Status of Investigation/Cleanup Activities – Willamette Cove

Presentation to EPA Region 10

January 2015

DEQ
State of Oregon
Department of
Environmental
Quality

Current Considerations:

- Status of upland work
- Relationship to current parties undertaking the work (Port/Metro)
- Community concerns
- Environmental justice considerations
- Restoration and community access goals and expectations

Overview

- 27-acre site with ~3000 feet of Willamette River shoreline. Located immediately downstream of M&B Superfund site. Approximately RM 6.8E.

- Currently owned by Metro, a regional governmental agency for Portland area. The Port of Portland (who currently funds most of the investigation) owned the central parcel until the 1953, however a myriad of other operators also were present, including the US, Portland Development Commission, and Simpson Lumber.

- Site had substantial upland and overwater use from early 1900s to 1970s. On-land and over-water activity including lumber mills and ship repair (dry dock in Cove).

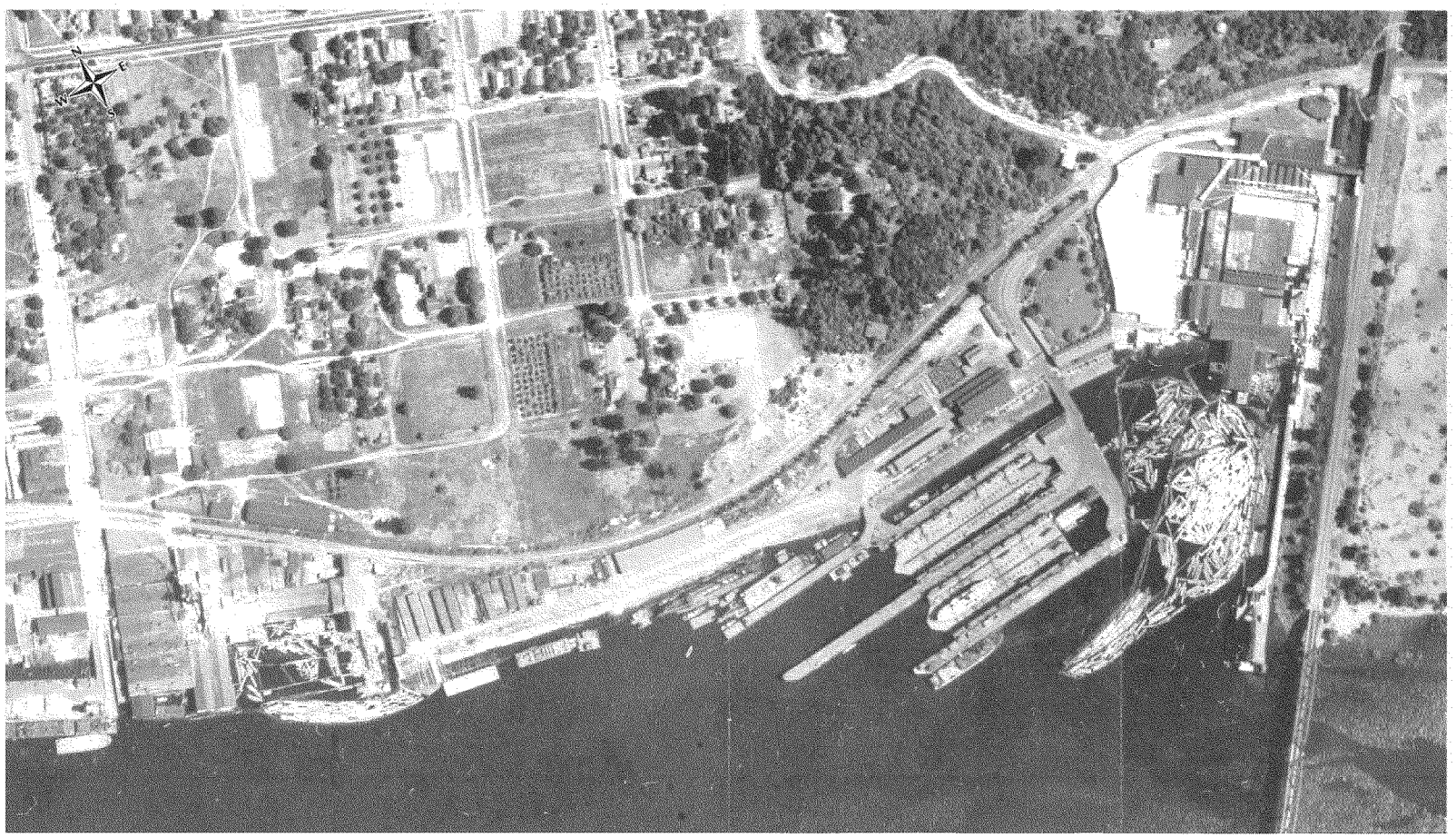
- Currently vacant and access limited. Significant upland habitat and limited trespasser use.

