



2019 Annual Meeting

Ashland Superfund Site

*Brian Hinrichs, Client Team Leader
Foth Infrastructure & Environment*



Site Location



SITE LOCATION MAP



COUNTY LOCATION MAP

NOT TO SCALE

Project Team

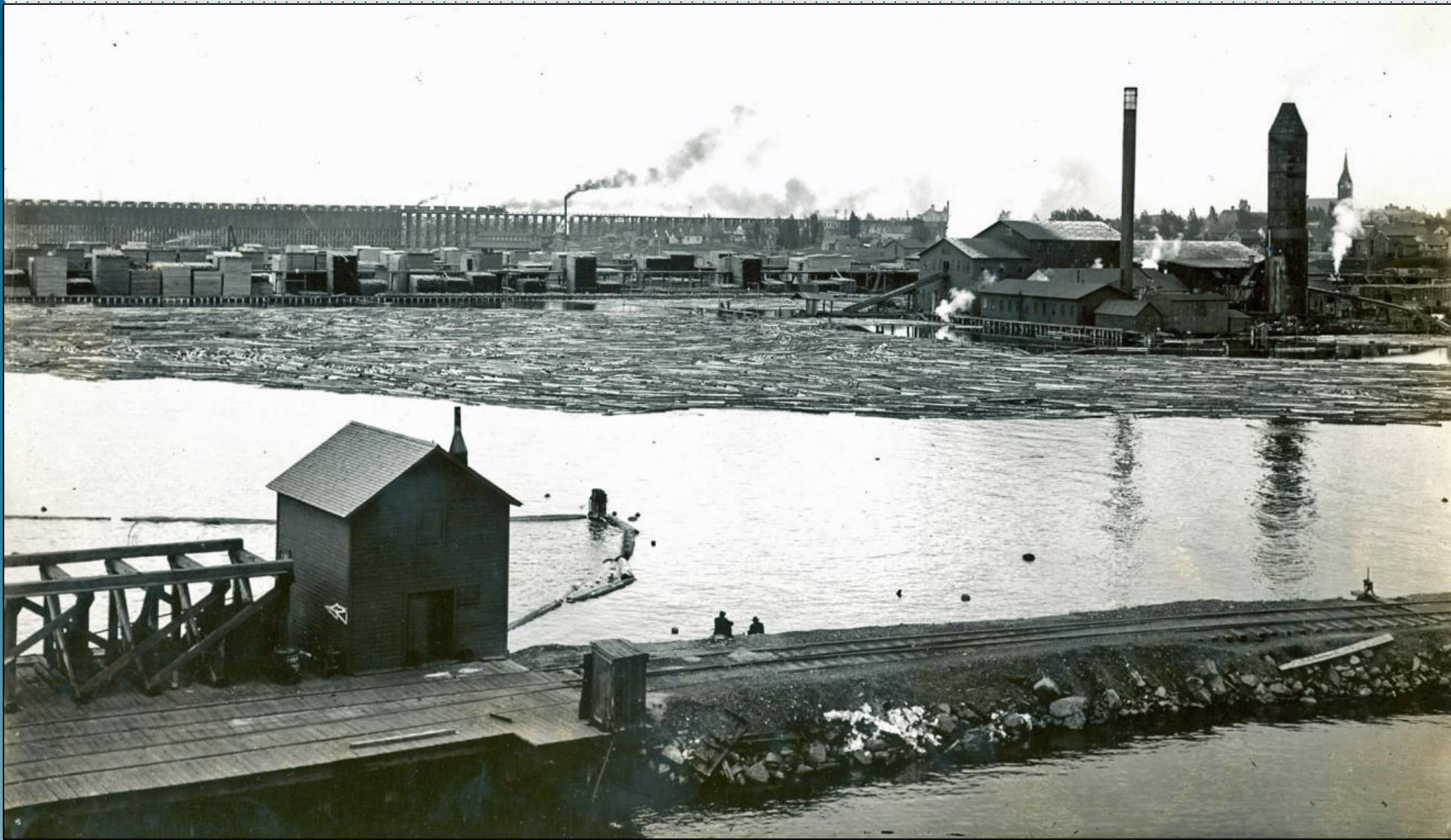
LATHAM & WATKINS LLP

Baird.



