

Response to Comments

Remedial Investigation and Feasibility Study

Boeing Isaacson Thompson Cleanup Site Tukwila, WA

Toxics Cleanup Program

Washington State Department of Ecology Northwest Regional Office Shoreline, Washington

February 2024



Publication Information

This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/cleanupsearch/site/1944

Related Information

Clean-up site ID: 1944Facility site ID: 2218

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¹ www.ecology.wa.gov/contact

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300

Northwest Region 206-594-0000

Central Region 509-575-2490 Eastern Region 509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

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Public Outreach Summary

The Boeing Isaacson Thompson cleanup site (Site) located 8707 E. Marginal Way S., Tukwila, WA is continuing Washington State's <u>formal cleanup process</u>² as directed under the Model Toxics Control Act (<u>MTCA</u>³). The Boeing Company is addressing contamination at the Site under a legal agreement with Ecology.

The Department of Ecology's public involvement activities related to this Site's 67-day comment period November 6, 2023 – January 11, 2024 included:

Fact Sheet:

- US mail distribution of a fact sheet providing information about the cleanup documents, the public comment period, and open house to approximately 2046 addresses including neighboring businesses and other interested parties.
- Email distribution of the postcard and a fact sheet to 1,107 people, including interested individuals, local/county/state/federal agencies, neighborhood associations, and interested community groups.
- The fact sheet was available digitally through Ecology's <u>cleanup site webpage</u>⁴.

• Legal Notices:

Publication of one paid display ad in The Seattle Times, dated 03 November 2023

• Site Register:

- Publication of 5 notices in Ecology's Toxics Cleanup Site Register:
 - Comment Period Notice:
 - November 2, 2023
 - November 16, 2023
 - November 30, 2023
 - December 14, 2023
 - December 28, 2023
 - Response Summary Notice:
 - February 22, 2024
 - Visit Ecology's Site Register website⁵ to download PDFs.

Social Media:

- X: Ecology Northwest Region @ecyseattle posted <u>a tweet</u>⁶ on 6 November 2023 connecting readers to the comment period including the cleanup site webpage, open house information, and how to submit comments.
- Blog:

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² https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process

³ https://ecology.wa.gov/mtca

⁴ https://apps.ecology.wa.gov/cleanupsearch/site/1944

⁵https://apps.ecology.wa.gov/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Toxics+Cleanup&DocumentTypeName=Newsletter

⁶ https://twitter.com/ecyseattle/status/1721592696081707137

- On 29 November 2023, Ecology's Northwest Regional Office posted a Boeing Isaacson Thompson blog entitled Cleaning up: Range of cleanup options considered for Lower Duwamish Waterway site on Ecology's blog⁷, which has approximately 1,200 email subscribers.
- A <u>blog</u>⁸ was written on the Georgetown Community Council website on 6
 November 2023 entitled *Dept. of Ecology Boeing Isaacson Thompson Cleanup Site.*
- A <u>notice</u>⁹ on the Georgetown Community Council blog about the extension of the Boeing Isaacson Thompson cleanup site was published on 3 January 2024.
- Facebook: Notice of this comment period, the corresponding open house, and the comment period extension were published three times throughout the comment period on the South Park Neighborhood Facebook page.

• Online and In-person Open House

 Ecology hosted an online and in-person open house on December 5, 2023 from 5:30 p.m. - 7:30 p.m. Ecology presented details on the Remedial Investigation and Feasibility Study and answered questions about the Site.

Websites:

Ecology announced the public comment period, open house, comment period extension, fact sheet, and made the review documents available on <u>Ecology's Boeing Isaacson Thompson webpage</u>¹⁰ and Ecology's <u>Public Inputs & Events</u> webpage¹¹.

• Document Repositories:

- Ecology's Northwest Regional Office (15700 Dayton Ave N., Shoreline, WA)
- o South Park Branch, Seattle Public Library (8604 8th Ave S., Seattle, WA)

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⁷ https://ecology.wa.gov/blog/november-2023/cleaning-up-range-of-cleanup-options-considered-for-lower-duwamish-waterway-site

⁸ https://www.georgetowncommunitycouncil.com/post/public-comment-period-boeing-isaacson-thompson-cleanup-site

⁹ https://www.georgetowncommunitycouncil.com/post/dept-of-ecology-extended-comment-periods

¹⁰ https://apps.ecology.wa.gov/cleanupsearch/site/1944

¹¹ https://10ecology.wa.gov/Events/Search/Listing

Comment Summary

From November 6, 2023 – January 11, 2024, Ecology solicited public comments on a Remedial Investigation and Feasibility Study for the Boeing Isaacson Thompson cleanup site.

Ecology received 3 comments during the 67-day comment period.

Table 1: List of Commenters

	First Name	Last Name	Agency/Organization/Business	Submitted By
1	Jamie	Hearn	Duwamish River Community Coalition	Organization
2			Port of Seattle	Business
3	Jamie	Hearn	Duwamish River Community Organization	Organization

Next Steps

Ecology has reviewed and considered the public comments received on the Remedial Investigation and Feasibility Study. Based on Ecology's evaluation of the comments, no changes were necessary in the documents, and they are being finalized.

Work will begin on the Cleanup Action Plan. See graphic below and visit Ecology's <u>cleanup</u> <u>process webpage</u>¹² to learn more about Washington's formal cleanup process.

The next comment period for this site is anticipated to be in Spring 2024.

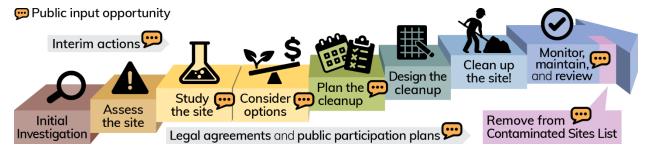


Figure 1: Washington's formal cleanup process (download a text explanation¹⁵)

¹² https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process

¹⁵ https://apps.ecology.wa.gov/publications/SummaryPages/1909166.html

Comments and Responses

The public comments are presented below, along with Ecology's responses. Appendix A, page 25, contains the comments in their original format.

Comment from: Jamie Hearn, Duwamish River Community Coalition

This comment was submitted by the Duwamish River Community Coalition via email. The

Department of Ecology uploaded it our online commenting system on 12/21/2023. This comment requests a seven-day extension to the Boeing Isaacson Thompson Remedial Investigation and Feasibility Study comment period. See page 26 for the comment in its original form.

Response:

The Department of Ecology extended the Boeing Isaacson Thompson site Remedial Investigation and Feasibility Study comment period by seven days. The ending date for this comment period became January 11, 2024.

Comment from: Port of Seattle

January 11, 2024

Please see below for comments from the Port of Seattle ("Port") on the Boeing Isaacson-Thompson Site ("Site") Remedial Investigation ("RI") and Feasibility Study ("FS") draft documents out for public comment. First, we provide general comments regarding the Site and the draft documents. Following that is a table providing specific comments, identified by sections within the documents. Above all, the Port emphasizes (1) that the Port Sliver need not be reconstructed following remediation, and (2) that the Port's permission or authorization is not needed for sampling, remediation, or other remedial actions.

I. General Comments

A. Use Consistent Phrasing for the Port Sliver

The Site, located along the eastern shoreline of the Lower Duwamish Waterway ("LDW" or "Waterway"), includes a sliver of uplands in which the Port holds limited property rights, inherited in 1963 from the former Commercial Waterway District No. 1 of King County ("CWD"), which dissolved at the time. The RI and FS draft documents use a variety of terms to refer to this area. The Port recommends consistently referring to this area as the "Port Sliver," coining that as a defined term at the start of each document, and removing all other names and references.

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Response to Section A:

The way the Port Sliver is described is sufficiently clear for the purposes of the RI and FS.

B. The Port Sliver at the Boeing Isaacson-Thompson Site—Historical Context

Understanding the historical development and unusual legal status of the Port Sliver is important for Ecology decision-making regarding remedy planning for the Sliver and the broader Site. The draft FS's remedial action alternatives all assume that the Port Sliver must be reconstructed following remediation. As discussed below, that assumption is unfounded, as the Port cannot and would not require its reconstruction.