Site Layout

Willamette Cove
East Parcel
McCormick & Baxter Creosote Company Superfund Site
Willamette Cove
Central Parcel
West Parcel
BNSF RR Bridge
Willamette River
Legend
City Outfall OF-49 (LWG, 2008)
AOPC 13 (LWG, 2011)
Willamette Cove Upland Facility Boundary
McCormick and Baxter Cap
Navigation Channel (ACOE, 2005)
Rivermile
Note: Aerial Photography - 2011
0 250 500
Feet
PORT OF PORTLAND
WILLAMETTE COVE
FIGURE 1
WILLAMETTE COVE AND VICINITY
DATE: DEC 27, 2014
BY: DLL
FOR: MDL
FORMATION ENVIRONMENTAL

Historical 1925

Historical 1939



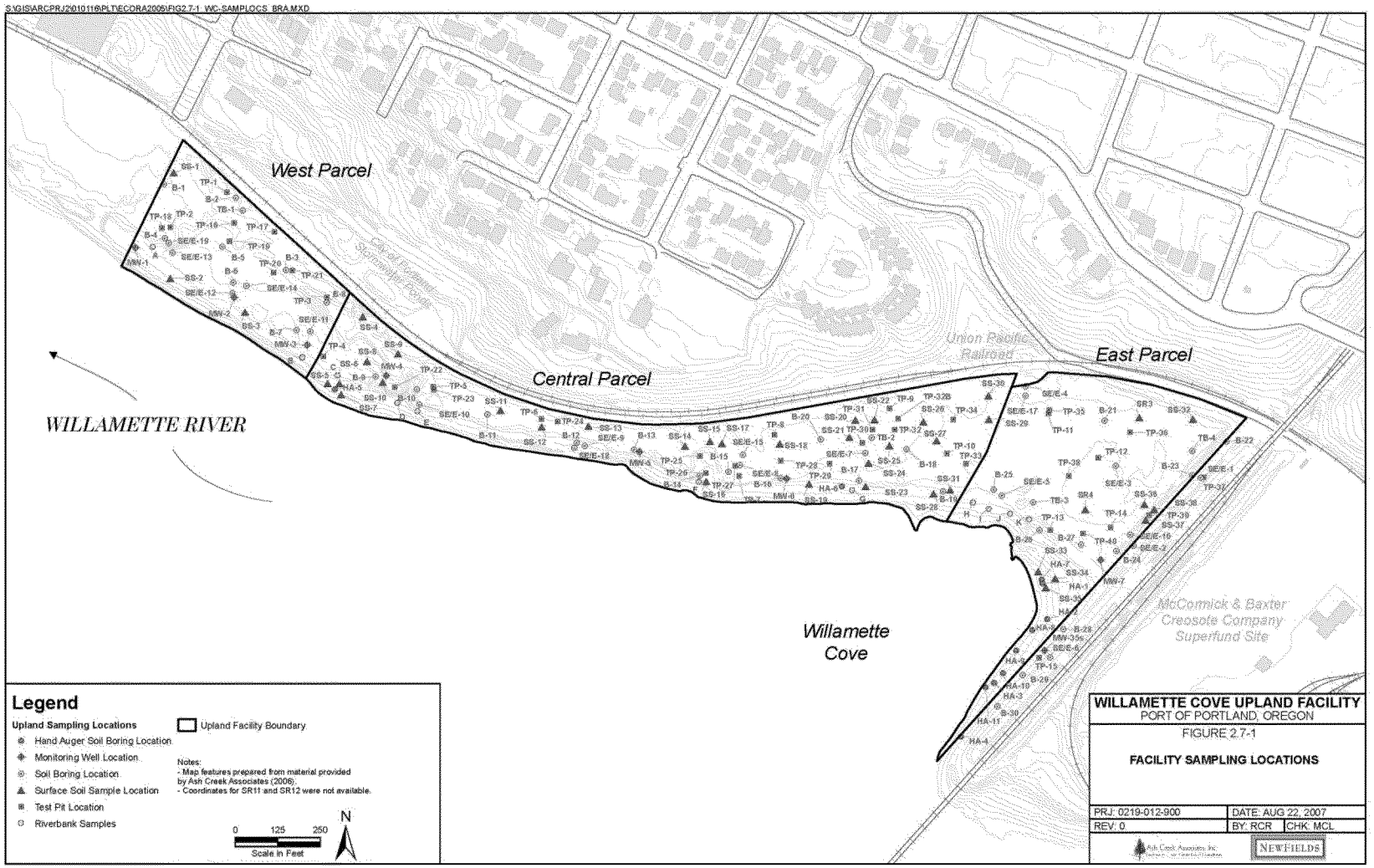
1939 Aerial Photograph

Current

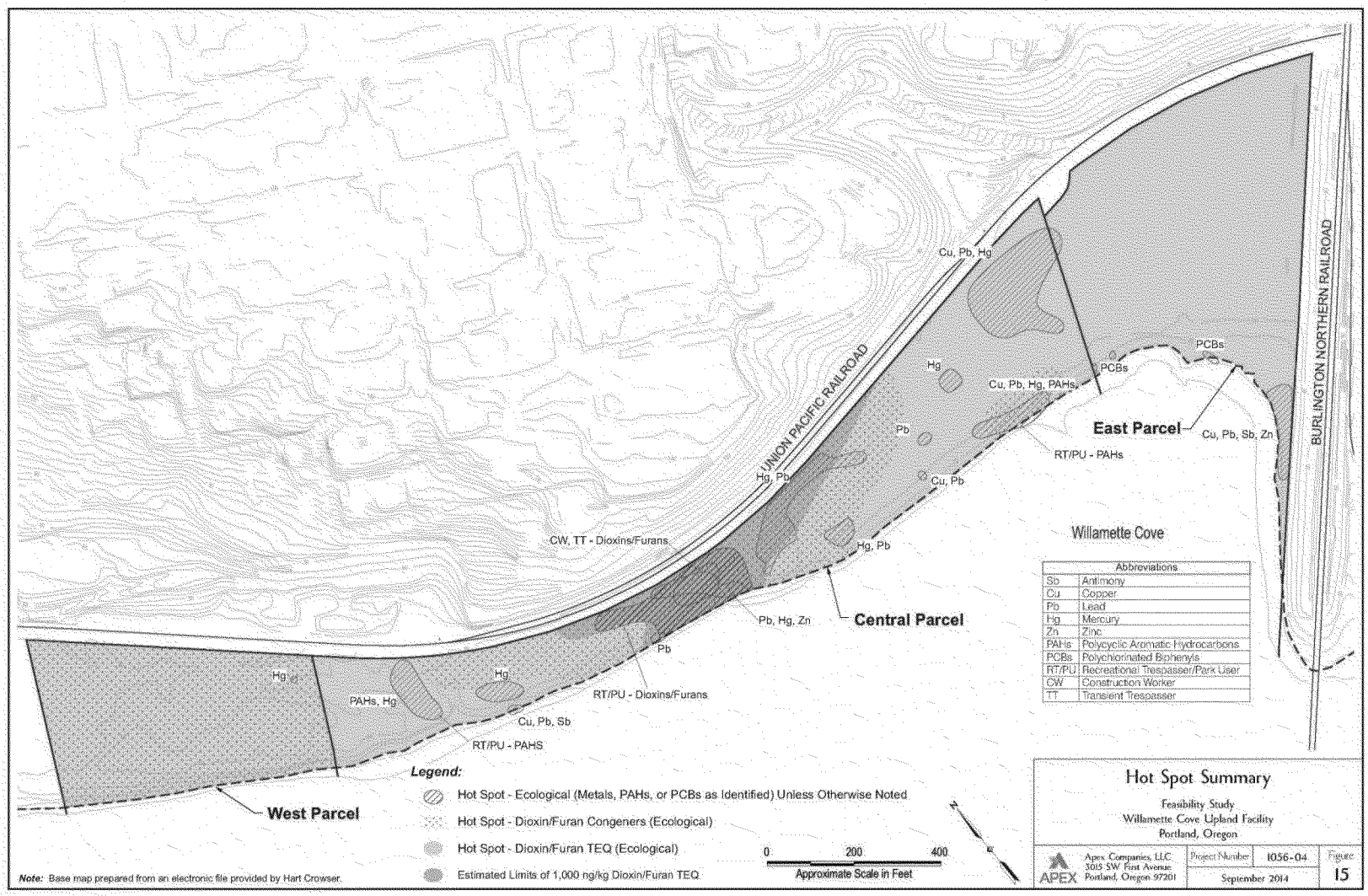
Upland

- Environmental investigation 1990s to Present.
- Dioxin/furans and metals elevated in most of upland, with localized PCB impacts. High levels of dioxins (>200 ug/kg TEQ) in central parcel.
- Human and ecological risk assessments approved by DEQ; revised upland FS currently under review.
- Limited upland removal scheduled for March 2015. Upland remedy selection/SCD expected later in 2015 via DEQ ROD.

