



Unocal Edmonds Cleanup Site

Public Comment Period: Sept 9, 12:00 am – Oct 24, 11:59 pm, 2024

Review Documents: Revised Draft Feasibility Study & Updated Public Participation Plan

Open House and Public Meeting: Sept 16, 2024

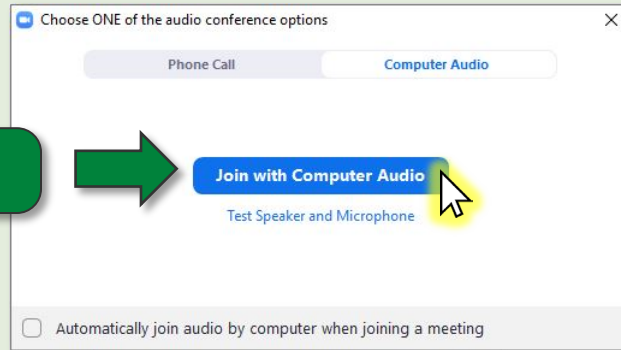
Welcome to our online meeting

We will start our presentation shortly.

No sound? We will unmute soon for sound checks.

Join

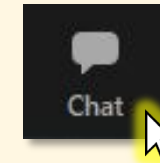
Connect Audio & Join



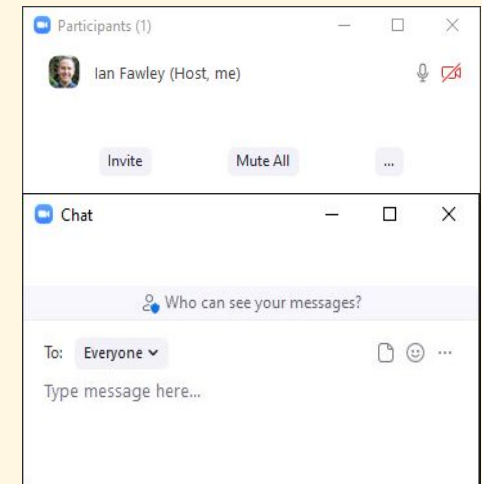
Tip Try your computer audio *first*.

If you'd like, you can test your speaker and microphone *before* joining.

Participate



Question?
Need help?
Chat with us!



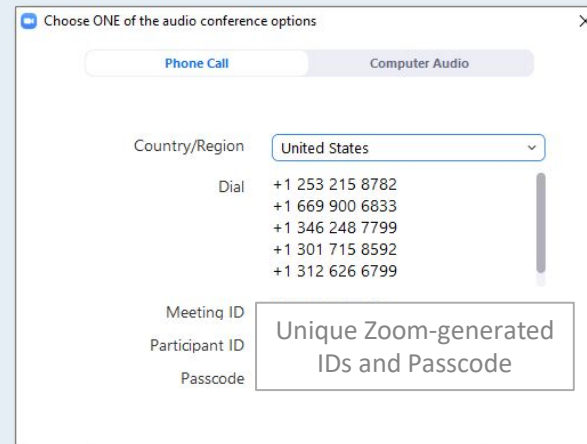
Turn on the Chat box and Participant list from your toolbar.

Audio

A Best Option: Use computer for audio

B If selecting "Phone Call"...

- Dial: **253-215-8782 (Tacoma)**
- Enter Zoom Meeting ID **890 8112 0364** followed by "#"
- Enter your unique Zoom Participant ID, followed by "#"
- (If you do not enter the Participant ID, you will be prompted to enter the Passcode.)



Participation

During the Presentation

Please save questions for Q/A at the end of presentation.

(This will help us facilitate both the in-person and online attendees.)

During Q&A

Facilitators will address questions:

- **1st:** Online chat questions
- **2nd:** In-room attendee questions

Verbal questions are NOT *formal* comments and will NOT receive *formal* responses. You can submit *formal* comments during the public comment period.

Presentation Outline



- **Introductions**
- **Cleanup Process & Public Participation**
- **Site Information**
 - Site Location and Background
 - Previous and Ongoing Cleanup
 - Remaining Contamination
 - Revised Draft Feasibility Study
 - Disproportionate Cost Analysis (DCA)
 - Evaluation of Alternatives
 - Preferred Cleanup Alternative: Lower Yard
 - Additional Lower Yard Sampling
- **Conclusion**
 - Planned Next Steps
 - How to Comment
 - Questions and Answers



