

Victor Brakauskas

There is no moral case for choosing a clean up option that prioritizes greater company profits over the duty to clean up contaminants in the community that will be affecting our children and grand-children.

'Capping' waste is merely a stop-gap solution that will continue to pollute. Please choose the most comprehensive clean up plan for our community (option 5 in the attached powerpoint)



Image source: Jon Thompson



Port Angeles Rayonier Mill Public Comment Period

Marian Abbett, P.E., Section Manager TCP-SWRO and Site Manager

Connie Groven, P.E., UST/Technical Support Unit Supervisor

Abby Zabrodsky, Public Involvement Coordinator

July 8, 2025

Rayonier Mill Public Review

Consent Decree, Draft Interim Action Plan,
SEPA Determination of Non-significance

Schedule of Events

5:00-6:00 Open House

6:00-7:15 Presentation and Q&A

7:15-8:00 Open House

Public Comment Period

Comments accepted until August 12, 11:59 PM

Submit comments online:

go.ecology.wa.gov/comment2270



Ecology's Rayonier Mill Webpage



Submit your comments online

Introductions

Ecology Project Team	
Bobbak Talebi	Southwest Region Director
Nhi Irwin	Toxics Cleanup Program Manager
Marian Abbett	Section Manager/Project Manager
Connie Groven	Unit Supervisor
Nancy Davis	Environmental Planner
Thomas Praisewater	Environmental Engineer
Valerie Chu	Toxicologist
Abby Zabrodsky	Public Involvement Coordinator
Carolyn Subramaniam	Public Involvement Coordinator
Sarah Miller	Public Involvement Coordinator

Documents Available for Comment

We are accepting comments on:

- Consent Decree
- Draft Interim Action Plan
- State Environmental Policy Act Determination of Nonsignificance and Checklist

Document Review

In-person document review

Port Angeles Main Library

Ecology Lacey Office (by appointment)

- PublicDisclosureSWRO@ecy.wa.gov
- or 360-407-6365



Online review

Visit go.ecology.wa.gov/2270

 DEPARTMENT OF
ECOLOGY
State of Washington

Cleanup and Tank Search

Home Search Cleanups Search US Ts Contact Help

Port Angeles Rayonier Mill Site

700 N Ennis
Port Angeles, Clallam County

Facility Site ID: 19
Cleanup Site ID: 2270

Site Status

Cleanup Started

Brownfield

This site has received funding as part of our Brownfields Program. [Brownfields Public Fundings: \\$200,000.00](#)

Site Details

Download Site Report

View documents 116

View contaminants 16

Contacts

Marian Abbott PE
marian.abbott@ecy.wa.gov
Site Manager
360-489-4569

Southwest Regional Office
360-407-6300

More about cleanup

- Cleanup comment periods and events
- Terms and acronyms
- The cleanup process
- Contaminated sites in Washington

Site Description



Rayonier Mill Study Area is located along the shoreline and in the eastern portion of Port Angeles Harbor. The Study Area includes a marine and an upland portion.

redevelopment into the cleanup.

In 2010, the city's and port's PAH-WDA received an Ecology (Brownfields Program) Integrated Planning Grant for \$200,000. PAH-WDA used these funds to conduct due diligence and market analysis in support of their plans to acquire the property.

The extent of contamination at the site is unknown, so we decided to focus on a study area that includes the former mill property and adjacent marine environment.

The amount and type of contamination vary across the upland portion of the Study Area. Most of the contaminated hot spots were cleaned up with interim actions in the 1990s and 2000s. Over 30,000 tons of contaminated soil was removed from the site.

Status Update

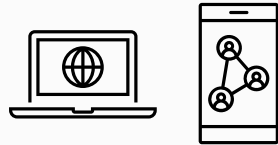
The remedial investigation and feasibility study for the Study Area are complete. We are preparing the public review draft of the interim action plan for the Study Area and a new legal agreement to implement the plan. Both the plan and the legal agreement will be available for public comment when they are ready.

Visit the [Rayonier Mill project home page](#) for more information and the latest news about the cleanup.

Rayonier ran a pulp mill on the property from 1930 to 1997, and then afterwards dismantled the mill. When the mill was running, sulfite and acid would break down wood chips into cellulose fibers. Operations at the mill contaminated air, soil, groundwater, and sediments.

In 2008, the City of Port Angeles and the Port of Port Angeles created the Port Angeles Harbor Works Development Authority (PAH-WDA) with the intention of acquiring the Rayonier Mill property to integrate

Comment period will close
Tuesday, August 12 at 11:59 PM



Submit comments online

go.ecology.wa.gov/comment2270



Or by mail or email

Marian Abbett, Site Manager

WA State Department of Ecology

PO Box 47775

Olympia, WA 98504-7775

Marian.Abbett@ecy.wa.gov

**How to
Comment**

After the comment period, we will:

- Consider your comments
- Update the documents as needed
- Respond to comments in a comment responsiveness document

Comment Response

Presentation Overview

1

Washington's Cleanup Process

2

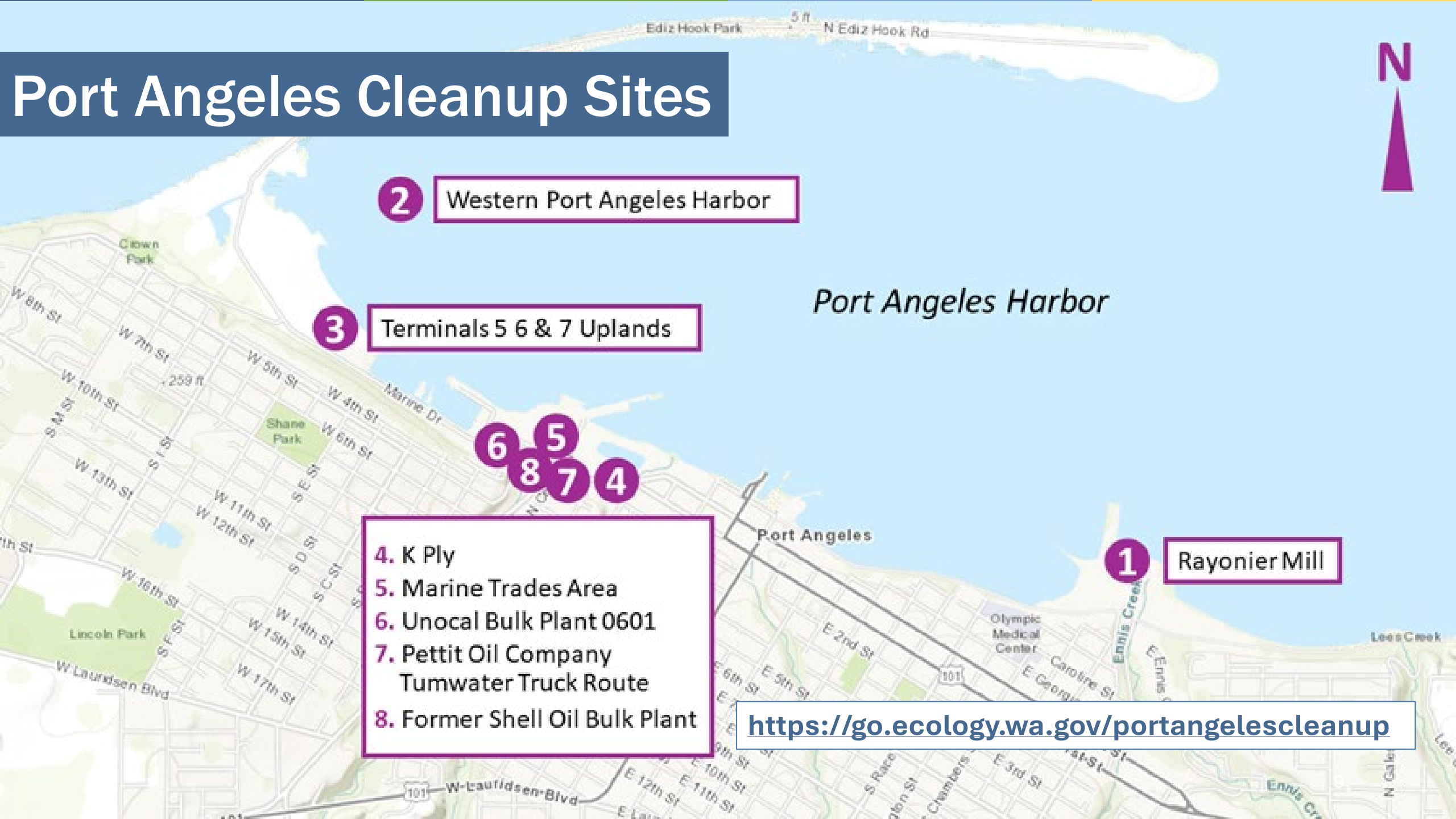
Rayonier Mill Study Area Cleanup

- Draft Interim Action Plan
- Cleanup, Structure Removal, and Restoration
- Consent Decree

3

Next Steps

Port Angeles Cleanup Sites



2 Western Port Angeles Harbor

3 Terminals 5 6 & 7 Uplands

- 4. K Ply
- 5. Marine Trades Area
- 6. Unocal Bulk Plant 0601
- 7. Pettit Oil Company
Tumwater Truck Route
- 8. Former Shell Oil Bulk Plant

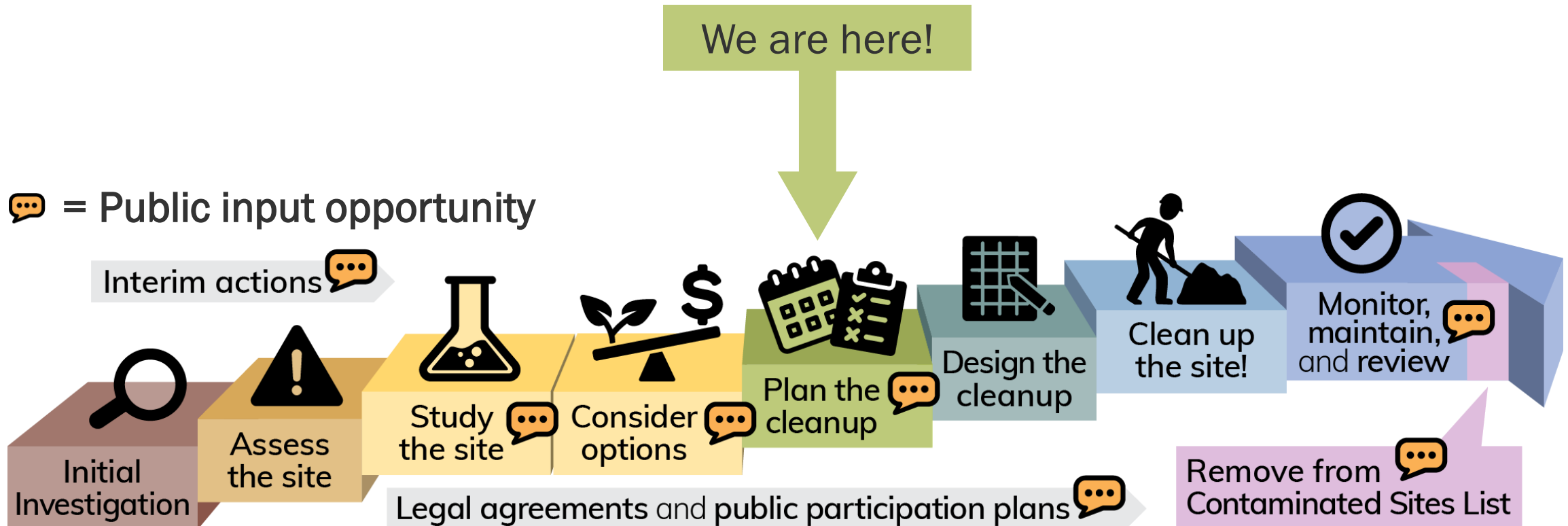
1 Rayonier Mill

<https://go.ecology.wa.gov/portangelescleanup>

Cleanup Process

We are here!

 = Public input opportunity



Remedial Investigation and Feasibility Study (RI/FS) Process



1. Collect Data

- What?
- Where?
- How much?



3. Set Cleanup Standards

- Cleanup Levels
- Points of Compliance



2. Evaluate Risk

- Pathways



4. Evaluate Remedies

- Benefits
- Cost
- Permanence



Rayonier Mill Study Area



Rayonier Mill and floating log ponds while in operation.

Rayonier Mill Study Area

Strait of Juan de Fuca

Port Angeles Harbor

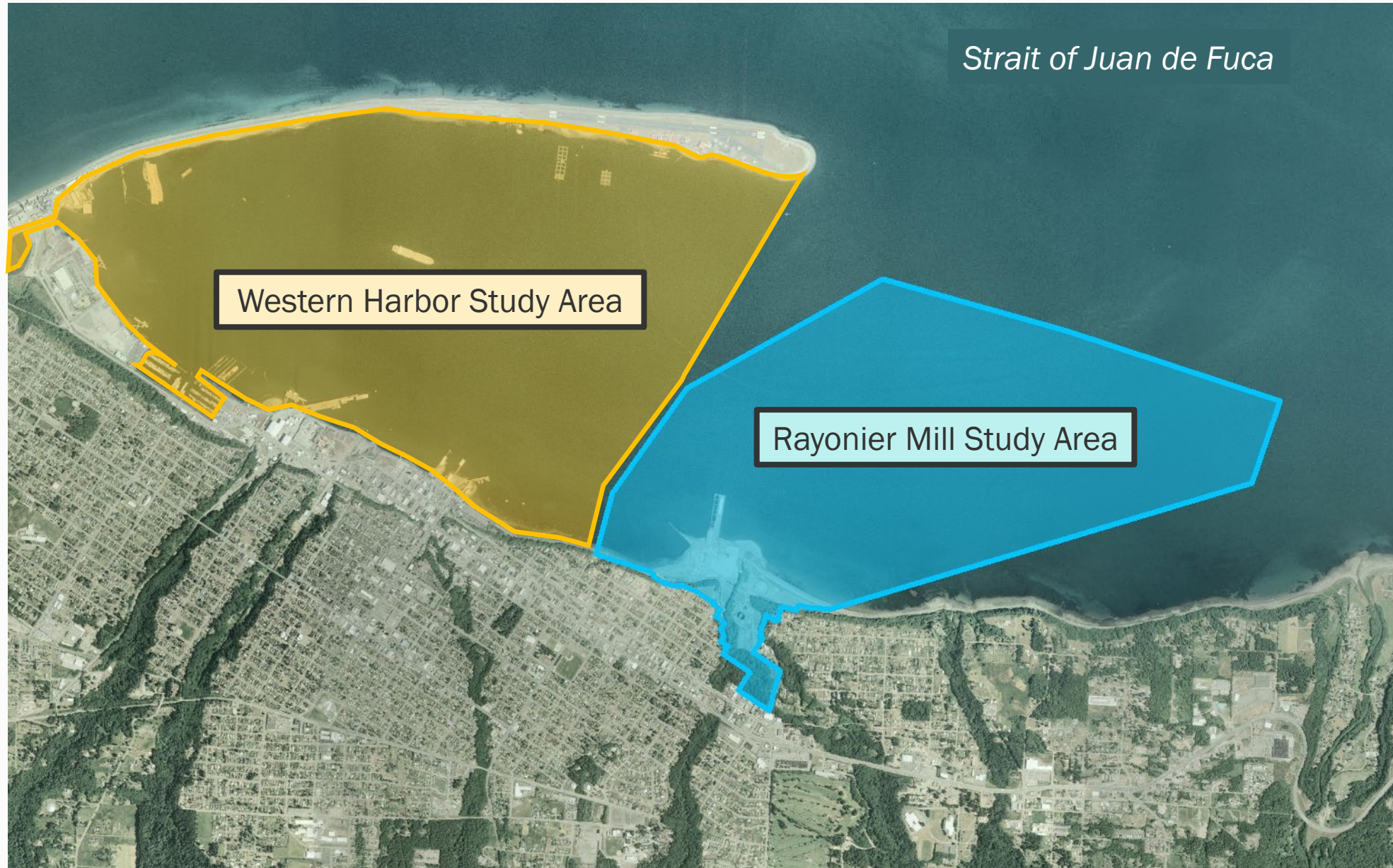
Study Area

Marine

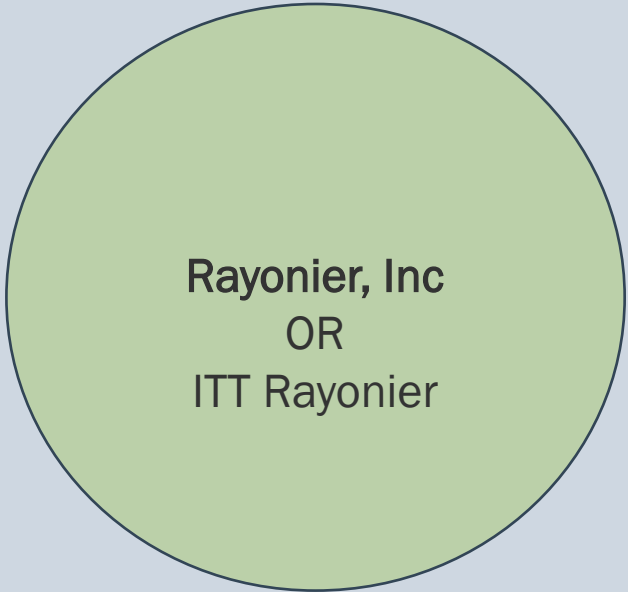
Upland

— Deep Water
Outfall Line

Rayonier Mill and Western Harbor Study Areas



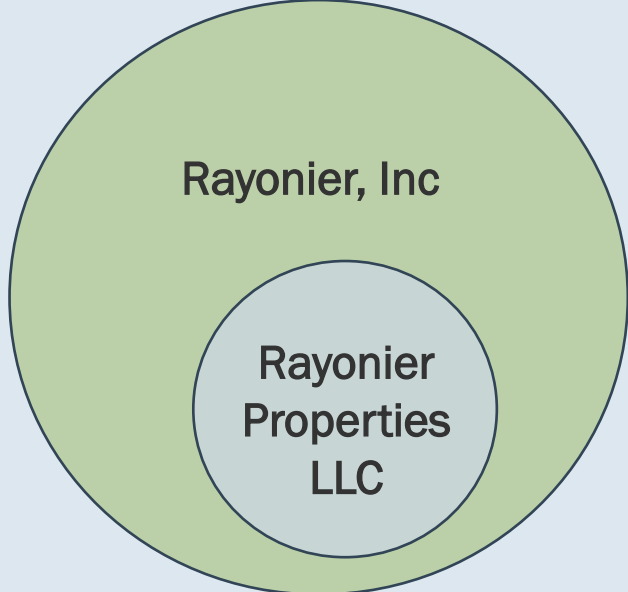
Rayonier – What's In a Name...



