Welcome to the Lower Duwamish Waterway Roundtable Meeting WEDNESDAY, MARCH 31, 2021



Do you have your meeting materials?

Meeting materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website:

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You will need:

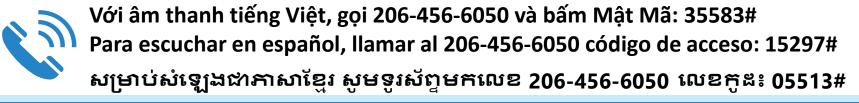
- Today's meeting agenda
- Latest version of Roundtable Operating Procedures
- Draft 2021-2022 Roundtable Work Plan



Với âm thanh tiếng Việt, gọi 206-456-6050 và bấm Mật Mã: 35583# Para escuchar en español, llamar al 206-456-6050 código de acceso: 15297# សម្រាប់សំឡេងជាភាសាខ្មែរ សូមទូរស័ព្ទមកលេខ 206-456-6050 លេខកូដ៖ 05513#

Facilitator's Notes

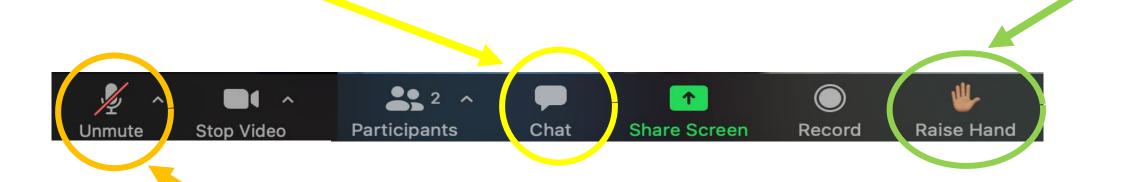
- Keep yourself on mute unless you are speaking.
- Balance speaking time and stay on the agenda topic.
- Introduce yourself when speaking: "This is (name) with (affiliation, caucus/seat)"
- In disagreements, share the reason why you feel as you do, and ask questions to find out how other feel.
- **Be respectful and courteous.**
 - **Be patient with potential internet connectivity issues we will do our best to create a seamless experience!**

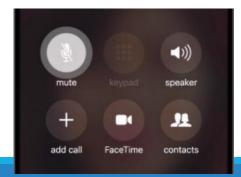


Tips for Using Zoom

If you have a **technical problem or want to type a question**, please type them in the chat! Or, ask your interpreter to type for you.

If you want to **comment or ask a question verbally**, please click 'Raise Hand' and we will call on you.





Please **keep yourself on mute** unless you are speaking. By phone only? Use "*6"



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Multilingual Meeting Best Practices

English participants should...

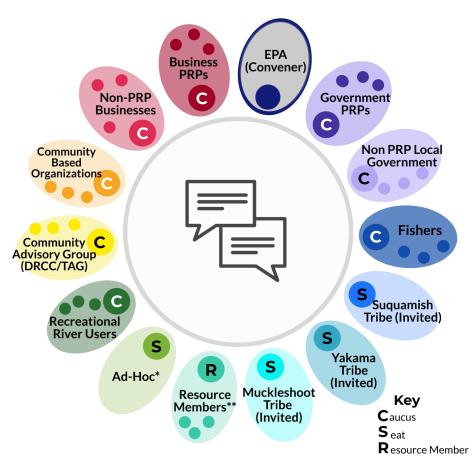
- 1. Speak slowly!
- 2. Take pauses every 2-3 sentences
- 3. Avoid acronyms
- 4. Use common language





Với âm thanh tiếng Việt, gọi 206-456-6050 và bấm Mật Mã: 35583#
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Purpose of the Roundtable



^{*} Non-governmental community members or interest groups not represented in the Community caucus.

The Lower Duwamish Waterway Roundtable is a forum for those affected by the cleanup of the Lower Duwamish Waterway Superfund Site to make **recommendations** to the US Environmental Protection Agency during the design and construction of the cleanup.

^{**} Government entities that contribute information but do not develop recommendations, including but not limited to the WA Dep't of Ecology and others

Today's Meeting Purpose



- Advance the development of the Roundtable by finalizing Roundtable
 Operating Procedures and reviewing the draft 2021-2022 Roundtable
 Work Plan
- Hear technical updates from EPA, including on the status of the cleanup and next steps
- Identify topics, directly or indirectly related to cleanup design and action, that could be important for Roundtable members to discuss, and to develop a timeline and process for including in future agendas

Today's Agenda

- Optional Technology Testing 30 minutes prior
- Welcome and Introductions
- Roundtable Administration
- Technical Updates
- Other Site News and Updates
- Wrap Up and Next Steps
- Optional Debrief

Welcome and Roundtable Introductions



Elly Hale

Remedial Project Manager

U.S Environmental Protection Agency (EPA)



Kay Morrison

Community Involvement Coordinator

U.S Environmental Protection Agency (EPA)

Piper Peterson

Institutional Controls Coordinator

U.S Environmental Protection Agency (EPA)

Welcome and Roundtable Introductions

The facilitator will review the Roundtable caucuses and caucus leads.





Roundtable Steering Committee

Coordinates with EPA to guide the work of the Roundtable, including soliciting agenda topics, drafting meeting agendas, developing Roundtable work plans

Includes members from three interest groups:

- Residents (Primary: James Rasmussen, DRCC; Alternate: Edwin Hernandez Reto, community member)
- Business/industry/labor (Primary: Pat Jablonski, Nucor; Alternate: Jonathan Hall, La Farge)
- Fishers (Rotating: Sophorn Sim, Emma Maceda, Quan Phan)

Recap of Previous Roundtable Meeting and Webinars

Did you watch the Roundtable webinar series (or read the summaries)?