Introductions



Meet Your Presenters



Tanner Bushnell
Site Manager

Ian Fawley
Senior Outreach Planner

Kristen Forkeutis
Outreach Specialist



Sam Miles
Arcadis Project Manager



Cleanup Process & Public Participation

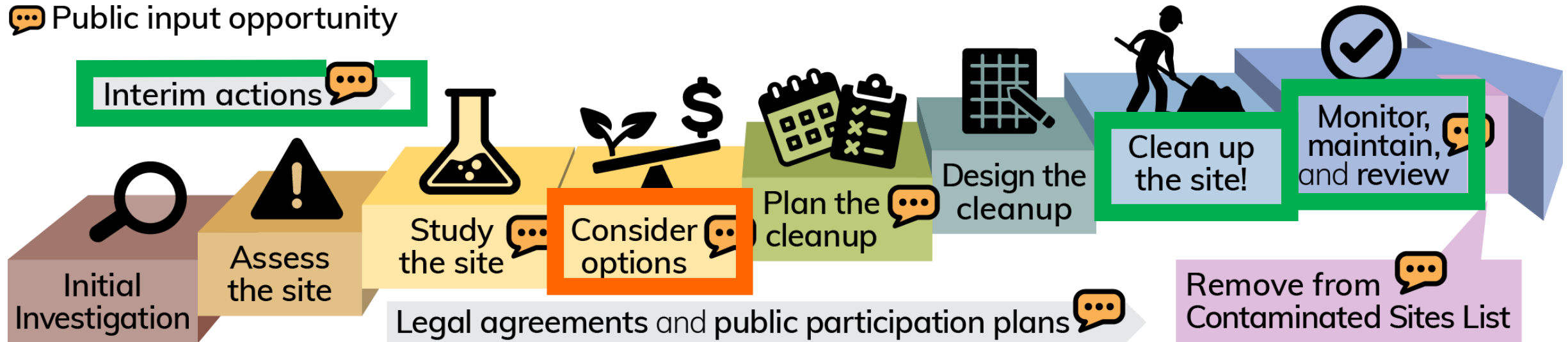
Washington's Cleanup Process

The Model Toxics Control Act (MTCA)

1. What has happened so far?

2. Where are we now?

 Public input opportunity





Public Participation

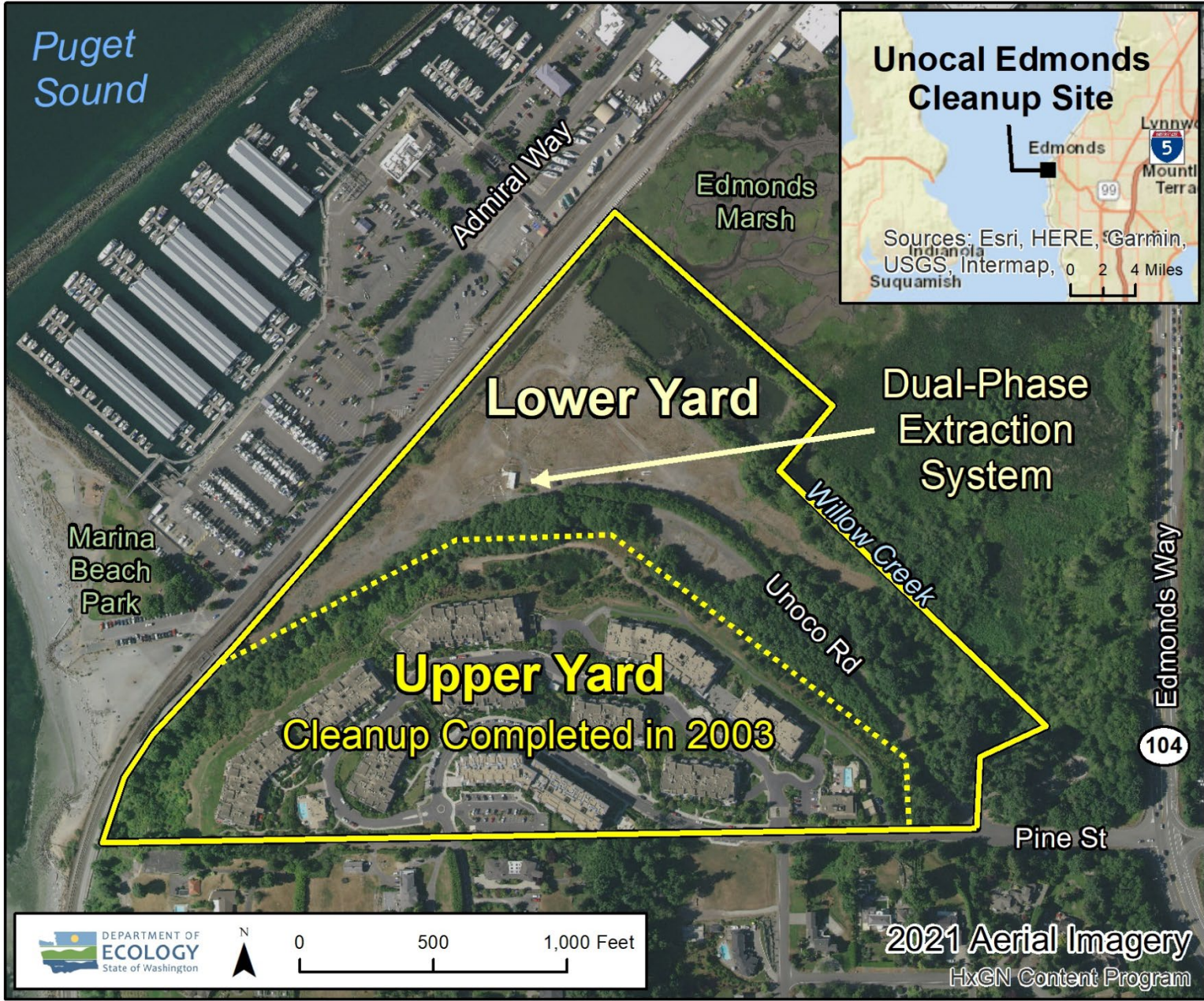


Ecology has 2 documents ready for public review and comment:

1. Draft Feasibility Study
 - a) 2017 Draft Feasibility Study
 - b) 2024 Draft Feasibility Study Addendum
 - c) Site-Specific Terrestrial Ecological Evaluation
2. Updated Public Participation Plan



Site Information



Site Location

Site Name:
 Unocal Edmonds Bulk Fuel Terminal 0178

Site Address:
 11720 Unoco Rd,
 Edmonds, Washington

Facility Site ID: 2720
Site Cleanup ID: 5180

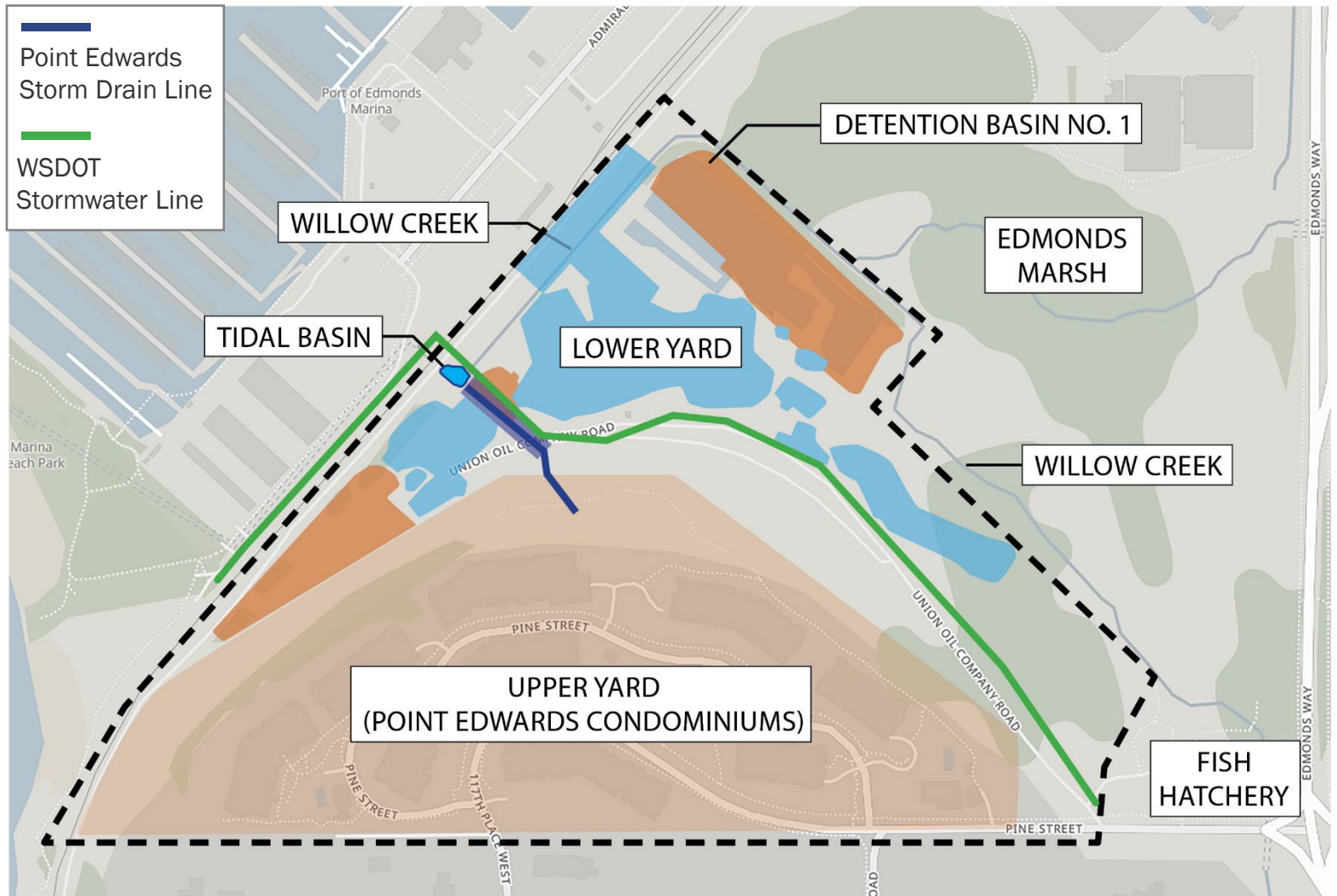
Site Background

- **1923 – 1991:**
Fuel terminal operations
- **1953 – late 1970s:**
Asphalt plant operations