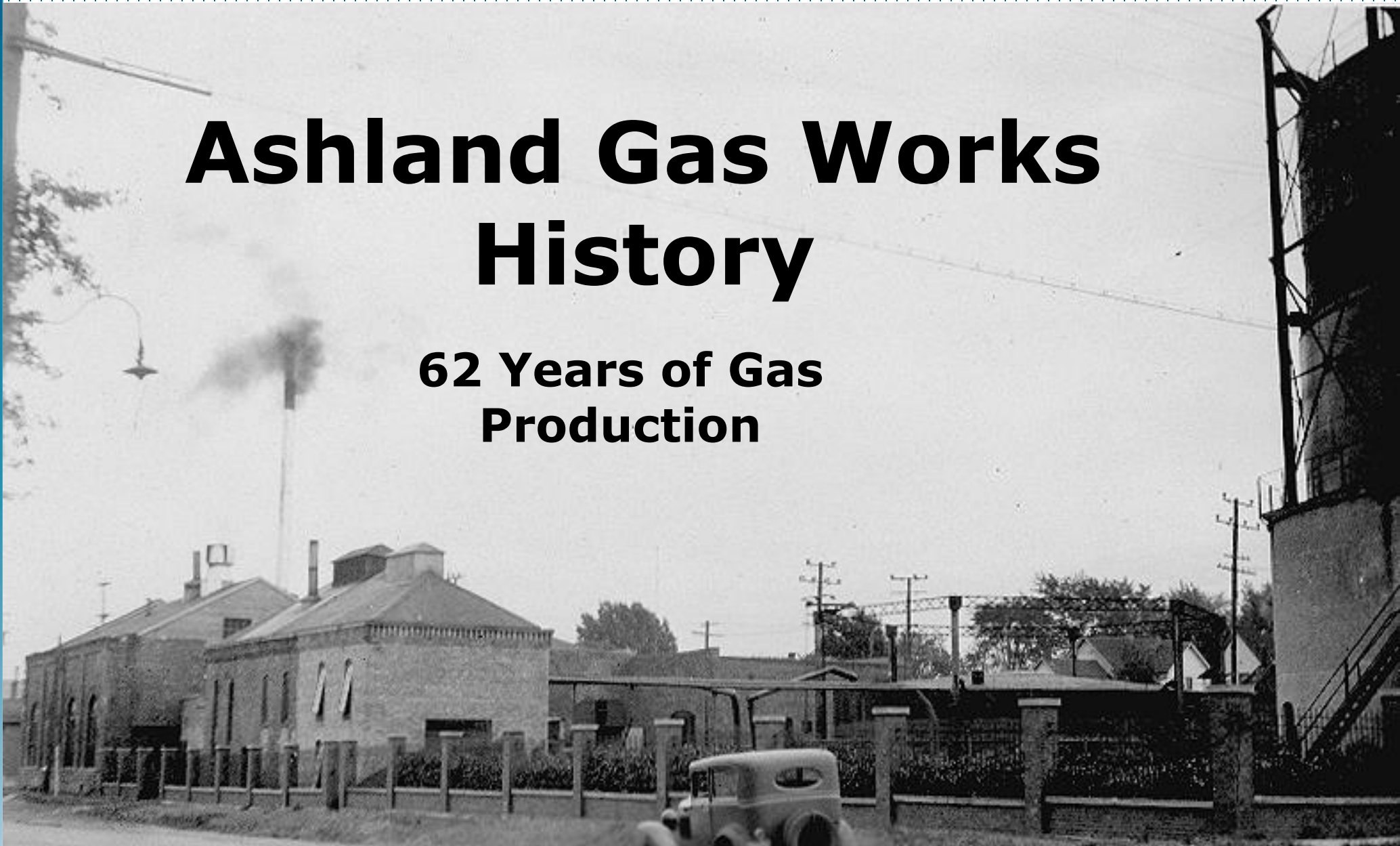
Joint Venture





Ashland Gas Works History

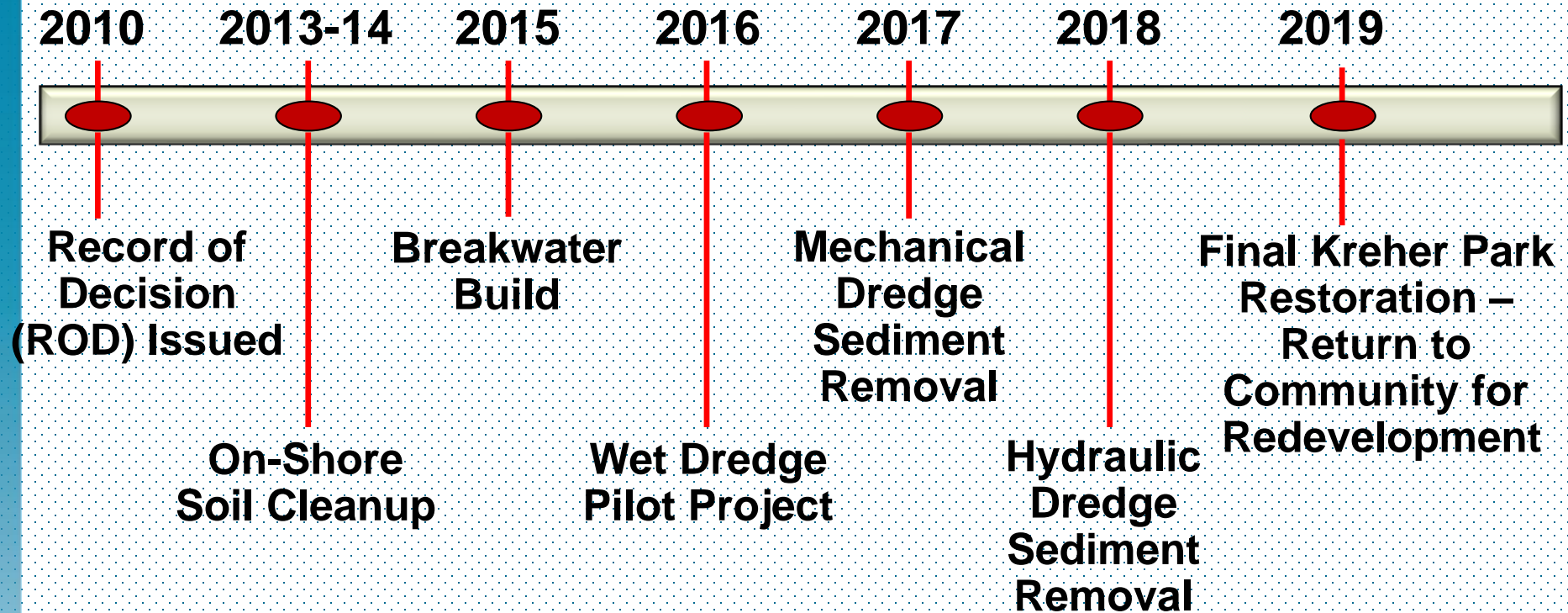
62 Years of Gas
Production



Superfund Project

- ◆ Superfund Program - started 1980
- ◆ Ashland Superfund Record of Decision (ROD) issued September, 2010.
- ◆ The ROD explained which cleanup alternatives to be used at the site.