The Port has had no material involvement with the small and legally unusual area referred to as the Port Sliver. Neither the Port nor the CWD constructed or operated on the Port Sliver, and neither entity contributed contamination to the Port Sliver. The history of the CWD and upland "slivers" along the LDW begins with construction of the Waterway in the early 20th century. 13

In 1889, by virtue of becoming a state, Washington received ownership over the bed and banks of all navigable waters in the state under the equal footing doctrine. Beginning in 1909, the Washington Legislature passed a series of laws that enabled local governments to create "waterway districts" for the economic development of the state. ¹⁴ These districts were intended to promote the public purposes of commerce and navigation, create access to and use of commercial waterways, and widen and straighten water bodies as needed to achieve these goals. *See* Laws of 1909, Ex. Sess., ch. 8. The districts were "given the right, power and authority by purchase or the exercise of the power and authority of eminent domain, or otherwise, to acquire all necessary and needed rights of way" to straighten, deepen, and widen rivers and streams. Laws of 1917, ch. 152, § 2.

In 1911, the King County Board of Commissioners created the CWD and approved a plan to acquire a 500-foot right-of-way for straightening, widening, and deepening the lower 5 miles of the Duwamish River. The CWD began acquiring upland property within the designated area in 1913. Construction was largely completed in 1915. The river was diverted into the new,

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¹³ See also Leidos. 2018. Lower Duwamish Waterway, Inventory of Lower Duwamish Waterway Slivers. Prepared for the Washington Department of Ecology. May.

¹⁴ The 1909 legislation was found unconstitutional, and its defects were cured by 1911 legislation. *See* Laws of 1911, chs. 10, 11. Further amendments were made in 1913 and 1917. *See* Laws of 1913, ch. 46, Laws of 1917, ch. 152.

straightened channel, and former meanders were filled in. Only the center 250 -foot-wide channel has since been dredged and maintained as a federal navigable waterway, which generally left an area of about 125 feet on either side of the center channel subject to sedimentation. There are also many "slivers" of dry land that were either filled in intentionally by adjoining landowners or were for some reason never excavated out to the full 500-foot width of the Waterway.

The U.S. Army Corps of Engineers ("Corps") took over dredging and maintenance of the center channel in 1924. In 1963, the Washington Supreme Court held that the CWD lacked authority to lease, alienate, or otherwise profit from any area within the 500-foot-wide LDW right-of-way. *Commercial Waterway Dist. No. 1 v. Permanente Cement Co.*, 61 Wn.2d 509, 513 (1963). Soon after, in 1963, the CWD was dissolved, and its assets and obligations were transferred to the Port pursuant to RCW Chapter 91.07. The Port, like the CWD before it, holds "the land acquired by purchase and condemnation within the 500-foot right of way for the construction of the waterway . . . in trust for the public." *Id.* at 513. The Corps continues to issue permits to adjoining landowners for activities such as dredging and construction of docks or bulkheads.

With respect to the Port Sliver specifically, based on aerial photographs, it appears that the origin of the sliver can be divided into approximate thirds: the northern section was a portion of the CWD-dredged channel that was later filled by Isaacson; the middle section was within the CWD right-of-way and either filled before the 1930s or never dredged; and the southern section was part of the original meander of the Duwamish River and was historically the mouth of Slip 5 before it was filled (Floyd|Snider 2023). Neither the CWD nor the Port constructed or ever used the sliver. A small central portion of the sliver is visible in aerial photographs from the 1930s, during which time the Duwamish Lumber Company (operating on what is today the Boeing Isaacson property) appears to have used the area as part of its operations. This portion of the sliver appears to be within the 500-foot right-of-way granted to the CWD. It is unclear whether Duwamish Lumber Company or another entity created this area with fill, or if it instead represents an area that was never dredged as part of the LDW construction. Aerial photos from the 1940s to 1950s show that the northern portion of the sliver was beginning to be filled, presumably by Isaacson Iron Works, then operator of the Site. By 1960, the southern portion of the sliver had been filled as well, connecting by 1969 with the Boeing Thompson property to the south, which had been constructed on fill replacing Slip 5 (one of the former Duwamish River meanders).

Response to Section B:

Thank you for providing additional historical context. Assuming that the Port Sliver would be backfilled with clean material following excavation was a conservative assumption made for the purposes of completing the FS-level cost estimate. The final design of the remedy will be discussed between Ecology, Boeing, and the Port.

C. Access to the Port Sliver is Unimpeded

No Port permission is required in order to conduct sampling or remedial actions on the Port Sliver. The Washington Supreme Court has explicitly confirmed the extremely limited rights held by the CWD (and by extension the Port) in such areas. Specifically, the Port "has no power to lease [or alienate] any area within the 500-foot right of way," and adjacent landowners have "a right of access to the extent that neither navigation nor any other right of the general public is interfered with." Id. at 525. Thus, to the extent that remediation of the sliver—or even the removal of the sliver in its entirety—is required, no Port permission is required.

Response to Section C:

Thank you for providing this information.

D. Reconstruction of the Port Sliver is Not Necessary

As noted, the Port did not construct the Port Sliver, nor has it ever conducted operations on, or contributed contamination to, the property. And insofar as the Port Sliver will be excavated as part of Site remediation, from the Port's perspective, the property need not be reconstructed to its present state following remediation. If Boeing or another party wishes to utilize the area for habitat restoration, public Waterway access, or other usage that does not interfere with navigation or other public rights, the Port cannot and would not oppose such efforts. The Port has communicated this position to Boeing via email on November 10, 2022.

Response to Section D:

Assuming that the Port Sliver would be backfilled with clean material following excavation was a conservative assumption made for the purposes of completing the FS-level cost estimate. The final design for the remedy will be discussed between Ecology, Boeing, and the Port.

II. Specific Comments

Comment	Section	Comment	Ecology's Response
1	RI and FS – throughout	Use "Port Sliver" throughout the document. Currently, various terms are used, including "Port parcel" or "Port-owned parcel" which are incorrect (the area in question is not a discrete parcel). Recommend also referring (at first use of the term) to the Leidos 2018 LDW sliver inventory prepared for Ecology, wherein this sliver is identified as "Sliver 35E."	The way the Port Sliver is described is sufficiently clear for the purposes of the RI and FS.
2	RI (multiple references)	" owned by the Port" "owned and/or controlled by the Port"	These references are sufficiently clear for the purposes of the RI.
3	RI Executive Summary (CSM) RI Section 10.4.2.3	"Concentrations in soil behind the Port bulkhead have not been determined" Please revise "Port bulkhead" to "Port Sliver bulkhead."	The way the bulkhead is described is sufficiently clear for the purposes of the RI.
4	FS Section 1.0	FS Section 1.0. Recommend defining here (at first use): "Port Sliver" not just as "also known as," but as how it will be referred to in the FS.	The way the Port Sliver is described is sufficiently clear for the purposes of the FS.
5	FS Section 1.1	The reference to parcel/property is confusing to readers. When all properties/parcels at the site have been established "for the purposes of this FS, these three parcels are referred to collectively as the Isaacson-Thompson Site." Once defined, then refer to a collective "Site" moving forward in the document rather than naming specific properties repeatedly.	References to specific areas of the Site are appropriate to help the reader understand where on the Site is being discussed.