Roundtable webinar materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website:

https://www.duwamishwaterwayroundtable.org/trainingmaterials

10/30/19 (in-person!) Roundtable Meeting highlights:

- Discussion on Operating Procedures
- Approval of Steering Committee appointments
- Remedial Design overview
- Preliminary Design Investigation demonstration
- IC updates



Acknowledge Federal Administration Change

Roundtable Administration



Non-PRP
Businesses

C

Community
Based
Organizations
Organizations
Recreational
River Users

S

Ad-Hoc*
Resource
Members**

Resource
Members**

S

Muckleshoot
Tribe
(Invited)

Key
C

Caucus
S

eat
Resource Member

REVIEW DRAFT 2021-2022 ROUNDTABLE WORK PLAN APPROVAL OF ROUNDTABLE OPERATING PROCEDURES

Roundtable Administration: Work Plan



- 1. Overview of Roundtable Work Plan
- 2. Feedback from Roundtable members
- 3. Identify additional Superfund-related topics of interest for future meetings

REVIEW DRAFT 2021-2022 ROUNDTABLE WORK PLAN

Meeting materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website:

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Roundtable Administration: Work Plan



REVIEW DRAFT 2021-2022 ROUNDTABLE WORK PLAN

Meeting materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website:

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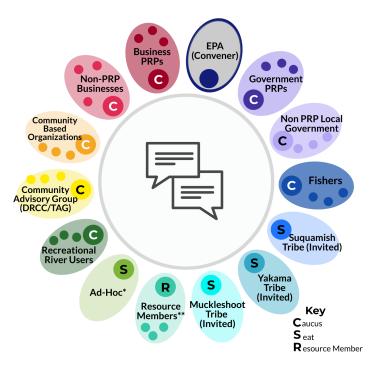
Recommended timing of meeting or webinar	Agenda topic	Why this topic matters	Purpose of the agenda topic	Estimated publishing date of related document(s)
	Carbon Amendment Pilot – Year 3 report	Report will make a recommendation about the benefits of adding activated carbon to Enhanced Natural Recovery (ENR). EPA may require this in Upper Reach and/or in later cleanup phases (if additional data are needed).	Based on the report, give input to EPA on the following options: incorporate Carbon Amendment in Enhanced Natural Recovery (ENR) for the Upper Reach, have Lower Duwamish Waterway Group (LDWG) get more data to make the decision in time for later phases, or decide not to use carbon in Enhanced Natural Recovery (ENR) at LDW at all?	March 23, 2021
Roundtable meeting Fall 2021	Phase 2 Fieldwork Summary	This topic keeps the Roundtable informed on where sampling was done and what results are. This fieldwork will inform where clean up actions take place.	Report back on what Phase 2 fieldwork was done over the summer and when reports will be available	Field work starts only after Quality Assurance Project Plan (QAPP) is approved by EPA. Field dates are uncertain and depend on the work to be done, logistics, and suitable site conditions.
	Tiering Decisions	EPA decides what tiered analysis will be done based on Quality Assurance Project Plan (QAPP) and initial results.	Keep Roundtable members up to date with Phase 2 fieldwork and describes/shares data, as available.	If Quality Assurance Project Plan (QAPP) includes a tiered decision process, the timing may not allow for Roundtable input to tiering. Quality Assurance Project Plan (QAPP) will make tiering criteria as clear as possible.
	Other topics suggested by Steering Committee (SC)	The Roundtable should have the opportunity to	Roundtable members can discuss issues and solutions	
	and agreed to by EPA (see Attachment B for ideas)	bring forward issues relevant to other members.	with each other and EPA.	

Roundtable Administration: Work Plan

3. Identify additional Superfund-related topics are of interest for future meetings

Proposed Agenda Topic	Why this topic matters

Roundtable Administration: Operating Procedures



APPROVAL OF ROUNDTABLE OPERATING PROCEDURES

- 1. Overview of updates since last meeting
- 2. Questions or comments by caucus

Meeting materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website:

https://www.duwamishwaterwayroundtable.org/meetings

4. Other Roundtable Considerations

- Compensation: EPA's legal advisors have confirmed that EPA is not permitted to provide financial stipends to community members for their participation. Other entities (e.g. government agencies, foundations, nonprofit organizations, businesses, etc.) may independently provide community participation stipends, but EPA cannot direct entities to do this or be involved in decisions about compensation. or encourage entities to do this or be involved in decisions about compensation. Other entities involved in the Roundtable will work to find funding to compensate community members who require financial support for their participation. If funding is not available to support stipends for community members, all Roundtable members will be alerted to this in advance of Roundtable meetings. If Roundtable members choose to not participate in the Roundtable as a result of unavailable community stipends, EPA will work with Roundtable members to identify potential solutions, or, if none are acceptable, to recommend whether to dissolve the Roundtable. EPA will make a decision, considering all options for public involvement, and will move forward with remedial design and action.
- B. <u>Attendance</u>: Roundtable Members and members of the public are encouraged to attend Roundtable meetings consistently so that EPA hears their perspective and so that they stay abreast of cleanup updates.

B. Role of the Steering Committee

ABelow is information on the purpose of the Steering Committee will be and how it is established that consists of 3-5 Roundtable Members from among the member types listed on page 6.

- Purpose: The Steering Committee will coordinate with EPA to guide the work of the Roundtable, including soliciting agenda topics, drafting meeting agendas, developing Roundtable work plans, and other duties as assigned. Roundtable Members can submit The Steering Committee will meet either by phone or in person up to twice prior to each Roundtable meeting. Steering Committee members (both members and alternates) will receive an agenda topic a week in advance of their meetings. Note: any Roundtable Member can directly request an agenda topic to EPA and, the Steering Committee, or any Steering Committee member at least a month six weeks prior to a Roundtable meeting.
- Steering committee—Steering Committee Composition: EPA will establish a Steering Committee with members from three interest groups that have been actively involved in the Roundtable to date and which are likely to be impacted by the cleanup: residents, business/industry/labor, and fishers. As Section 3B describes, the Community Advisory Group (CAG) Caucus, the non-CAG Community Caucus, and Recreational River Users represent residential interests in the Duwamish Valley; the Potentially Responsible Party (PRP) Business/Industry/Labor Caucus and Non-PRP Business/Industry/Labor Caucus collectively represent the interests of business/industry/labor; and the Fishers Caucus represents the interests of the fishing and fish consuming community associated with the Duwamish River.
- Nominations: Steering Committee members may be self-nominated and/or nominated by atheir caucuses during Roundtable meetings or during separate caucus. Steering committee membership is approved by EPA. Every year meetings. EPA and the Roundtable will be notified of these nominations.