Project Timeline

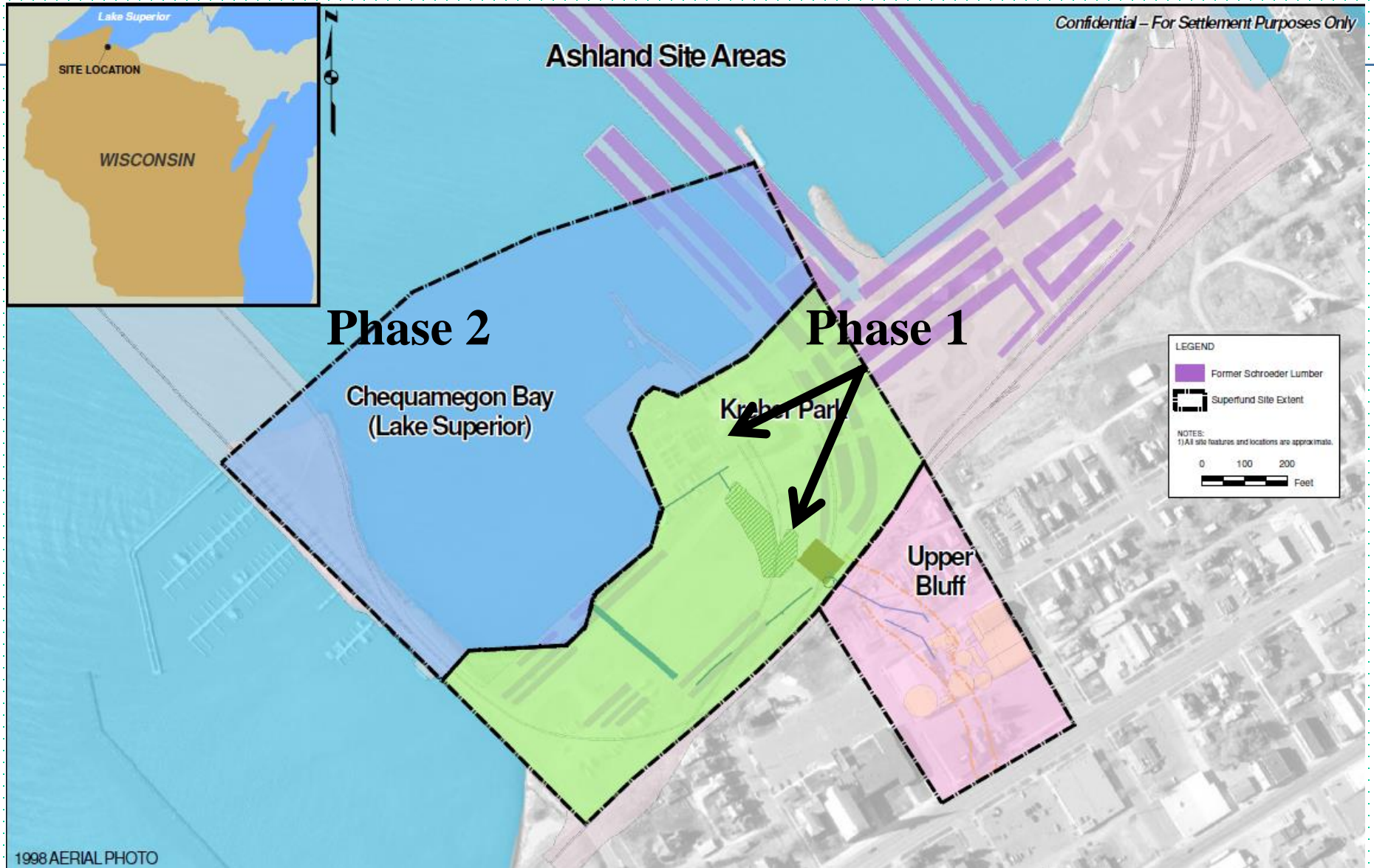


Project Cost

Summary of Work

- ❖ Design/Build Project
 - ▶ Building Demolitions, Slurry Wall,
 - ▶ Bulkhead Wall,
 - ▶ Soil Excavation, Soil Treatment
 - ▶ Groundwater Extraction
 - ▶ Water Treatment Plant
 - ▶ Contaminated Sediment Cleanup

Multi-Year - Two Phases



An aerial photograph of a waterfront area in Ashland, Wisconsin, showing a large-scale construction project. The site is divided into two main phases. Phase 1, on the left, features a large, flat, reddish-brown dirt area with some construction equipment and a partially demolished building. Phase 2, on the right, includes two large white metal buildings, a parking lot, and a paved area. The site is bordered by a body of water on the right and a residential and commercial neighborhood on the left. A marina with many boats is visible in the upper right. A large orange barge is in the water on the right. The text 'Ashland/NSP Lakefront Superfund Site' is overlaid in large white letters at the top. 'Phase 1' is overlaid in white on the left side, and 'Phase 2' is overlaid in white on the right side.

Ashland/NSP Lakefront Superfund Site

Phase 1

Phase 2

Phase 1 Source Control

- ❖ Excavation: 90,000 tons
- ❖ Thermal Desorption: 70,000 tons
- ❖ Offsite Disposal: 20,000 tons
- ❖ Met All Soil Cleanup Standards

05/21/2015 08:07

Soil Excavation and Treatment



Phase 2 Breakwater

❖ Primary Purpose

- ▶ Wave Barrier for 2016 Pilot Project
- ▶ Full-Scale Sediment Remedy Benefits
- ▶ Community Benefits