Historic view of fuel terminal

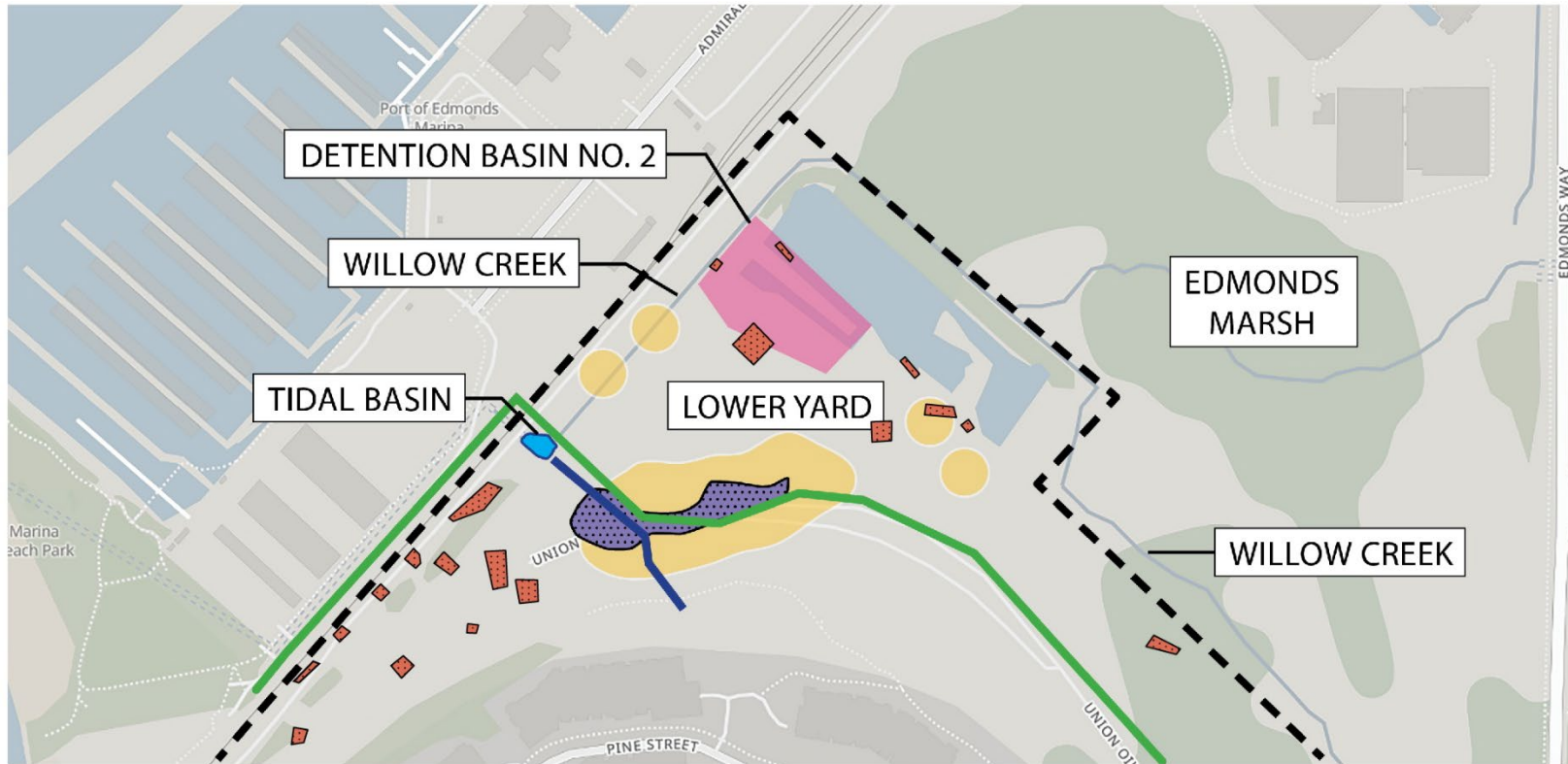
Previous and Ongoing Cleanup



- 2001-03 Upper Yard Remediation Actions**
 - ~100,000 tons of metals and petroleum-impacted soil and 23 fuel storage tanks removed
 - Upper Yard approved for residential development
- 2001-03 Lower Yard Remediation Actions**
 - ~40,000 tons of metals and petroleum-impacted soil removed
- 2007-2008 Lower Yard Remediation Actions**
 - ~130,000 tons of petroleum-contaminated soil and sediment removed
 - ~9,000 gallons of non-aqueous phase liquid removed

Some areas had remediation work during 2001-03 and in 2007-08. Site map is a graphical representation for illustrative purposes only.