Can we use these Operating Procedures for now?

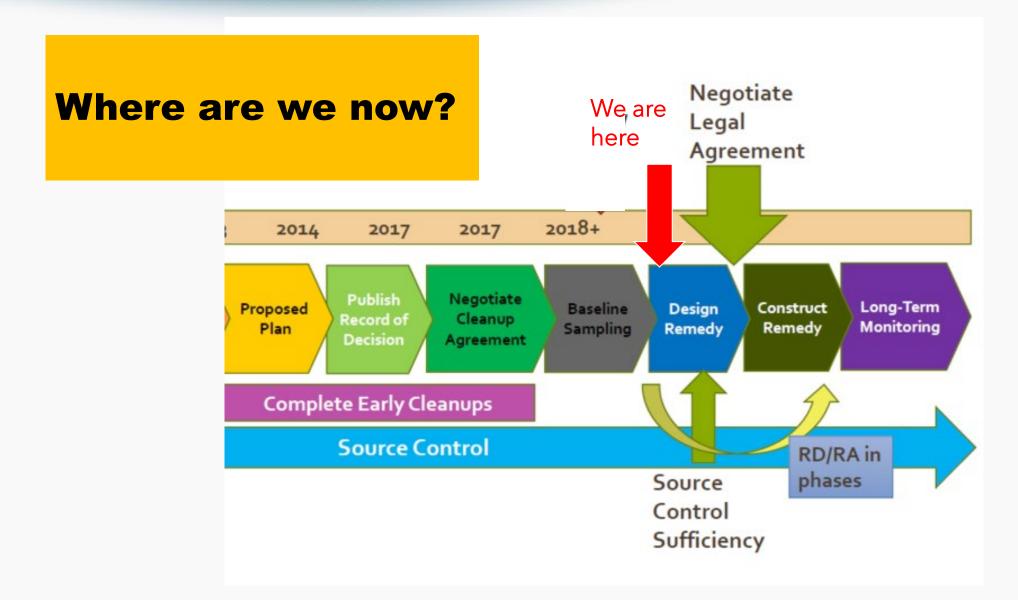


Lower Duwamish Waterway Technical Updates



ROD – 2014 It is now 2021 Process is slow – but without deadlines, we won't get there





Upper ReachRemedial Design*

Pre-design Investigations

30% design

60% design

90% design

100% design

Remedial Action

Remedial Action Work Plan

Phasing Remedial Design (RD)/Remedial Action (RA)

Remedial Action

Remedial Action Work Plan

*Administrative Order on Consent – Amendment #4



Remedial Design

100% design

Pre-design Investigations 30% design 60% design 90% design



Lower Reach Middle Reach Upper Reach

Lower Reach

Remedial Design

Pre-design Investigations

30% design

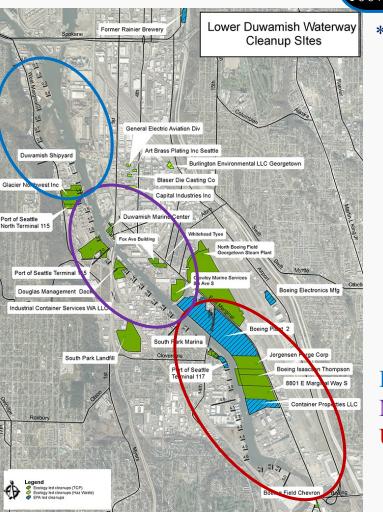
60% design

90% design

100% design

Remedial Action

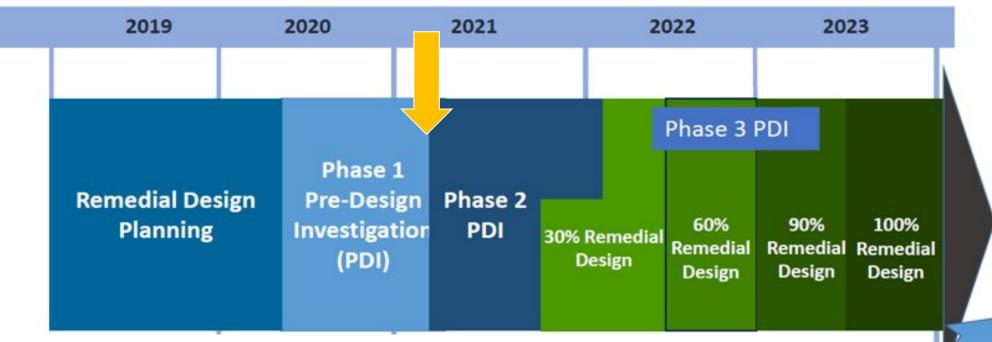
Remedial Action Work Plan





Upper Reach Remedial Design Schedule (may change)





PDI=predesign investigation

Ready for contracting and upper reach cleanup

Lower Duwamish Waterway Technical Updates



- 1. Information Only: Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach
- 2. Opportunity for Feedback: Quality Assurance Project Plan (QAPP) for Phase 2 Pre-Design Investigation Sampling for Upper Reach
- 3. Comment Period Open: Explanation of Significant Differences for cPAHs



Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach

What is the Phase I Pre-Design Investigation Data Evaluation Report?

Lower Duwamish Waterway Group (LDWG) prepared a report summarizing 2020 pre-design investigation samples collected of sediment samples and visual surveys of shoreline.