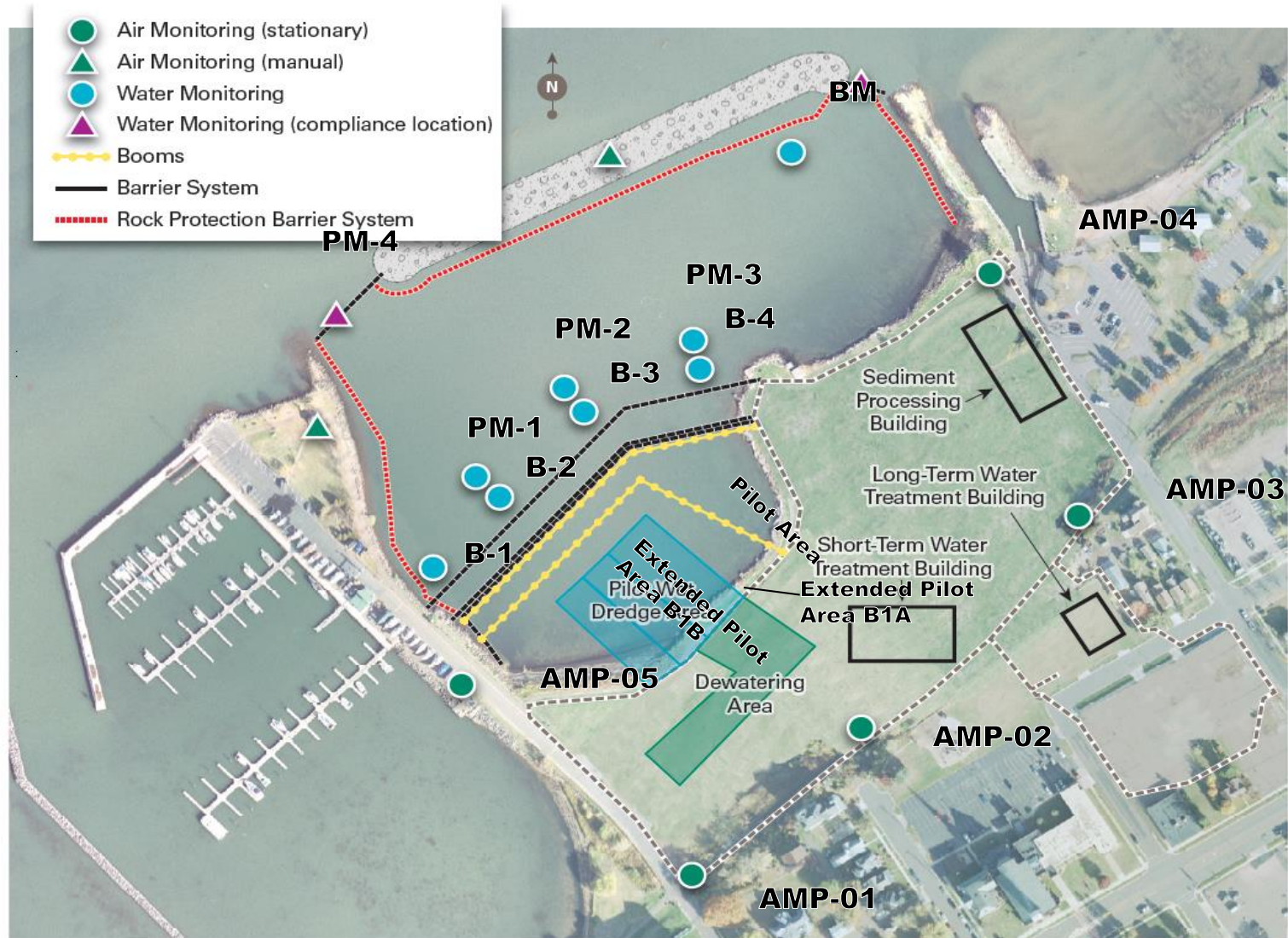
Breakwater Construction





Phase 2 Pilot Project

PM-5



Pilot Project Work

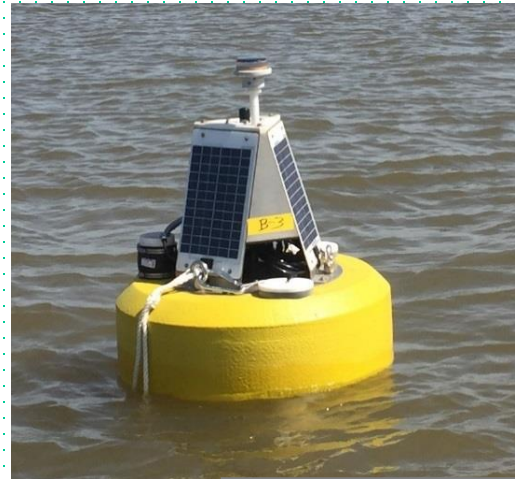
- ❖ 40,000 square foot Pilot Study Dredge Area
- ❖ 8,000 cubic yards Removed
- ❖ 520 Truckloads to Sub-Title D Landfill
- ❖ 4 million gallons Water Treated





