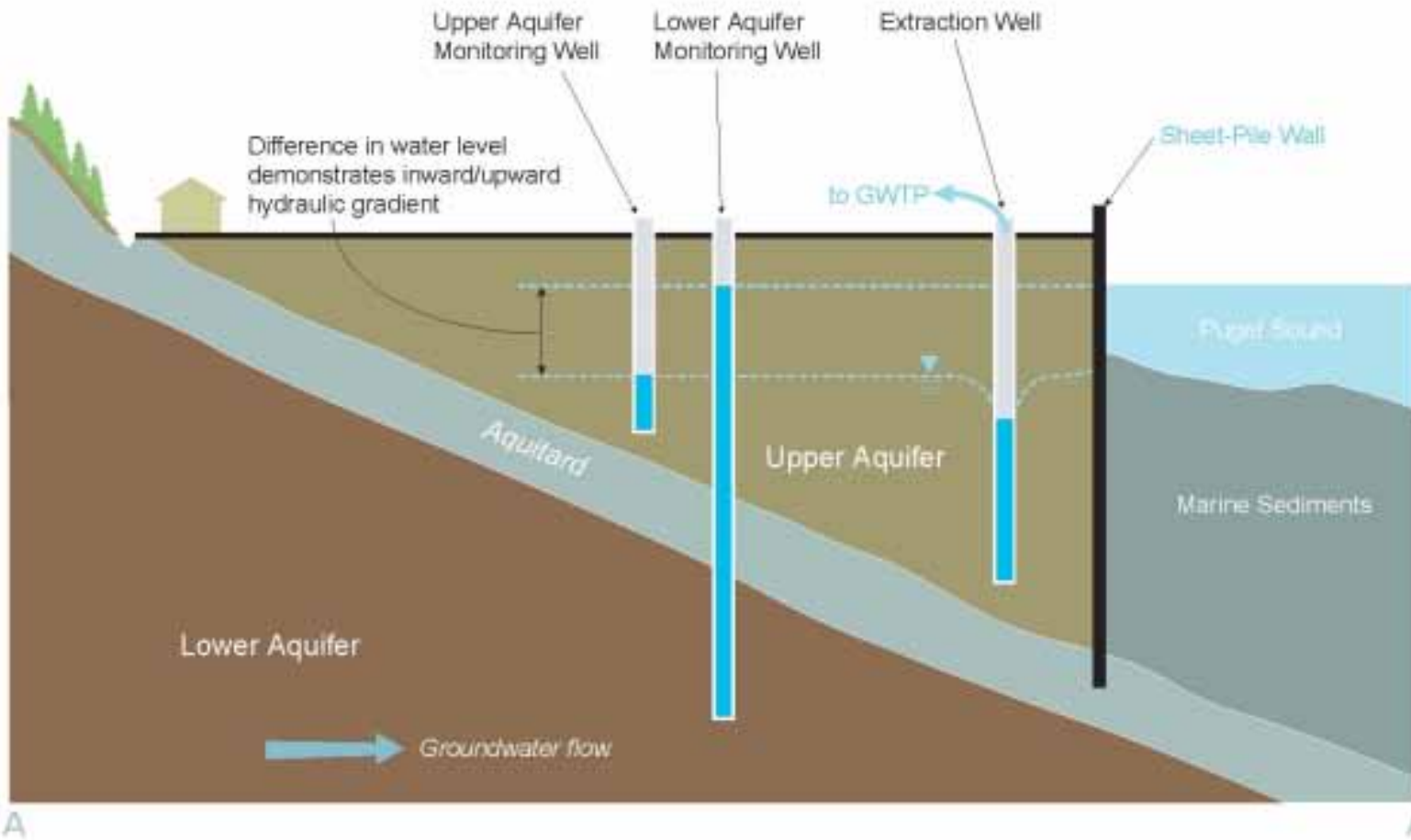


Soil and Groundwater Operable Units

(Former Process Area or the “Point”)



Current Conditions: Hydraulic Containment



Replacement Groundwater Treatment Plant

- Existing treatment plant has been in operation for 15 years and is in need of replacement.
- U.S. Army Corps of Engineers awarded contract to ECC construction firm. Construction expected to be complete in spring 2008.
- New plant to be located in large green boiler building with new storage tank farm located to south of building.