Why this topic matters:

This draft report summarizes Phase 1 (2020) sampling results and other site data relative to Record of Decision (ROD) action levels and provides an initial idea of remedial boundaries for the different cleanup methods. These initial boundaries will change, but they help identify data gaps to be filled in Phase 2 (2021) sampling.

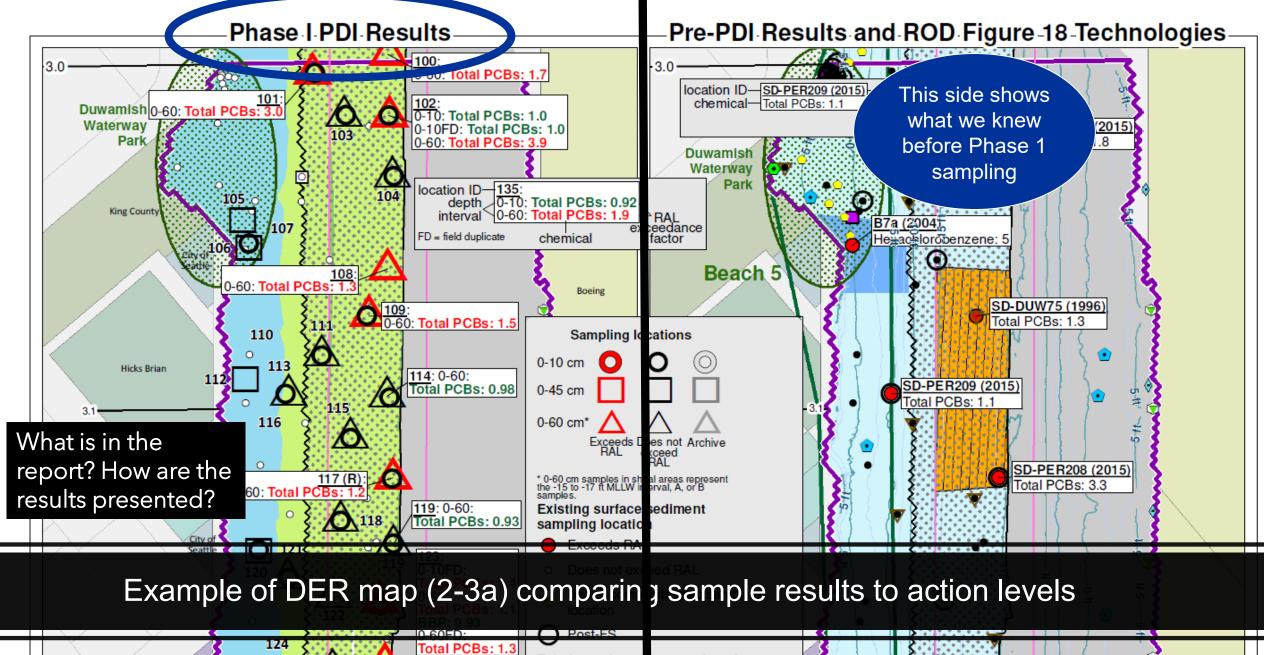
The Phase 1 Report is not a decision document itself, but it presents data that will help determine final cleanup areas in the Upper Reach.



Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach

What is in the report? How are the results presented?

- 2020 results are combined with older data to estimate <u>initial</u> areas that may have to be cleaned up. Why <u>initial</u>? We are using what we know (Phase 1 and other data) to determine where we need to know more. In 2021, Phase 2 will try to fill "data gaps" needed to complete the cleanup design by additional sampling or by analyzing additional samples.
- Maps show which sample locations have contamination levels higher than action levels in the cleanup plan (color), by how much (factor), and at which depth (shape).



Wise Kaler

Terhune Keith

Does not exceed RAL

Does not exceed RAL

DR201 (1998)

DR201 (1998)

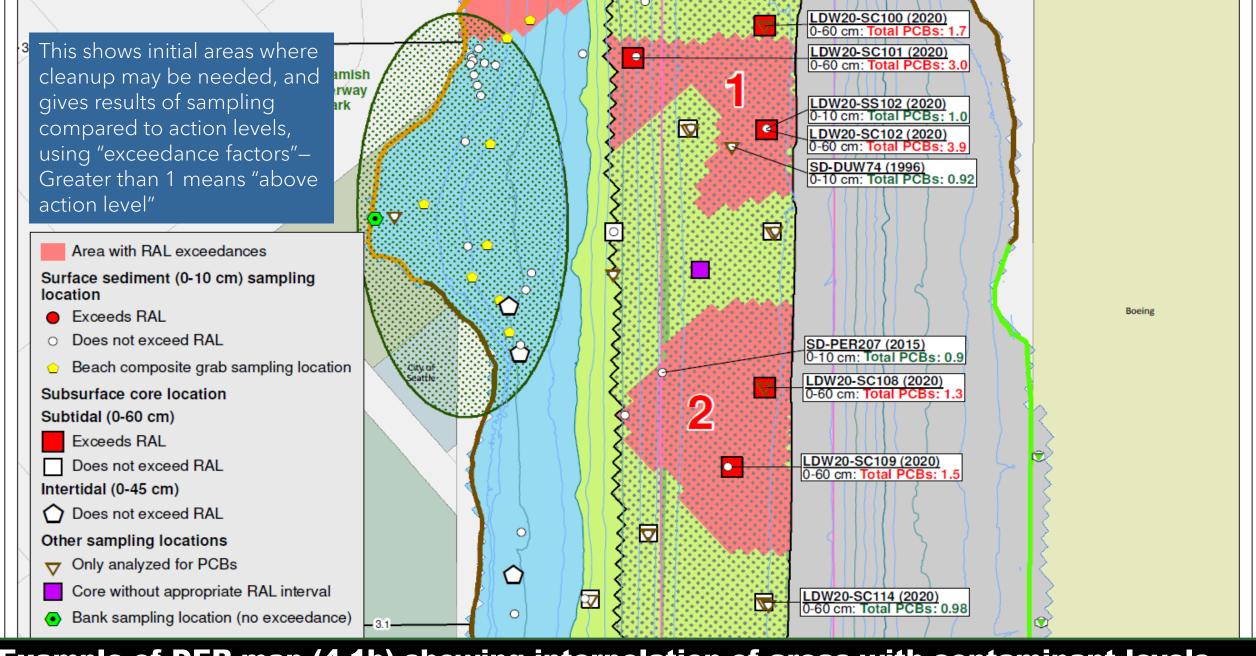


How do we draw lines around sample locations to define an area?