Pilot Project Successful!
Move to Full Scale
Phase 2 Dredging

Extensive Monitoring



Water Quality Results

- Over 10,000 samples analyzed
- >99.9% meet water quality standards



Enhanced Technologies

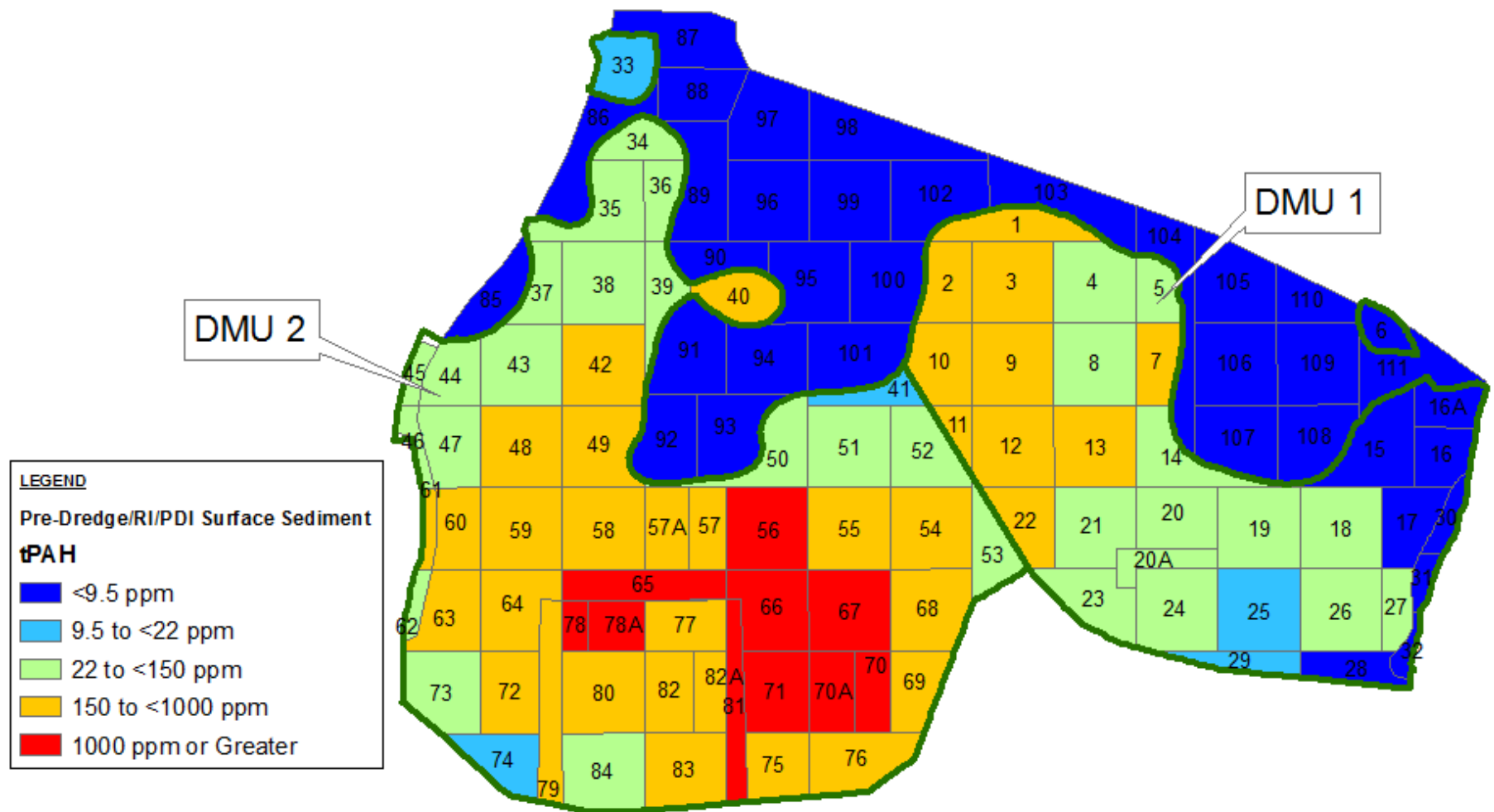


Multiple Barrier Curtain System
to contain work area impacts and protect Lake Superior