Comment	Section	Comment	Ecology's Response
6	FS Section 1.2	The summary of site background	Thank you for this additional
	DI Continue 2.4	makes no mention of the history of	historical information. However,
	RI Section 2.1	the Port Sliver and its relationship to	the historical uses currently
		historical operations at the Site.	presented in the RI and FS are
		Suggest additional context to be	sufficient to meet the goals of the
		added such as the following:	documents.
		"The Port Sliver falls within the 500-	
		foot LDW right-of- way granted to	
		the CWD in 1911 in the effort to	
		straighten, widen, and deepen the	
		lower 5 miles of the Duwamish	
		River. Based on aerial photographs,	
		it appears that the origin of the	
		sliver can be divided into	
		approximate thirds: the northern	
		section was a portion of the CWD-	
		dredged channel that was later filled	
		by Isaacson; the middle section was	
		within the CWD right-of-way and	
		either filled before the 1930s or	
		never dredged; and the southern	
		section was part of the original	
		meander of the Duwamish River and	
		was historically the mouth of Slip 5	
		before it was filled. A small central	
		portion of the sliver is visible in	
		aerial photographs from the 1930s,	
		during which time the Duwamish	
		Lumber Company (operating on	
		what is today the Boeing Isaacson	
		property) appears to have used the	
		area as part of its operations. This	
		portion of the sliver appears to be	
		within the 500-foot right-of-way	
		granted to the CWD. It is unclear	
		whether Duwamish Lumber	
		Company or another entity created	
		this area with fill, or if it instead	
		represents an area that was never	
		dredged as part of the LDW	

construction. Aerial photos from the	
1940s to 1950s show that the	
northern portion of the sliver was	
beginning to be filled, presumably	
by Isaacson Iron Works, then	
operator of the Site. By 1960, the	
southern portion of the sliver had	
been filled, connecting by 1969 with	
the Boeing Thompson property to	
the south, which had been	
constructed on fill replacing Slip 5	
(one of the former Duwamish River	
meanders). With respect to the Port	
Sliver specifically, neither the CWD	
nor the Port constructed or ever	
used the sliver. The Port inherited	
the sliver from the former CWD	
upon its dissolution in 1963."	

Comment	Section	Comment	Ecology's Response
		Citations for Fill History and Historical	
		Use of the Sliver:	
		• Dames & Moore. 1983. Report of	
		Evaluation of Site Contamination	
		Isaacson Steel Property for the	
		Boeing Aerospace Company. 4	
		October.	
		• Floyd Snider. 2023. Isaacson-	
		Thompson Port of Seattle Sliver	
		Property Site History and Aerial	
		Photographs. September.	
		(Provided as an attachment to	
		comment submission.)	
		• Foster, Richard F. 1945.	
		Sources of Pollution in the	
		Duwamish-Green River	
		Drainage Area. Pollution	
		Control Commission Survey. 6	
		December.	
		• Landau Associates. 2009. Data	
		Summary Report Thompson-	
		Isaacson Property, Tukwila,	
		Washington. Prepared for The	
		Boeing Company. 2 September.	
		• Leidos. 2018. Lower Duwamish	
		Waterway, Inventory of Lower	
		Duwamish Waterway Slivers.	
		Prepared for the Washington State	
		Department of Ecology. May.	
		Wicks and Sweet, Edwards &	
		Associates, Inc. 1983. Evaluation	
		of Potential Soil and Ground	
		Water Contamination at the	
		Isaacson Corporation Property,	
		Seattle, Washington. Submitted	
		to Isaacson Corporation and	
		Graham & Dunn. 21 December.	

Comment	Section	Comment	Ecology's Response
7	FS Section 1.5, first paragraph, last sentence	With respect to the sentence "Future uses of the Port's Sliver Property are unknown." Recommend amending to the following: "Future uses of the Port Sliver are unknown. The Port inherited the sliver from the former Commercial Waterway District No. 1 of King County when it dissolved in 1963. The Port cannot lease or sell the sliver or exclude parties from it (unless they impede navigation or other rights of the public). The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes."	Thank you for providing additional information. However, the statement currently in the document is appropriate for the purposes of the FS.

Comment	Section	Comment	Ecology's Response
8	Section 5.2	All proposed remedial alternatives involve excavating the Port Sliver, filling the excavated area with clean fill to an elevation above the high-water line, and replacing the existing bulkhead. However, the Port does not request or recommend that the Port Sliver be returned to grade or that the existing bulkhead is replaced. The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes (See comment 7)." If the Port Sliver is not reconstructed, the dilapidated bulkhead would not need to be replaced. For shoreline stability purposes, consider extending the wooden/steel bulkhead that exists along the Boeing Thompson shoreline northward along the Boeing Isaacson property and Port Sliver boundary.	Assuming that the Port Sliver would be backfilled with clean material following excavation was a conservative assumption made for the purposes of completing the FS-level cost estimate. The final design for the remedy will be discussed between Ecology, Boeing, and the Port.
9	Section 5.2.3, page 5-9	Regarding the remedial excavation statement that "The Port property excavation will include soil removal between the proposed PRB location and the Port property shoreline." This is incorrectly described. The extent of excavation extends from the shoreline into the Boeing Isaacson parcel. The Port Sliver encompasses only half the excavation area that is colored green. Suggest revising to "The planned soil removal excavation is shown in green on Figure 5-3 and includes the area between the proposed PRB location and existing shoreline."	The existing description is clear.

Comment	Section	Comment	Ecology's Response
10	Figures 3-2 through 3-8, and 3-25	The groundwater IDW interpolations should extend westward onto the Port Sliver similar to the soil concentration figures and not stop at the property line (Figures 3-2 to 3-8). This would help to inform the extent of metals contamination in groundwater as depicted in Figure 3-25. Is the extent of arsenic groundwater contamination north of the Site bounded by Jorgensen Site wells, which are not shown in the RI? Should the groundwater contour line for arsenic along this northern boundary be shown with question marks,	The decision to not extend the groundwater contours onto the Port Sliver was made based on the lack of monitoring wells on the Port Sliver. Since only groundwater grab sample data is available for the Port Sliver, the chemical concentration contours could be extended but not the groundwater contours. At the time the RI was completed, only limited data was available for the Jorgensen Site, however, more data is available now. From a preliminary review of the data, the concentrations are bounded to the north as shown. However, the Pre-Remedial Design Investigation will confirm that contamination is not migrating north.

Comment	Section	Comment	Ecology's Response:
		and how does the FS address groundwater contamination migration north (and off) of the Site?	
11	Figures 5-5, 5-7, and 5-9	Existing and/or proposed bulkhead replacements should be added to cross sections. A reference or depiction of the range of anticipated LDW surface water levels would be helpful to assess remedial features relative to the adjacent surface water elevation. Surface water levels during a specific survey is provided in 3-1c, but these are not in a comparable datum and do not represent the range of anticipated surface water levels.	This information will be included in the Engineering Design Reports completed prior to the Remedial Acton. This information is not necessary to complete the FS.
12	Figure 5-3	Clarify that the Port Sliver is upland only (above mean higher high water) and waterward of the Boeing property line. From this figure, it appears as if the green-colored area is all Port Sliver.	A dashed line exists on Figure 5-3, which shows the boundary between the Isaacson and Thompson parcels and the Port Sliver.

Comment from: Jamie Hearn, Duwamish River Community Coalition

January 9, 2024

David Butler

david.butler@ecy.wa.gov

Site Manager

RE: Boeing Isaacson Thompson Remedial Investigation and Feasibility Study

To Mr. Butler:

The Duwamish River Community Coalition (DRCC) has long been a community steward for environmental justice in the Duwamish Valley, which is one of the most polluted areas in the entire Pacific Northwest following 100 years of industrial dumping and release of toxic waste. DRCC has worked tirelessly alongside community groups and neighbors for 20 years to clean up the water, land and air while fighting to eliminate ongoing industrial pollution that makes our communities among the least healthy in the County.

Our MTCA work over the past several years has included engaging the community in creative ways such as through in-person gatherings, community events, and multilingual social media and video interactions to bring some of this information to

the community and gather their input. We prioritize the voices of those who are directly impacted by these changes to ensure that our impacted low-income and black/indigenous/people of color immigrant, refugee, and fisher communities who already suffer the greatest exposures and health disparities can be meaningfully informed and engaged.

As we have expressed in previous comment letters, communities should be meaningfully engaged in decisions that will most heavily impact them. As a community steward, we are committed to keeping our community informed and ensuring that they access information in a way that allows them to provide their input. However, DRCC did not receive an Ecology Public Participation Grant for 2023-2025. This means that we are no longer able to support the type of engagement that we had been doing previously, including but not limited to: multilingual advertising and attending community meetings; sharing MTCA site details at community-hosted events with DRCC created materials; and detailed comment letters informed by thorough review of all site document with consultation by technical advisors. In light of this fact, Ecology can no longer rely on DRCC's community expertise and it will need to conduct its own community outreach.