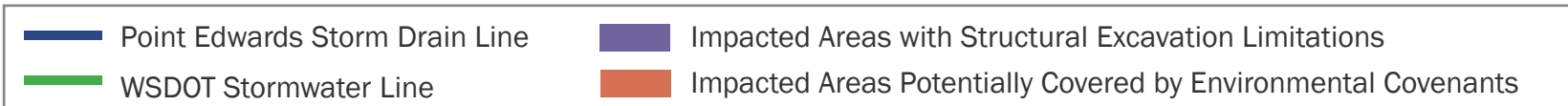
Previous and Ongoing Cleanup



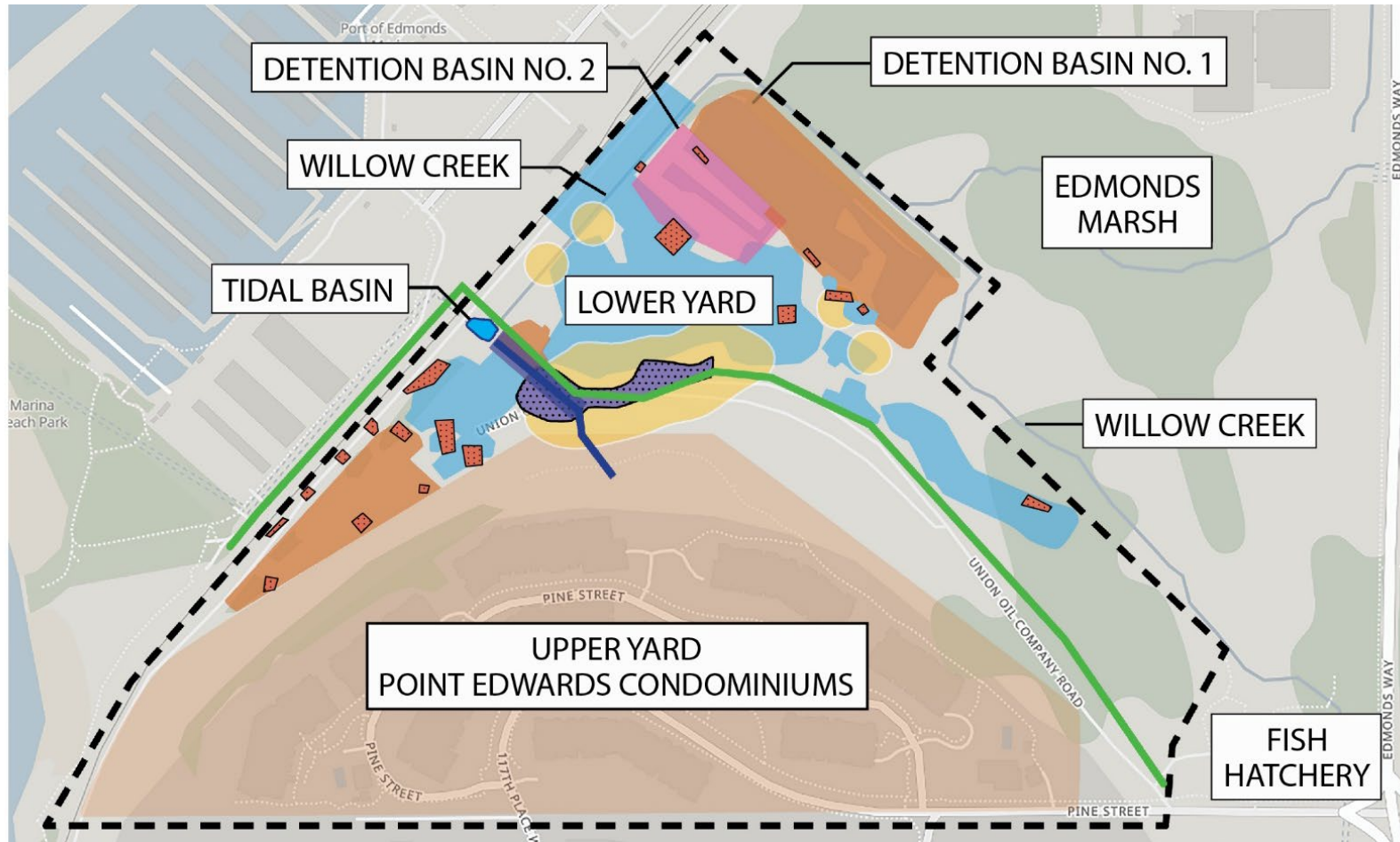
Site map is a graphical representation for illustrative purposes only.

- 2017-18 Remediation Actions**
 - Petroleum-contaminated soils removed from stormwater Detention Basin 2
 - Installed dual-phase extraction system (removes and treats petroleum from soil, groundwater, and soil vapor) in the WSDOT storm drain area

- 2019-Present Interim Actions**
 - Expand dual-phase extraction system to optimize groundwater capture in the north/northeast of the WSDOT storm drain treatment area



Remaining Contamination



Site map is a graphical representation for illustrative purposes only.

- Areas Potentially Covered by Environmental Covenants**
 - The small areas of contamination are shallow and pose an exposure risk.