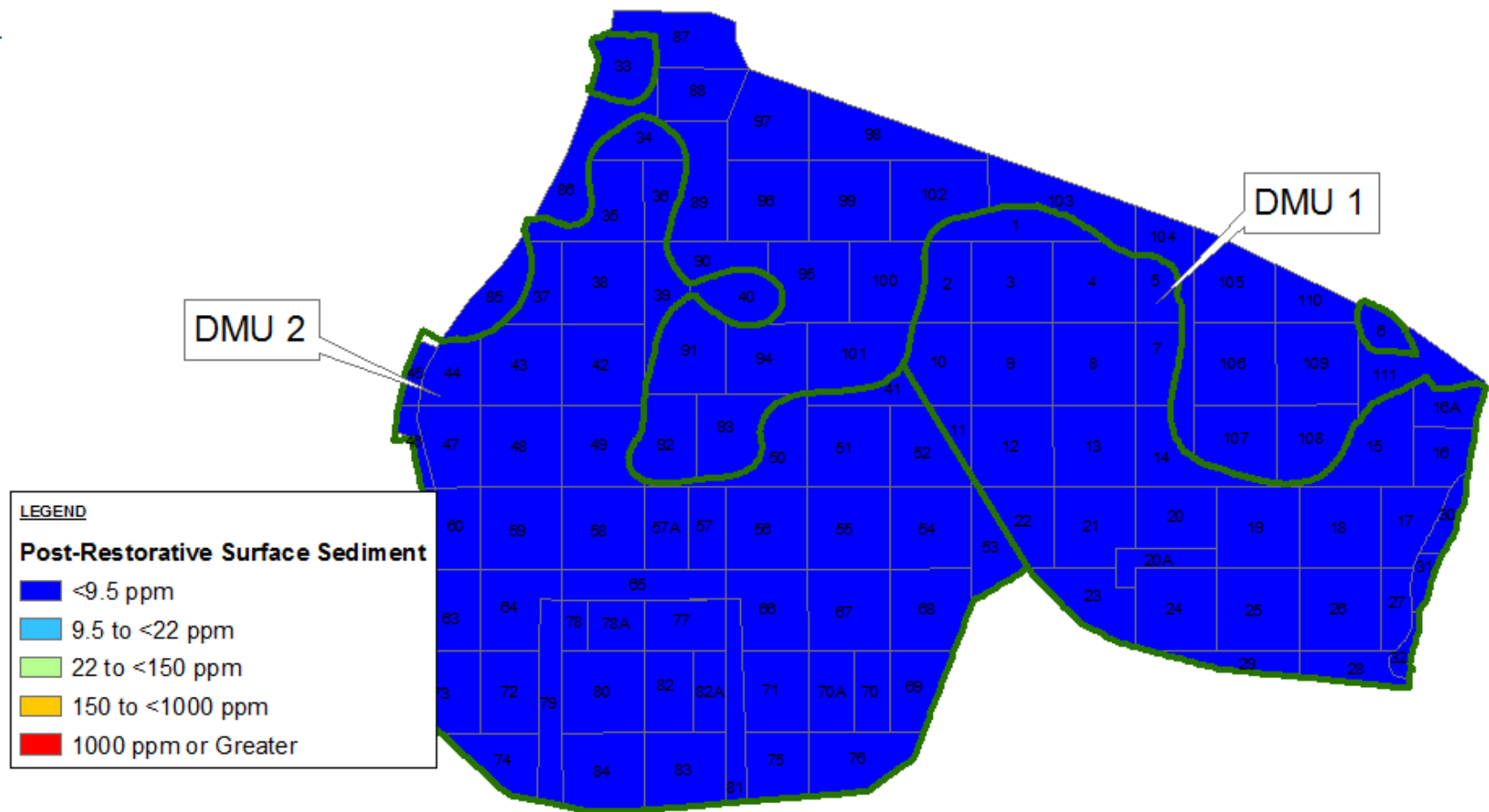
Vapor Phase Odor Control System

Sediment Pre-Project



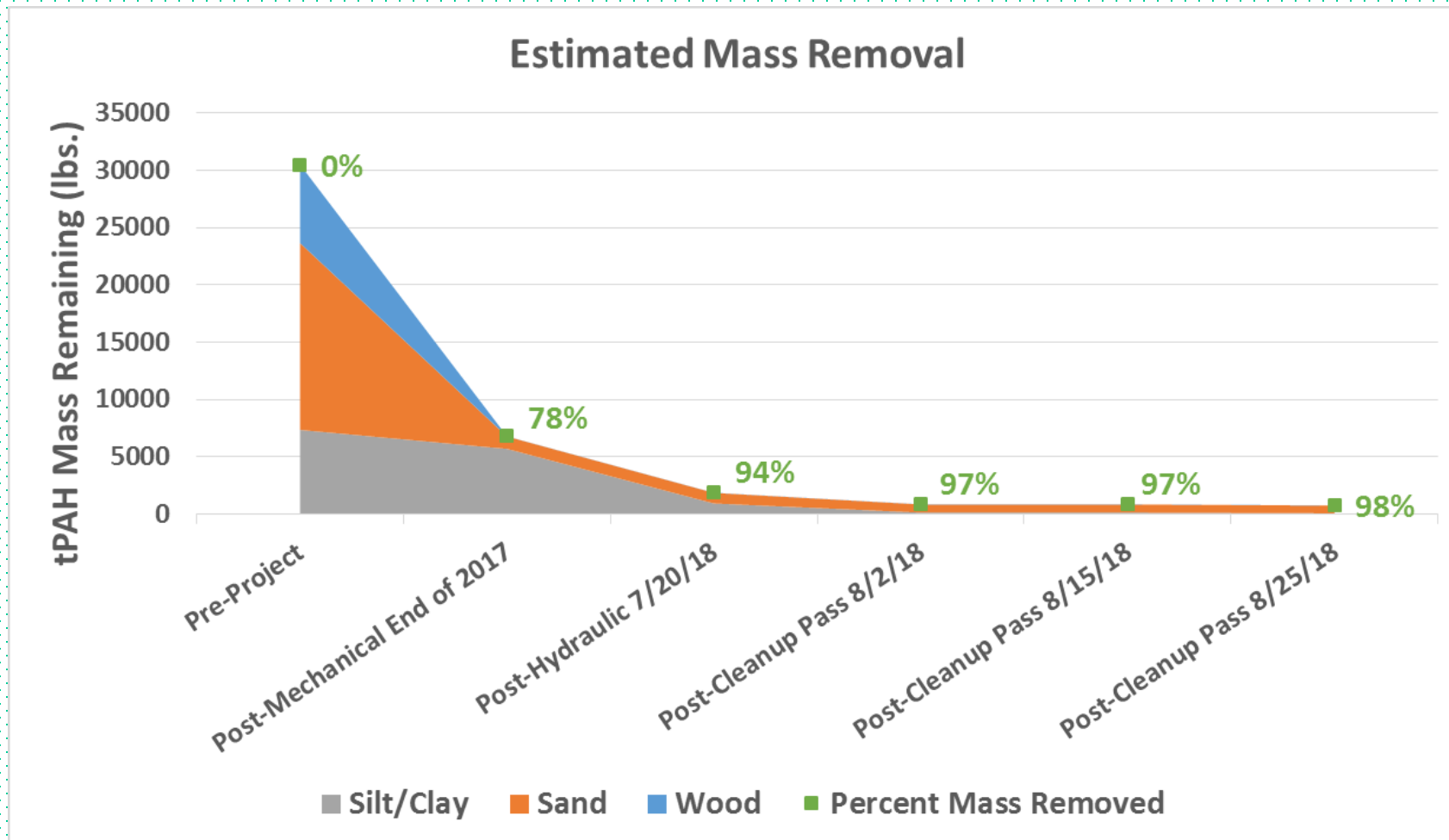
SWAC = 409 ppm

Sediment Post Dredging