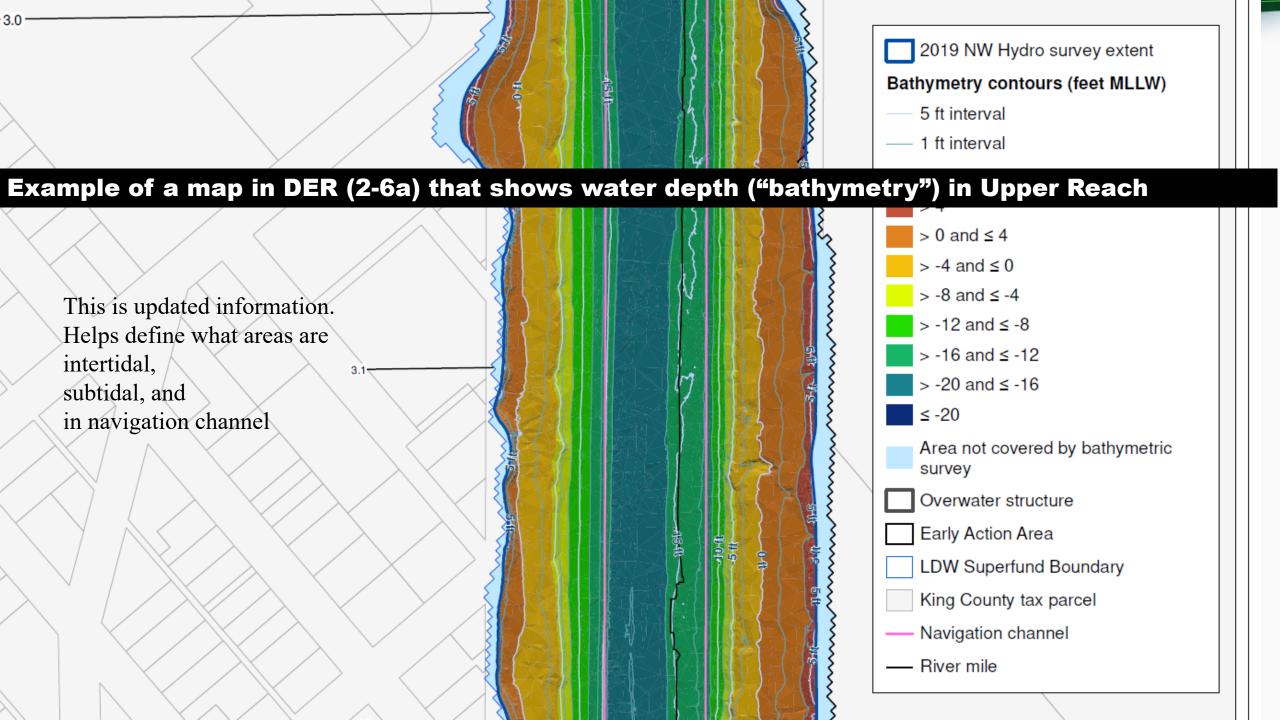
- If one sample is "dirty" and one is "clean," where do we draw a line?
- If one sample is "cap" and one is "dredge," where do we draw the line?

We use "INTERPOLATION"

Interpolation takes two samples and estimates where the values go from "above action level" to "below action level" to draw outline.



Example of DER map (4-1b) showing interpolation of areas with contaminant levels higher than remedial action levels.





Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach

How do I access the report?

Please contact Elly Hale (<u>hale.elly@epa.gov</u>) if you want to see the report. The report is in multiple parts, and some parts are very large.

How will EPA use the report?

EPA will use the report to document the Phase 1 sampling and surveys and to support plans for Phase 2 work.





Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach

Summary of comments made to Lower Duwamish Waterway Group (LDWG) from EPA





Roundtable questions on the Phase I Pre-Design Investigation Data Evaluation Report for Upper Reach





Opportunity for Feedback: Quality Assurance Project Plan (QAPP) for Phase 2 Pre-Design Investigation Sampling for Upper Reach



Why this topic matters:

This plan describes what sampling the Lower Duwamish Waterway Group (LDWG) proposes for 2021 sampling.

Opportunity for Feedback: Interested Roundtable members can provide written feedback for EPA to consider by April 12. *This is not a formal public comment period.*



What is the Quality Assurance Project Plan (QAPP) for Phase 2 Pre-Design Investigation Sampling?

The plan describes how chemical, geotechnical, and physical information will be collected in 2021.

- LDWG provided Phase 2 plan (QAPP) to EPA on March 12, 2020
- EPA is now reviewing the plan (QAPP) for Phase 2 sampling
- Input from reviewers due to EPA by April 12



Phase 2 sampling is likely to include the following:

- Samples in likely dredge areas to see how deep to dredge
- Samples to make sure the shoreline (bank) is not a source of pollution
- Additional sampling of top 10 cm, 45 cm, or 60 cm depths for site contaminants, to make more exact outlines of areas above RALs.
- In areas that require remediation, Phase 2 sampling will collect other information, such as slope stability, strength, ability to dredge, presence of rip-rap, and geotechnical information.
- Sediment sampling near and under docks, piers and other structures, if these areas can be accessed safely.