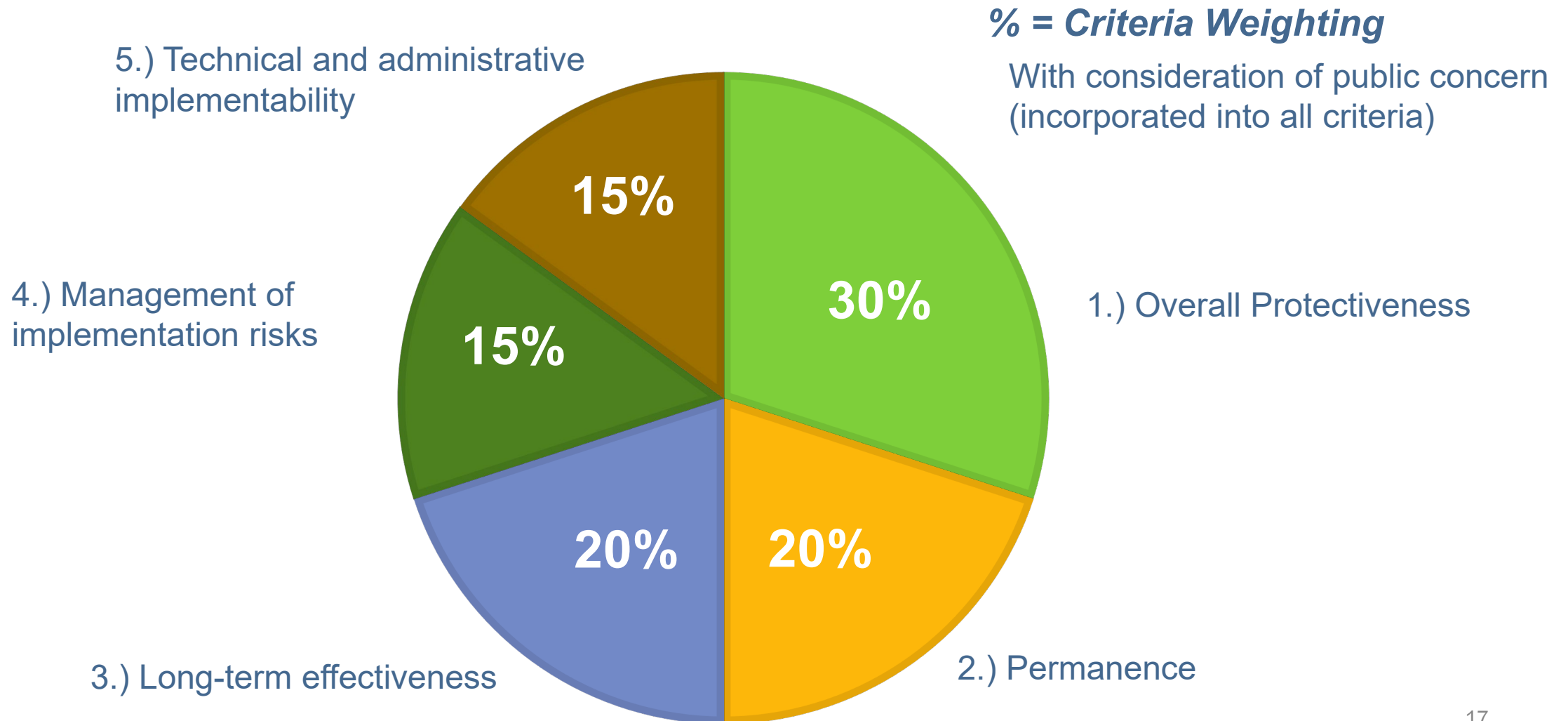
- Area Near Stormwater Line with Structural Excavation Limitations**
 - The draft Feasibility Study proposes environmental covenants to manage the remaining contamination.

 Point Edwards Storm Drain Line	 Impacted Areas with Structural Excavation Limitations
 WSDOT Stormwater Line	 Impacted Areas Potentially Covered by Environmental Covenants