We include this background information in order to remain transparent as a communitybased organization and as a request to the Department of Ecology to reevaluate the way their existing funding structures and reliance on overburdened communities and grassroot organizations to perform uncompensated labor is antithetical to principles of environmental justice and equity.

Response:

Thank you for your comment. Ecology will continue to maintain an ongoing dialogue with the public throughout the cleanup process. The Public Participation Plan outlines the methods we'll use for this project, and you can also find this information as part of the broader engagement strategy for the Lower Duwamish Waterway site.

With regard to DRCC's review of the Boeing Isaacson Thompson (Boeing IT) Remedial Investigation and Feasibility Study and associated documents, we offer this limited review:

DRCC does not concur with the proposed Preferred Alternative, as we are concerned about its long term protectiveness. We are also concerned that the FS does not adequately discuss climate change impacts or Green Remediation alternatives such as habitat restoration along the Duwamish River and its communities:

Extent of soil excavation/remediation: The arsenic concentrations in groundwater migrating to the Lower Duwamish Way (LDW) Superfund site are excessively high. We believe that the placement of the Permeable Reactive Barrier (PRB) is too close to the river and should be moved back farther into the site order to achieve better source control for the Lower Duwamish Way (LDW). This

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would require more soil excavation than recommended in the Preferred Alternative. Moving the PRB farther inland would give more room for possible failure of technology and subsequent response.

Response to bullet 1:

The exact location of the PRB will be determined during the Pre-Remedial Design Investigation and Engineering Design which will occur as the first activities under the Cleanup Action Plan (CAP). Proximity to the river will be an important consideration while designing the PRB. Additionally, contingency measures will be included in the Cleanup Action Plan to ensure that the Remedial Objectives are met.

Steel bulkhead installation to replace Port Sliver wooden bulkhead: We do not agree that placing a steel bulkhead to deter groundwater contamination and/or prevent erosion along the riverfront is appropriate. While we understand that installation of bulkheads and/or slurry walls are intended to contain onsite contamination, we do not believe that they contribute to restoring the environment, including supporting increased water storage during flood events due to sea level rise and climate change. They do not improve nor protect habitat for the river.

Response to bullet 2:

Preventing contamination from migrating off-site (into the LDW) is the primary goal of all the remedial alternatives in the FS. Achieving this goal is the best way for this project to improve the conditions of the LDW.

South portion of shoreline: The discussion on what will occur south of the Port sliver is inadequate. It is unacceptable to use a "wait and see" approach. It is important to develop some alternatives in the FS on how the south portion of the site will be treated. We strongly recommend that this area is considered for a new habitat restoration area (see below).

Response to bullet 3:

Ecology has determined that all of the remedial alternatives (including the preferred alternative) sufficiently address contamination in this area of the Site. The CAP will clarify how additional work in this area will be completed separately as part of a planned Boeing infrastructure project.

- **Climate Change Vulnerability Assessment:**
 - i. Revised MTCA (WAC 173-340) regulations call for attention to climate change at MTCA clean up sites. We request that all MTCA cleanup sites in the Duwamish Valley follow Sustainable Remediation: Climate Resiliency/Green Remediation Guidance (Ecology Publication No 17-09-052), and conduct Climate Change Vulnerability Assessments (CCVA).

Page 22 February 2024 ii. For the Boeing IT FS, the climate section is weak and does not follow the Sustainable Remediation Guidance. We request that the CCVA be fully presented.

Response to bullet 4:

The climate change analysis presented in Section 5.5 of the FS included analysis of sea level rise, increased flooding, and air temperature increase. All alternatives were found to be resilient to climate change. Ecology's selected remedy will consider climate change in detail as part of the future design process, consistent with Ecology's Sustainable Remediation: Climate Resiliency/Green Remediation Guidance.

 Green Remediation: According to the Sustainable Remediation: Climate Resiliency/Green Remediation Guidance (Ecology Publication No 17-09-052), Boeing IT would be classified as a Tier 3 complex site. DRCC believes that the FS should have included a Green Remediation analysis and its costs as part of the Remedial Alternatives. We propose installation of a habitat restoration area similar to T117 (People's Park) and Boeing Plant 2. Both of these restoration sites have proved to be climate resilient by increasing water storage during flood events such as the one on December 27, 2022. They have also improved fish and wildlife habitat which has supported Chinook recovery goals. In addition, both sites improve human health by increasing the beauty of the river and access to the environment. We request that pilot studies be incorporated into CAPs for sites that include or are in close proximity to public access areas to determine how restoration work can be utilized as part of cleanup.

Response to bullet 5:

The resilience and long-term effectiveness of all remedial alternatives was assessed for climate change impacts that have a high likelihood of occurring at the Site. It was determined that all the remedial alternatives were resilient and will be effective in the longterm. The remedial design phase will ensure that the remedy is resilient and effective in the long-term.

Regarding the habitat restoration element of the comment, Ecology would support integration of restoration actions into the cleanup but cannot require this under our MTCA authority. At a minimum, we will discuss with the Port of Seattle and Boeing the possibility of incorporating habitat restoration as part of the cleanup. However, as the property owner, The Boeing Company retains the authority to determine property uses on their property, within the constraints of local zoning. The potential for additional benefits from cleanup activities will be considered during remedial design.

 The CAP should include an in-depth assessment of how landscaping and vegetation management plans can be utilized as part of the selected remedy in accordance with Shoreline Management Act compliance.

Page 23 February 2024

Response to bullet 6:

The CAP will require that the Site cleanup meet the requirements of all applicable federal, state, and local regulations which includes the Shoreline Management Act.

We appreciate this opportunity to provide comments. Please do not hesitate to contact us if you have any questions.

Jamie Hearn

Director of Environmental Law and Climate Policy, Duwamish River Community Coalition jamie@drc.org

Appendices

Appendices
Appendix A. Public comments in original format

Duwamish River Community Coalition

This comment was submitted by the Duwamish River Community Coalition via email. The Department of Ecology uploaded it our online commenting system on 12/21/2023. This comment requests a seven day extension to the Boeing Isaacson Thompson Remedial Investigation and Feasibility Study comment period.

From: Waldref, Meredith (ECY)

To: "Jamie Hearn"

Cc: Nuszer, Augie (ECY); Carp, Brett (ECY); Butler, David (ECY)

Subject: RE: SP Landfill Comment Period

Date: Monday, December 18, 2023 9:36:49 AM

Hi Jamie,

I talked with David Butler (Cleanup Site Manager for Boeing IT) and we will be able to extend the comment period by one week.

• Old ending date: Thursday, January 4, 2024 (at 11:59pm)

• New ending date: Thursday, January 11, 2024 (at 11:50pm)

Augie and I will work on notifications to community about this change. I will send a small blurb to include in your newsletter today/tomorrow. I will submit our email chain as a comment for Boeing Isaacson Thompson in case someone wants to read why the comment period got extended.

Happy Holidays,

Meredith Waldref (she/her)

Senior Outreach Planner

Washington State Department of Ecology

Northwest Regional Office | Toxics Cleanup Program Cell: 425-229-3683 | meredith.waldref@ecy.wa.gov

From: Waldref, Meredith (ECY)

Sent: Friday, December 15, 2023 1:37 PM

To: 'Jamie Hearn' <jamie@drcc.org>

Cc: Nuszer, Augie (ECY) <naug461@ECY.WA.GOV>; Carp, Brett (ECY)

Sardiner, Ryan (ECY) <RYGA461@ECY.WA.GOV>; Butler, David (ECY)

Sbutd461@ECY.WA.GOV>

Subject: RE: SP Landfill Comment Period

Hi Jamie,

Oh no! Let me check with the Boeing Isaacson Thompson team and get back to you on this one.

Good to know about the January newsletter.