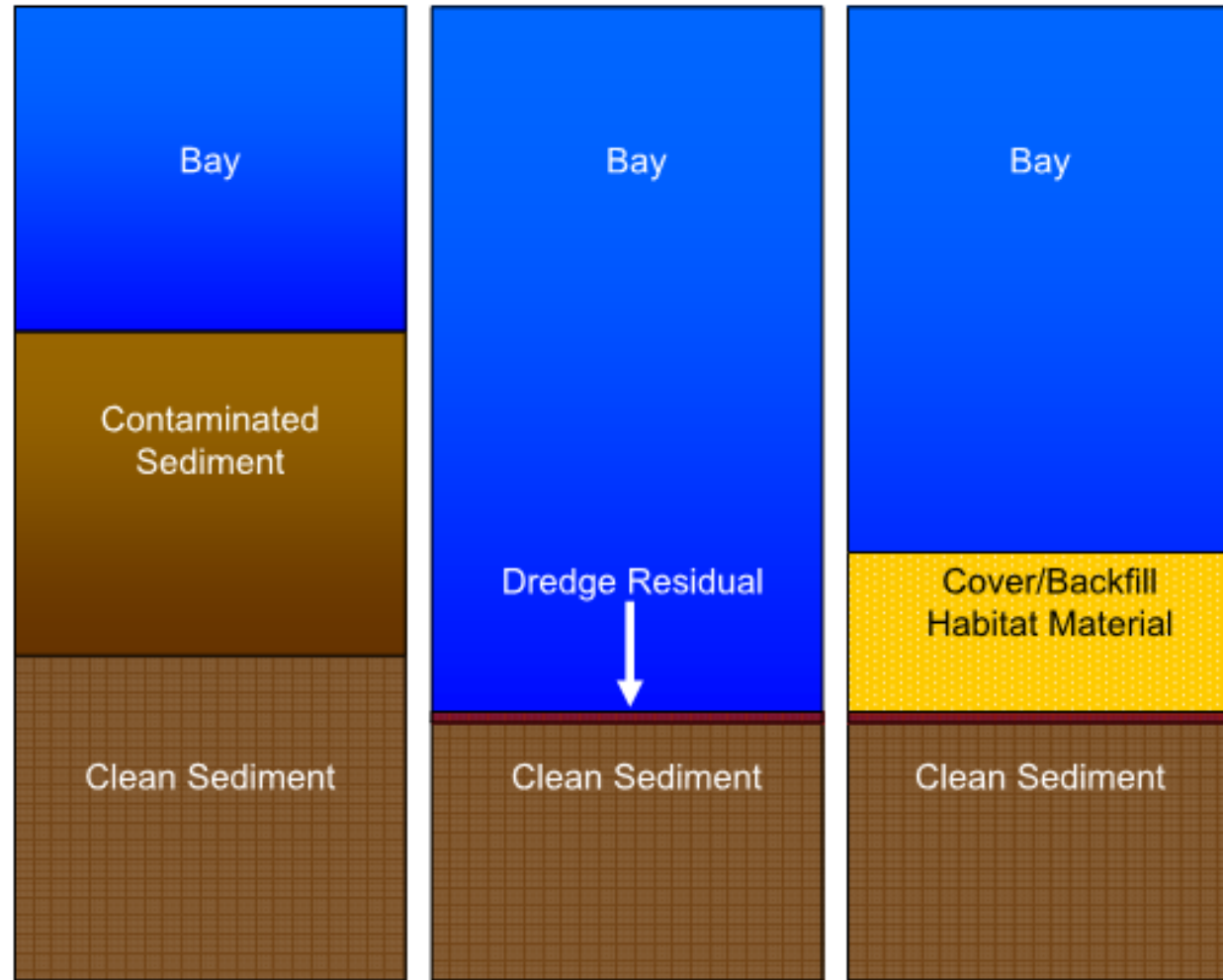


Meeting SWAC Performance Standard

tPAH Mass Removal Summary



Restorative Layer



Ashland Kreher Park

- draft conceptual plan