A large green circle containing the text "Rayonier, Inc OR ITT Rayonier".

Rayonier, Inc
OR
ITT Rayonier

Before 2004

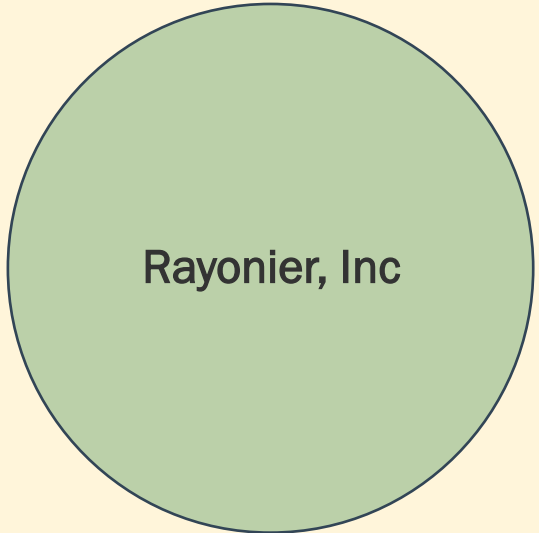


A large green circle containing a smaller light blue circle. The text "Rayonier, Inc" is in the green circle and "Rayonier Properties LLC" is in the light blue circle.

Rayonier, Inc

Rayonier
Properties
LLC

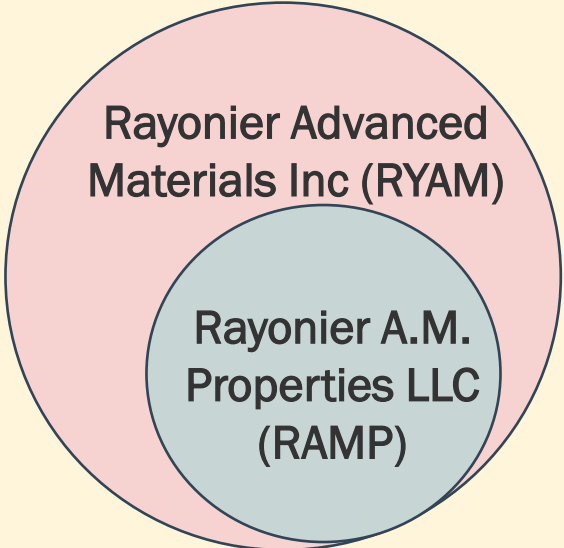
2004-2014



A large green circle containing the text "Rayonier, Inc".

Rayonier, Inc

Forest Resources,
Real Estate



A large pink circle containing a smaller light blue circle. The text "Rayonier Advanced Materials Inc (RYAM)" is in the pink circle and "Rayonier A.M. Properties LLC (RAMP)" is in the light blue circle.

Rayonier Advanced
Materials Inc (RYAM)

Rayonier A.M.
Properties LLC
(RAMP)

Performance Fibers

2014-present

Rayonier Mill Background

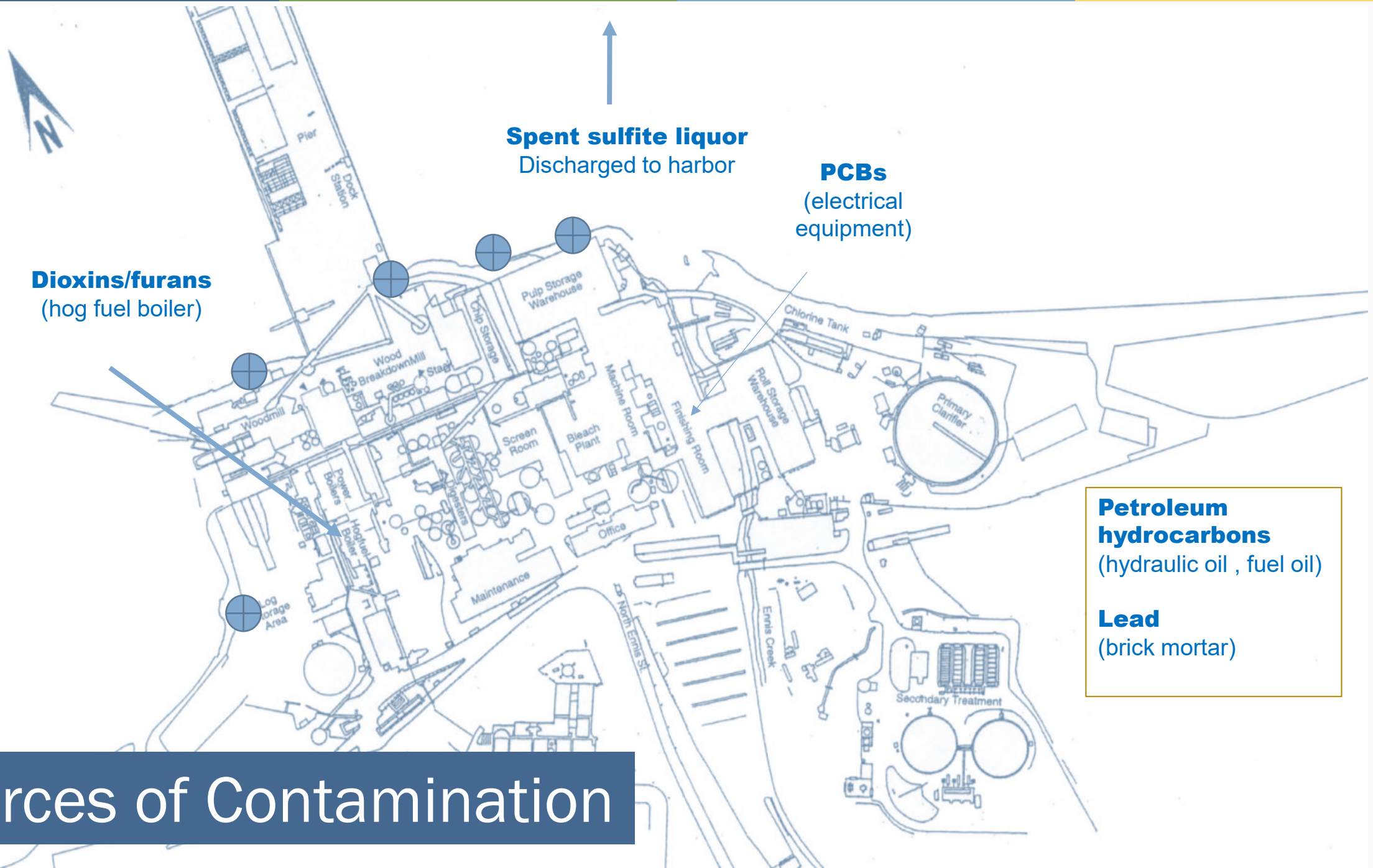


Mill in operation, 1994

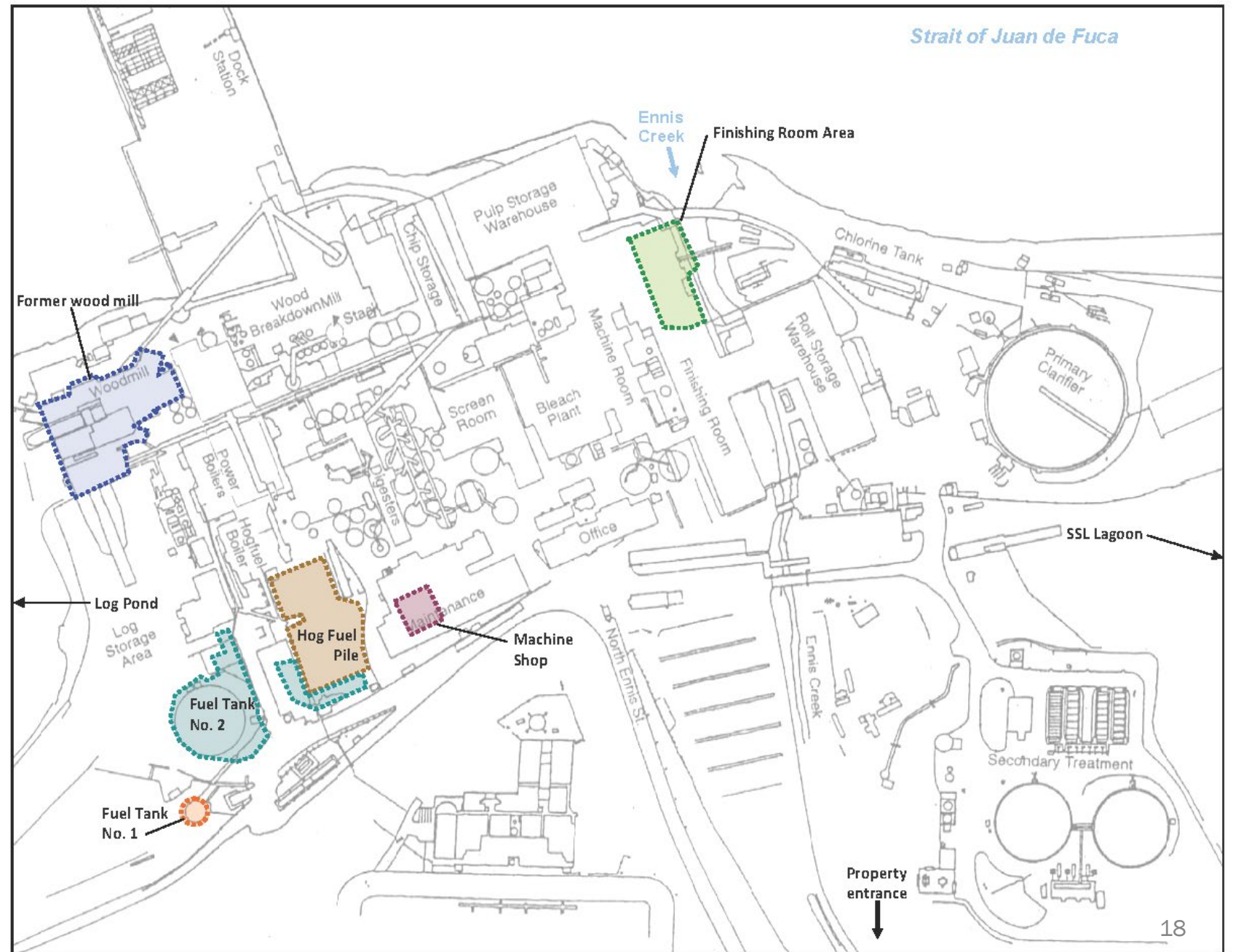


Dismantled mill site, 2006

Sources of Contamination



Interim Action Areas



Study Area Cleanup Progress

Rayonier tasks under Agreed Order

Feb 2013 Upland data summary report (Volume I) ✓

Dec 2014 Marine data summary report (Volume II) ✓

July 2019 Evaluate Interim Action alternatives (Volume III) ✓

Dec 2021 Draft Interim Action Plan (Volume IV) ✓

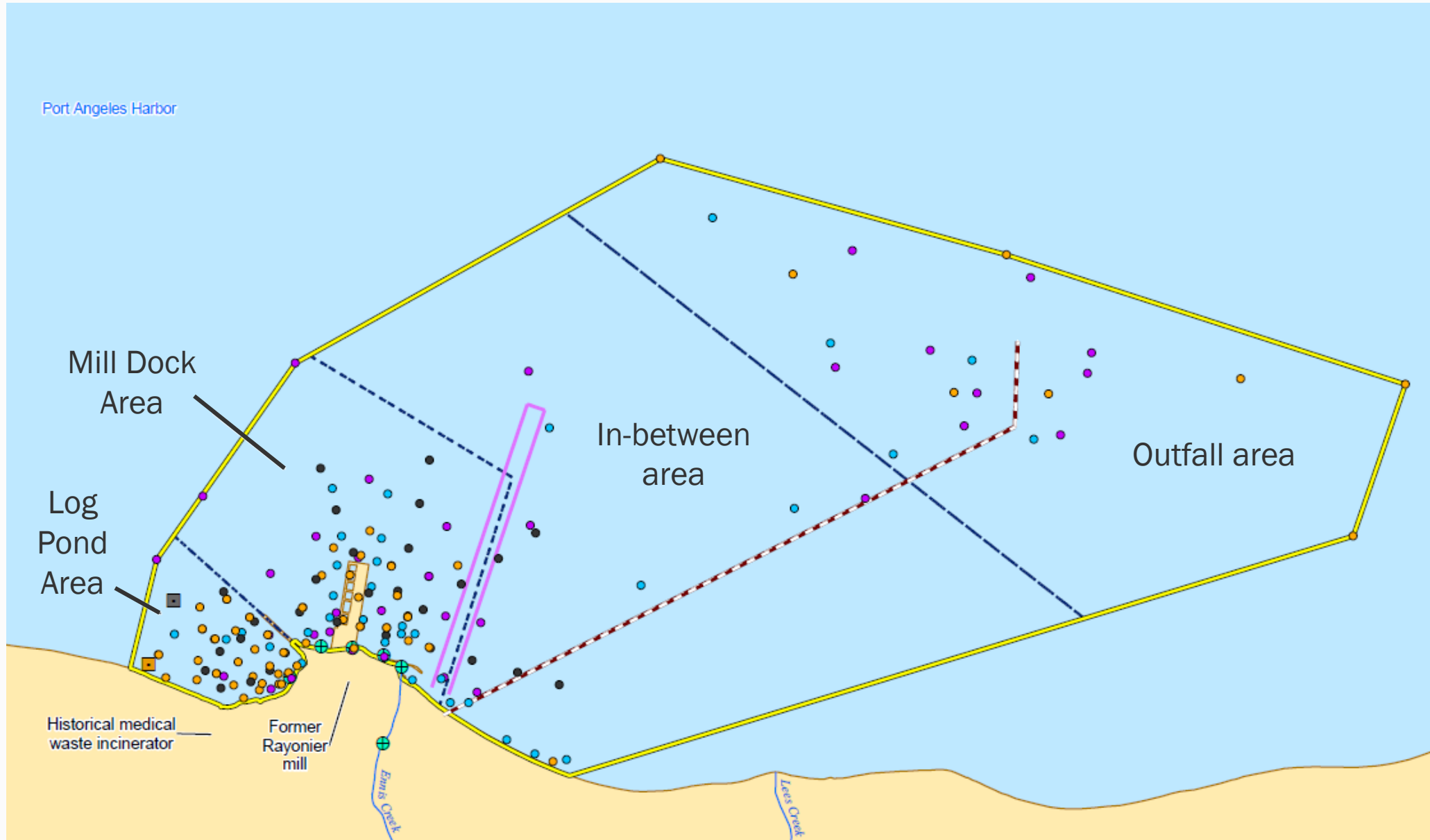
Ecology tasks

Aug - Nov 2019 Public Comment Period on Volumes I, II, and III ✓

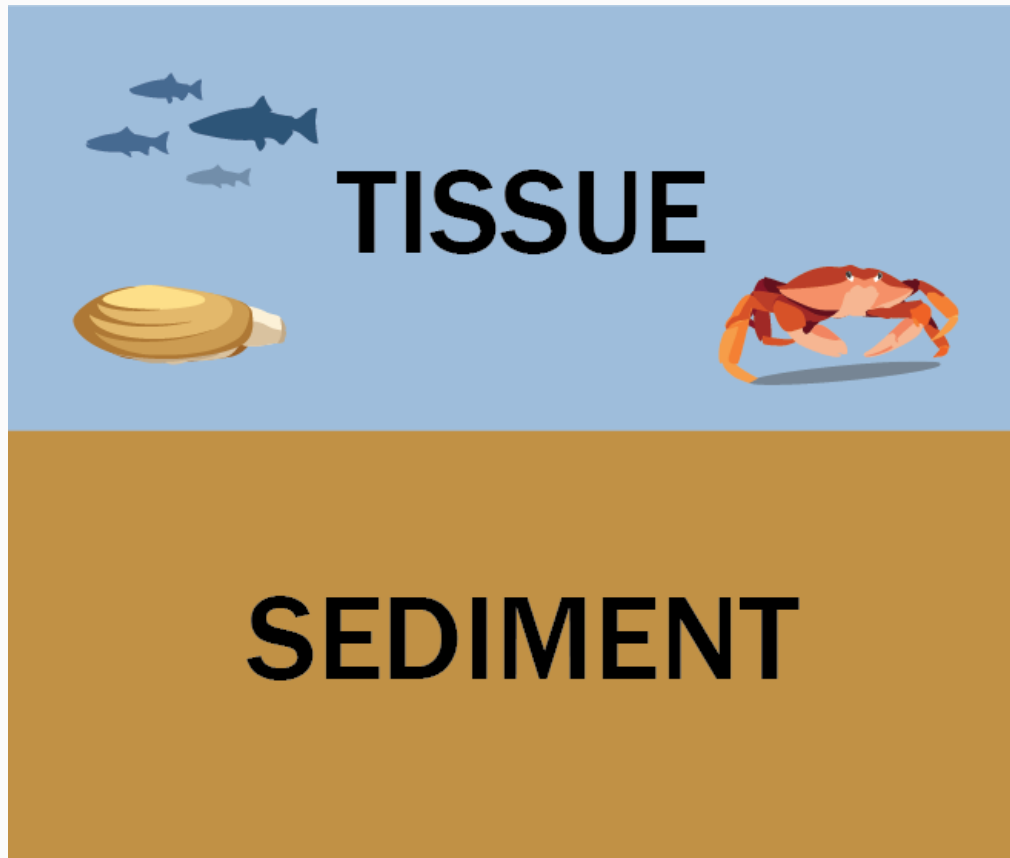
Revise into Ecology's draft Interim Action Plan ✓