Stay tuned,

Meredith Waldref (she/her)

Senior Outreach Planner

Washington State Department of Ecology

Northwest Regional Office | Toxics Cleanup Program Cell: 425-229-3683 | meredith.waldref@ecy.wa.gov

From: Jamie Hearn < jamie@drcc.org>

Sent: Friday, December 15, 2023 1:25 PM

To: Waldref, Meredith (ECY) < MPEN461@ECY.WA.GOV >

Cc: Nuszer, Augie (ECY) < naug461@ECY.WA.GOV >; Carp, Brett (ECY) < breedefine ECY.WA.GOV >;

Gardiner, Ryan (ECY) < RYGA461@ECY.WA.GOV >

Subject: Re: SP Landfill Comment Period

Hi Meredith,

I am so sorry! I mixed up the two open comment periods. I meant to ask for an extension for Boeing Isaacson Thompson. I will be able to meet the original deadline for SP Landfill. I hope this doesn't complicate things.

Yes, please send me a blurb you would like included in the Jan newsletter and we will be happy to include it.

Happy holidays!

On Fri, Dec 15, 2023 at 1:23 PM Waldref, Meredith (ECY) < MPEN461@ecv.wa.gov > wrote:

Hello Jamie,

I have talked with the team and we are able to offer a 1-week extension to the South Park Landfill comment period. That would make the new ending date for the comment period, Wednesday, January 24th at 11:59pm. Augie and I will work on notifying community of the extension in the coming week.

Do you have a newsletter coming out in early January? If so, I may write a little blurb up for you as an update to pass along to your outreach person. We had one community member say they learned of our comment periods from your newsletter at the open house, which was great feedback to hear!

Thank you again for your engagement with these sites.

Happy holidays,

Meredith Waldref (she/her)

Senior Outreach Planner

Washington State Department of Ecology

Northwest Regional Office | Toxics Cleanup Program Cell: 425-229-3683 | meredith.waldref@ecy.wa.gov

From: Waldref, Meredith (ECY)

Sent: Thursday, December 14, 2023 1:54 PM

To: 'Jamie Hearn' < jamie@drcc.org; Nuszer, Augie (ECY) < naug461@ECY.WA.GOV; Carp, Brett

(ECY) < brec461@ECY.WA.GOV >

Subject: RE: SP Landfill Comment Period

Hi Jamie,

Thank you for your continued interest and engagement with these cleanup sites. I will talk with the team about the extension and get back to you soon.

Best.

Meredith Waldref (she/her)

Senior Outreach Planner

Washington State Department of Ecology

Northwest Regional Office | Toxics Cleanup Program Cell: 425-229-3683 | meredith.waldref@ecy.wa.gov

From: Jamie Hearn < iamie@drcc.org>

Sent: Thursday, December 14, 2023 12:36 PM

To: Waldref, Meredith (ECY) < MPEN461@ECY.WA.GOV >; Nuszer, Augie (ECY)

<<u>naug461@ECY.WA.GOV</u>>; Carp, Brett (ECY) <<u>brec461@ECY.WA.GOV</u>>

Subject: SP Landfill Comment Period

Hi all,

I am working on a comment for South Park Landfill and I am wondering if it would be possible to get a one-week extension. We are working on multiple comment letters as we get ready to close our office for the holidays and would appreciate some additional time to provide comments that are as thoughtful as possible. Please let me know if this would be possible.

Best,

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Jamie Hearn, JD (she/her/hers)
Director of Environmental Law and Climate Policy
Duwamish River Community Coalition
(Learn about our new name)

7400 3rd Ave South, Seattle WA 98108

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Jamie Hearn, JD (she/her/hers)
Director of Environmental Law and Climate Policy
Duwamish River Community Coalition
(Learn about our new name)

7400 3rd Ave South, Seattle WA 98108

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Port of Seattle, September 2023 For Department of Ecology Information Boeing Isaacson-Thompson Port of Seattle Sliver Property

Site History and Aerial Photographs



Presentation Summary

- Site vicinity and Port Sliver Location
- Historical Duwamish Shoreline
- History of Boeing-Isaacson Property
- Former Slip 5 Fill and Pier History
- Aerials and Shoreline Obliques (1936 Current)



Source: City of Seattle

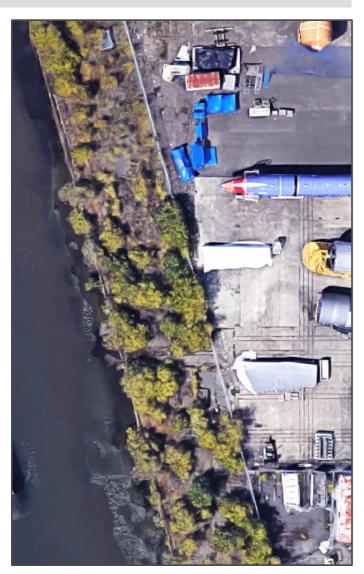


Current Site Vicinity (2023)



Site Information

- Port of Seattle Sliver inherited from former Commercial Waterway District No. 1 of King County ("CWD") upon its dissolution in 1963.
- 0.5 acre (400 feet by 60 feet).
- Unpaved, but records indicate previously covered with asphalt (1966).
- Wooden bulkhead constructed by 1966, with a section constructed as early as 1932.
- Currently fenced off from LDW and Boeing.



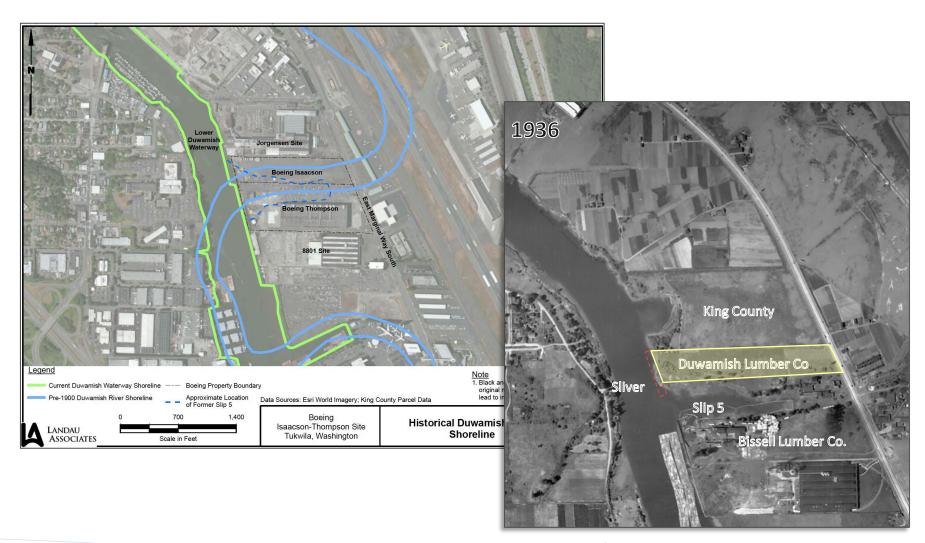


View of Bulkhead at Former Jorgensen Forge Site and Boeing Isaacson





Historical Duwamish Shoreline and Former Slip 5

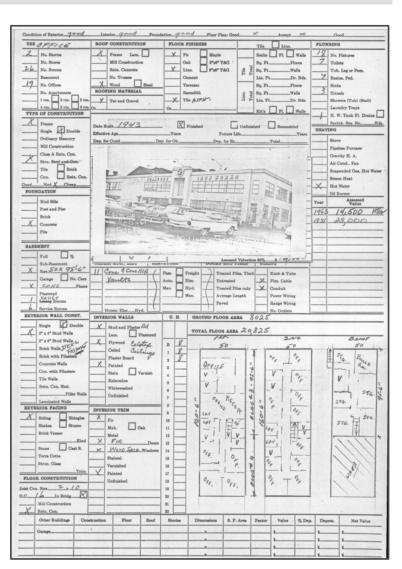


Property boundaries for Duwamish Lumber Co. and Sliver are approximate.