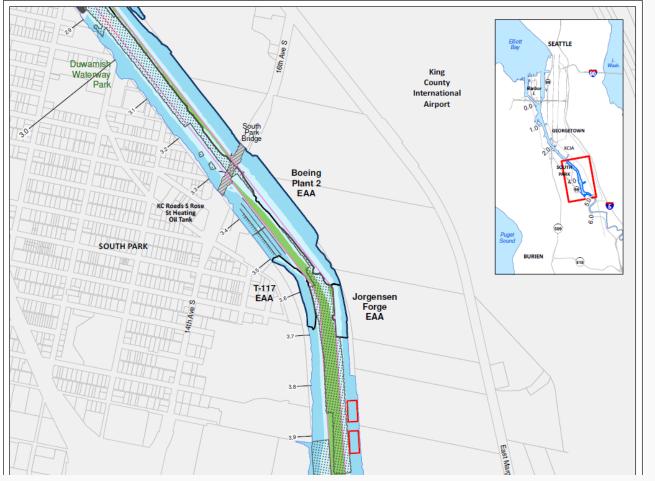
After Phase 2, engineering design begins. Combined chemical data will...

- > Define areas where active cleanup is required
- > Define actions to be taken (dredge, dredge and cap, cap, enhanced natural recovery)

...enough to support 30% design - PRELIMINARY



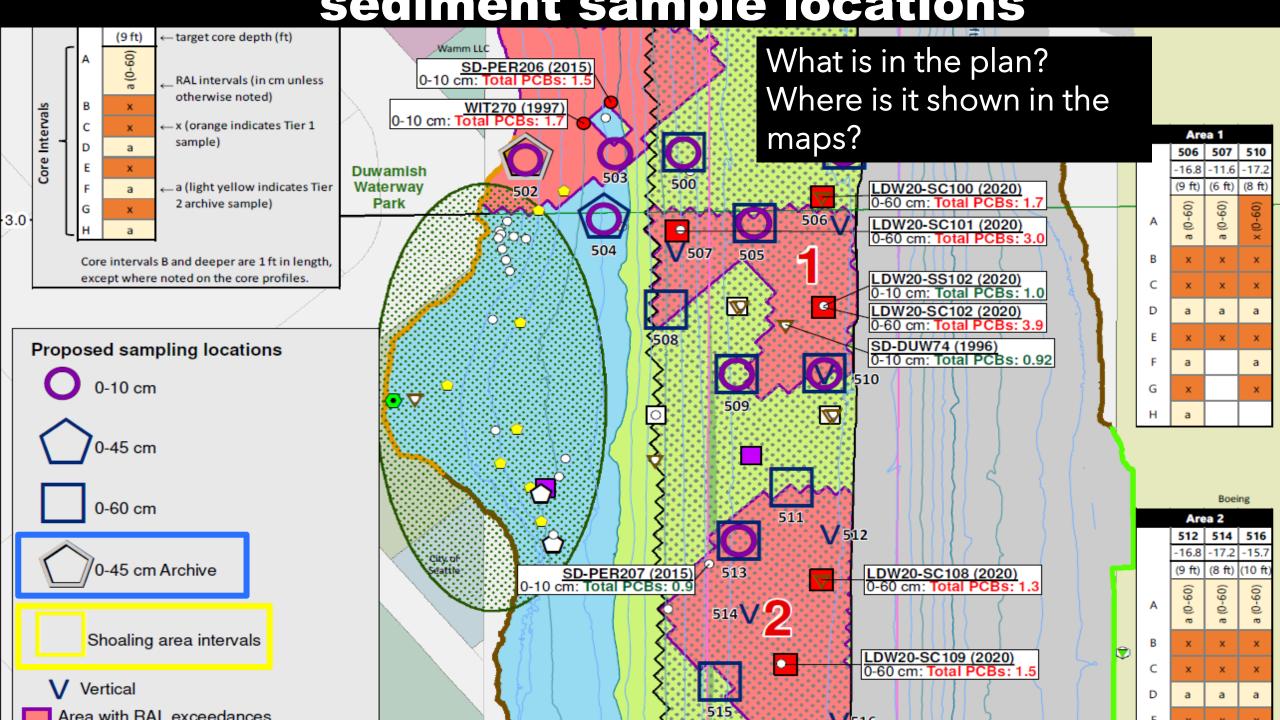
Example of map (QAPP map 1-1) Overview



What is in the plan? Where is it shown in the maps?

Overview map shows

- Intertidal areas (darker blue)
- Subtidal areas (light blue)
- Navigation channel shoal areas (green)
- Early Action Areas
- Carbon Pilot Study intertidal plots
- Recovery Category 1 areas (spotted)





What is "tiering"?



Tiering is when you collect more samples than you think you'll need, send those you know you need to lab for analysis (Tier 1) and save the rest (Tier 2) in freezer, then use Tier 1 lab results to decide which Tier 2 samples need lab analysis.



Tiering is done because field work is expensive (boats, equipment, staff).