June - Aug 2025 Public Comment Period on draft Interim Action Plan and Consent Decree ★

Marine Sampling Locations



Marine Contamination

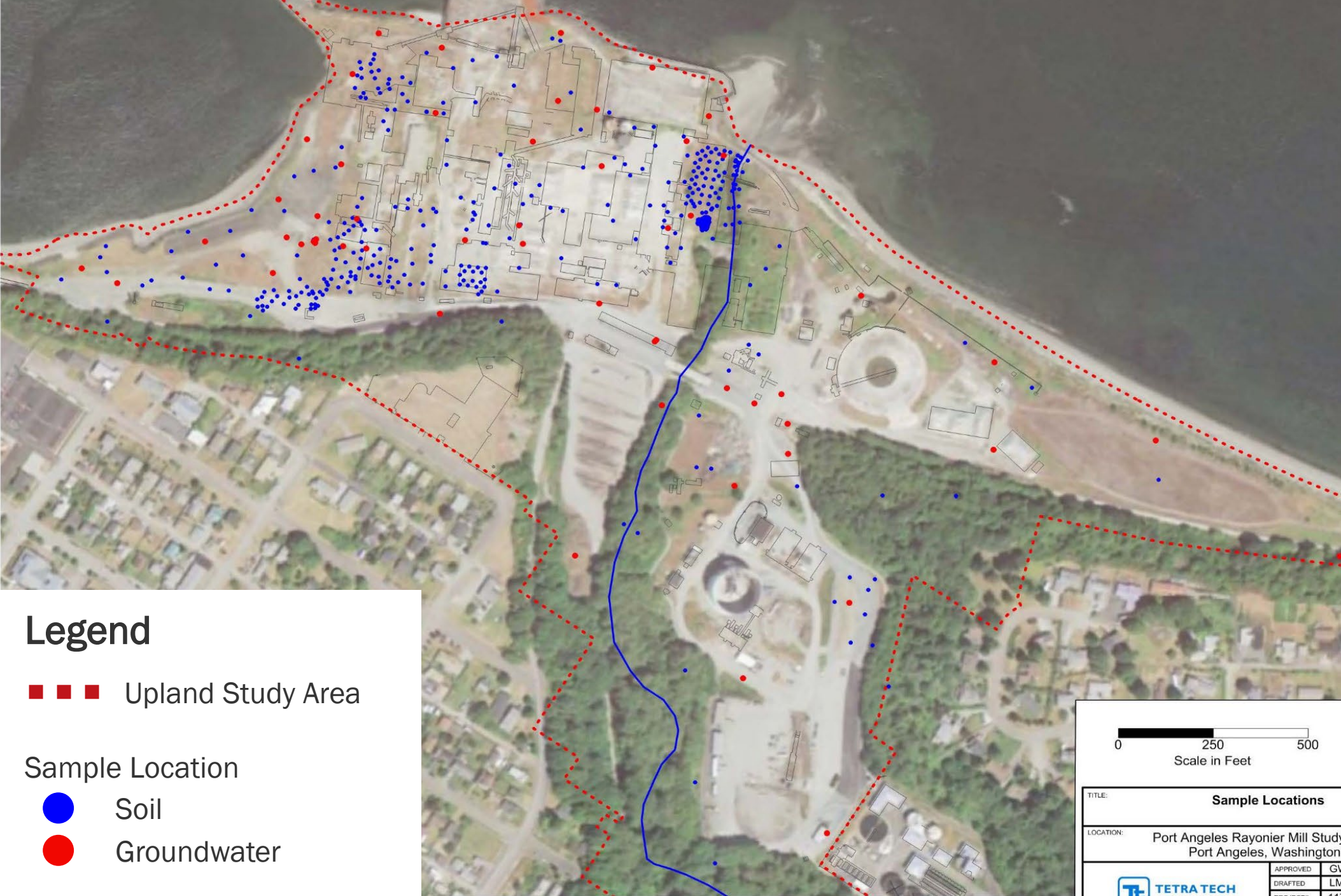


Metals
PAHs
PCBs
Dioxins

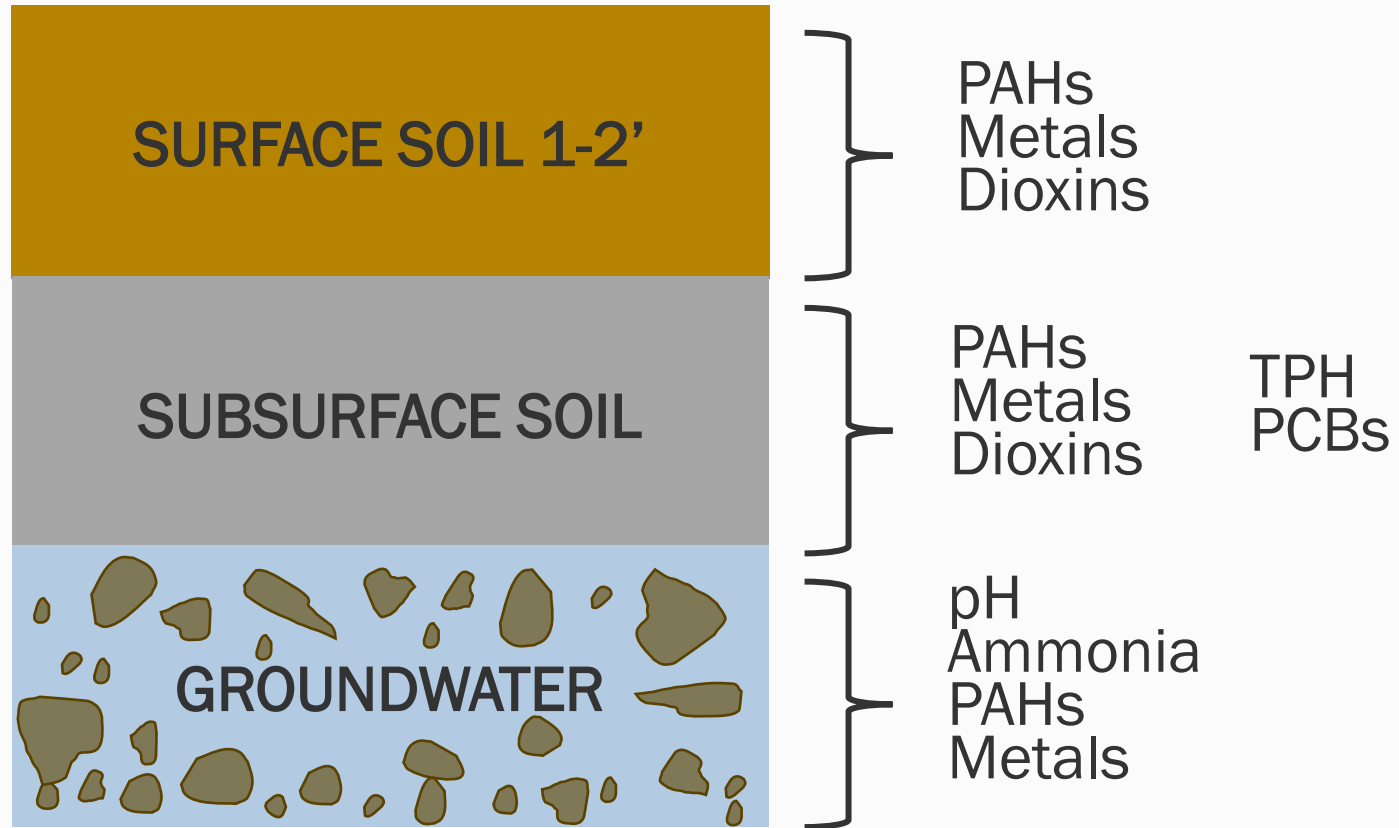
Metals
PAHs
PCBs
Dioxins

Phenols
Phthalates
Wood debris

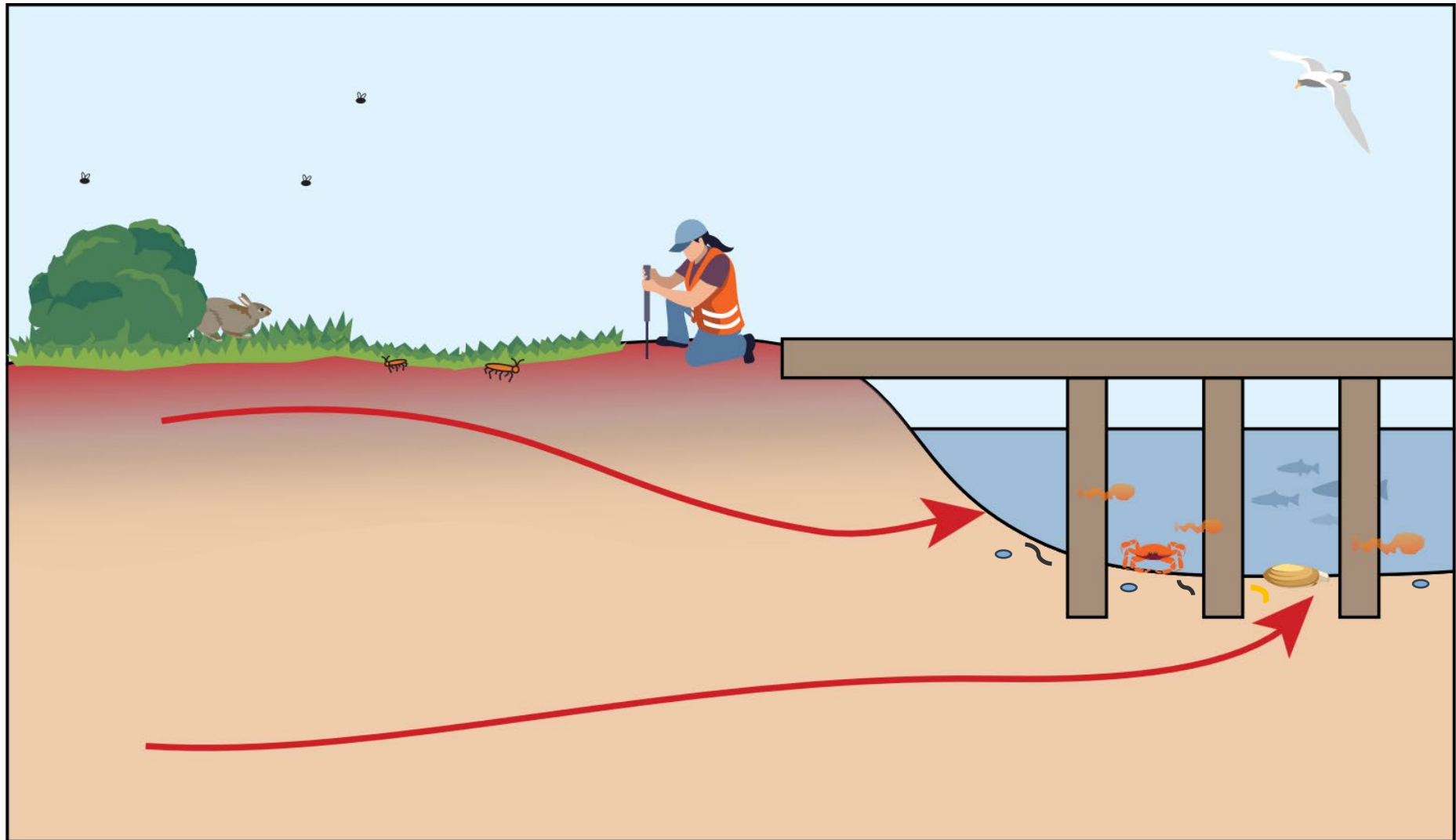
Upland Sampling Locations



Upland Contamination



Exposure Pathways



Selected Remedy

Media	Cleanup Actions	Cost (2019 \$)
Sediment	SMA1 – fill berth, EMNR SMA2 – dredge intertidal; EMNR subtidal SMA3 – contingent (EMNR or thin-layer cap or dredge) SMA4 – contingent (EMNR or thin-layer cap or dredge)	\$10.9M - \$13M
Soil	Consolidate and cap where soil exceeds unrestricted use cleanup levels	\$10M
Groundwater	Air sparging in phased approach	\$5.7M
Total		\$26.6M - \$28.7M