Early History of Boeing-Isaacson

- Isaacson purchased primarily farmland from King County in 1937 or 1938 which became a portion of Boeing-Isaacson.
 - Source: Wicks/Sweet Edwards, 1983
- Title records indicated that Duwamish Lumber Co. owned Boeing-Isaacson in 1920 until it was sold to Isaacson in 1943.
 - Source: Landau, 2008, Phase I review of title records
- Mineralized Cell Wood Preserving Co. reportedly operated at the Duwamish Lumber Co. location while owned by Isaacson (1946-1948).
 - Sources: Foster, 1945, review of pollution sources to Duwamish
 - Dames and Moore, 1983, aerial photograph from 1946



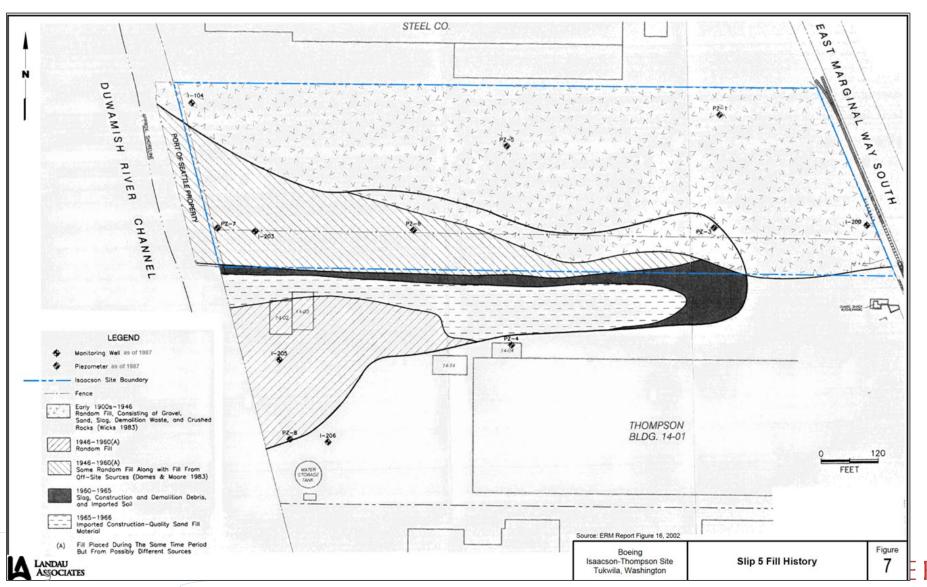


Boeing-Isaacson Property History

- Duwamish Lumber Company sawmill operated on the western portion of Boeing-Isaacson, north of former Slip 5 area from 1920 to 1946.
- Mineralized Cell Wood Preserving Company treated logs with heated solutions of arsenic and sulfate salts of copper and zinc on the northern side of Slip 5 before 1945. Storage tanks chemicals and sludge were reportedly drained onto the ground daily.
- Isaacson purchased the property in 1943 and developed it between 1943 and 1966.
- Isaacson facility was used for various purposes associated with the Isaacson Iron Works (later known as Jorgenson Forge) steel plant to the north [then operated by Isaacson], including the storage of scrap metal before melting.
- In the 1950s, expanded facilities east to west, covering almost the entire property north of the former Slip 5 area.
- In 1984, Boeing purchased the Isaacson property and repurposed the steel fabrication building for storage. The Isaacson building was dismantled prior to 1990.

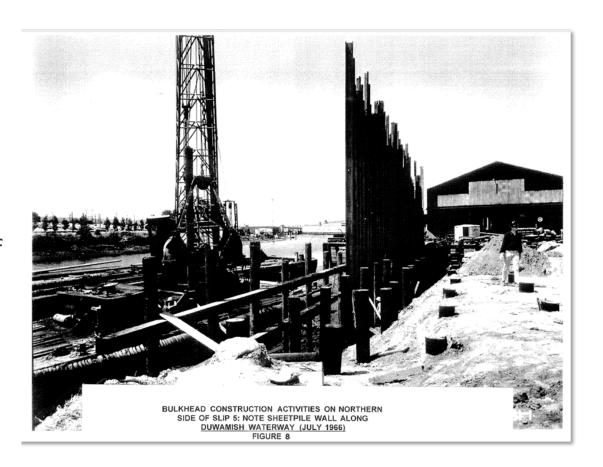


Former Slip 5 and Sliver Fill History



Sliver History (1932 to 1966)

- A section of wooden bulkhead appears to have been constructed (not by Port or CWD) as early as 1932.
- Sheetpile may have been installed behind upland of current dilapidated bulkhead.
- Slip 5 filling completed by 1966.
- Sliver filling appears to be completed by 1969.





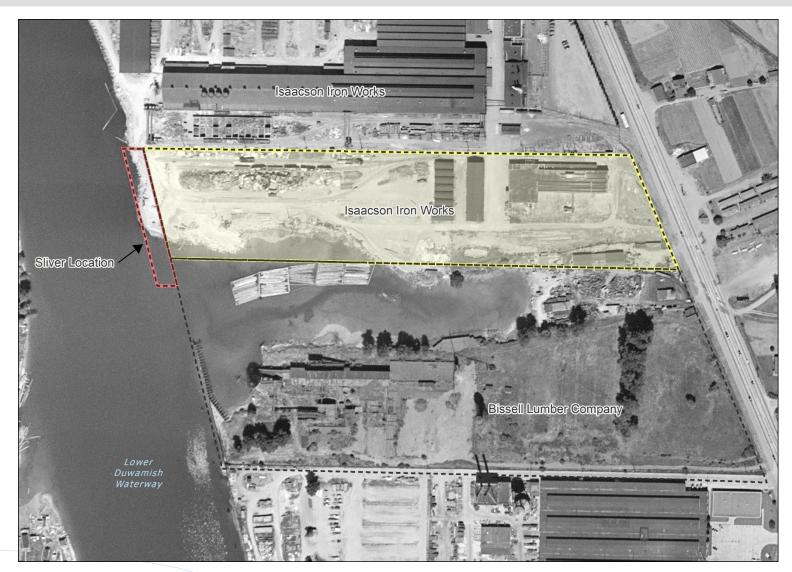
1932 USACE Survey Wooden Bulkhead and Slip 5

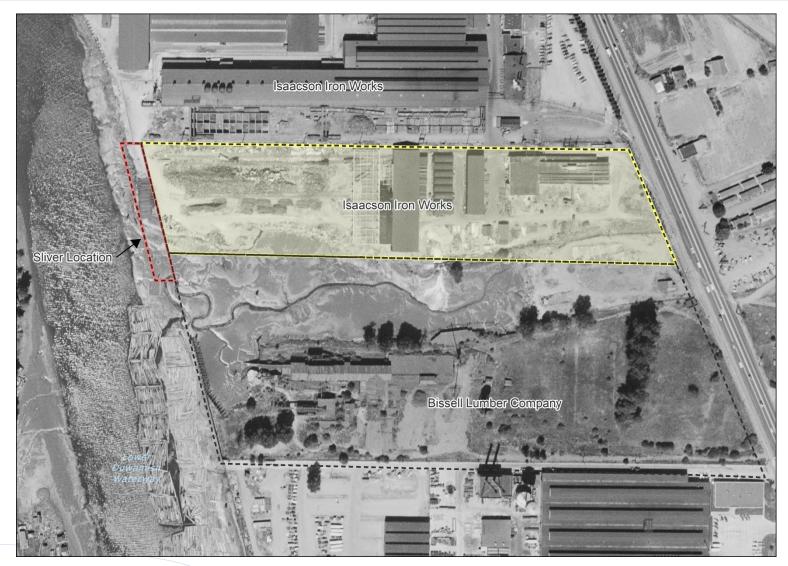






Property boundaries for Duwamish Lumber Co. and the Sliver are approximate.