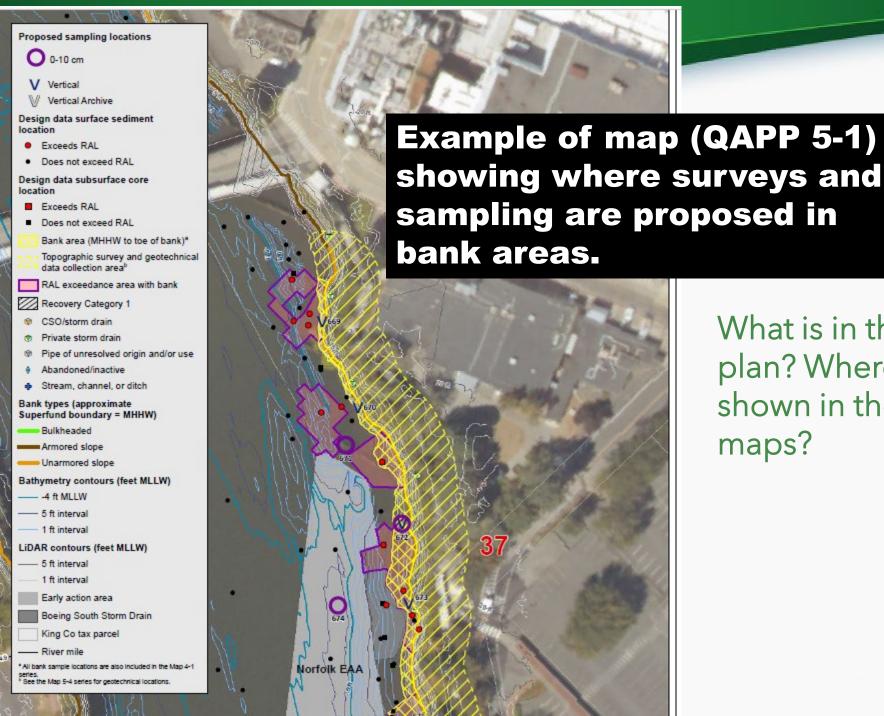
How will the boundaries change when the Phase 2 sample results come in?

The results may increase the pink areas or may reduce them.

Other information will help finalize boundaries for design.

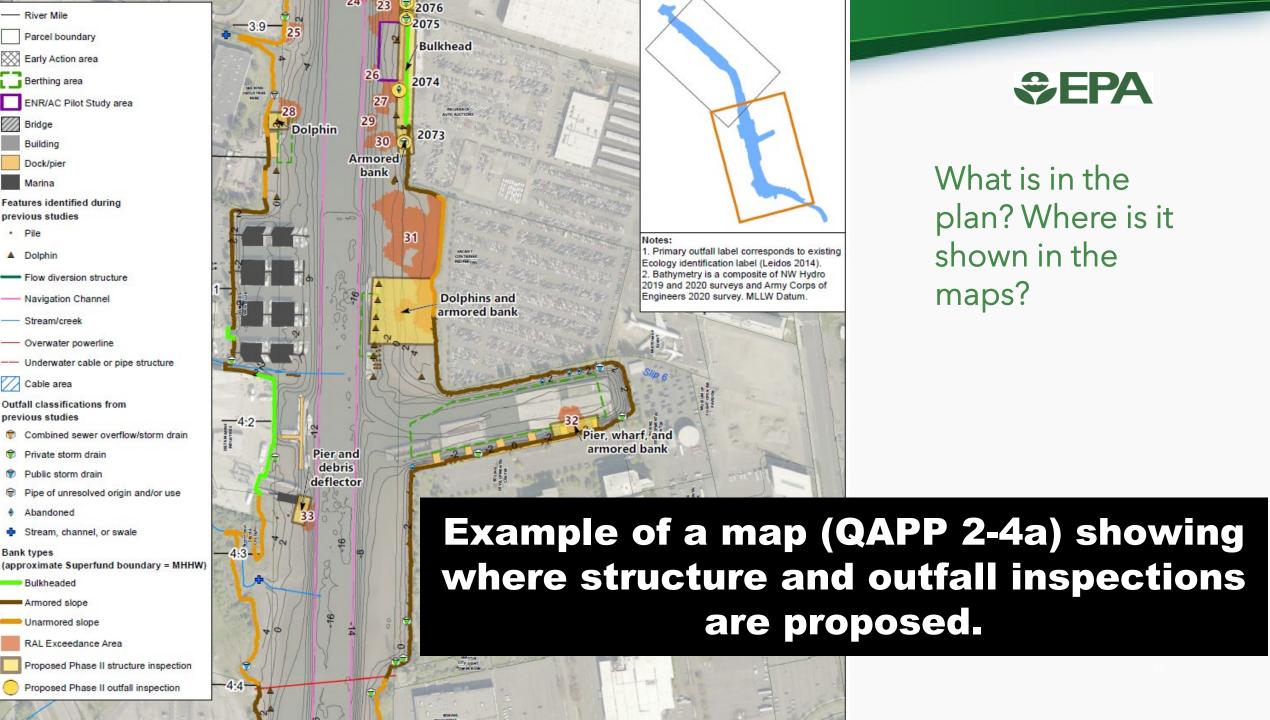
- Geostatistical boundaries, not just interpolation
- Phase 3 chemical data, if necessary
- Results of biological testing, where testing option used.
- Physical issues: berthing areas, navigation channel, structures

Engineers will consider how to make the outline simpler while including the sediment cleanup areas as required.





What is in the plan? Where is it shown in the maps?





The Plan (QAPP) also says where survey and geotechnical work is proposed.

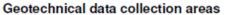
Types of geotechnical data collection areas and methods

- CPT (cone penetrometer test)
- Borings
- Vane Shear Tests
- Hand Auger or DCP







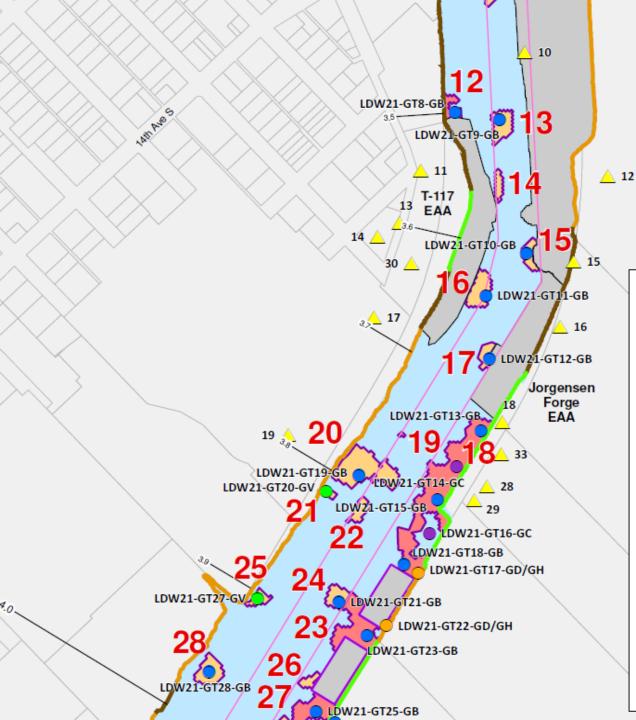


- Proposed CPT test location
- Proposed geotechnical boring location
- Proposed hand auger or DCP location
- Proposed Vane shear test location
- Historical geotechnical studies
- RAL exceedance area with bank
- RAL exceedance area without bank or with habitat constructed on bank