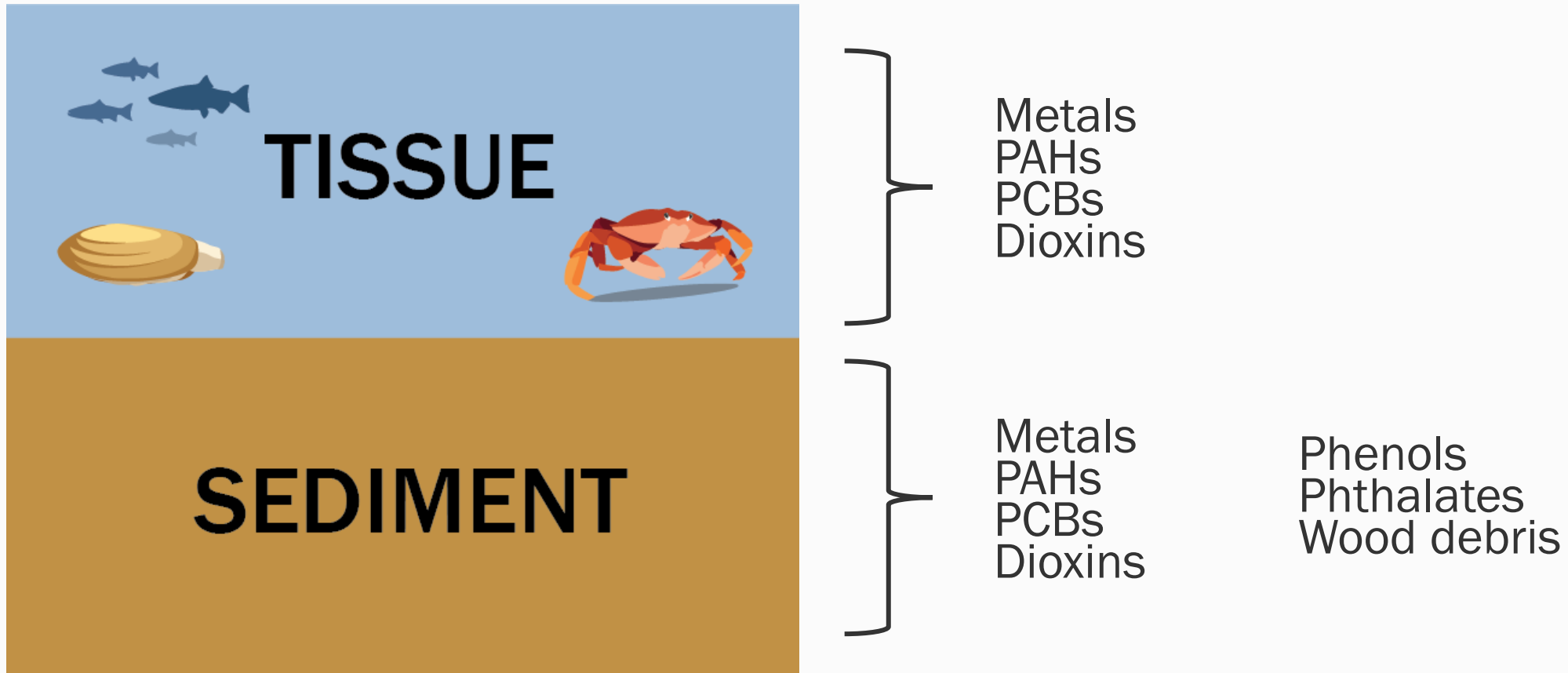


Sediment

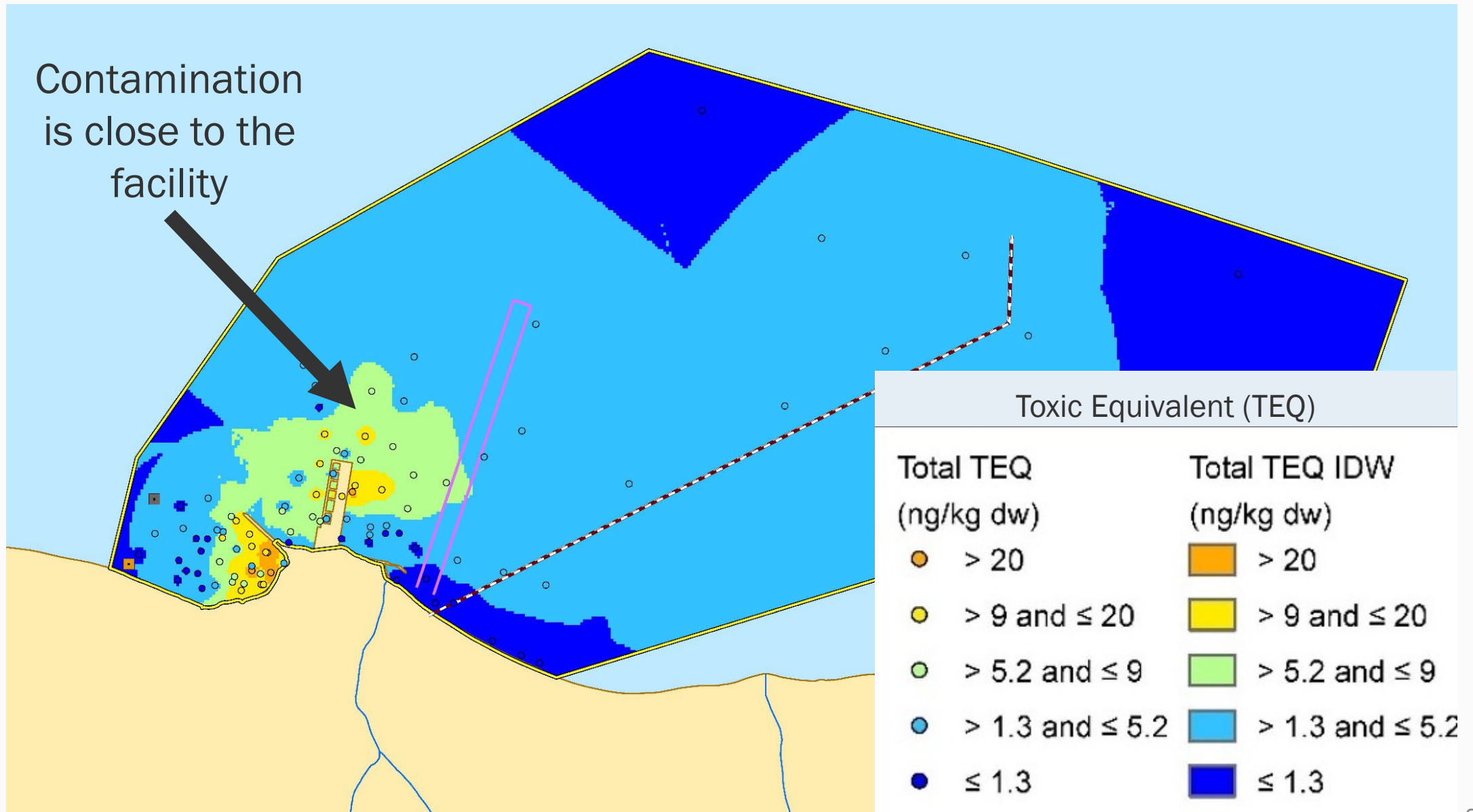


Beach looking east

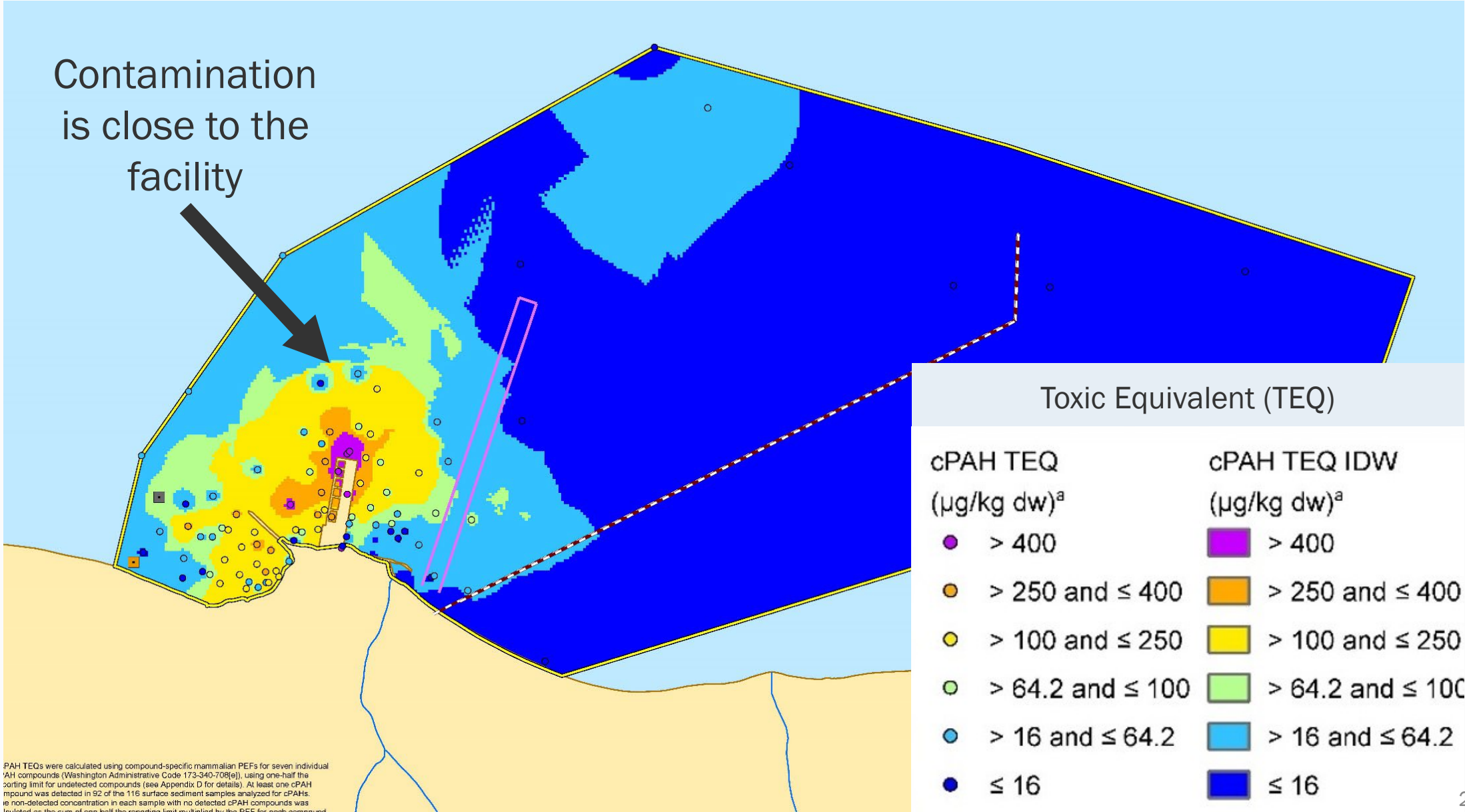
Marine Contamination



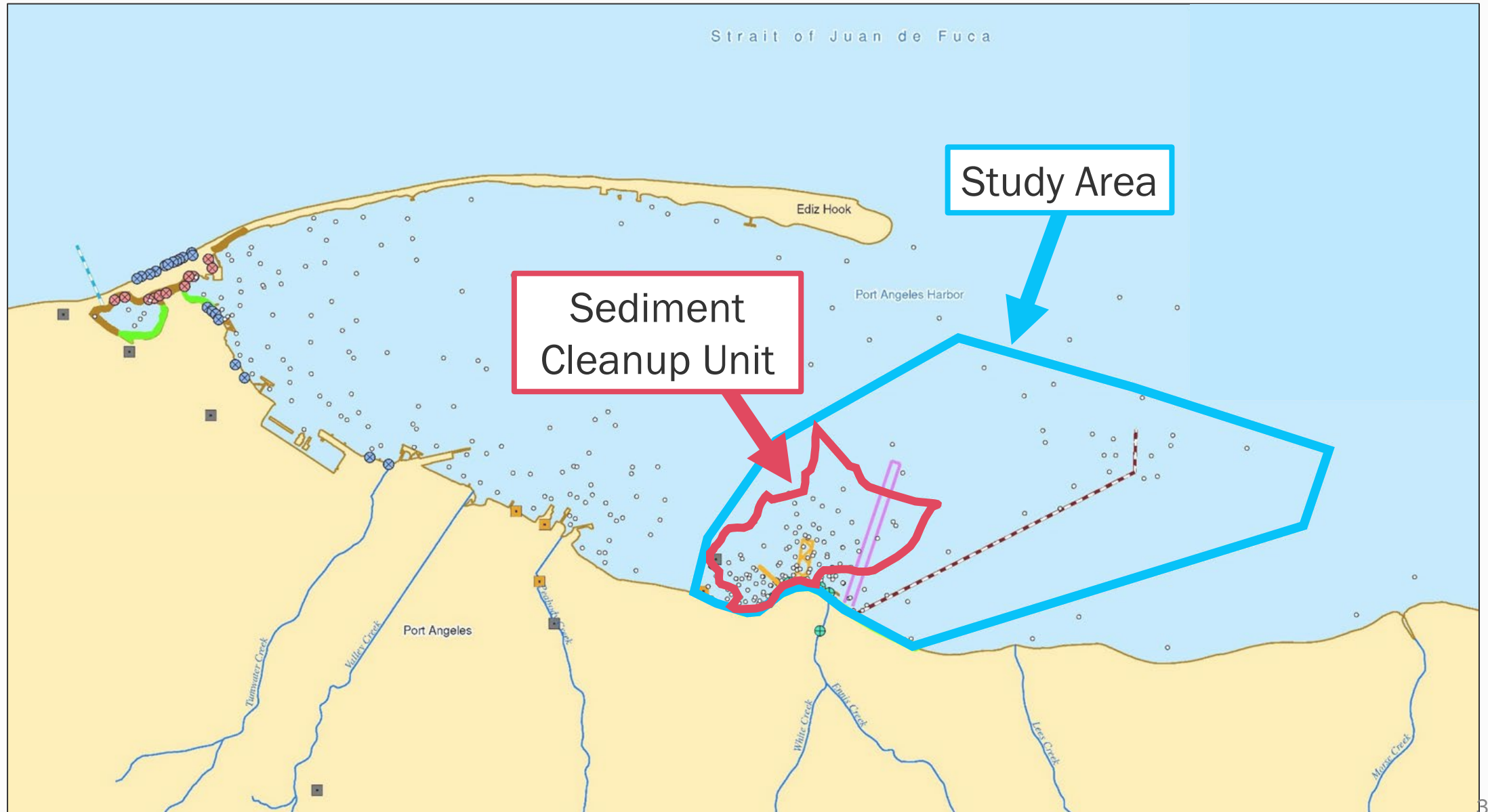
Sediment Contamination – PCB and Dioxin

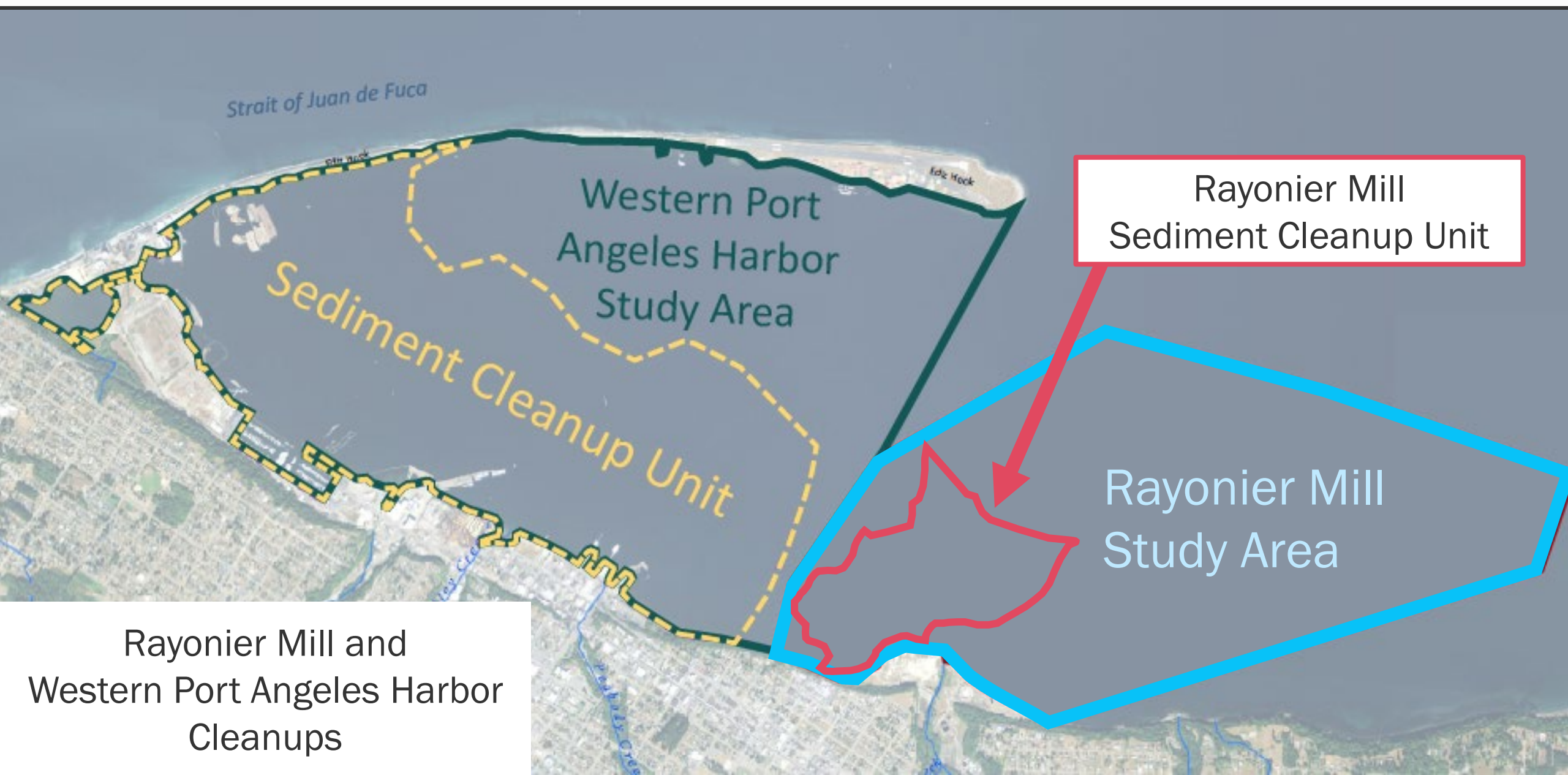


Sediment Contamination – Polycyclic Aromatic Hydrocarbons (PAHs)