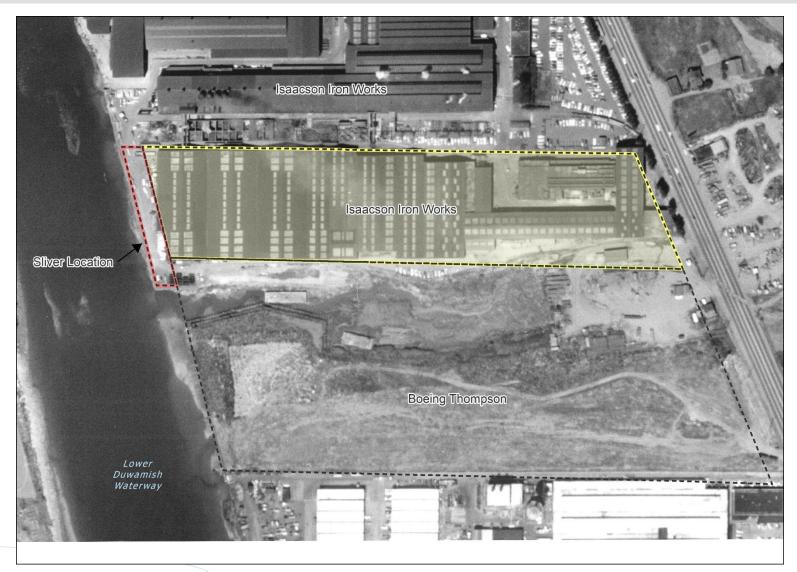




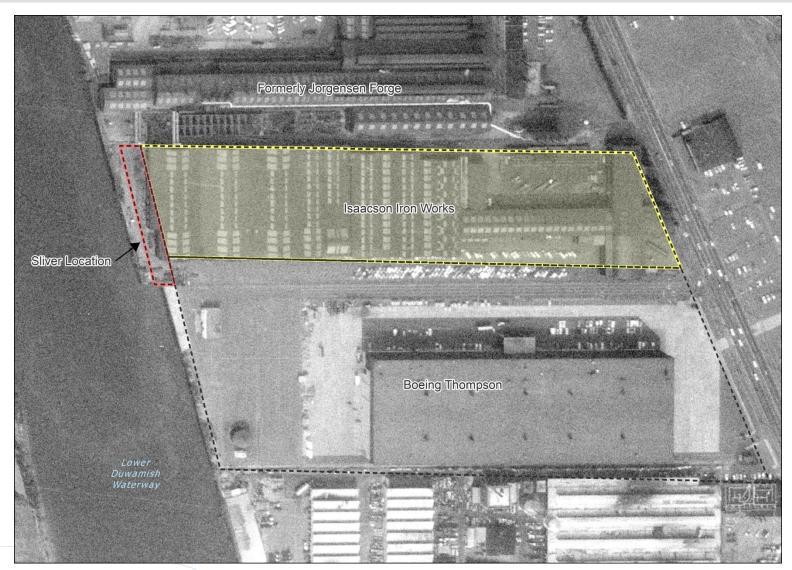


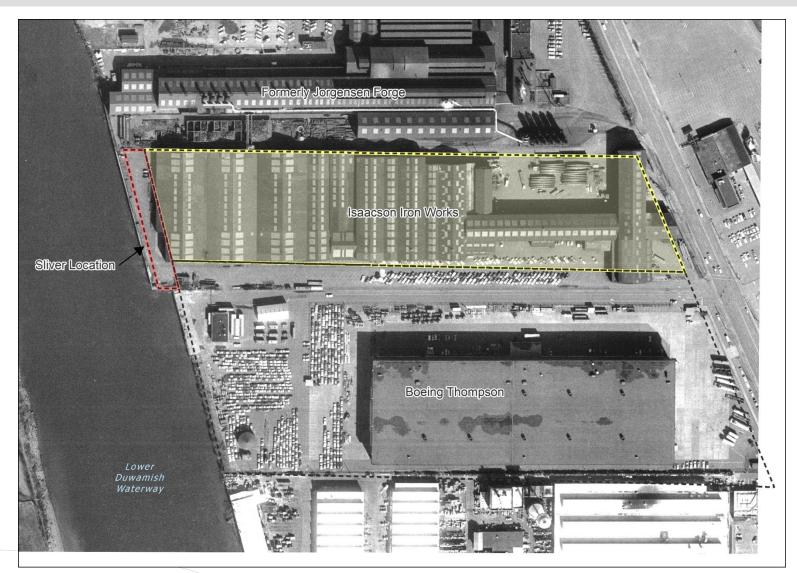


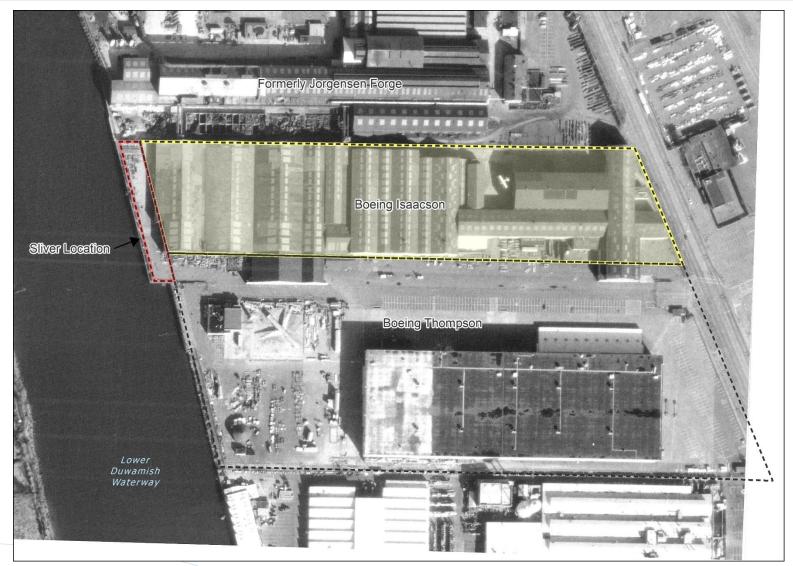


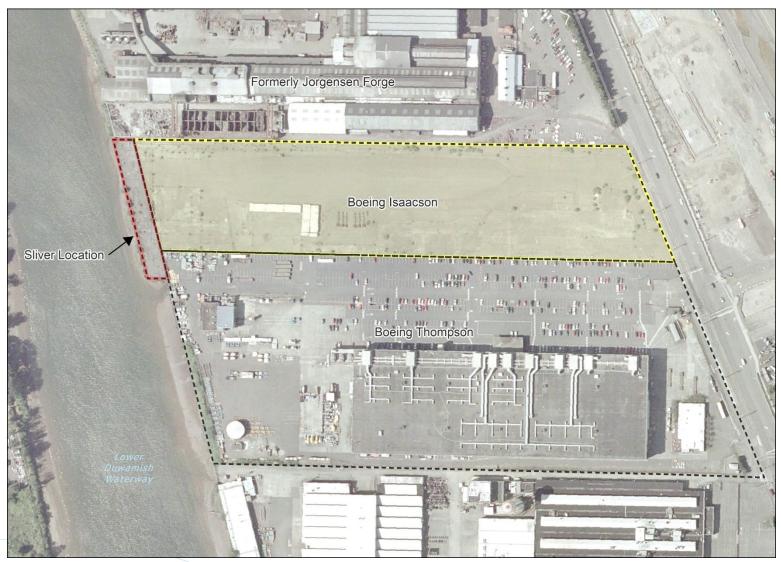
















Ecology Shoreline Obliques of Sliver Location



Property boundaries for Boeing Isaacson and Sliver are approximate.



Ecology Shoreline Oblique of Sliver Location



strategy - science - engineering

Context and Considerations

- The Port of Seattle and CWD had nothing to do with the construction or use of the Sliver property.
- Adjacent property owners and operators constructed the Sliver and (including Boeing)
 used it as their own.
- The CWD (in the mid- to late-1950s) tried to place such upland slivers under leases. The Washington Supreme Court rejected that in 1963, holding that the CWD had no authority to lease or sell any portion of the 500-foot-wide LDW right-of-way, and no authority to exclude third parties unless they were interfering with navigation or other rights of the public.
 - Commercial Waterway Dist. No 1 of King Cty. v. Permanente Cement Co., 61 Wn.2d 509, 379, P.2d 178 (1963)
- Port agreed in 1963 to inherit the assets of the then-dissolving CWD, knowing of the Permanente case and the above restrictions.
- The Port has no interest in post-remediation reconstruction of the Sliver (e.g., do not replace it).