Upland Investigation



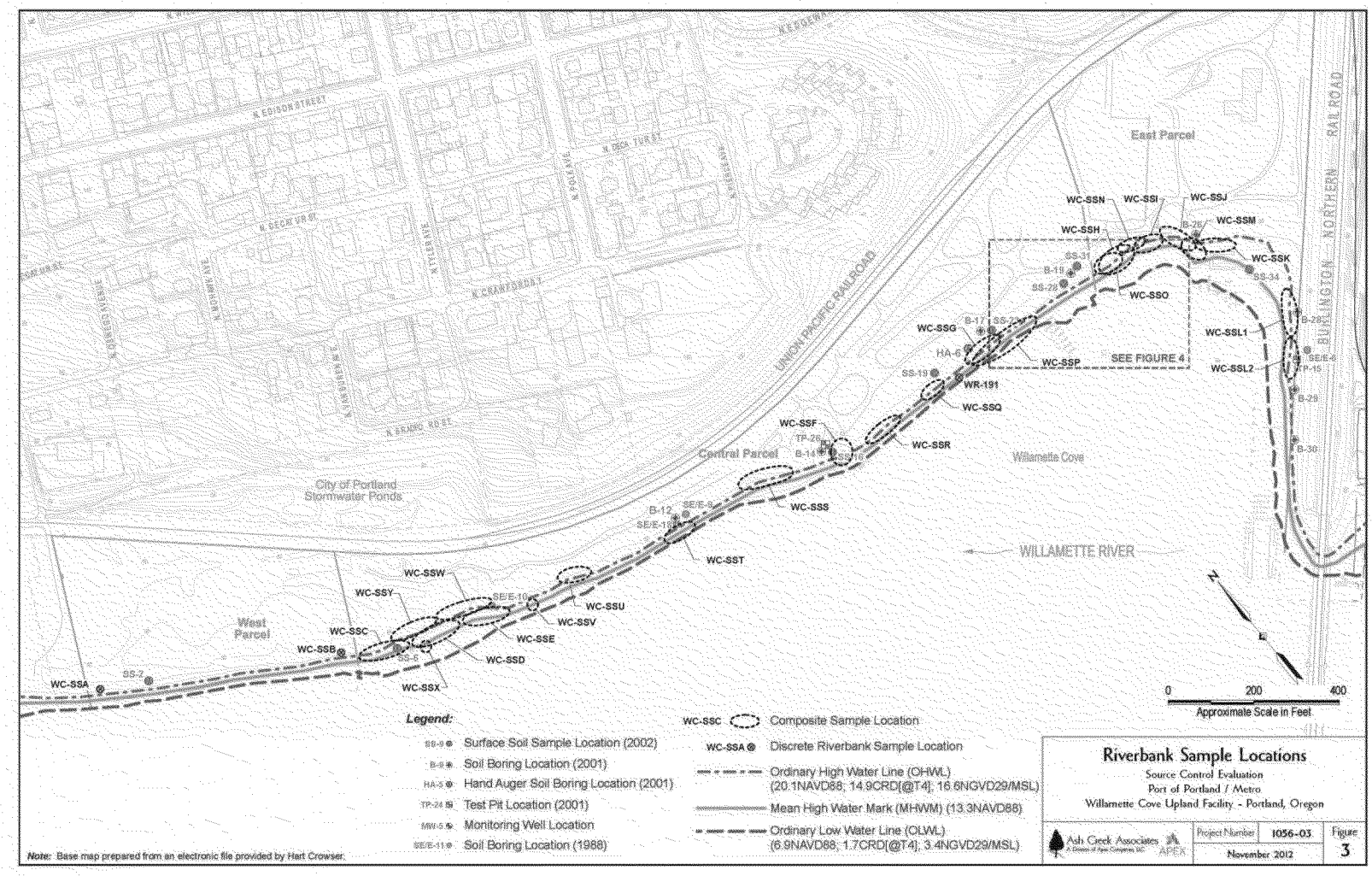
Upland Hot Spots



Riverbank

- Limited environmental investigation of bankline, in part due to bankline armoring in some areas of site. However, characterization sufficient for upland remedy selection
- Focus to date on inner cove and wharf road areas, where intensive (historical) bankline and over-water activity occurred.