Remediation Footprint – Sediment Cleanup Unit

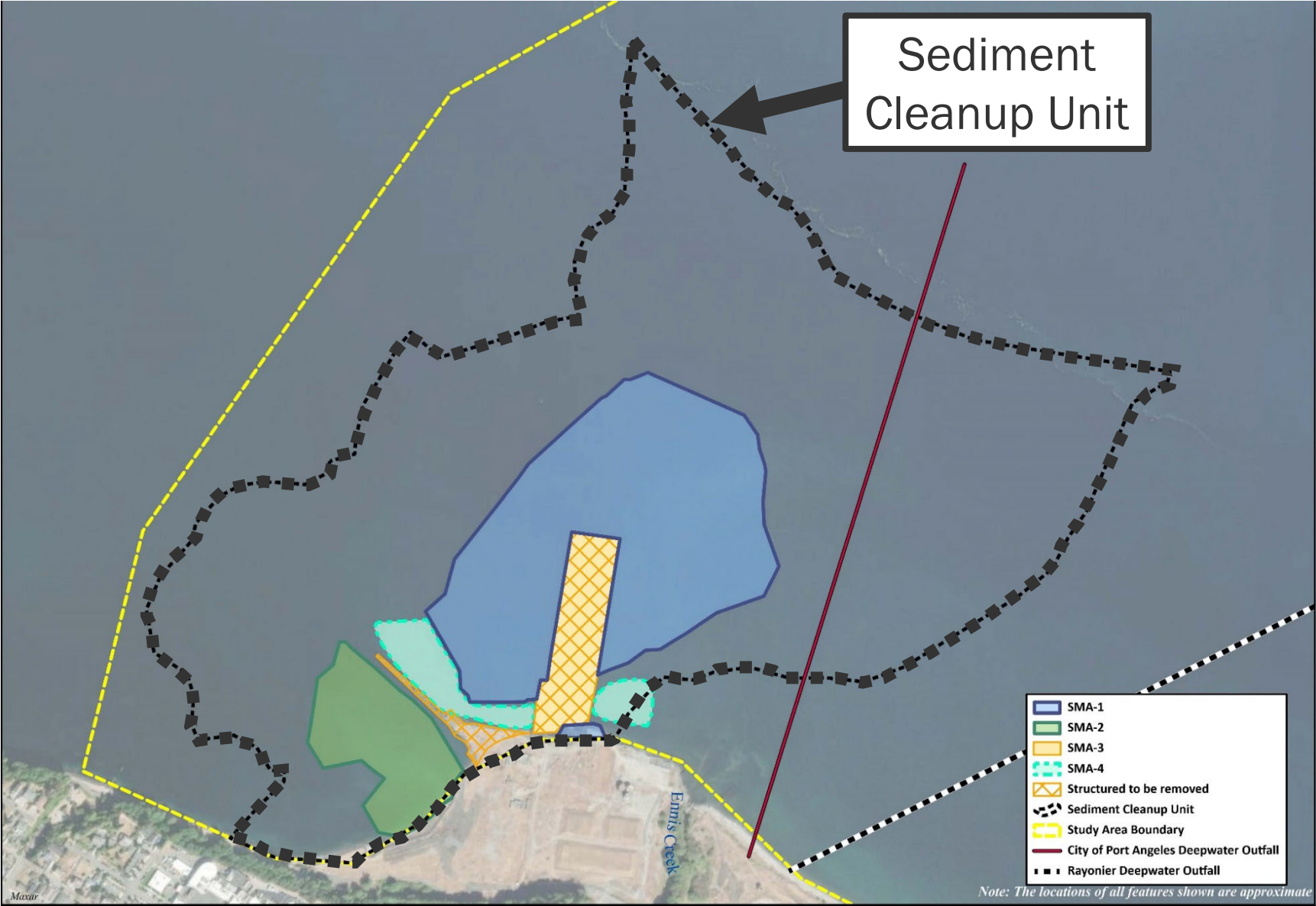




Rayonier Mill and
Western Port Angeles Harbor
Cleanups

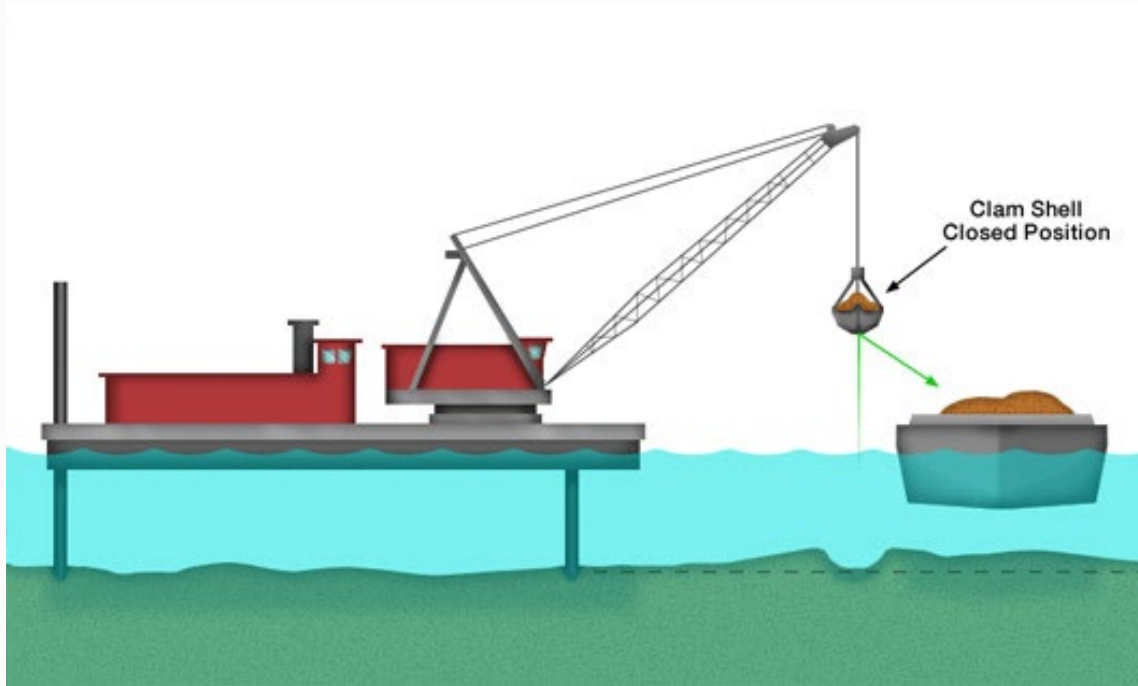
Sediment Management Areas (SMAs)

- SMA 1
- SMA 2
- SMA 3
- SMA 4

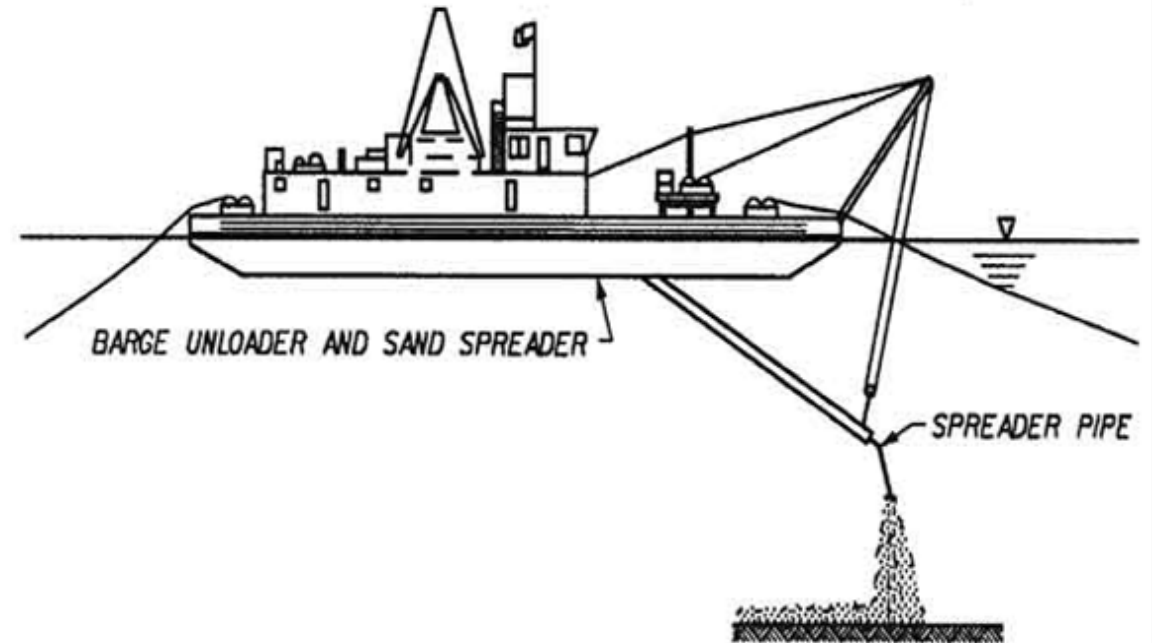


Sediment Cleanup Methods

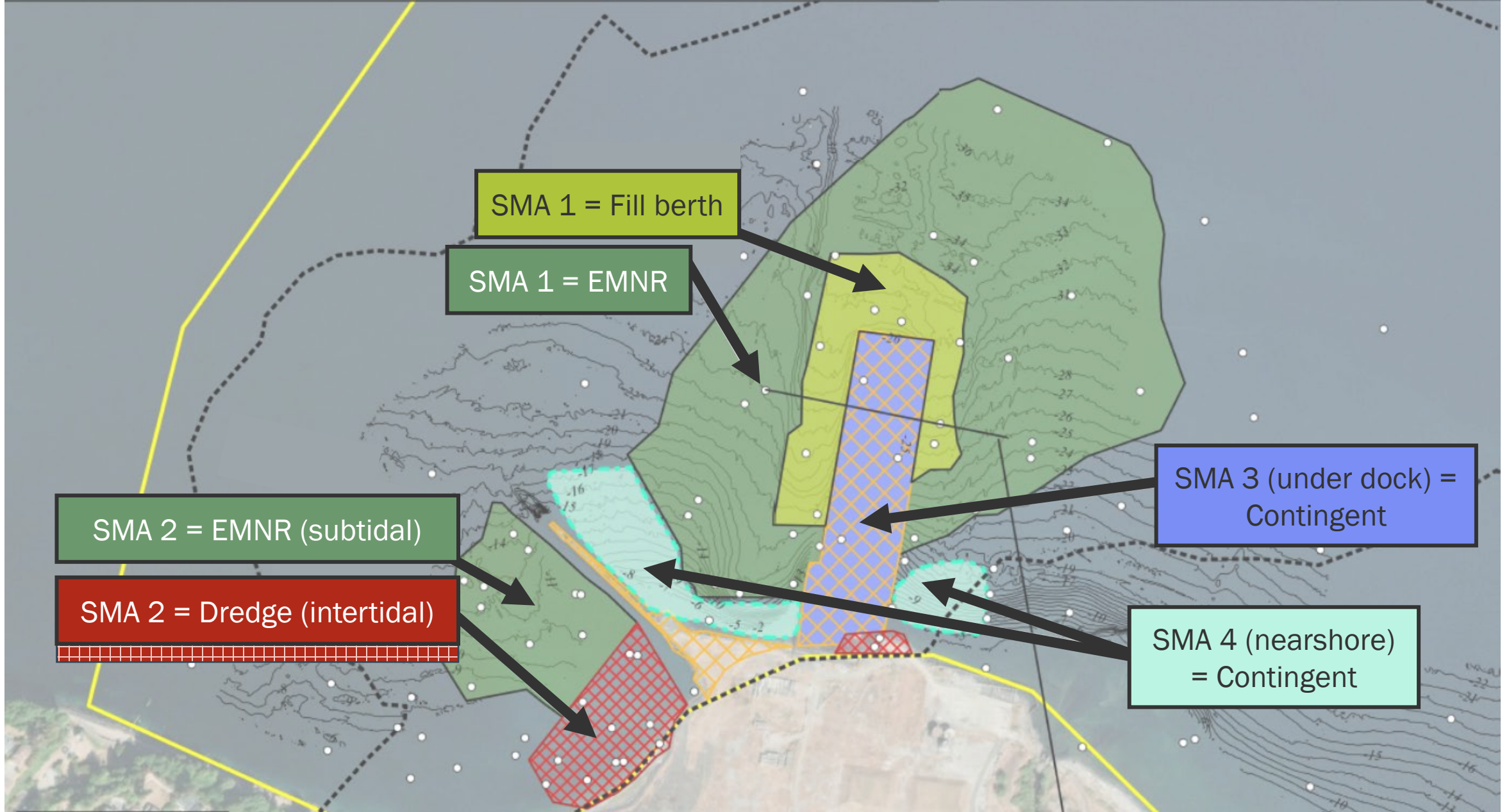
Dredging or Excavation



Enhanced Monitored Natural Recovery



Hydraulic barge unloader and sand spreader barge (from Kikegawa 1983)