Bank types (approximate Superfund boundary = MHHW)

- Bulkheaded
- Armored slope
- Unarmored slope
- Early Action Area
- AC Pilot plots
- King Co tax parcel
- Navigation Channel
- River mile

What is in the plan? Where is it shown in the maps?





Roundtable input to EPA is welcome (by April 12). *This is not a formal public comment period.*

- Are the samples in the right place?
- Are there enough samples?
- Are they testing for the right chemicals?
- Are the "cores" deep enough?
- Is the tiering approach reasonable?









Roundtable questions and comments to EPA on the Quality Assurance Project Plan (QAPP) for Phase 2 Pre-Design Investigation Sampling for Upper Reach



Lower Duwamish Waterway Technical Updates

Comment Period Open: Explanation of Significant Differences for cPAHs

Did you watch the ESD webinar (or read the summary)?
Explanation of Significant Differences webinar materials (English, Vietnamese, Spanish, and Khmer) can be found on the Lower Duwamish Waterway Roundtable Website: https://www.duwamishwaterwayroundtable.org/trainingmaterials

A. Why this topic matters:

EPA is proposing changes to the cPAH levels in the cleanup plan to incorporate updated health risk information. These changes are described in a proposed Explanation of Significant Differences (ESD).

B. Comment Period Open: Interested Roundtable members can provide written feedback for EPA to consider by April 6.

Proposed ESD (Explanation of Significant Differences): Why is one proposed?



Based on current studies, EPA updated the health info for benzo(a)pyrene (BaP) in the national database. BaP is a carcinogenic PAH.

EPA considered how the BaP change impacts the cleanup plan.

With input from Roundtable, EPA decided to issue a **proposed ESD** for public comment.



Human health risk information has changed

EPA considers changes to cleanup plan

EPA proposes changes to cleanup plan

EPA issues final changes to cleanup plan (final ESD)

Why did the benzo(a)pyrene value change?



- EPA's Integrated Risk Information System (IRIS) updated their BaP assessment in 2017
- EPA's IRIS program worked for over 10 years on this assessment
- IRIS assessments are reviewed with many agencies and scientists
- Current studies show that BaP's cancer slope factor is about seven times less than previous estimates.

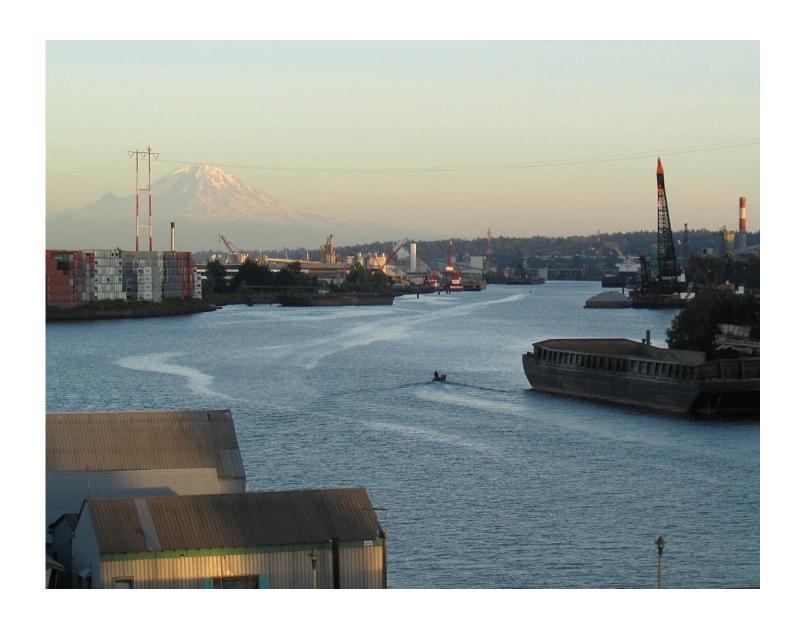
What is the EPA IRIS Program?

- Created in 1985 to provide a database of human health assessments for chemicals
- Goal: Foster
 consistency in the
 evaluation of
 chemical toxicity
 across EPA



Roundtable questions and comments on the ESD for cPAHs





Other Site News and Updates

1. Institutional Controls (IC) Updates from Community Health Advocates (CHAs)

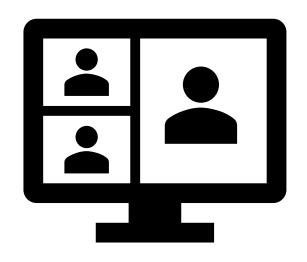
2. Brief updates from Roundtable Members

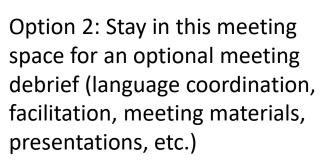


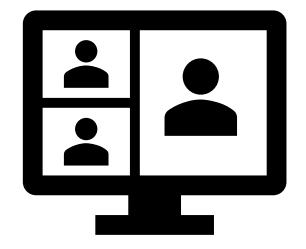
Comments and Questions from Observers



Option 1: Sign off and end your meeting experience. Thank you for coming!







Option 3: Join a breakout room for a continued discussion of cleanup topics with other Roundtable members.

Ending the meeting: 3 options for you