- Elevated dioxins, PCBs, metals, and petroleum detected in riverbank soil. Most notable contamination in central to south riverbank below MHW.

Bankline Sampling



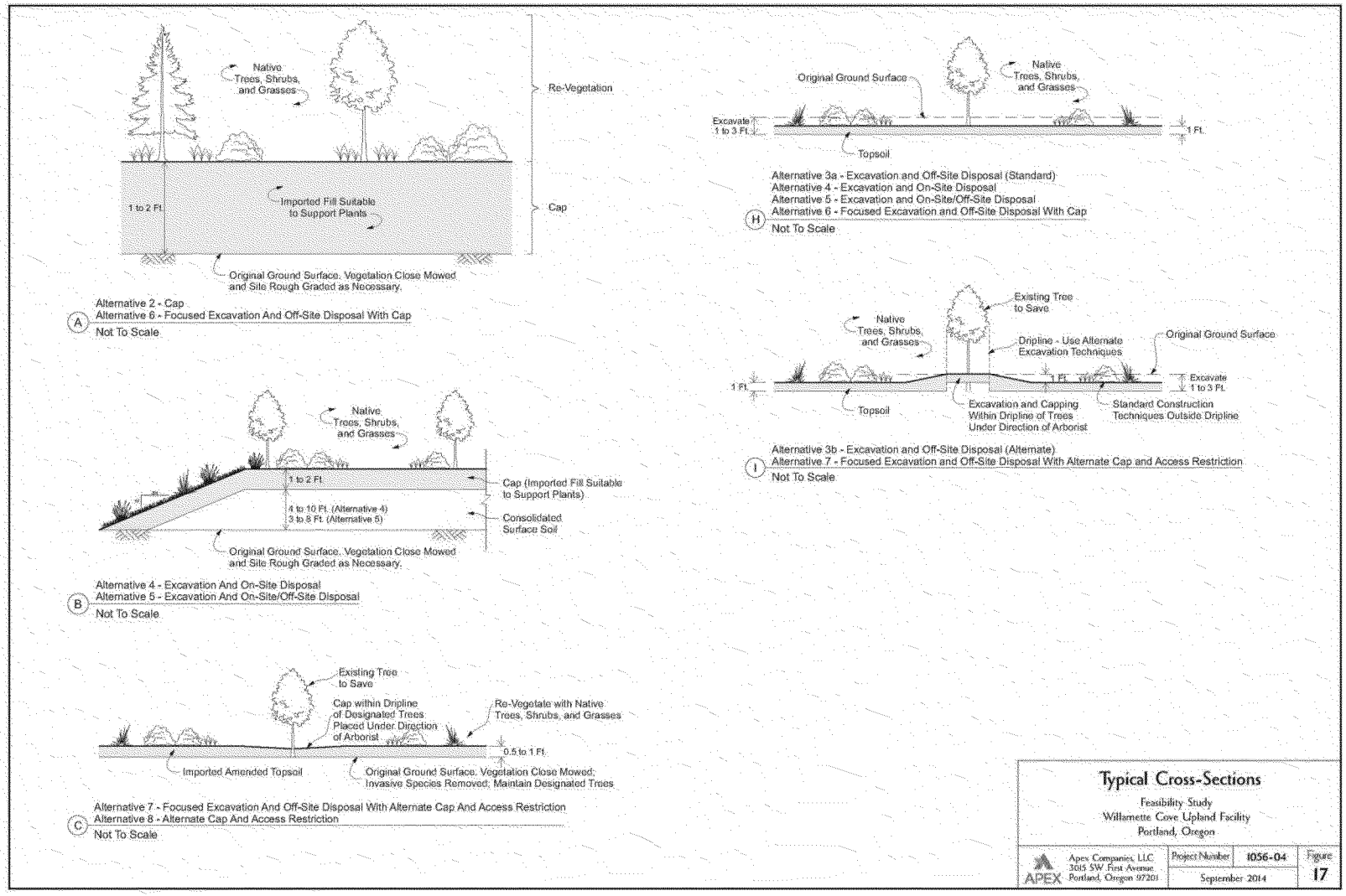
Source Control

- No active on-site storm drains, limited overland flow potential due to infiltration.
- Modest upland impacts to groundwater.
- Portions of bankline above MHW erodible and source control concern.
- Upland source control concerns to be addressed in combination with the final FS report.