Sediment Selected Cleanup Action

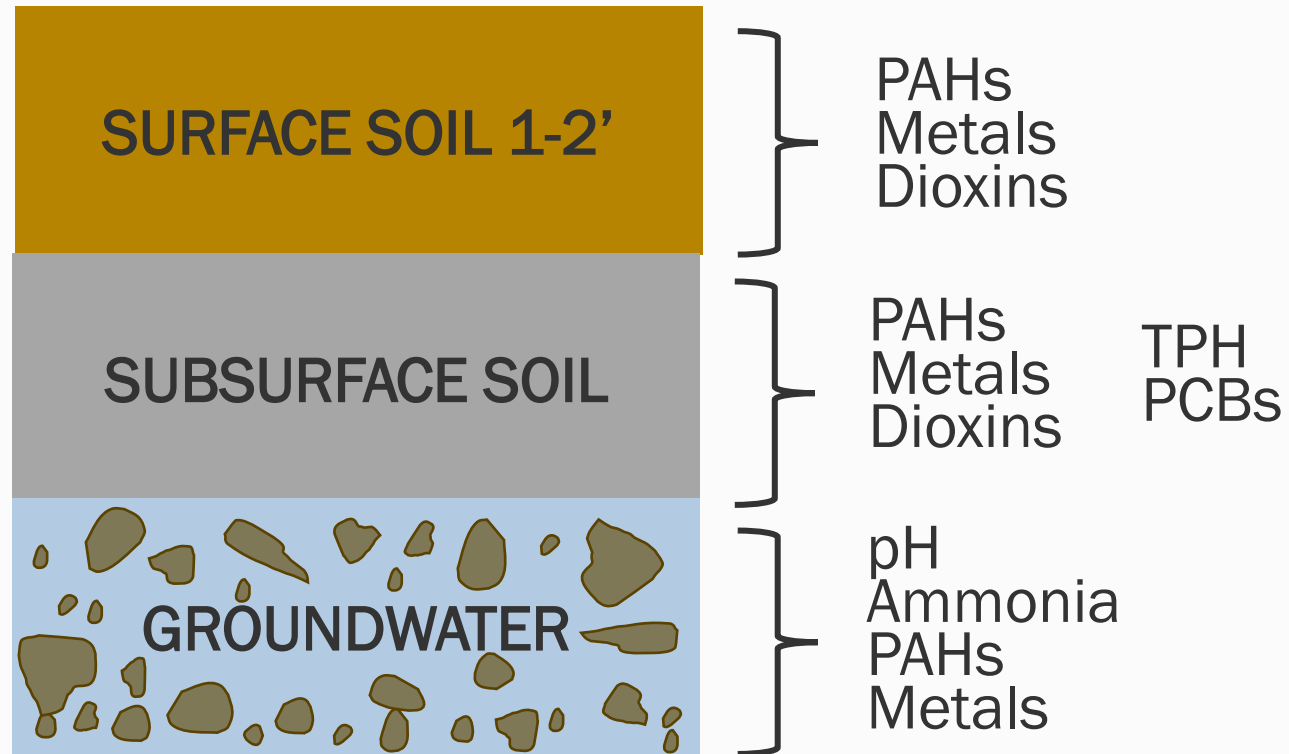


Soil

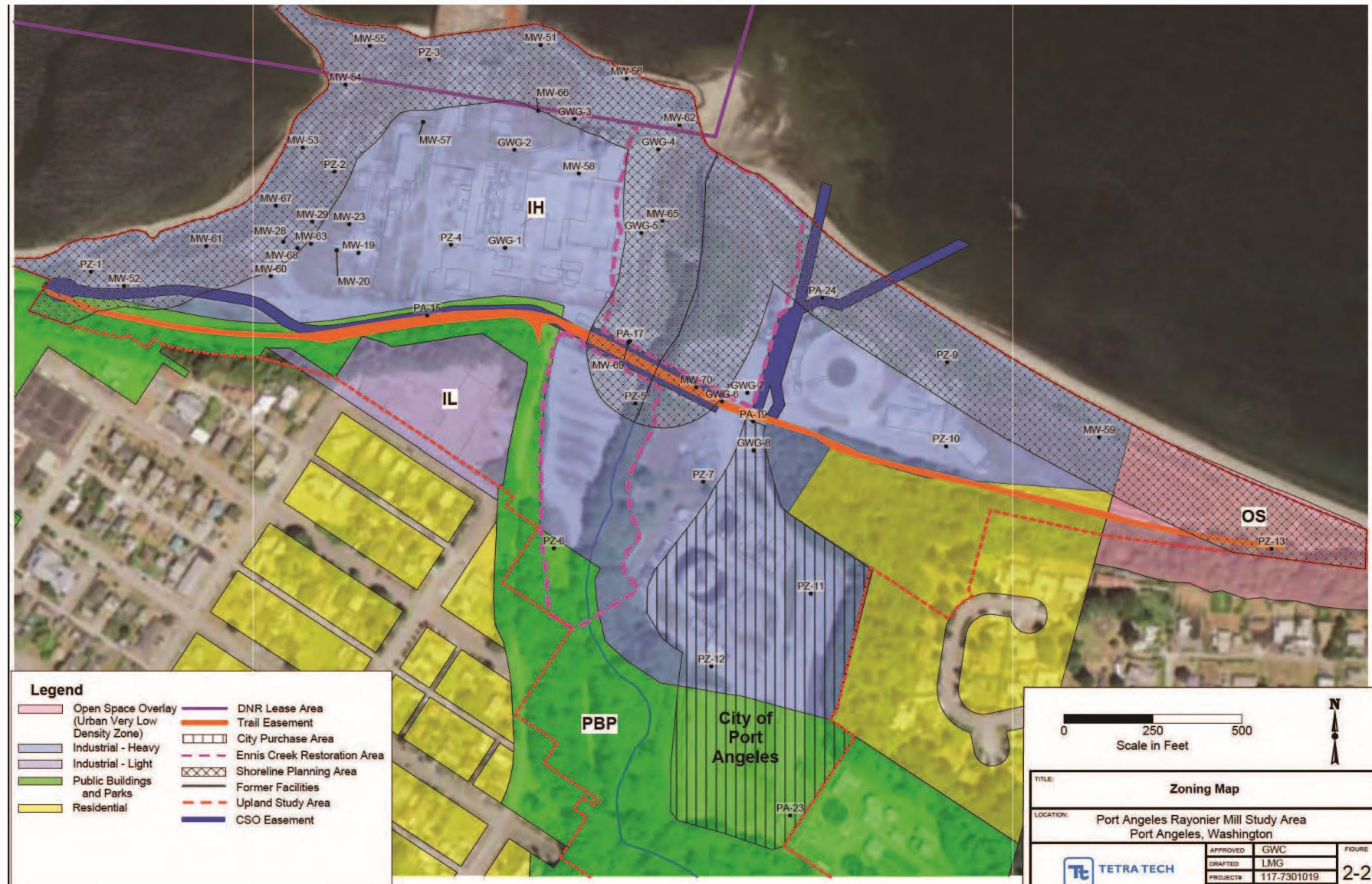


Test Pitting at Rayonier Mill

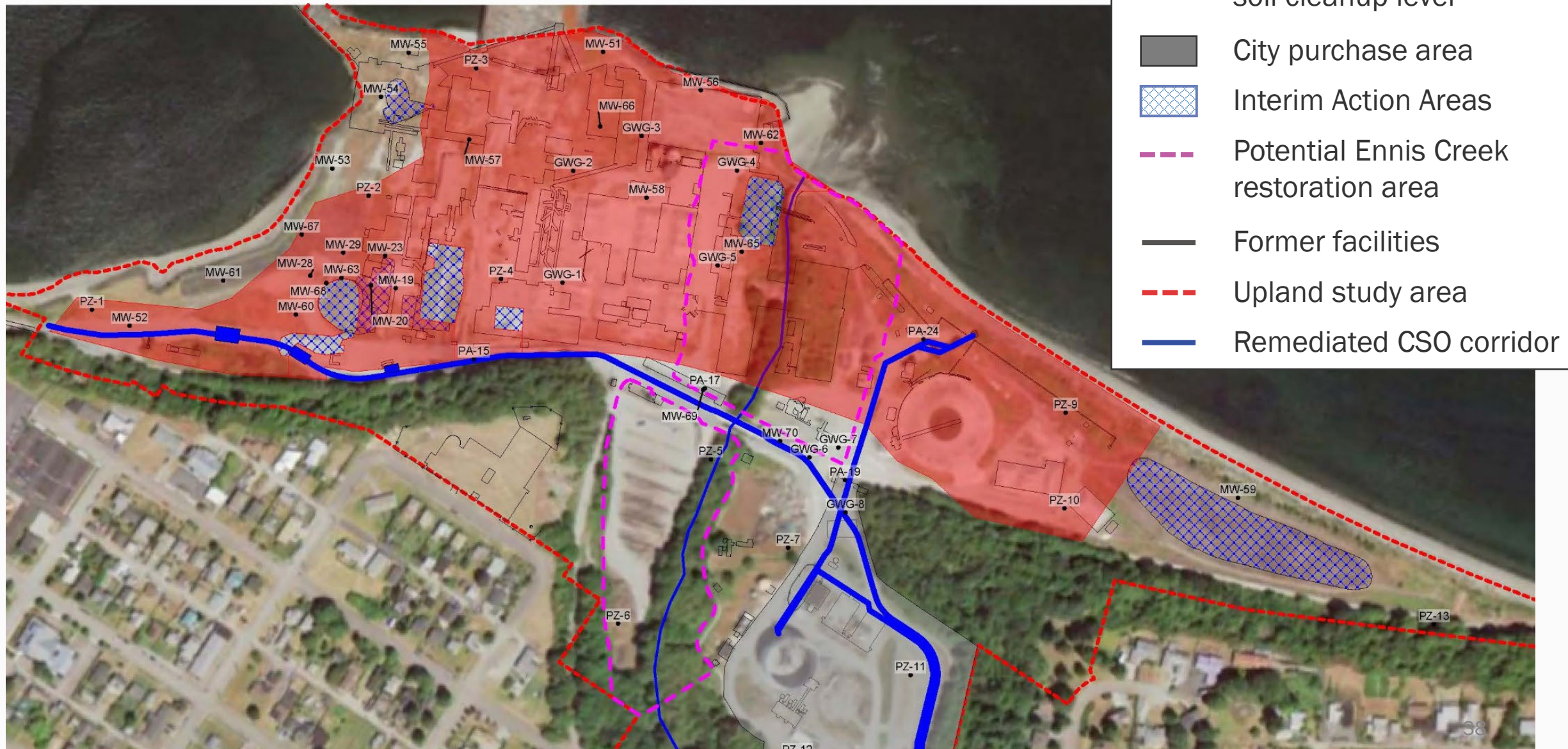
Upland Contamination



Zoning Map



Soil Contamination



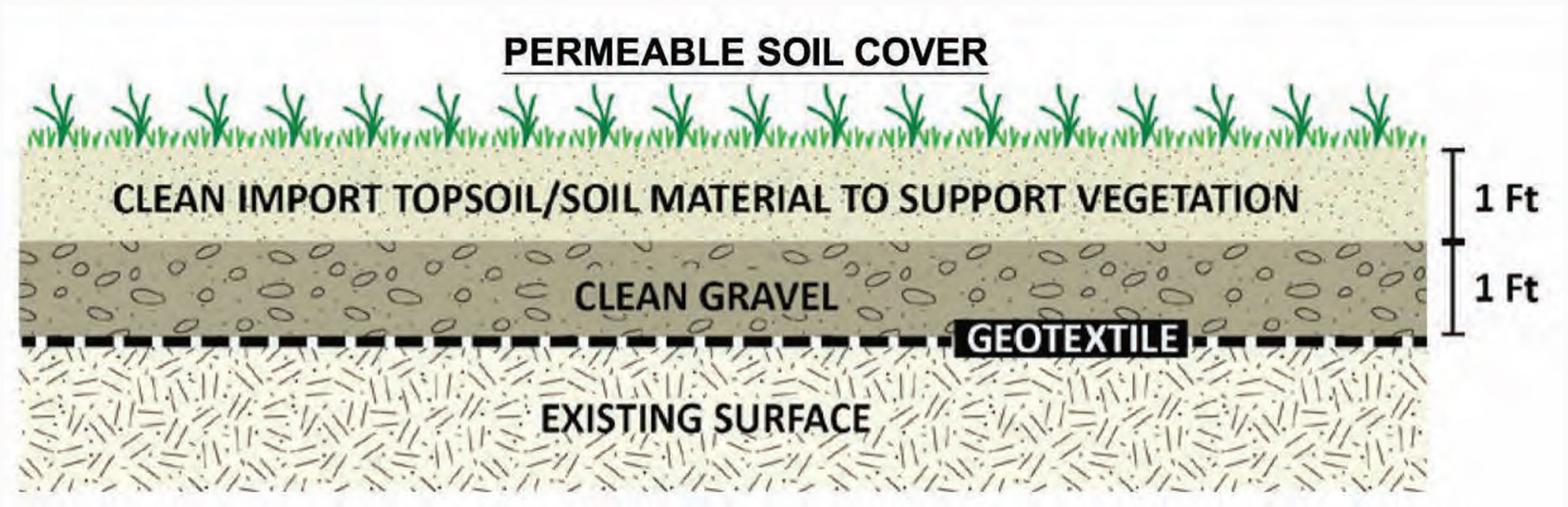
Soil Selected Cleanup Action



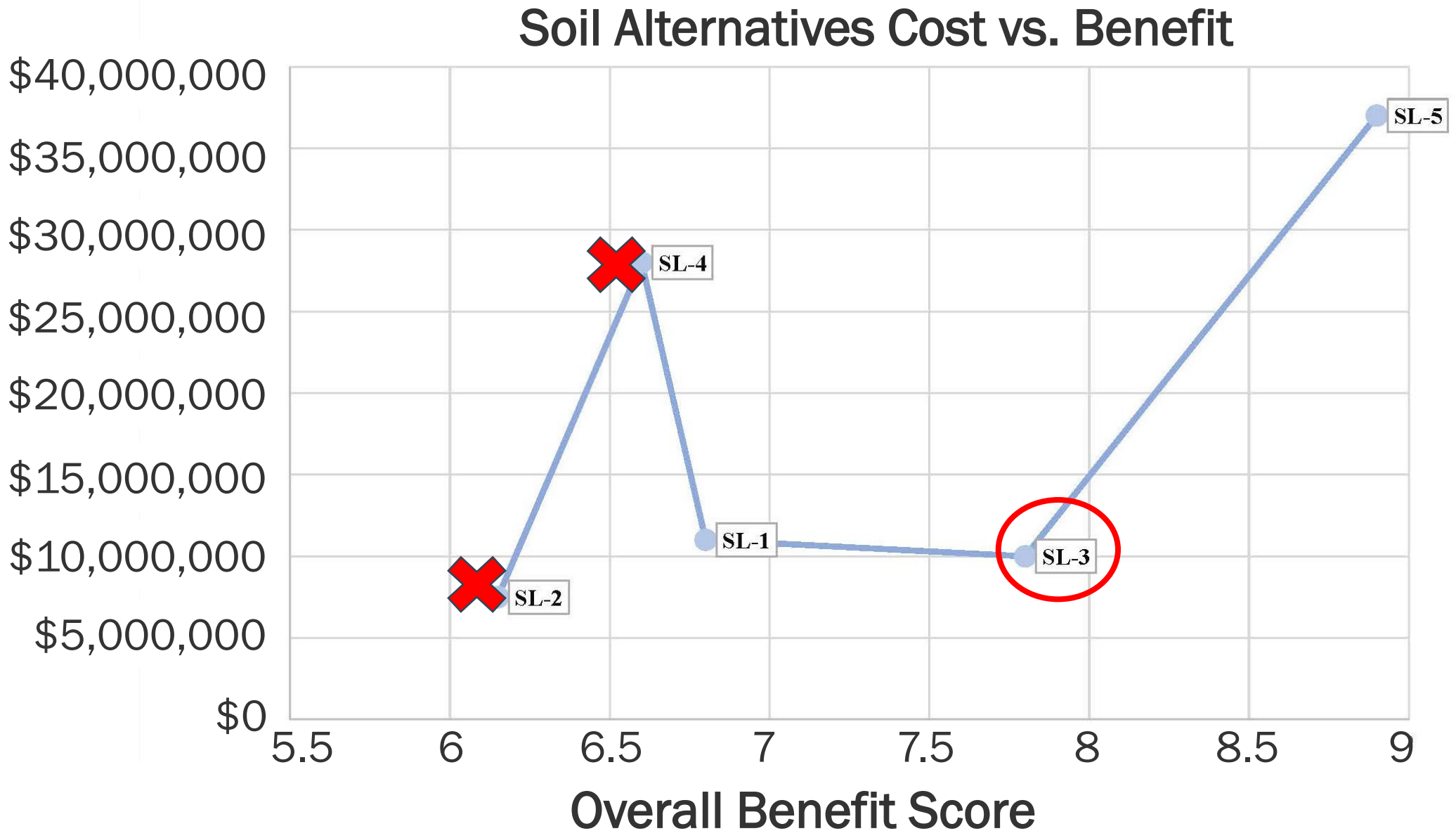
- Upland study area
- - - Potential restoration area
- Shallow Excavation Area
- Deep Excavation Area
- Cap Area

**Consolidate/Cap -
Unrestricted Use
Cleanup Levels**

Soil Cap Example

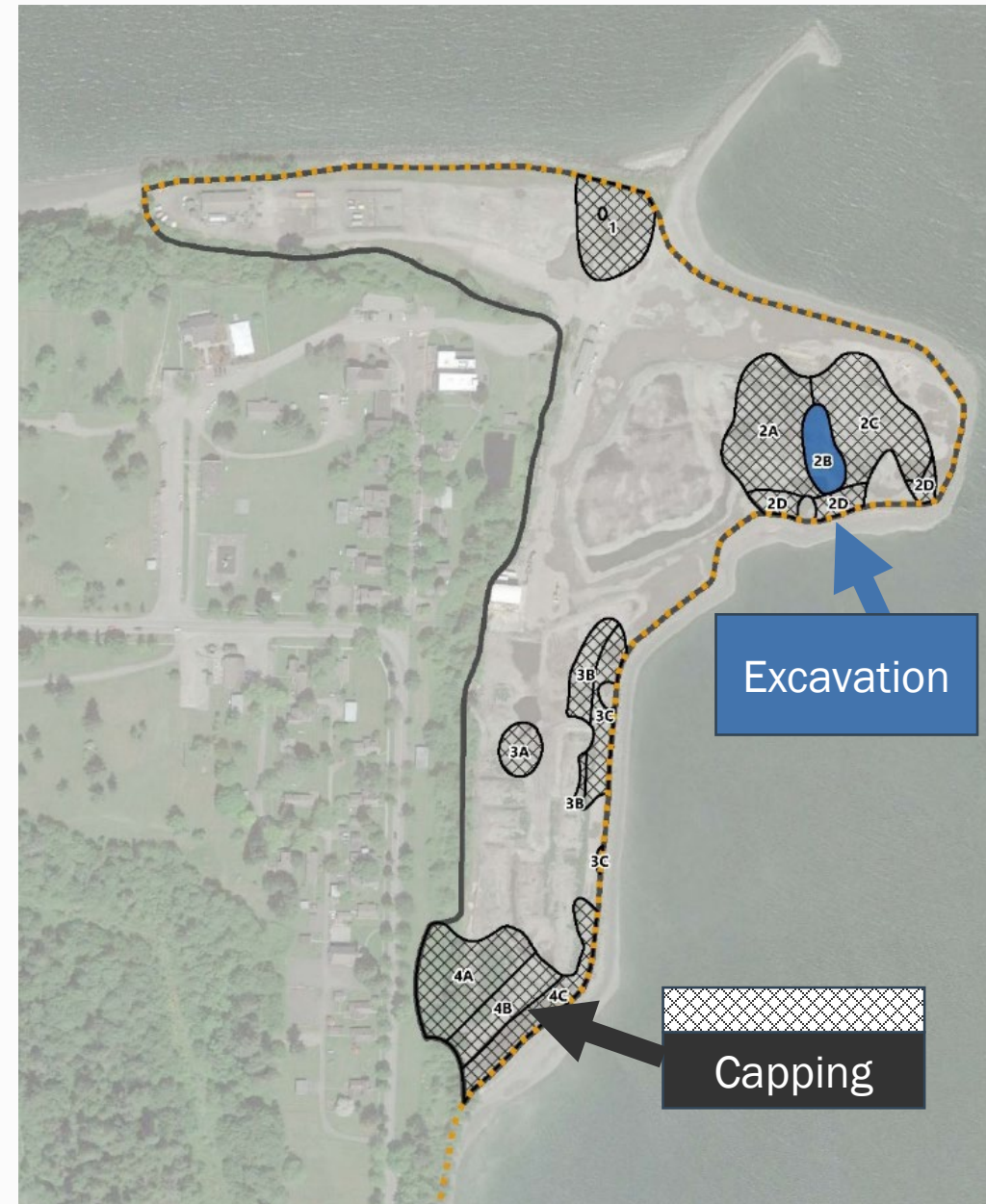


Soil – Disproportionate Cost Analysis



Port Gamble Bay and Mill Site

- Former Pope & Talbot sawmill
- 26,000 tons of contaminated soil previously removed as part of interim actions
- Elevated dioxins remain in soil
- Cap ~6 acres of property with elevated dioxins