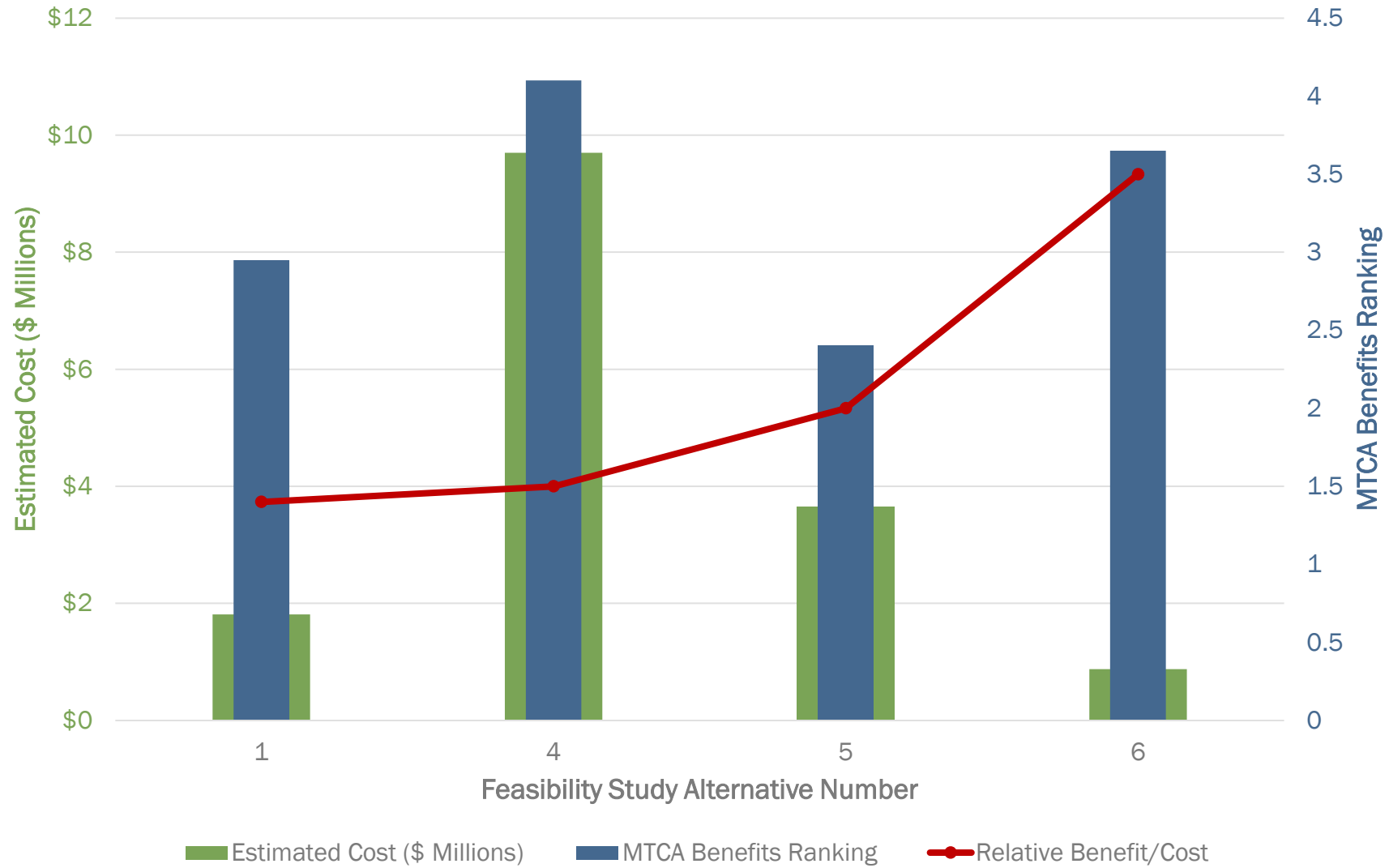
Revised Draft Feasibility Study

- **2017 Draft Feasibility Study:** Evaluated six different cleanup alternatives for the Lower Yard portion of the Site
- **2024 Draft Feasibility Study Addendum:** Considers revised cleanup levels (CULs), cleanup actions required for the protection of ecological receptors, and a revised Disproportionate Cost Analysis (DCA).
- **Site-Specific Terrestrial Ecological Evaluation:** Evaluates potential risks and calculates the protective CULs for native plants, soil biota, and wildlife (known as ecological receptors) that live in the environment.

Disproportionate Cost Analysis (DCA)