Upland Remedy

- Initial Proposed upland remedy (above MHW):
  - layback of entire bankline as part of restoration, generally at 3:1 slope.
  - removal of upland and riverbank hot spots as practicable.
  - capping of upland and riverbank.
  - preservation of mature trees (White Oak and Madrone) and potential amended thin-cap option for selected upland areas. Limited human access and eco restoration envisioned.
  - remedy to be designed for unimpeded in-water work.

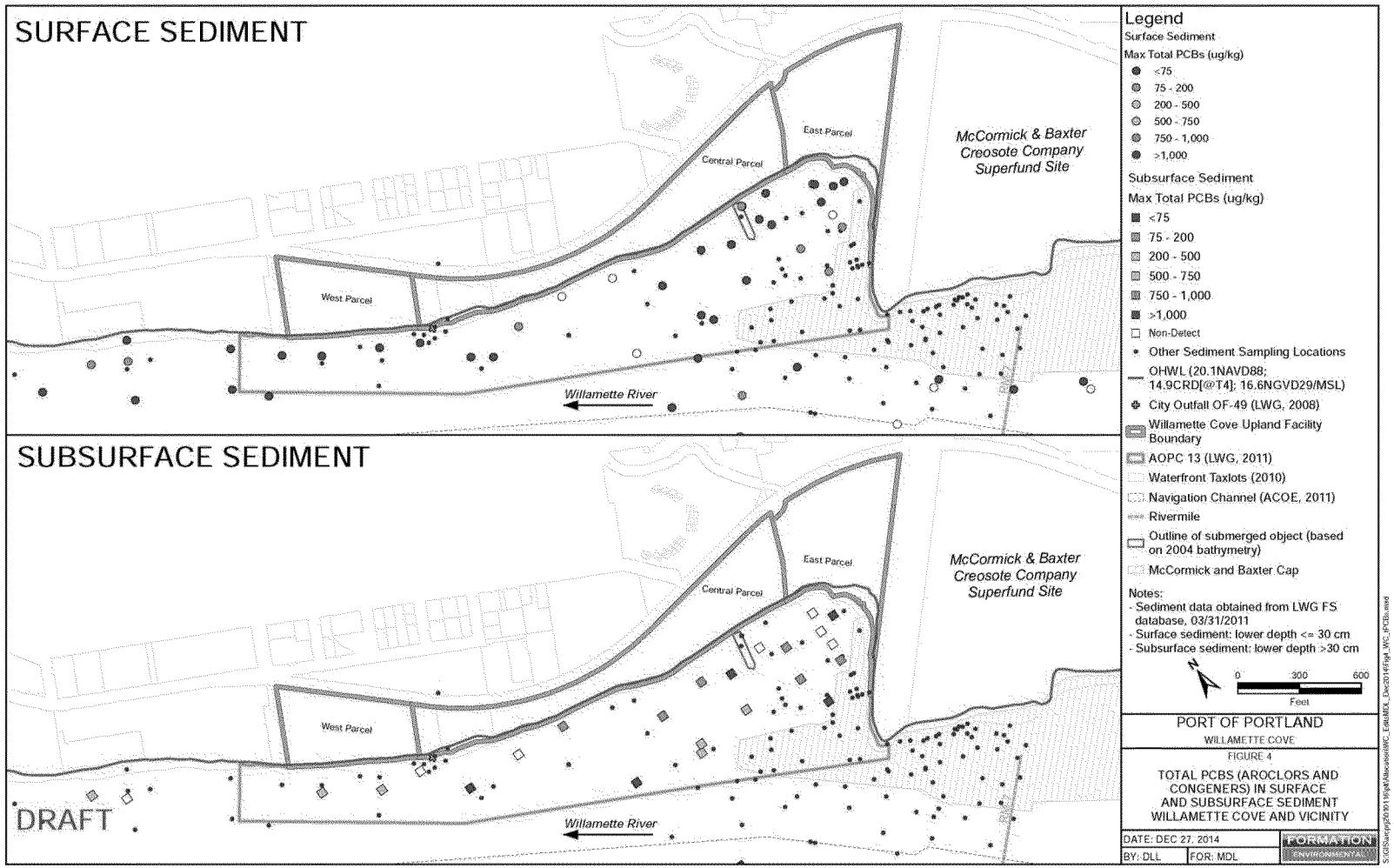
Upland Preliminary Design



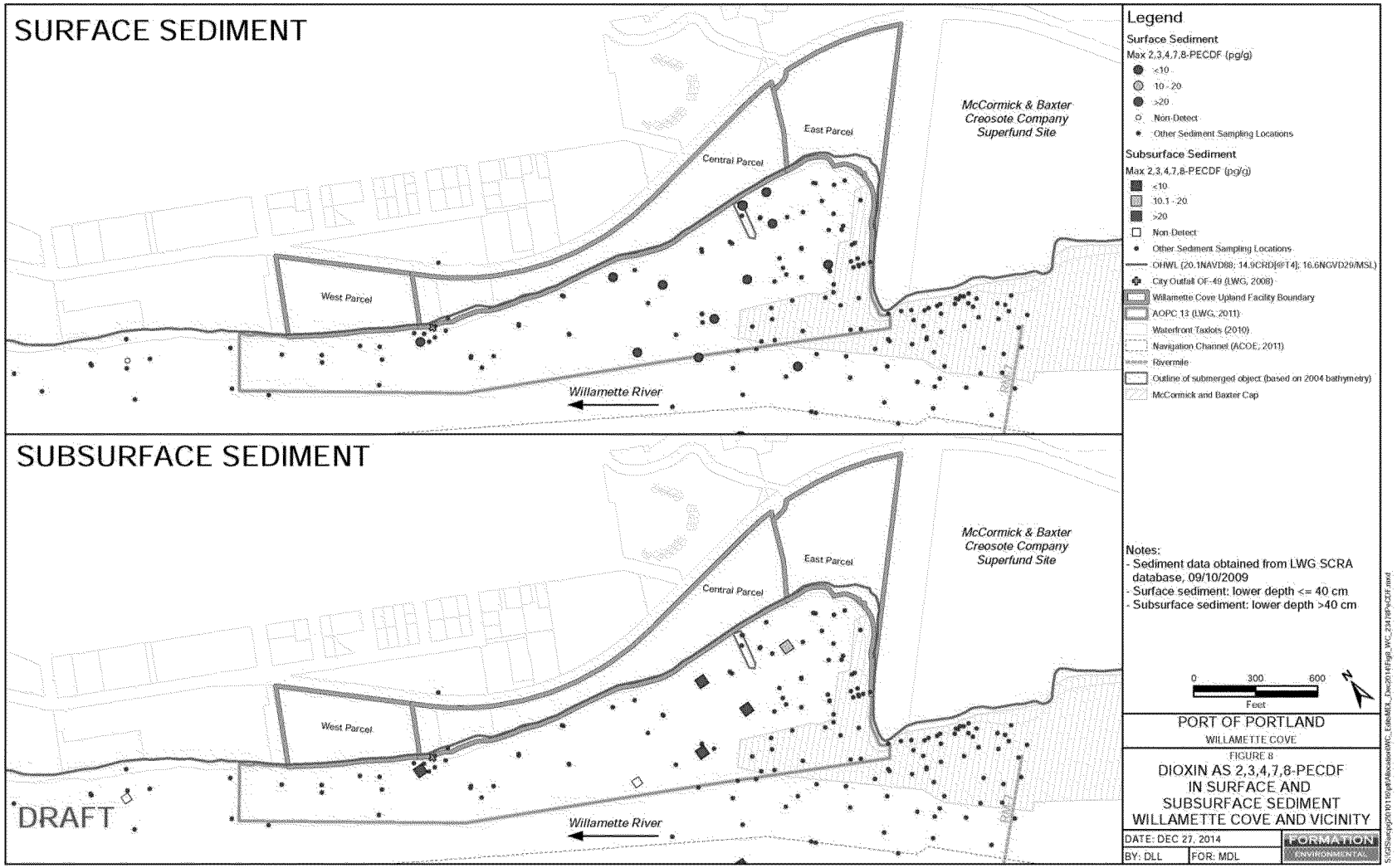
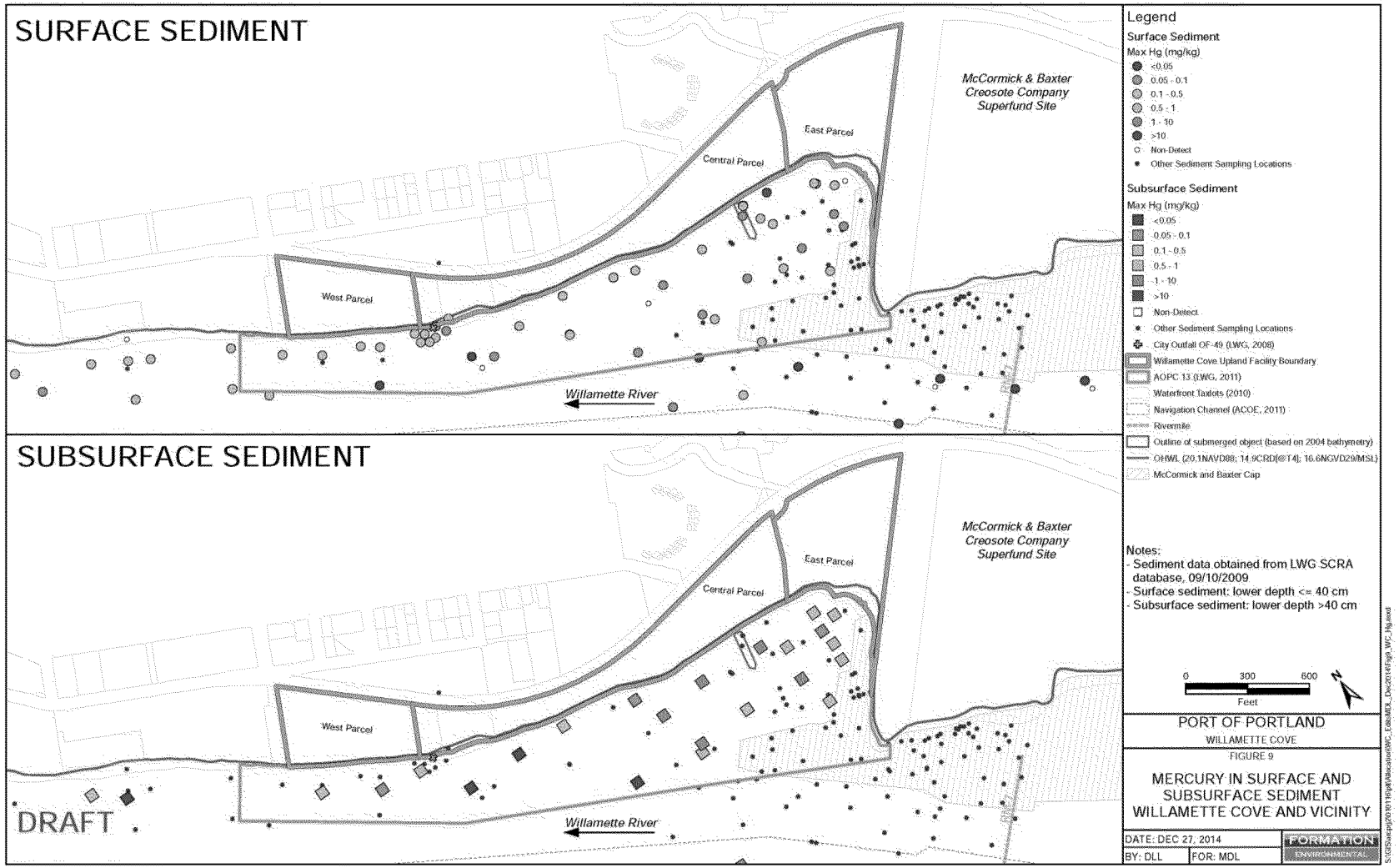
In-Water

- Elevated PCBs, metals, and dioxins in sediment and selected shoreline areas.
- Data collection needs for final design of remedy include inner cove and shoreline adjacent to former dry dock areas.
- Shallow water area- generally lower current velocity.
- In cove area, significant debris likely present in-water, limited navigation use (small boats).
- Cove contamination abuts M&B in-water cap.

Sediment PCBs



Sediment Dioxins



Sediment Mercury