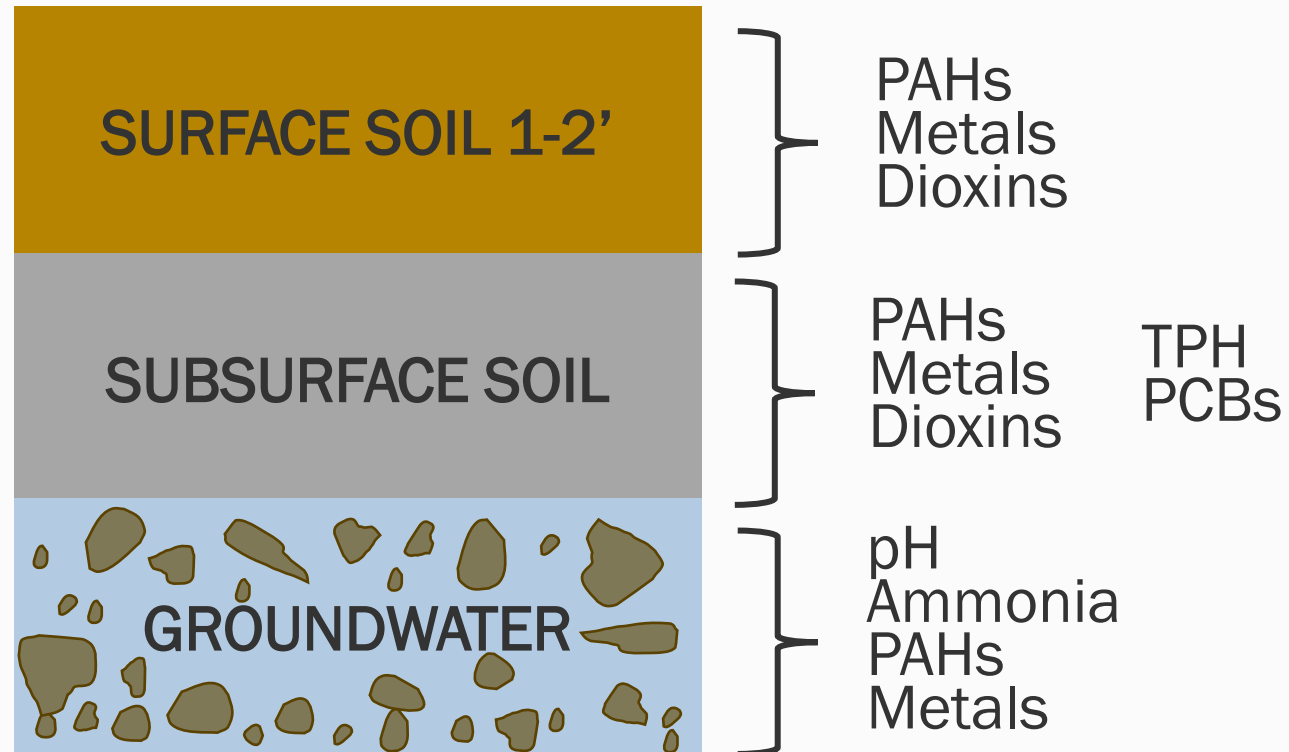


Groundwater

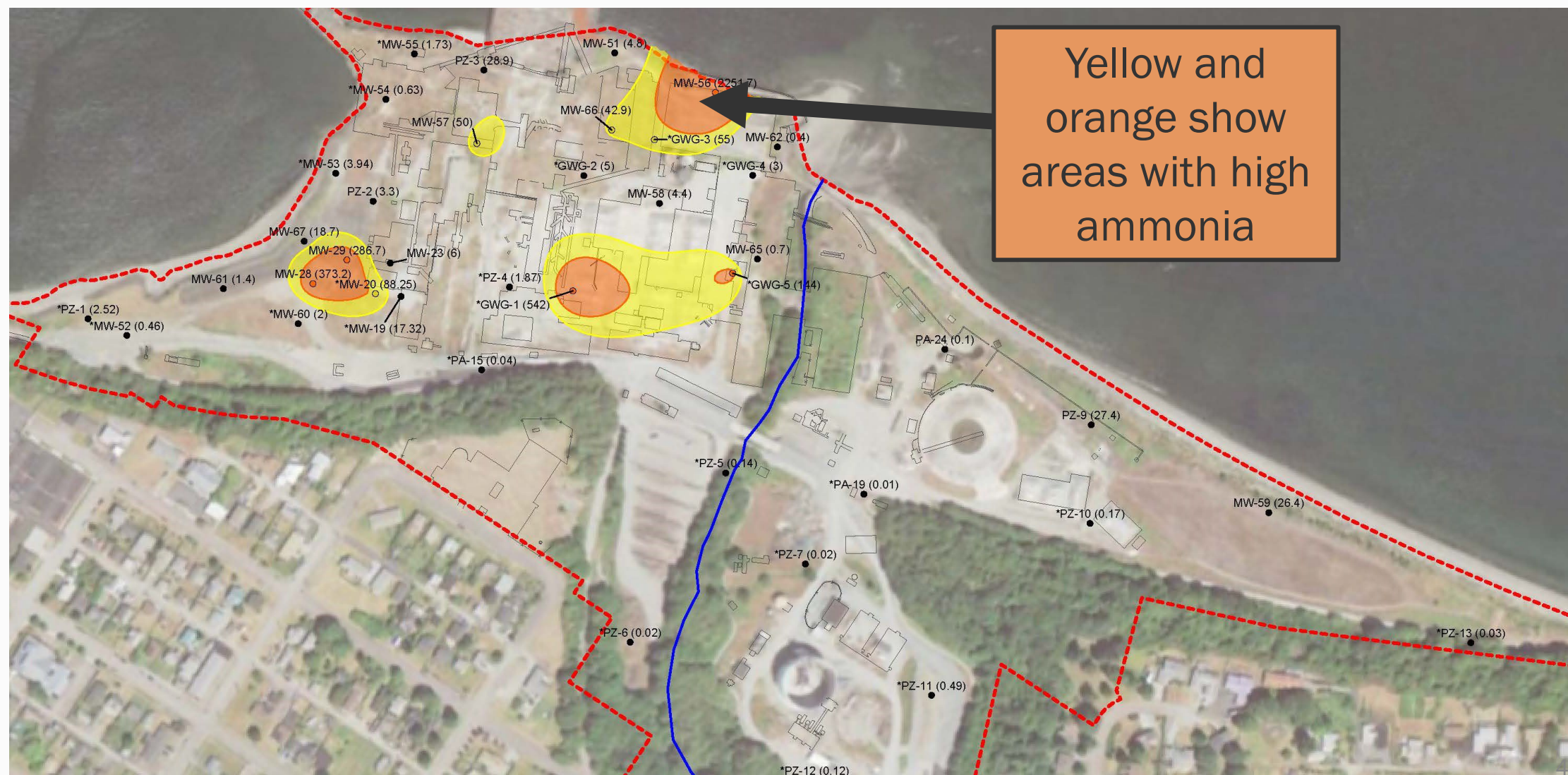


Drill Rig at Rayonier Mill

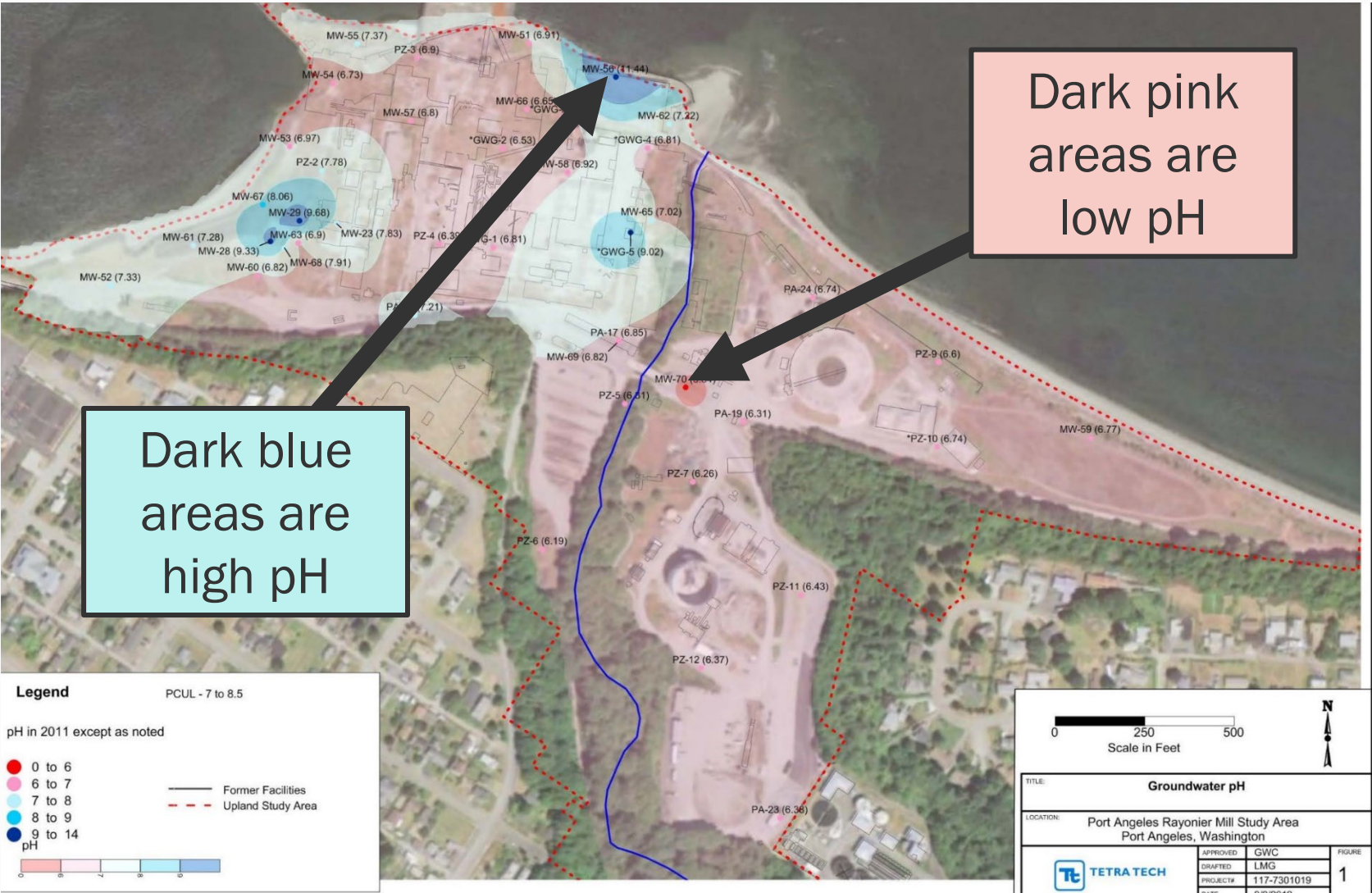
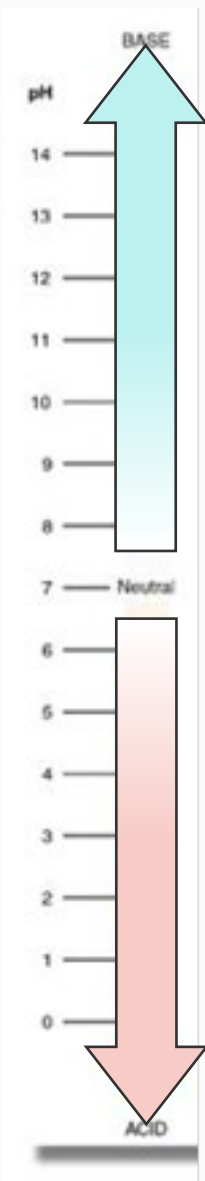
Upland Contamination