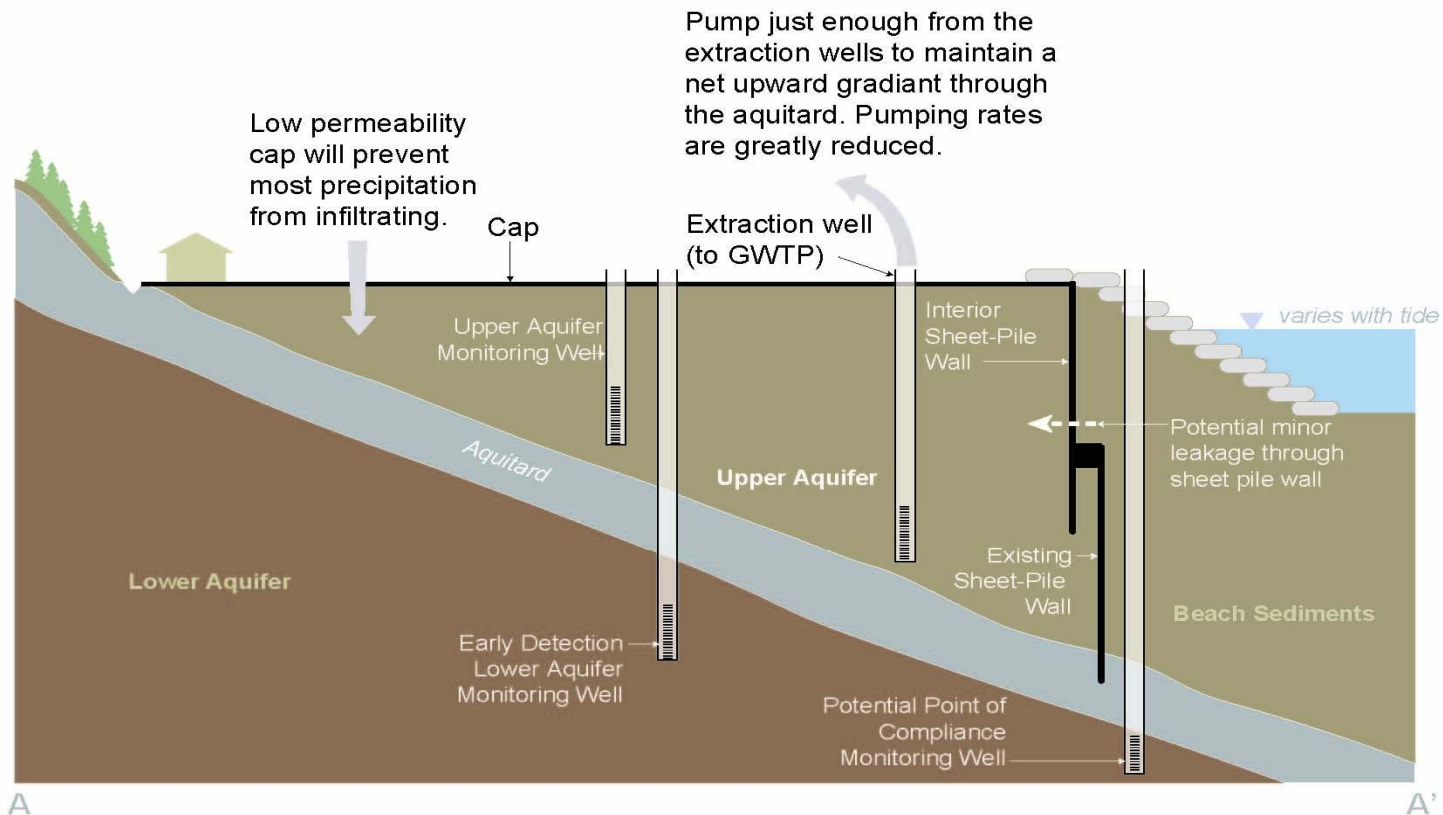
2000 Record of Decision

- Selected thermal treatment pilot to remove wood-treating wastes;
- Selected containment as contingency remedy in event thermal treatment could not meet cleanup objectives;
- State of WA and Suquamish tribe concurred with 2000 ROD;
- City of Bainbridge Island, as new property owner, increasing invested in decisions.

Results of Thermal Treatment Pilot

- **Conducted in 2002/2003;**
- **Will achieve some mass contaminant removal but will not achieve ROD goals for cleanup (i.e., will not result in “walk away” remedy);**
- **WA state regulatory standard for soil, groundwater, and sediments will not be achieved by thermal treatment.**

Summary of Containment Remedy Components



Path Forward for the “Point”

- **Any remedy implemented must be protective of human health and the environment and comply with environmental regulations.**
- **EPA is continuing discussions with Suquamish Tribe, WA Department of Ecology, the City of Bainbridge Island, and other federal and state regulatory agencies.**

Next Steps

Five-Year Review

- **Draft report will be reviewed by regulatory agencies.**
- **Final five-year review to be signed by September 2007.**
- **Final report will identified outstanding issues and plan for resolution of these issues.**

Questions and Discussion