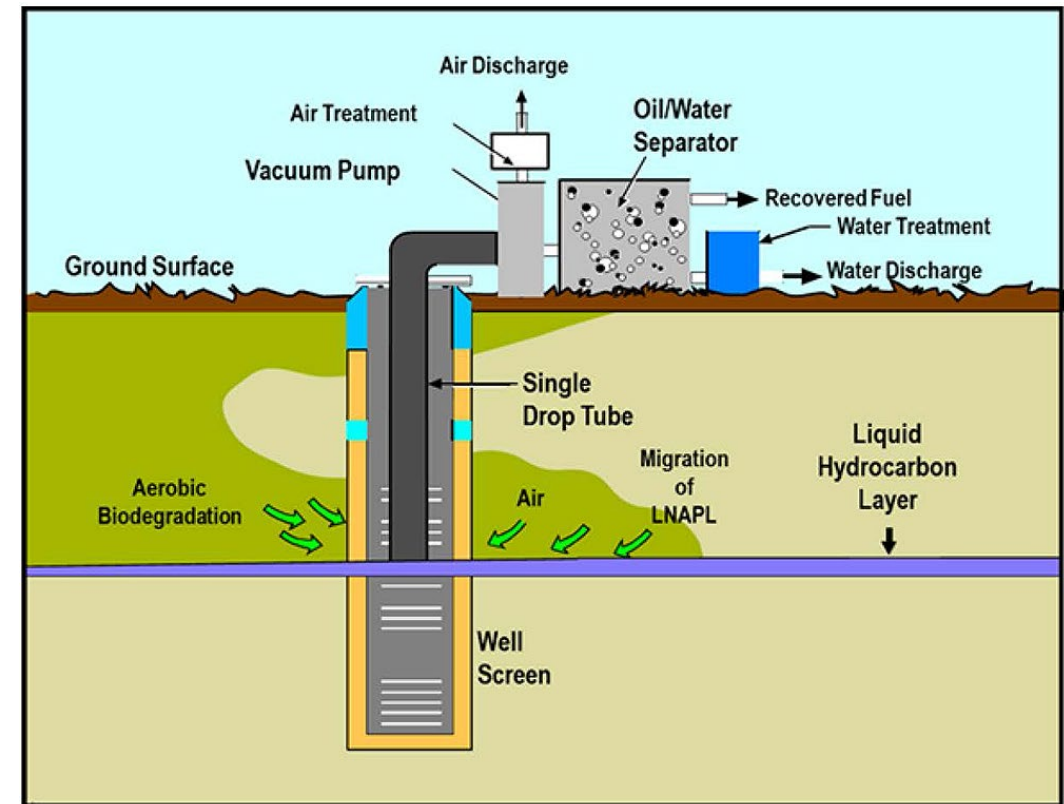
Evaluation of Alternatives



Preferred Cleanup Alternative: Lower Yard

Excavation, Dual Phase Extraction (DPE) Treatment and Limited Environmental Covenant

- Excavate impacted soil (2001-2017)
- Implement a DPE system (2017-present)
- Install a woven, geotextile fabric
- Implement a limited Environmental Covenant
- Monitor the results
 - Develop contingency plan



Dual phase extraction (DPE) system example

(Source: Federal Remediation Technologies Roundtable:
<https://www.frtr.gov/matrix/Multi-Phase-Extraction/>)

Additional Lower Yard Sampling

- MTCA typically requires additional sampling to inform future cleanup steps.
- Additional Lower Yard sampling will refine the areas for the selected TEE remedies.
- These refinements will inform the Draft Cleanup Action Plan.



Photo source: EPA



Conclusion

Planned Next Steps



Sept 9-Oct 24, 2024

2024

2025

- Hold public comment period with a public meeting
- Respond to public comments
- Finalize documents
- Continue planning the cleanup based on additional site sampling



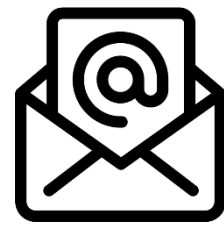
How to Comment

September 9
(12:00 a.m.)
to
October 24, 2024
(11:59 p.m.)



Comment Online

[https://go.ecology.wa.gov/
UnocalEdmondsComments](https://go.ecology.wa.gov/UnocalEdmondsComments)



Contact Site Manager

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Shoreline, WA 98133-9716
Tanner.Bushnell@ecy.wa.gov



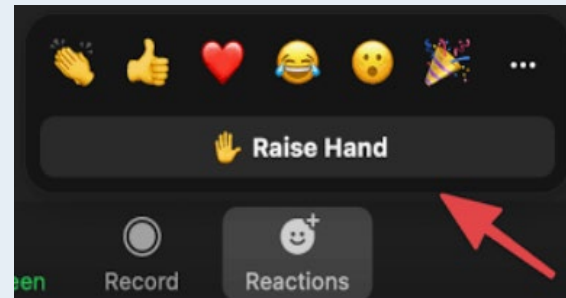
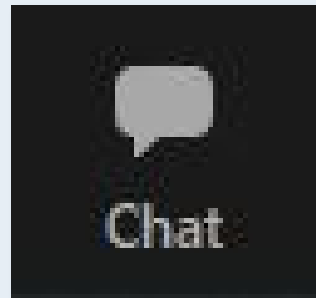
Q&A Ground Rules & Online Tips

- Be respectful of all thoughts and opinions
- Focus on the objective (to answer questions related to the cleanup of the site)
- Online Tips:
 - For inclusivity, we will address questions in the chat as a queue
 - If you need to verbalize a question, raise your Zoom hand
 - Once unmuted, speak slowly and clearly
 - Find a quiet area to participate
 - Turn your camera off when moving around

Questions and Answers

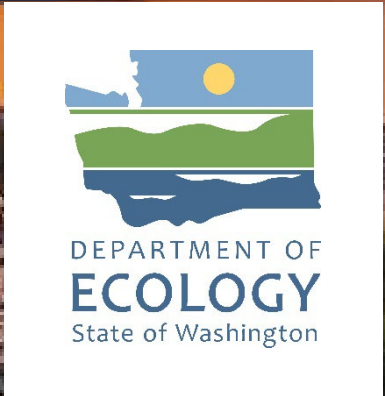
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Thank you

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Reminder:

A digital PDF of this presentation will be available on Ecology's webpage:
<https://go.ecology.wa.gov/UnocalEdmonds>