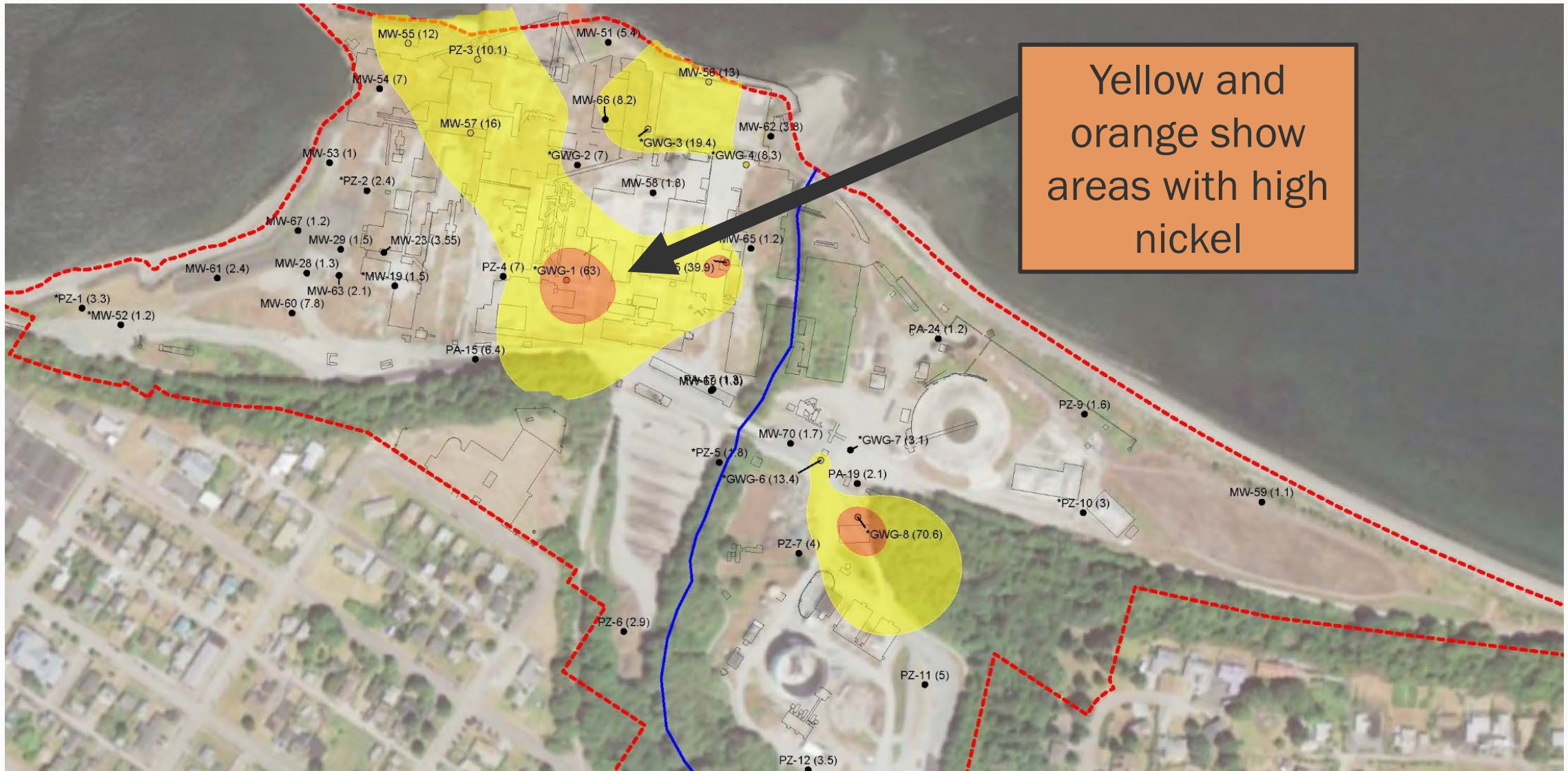
Groundwater Ammonia



Groundwater pH



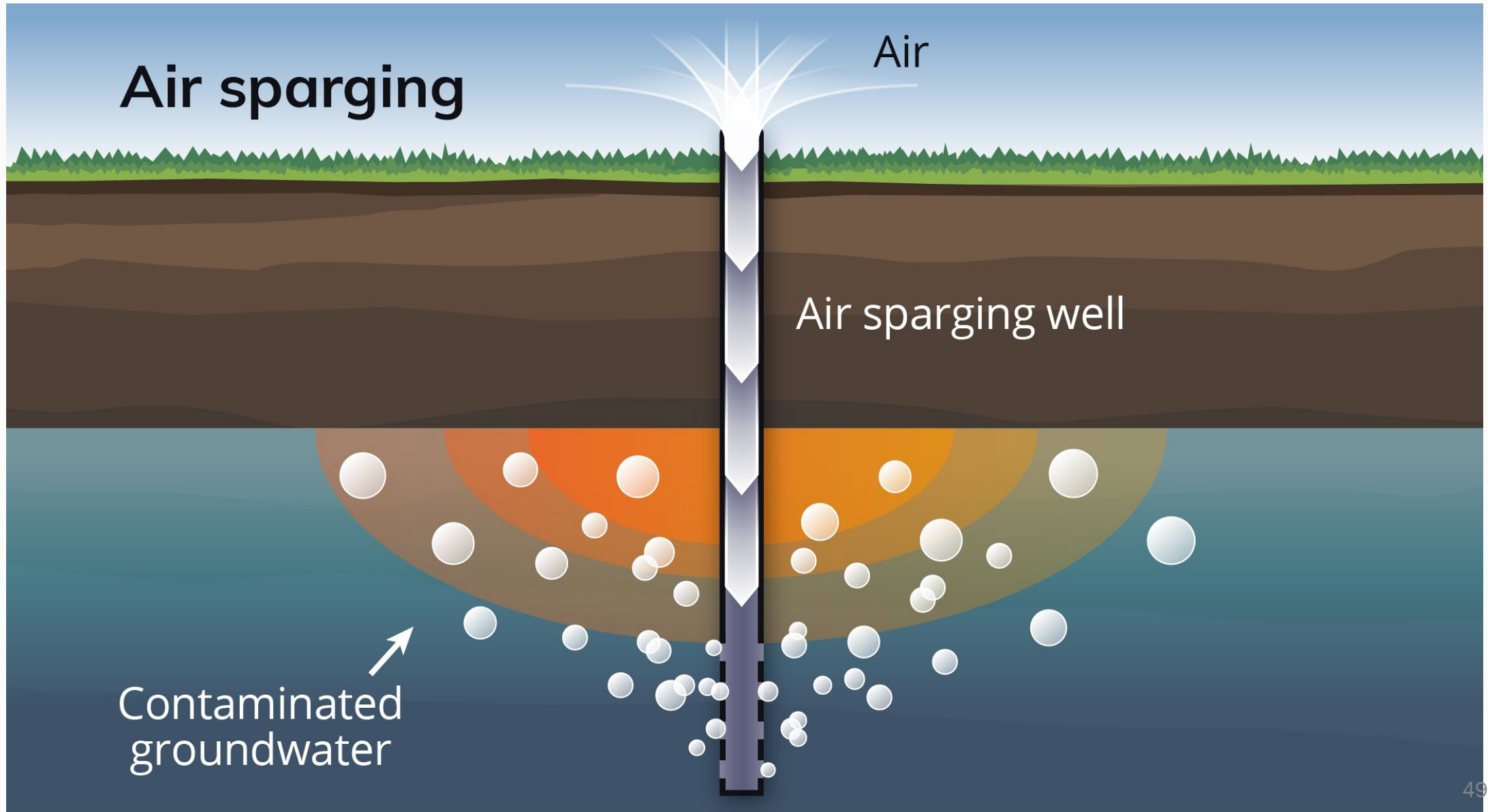
Groundwater Nickel



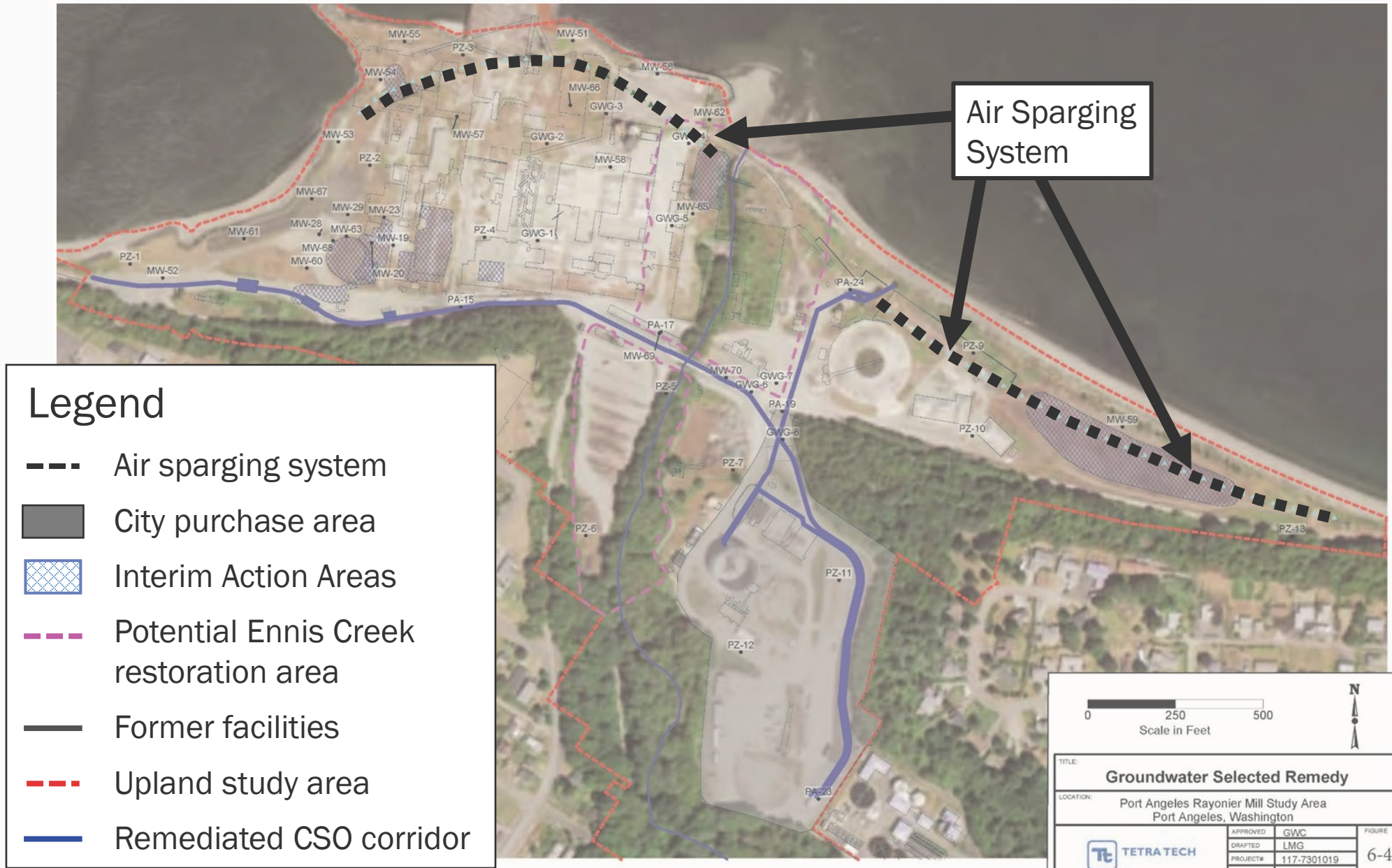
Groundwater Contamination



Groundwater Remedy – Air Sparging



Groundwater – Air Sparging



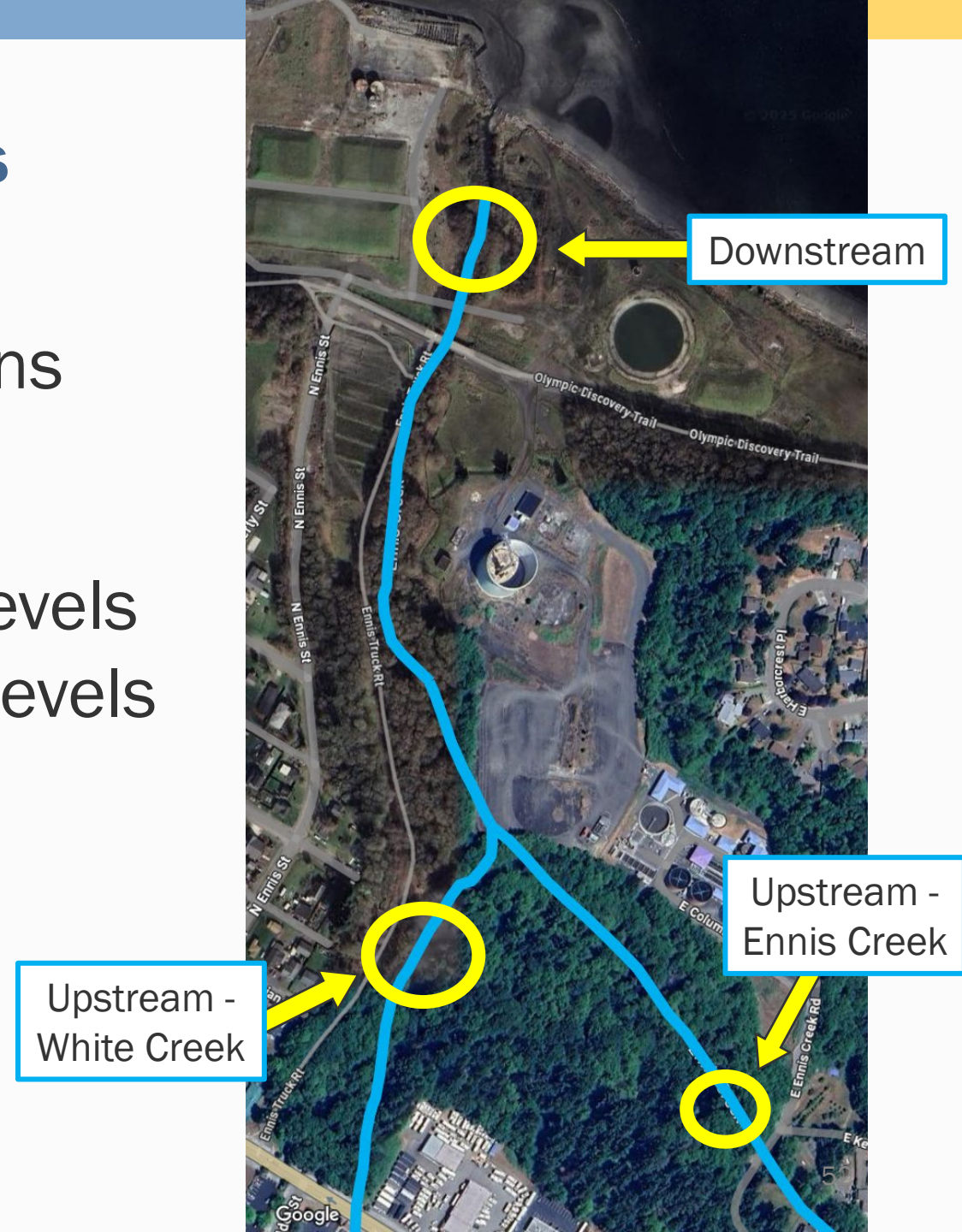


Surface Water



Surface Water Sampling Locations

- 5 surface water sampling locations
 - 2 upstream (White and Ennis Creeks)
 - 3 downstream
- Metals detected below cleanup levels
- Dioxins detected above cleanup levels
- Dioxin levels were the same both upstream and downstream



Selected Remedy

Cleanup Media	Cleanup Actions	Cost (in 2019 \$)
Sediment	SMA1 – fill berth, EMNR SMA2 – dredge intertidal; EMNR subtidal SMA3 – contingent (EMNR or thin-layer cap or dredge) SMA4 – contingent (EMNR or thin-layer cap or dredge)	\$10.9M - ~\$13M
Soil	Consolidate and cap where soil exceeds unrestricted use cleanup levels	\$10M
Groundwater	Air sparging in phased approach	\$5.7M
	Total	\$26.6M - \$28.7M



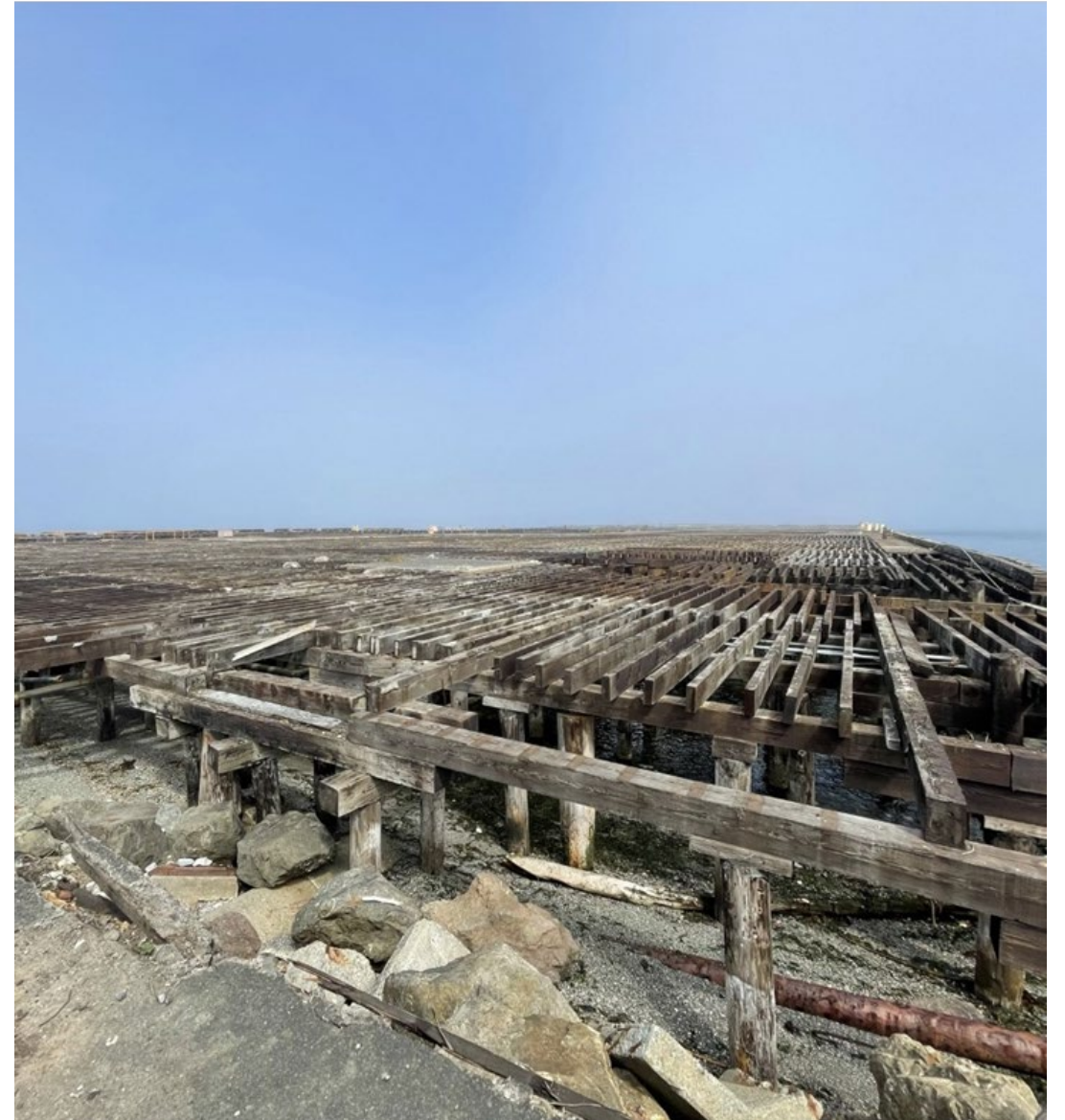
Cleanup, Structure Removal, and Restoration



Dock, Jetty and Shoreline







Ennis Creek Restoration





Rayonier Mill Consent Decree

**STATE OF WASHINGTON
CLALLAM COUNTY SUPERIOR COURT**

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Plaintiff,

v.

RAYONIER A.M. PROPERTIES LLC
and RAYONIER ADVANCED
MATERIALS INC.

Defendants.

NO. _____

CONSENT DECREE

TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	JURISDICTION	4
III.	PARTIES BOUND	5
IV.	DEFINITIONS.....	5
V.	FINDINGS OF FACT	6
VI.	WORK TO BE PERFORMED.....	10
VII.	DESIGNATED PROJECT COORDINATORS	14
VIII.	PERFORMANCE	15
IX.	ACCESS	16
X.	SAMPLING, DATA SUBMITTAL, AND AVAILABILITY	17
XI.	ACCESS TO INFORMATION	17
XII.	RETENTION OF RECORDS	18
XIII.	TRANSFER OF INTEREST IN PROPERTY	19

Consent Decree

- 29 sections (I – XXIX)
 - 4 (IV) – Definitions
 - 6 (VI) – Work to be performed
- 3 Exhibits
 - Rayonier Mill Study Area Diagram
 - Interim Action Plan
 - Western Port Angeles Harbor Study Area Diagram

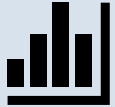


Next Steps



Soil excavation at Rayonier Mill during 2012/13 Interim Action

Remedial Design and Construction Steps

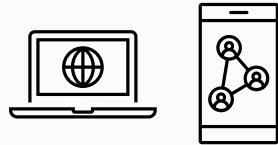
Hydrodynamic Modeling and sediment sampling		• Pre-Remedial Design Work Plan • Data submittals • Sediment & Hydrodynamic Modeling Results Report
Master Plan		• Master plan and Schedule • Phases of design and construction
Data collection and engineering evaluations		• Remedial Design Work Plan • Data submittals
Remedial design and permitting		• Engineering Design Report • Construction Plans and Specs • Permits
Construction		• Monthly Progress Reports • Annual Progress Reports • Cleanup Action Report
Long-term monitoring		• Monitoring • Periodic Reviews

Thank you!

Q&A Session



Comment period will close
Tuesday, August 12 at 11:59 PM



Submit comments online

go.ecology.wa.gov/comment2270



Or by mail or email

Marian Abbett, Site Manager

WA State Department of Ecology

PO Box 47775

Olympia, WA 98504-7775

Marian.Abbett@ecy.wa.gov

**How to
Comment**