Supplemental Images from EPA

 Supplemental images (1936, 1942, and 1946) from EPA Freedom of Information Act evaluating historical fill and operations at the former Jorgenson Forge Site.



1936 EPA Evaluation of Fill/Operations

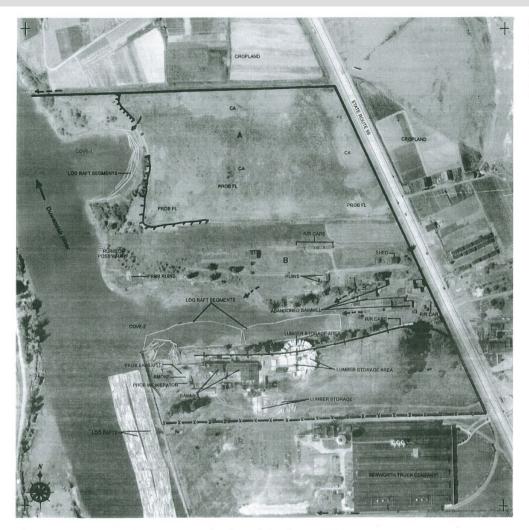


Figure 3. Jorgensen Forge Corporation/Duwamish River, 1936. Approximate scale 1:3,055.

INTERPRETATION CODE

SITE BOUNDARY x --- x --- FENCED SITE BOUNDARY

XXXXXX FENCE

← — — DRAINAGE

- FLOW HH RAILWAY

EXCAVATION/PIT (EXTENSIVE)

MOUNDED MATERIAL

BUILDING CLEARED AREA

DARK-TONED

IMPOUNDMANT MATERIAL

MOUNDED MATERIAL

OUTFALL OPEN STORAGE AREA

RAILROAD

SMOKESTACK COLLATERAL DATA

FLOYDISNIDER

1942 EPA Evaluation of Fill/Operations

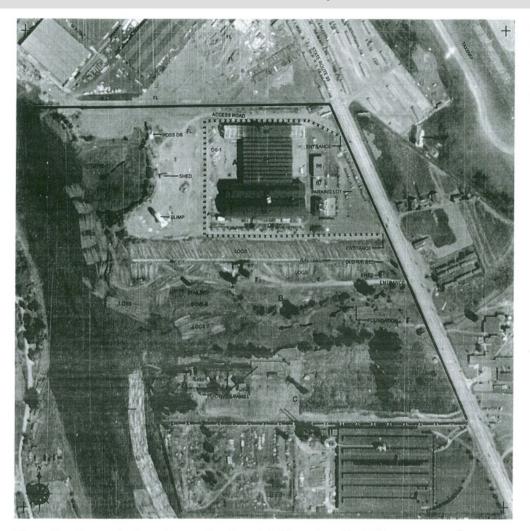


Figure 5. Jorgensen Forge Corporation/Duwamish River, May 13, 1942.

Approximate scale 1:3,400.

INTERPRETATION CODE

x — x — SITE BOUNDARY

FENCED SITE
BOUNDARY

XXXXXX FENCE

← — — DRAINAGE

FLOW RAILWAY

EXCAVATION/PIT (EXTENSIVE)

MOUNDED MATERIAL (EXTENSIVE)

B BUILDING

CA CLEARED AREA
DT DARK-TONED

EX EXCAVATION FA FILL AREA

L FILL

MATERIAL

M MOUNDED MATERIAL

OF OUTFALL
OS OPEN STORAGE AREA

R/R RAILROAD SS SMOKESTACK

* COLLATERAL DATA

1946 EPA Evaluation of Fill/Operations



Figure 6. Jorgensen Forge Corporation/Duwamish River, 1946. Approximate scale 1:3,400.

INTERPRETATION CODE

FENCED SITE XXXXX FENCE -- DRAINAGE EXCAVATION/PIT

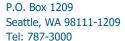
(EXTENSIVE)

MOUNDED MATERIAL (EXTENSIVE)

BUILDING CLEARED AREA DARK-TONED EXCAVATION FILL AREA

FILL IMPOUNDMANT MOUNDED MATERIAL

OUTFALL OPEN STORAGE AREA RAILROAD SMOKESTACK COLLATERAL DATA





January 11, 2024

Please see below for comments from the Port of Seattle ("Port") on the Boeing Isaacson-Thompson Site ("Site") Remedial Investigation ("RI") and Feasibility Study ("FS") draft documents out for public comment. First, we provide general comments regarding the Site and the draft documents. Following that is a table providing specific comments, identified by sections within the documents. Above all, the Port emphasizes (1) that the Port Sliver need not be reconstructed following remediation, and (2) that the Port's permission or authorization is not needed for sampling, remediation, or other remedial actions.

I. General Comments

A. Use Consistent Phrasing for the Port Sliver

The Site, located along the eastern shoreline of the Lower Duwamish Waterway ("LDW" or "Waterway"), includes a sliver of uplands in which the Port holds limited property rights, inherited in 1963 from the former Commercial Waterway District No. 1 of King County ("CWD"), which dissolved at the time. The RI and FS draft documents use a variety of terms to refer to this area. The Port recommends consistently referring to this area as the "Port Sliver," coining that as a defined term at the start of each document, and removing all other names and references.

B. The Port Sliver at the Boeing Isaacson-Thompson Site—Historical Context

Understanding the historical development and unusual legal status of the Port Sliver is important for Ecology decision-making regarding remedy planning for the Sliver and the broader Site. The draft FS's remedial action alternatives all assume that the Port Sliver must be reconstructed following remediation. As discussed below, that assumption is unfounded, as the Port cannot and would not require its reconstruction.

The Port has had no material involvement with the small and legally unusual area referred to as the Port Sliver. Neither the Port nor the CWD constructed or operated on the Port Sliver, and neither entity contributed contamination to the Port Sliver. The history of the







CWD and upland "slivers" along the LDW begins with construction of the Waterway in the early 20th century.1

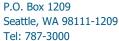
In 1889, by virtue of becoming a state, Washington received ownership over the bed and banks of all navigable waters in the state under the equal footing doctrine. Beginning in 1909, the Washington Legislature passed a series of laws that enabled local governments to create "waterway districts" for the economic development of the state.² These districts were intended to promote the public purposes of commerce and navigation, create access to and use of commercial waterways, and widen and straighten water bodies as needed to achieve these goals. See Laws of 1909, Ex. Sess., ch. 8. The districts were "given the right, power and authority by purchase or the exercise of the power and authority of eminent domain, or otherwise, to acquire all necessary and needed rights of way" to straighten, deepen, and widen rivers and streams. Laws of 1917, ch. 152, § 2.

In 1911, the King County Board of Commissioners created the CWD and approved a plan to acquire a 500-foot right-of-way for straightening, widening, and deepening the lower 5 miles of the Duwamish River. The CWD began acquiring upland property within the designated area in 1913. Construction was largely completed in 1915. The river was diverted into the new, straightened channel, and former meanders were filled in. Only the center 250 -foot-wide channel has since been dredged and maintained as a federal navigable waterway, which generally left an area of about 125 feet on either side of the center channel subject to sedimentation. There are also many "slivers" of dry land that were either filled in intentionally by adjoining landowners or were for some reason never excavated out to the full 500-foot width of the Waterway.

The U.S. Army Corps of Engineers ("Corps") took over dredging and maintenance of the center channel in 1924. In 1963, the Washington Supreme Court held that the CWD lacked authority to lease, alienate, or otherwise profit from any area within the 500-foot-wide LDW right-of-way. Commercial Waterway Dist. No. 1 v. Permanente Cement Co., 61 Wn.2d 509, 513 (1963). Soon after, in 1963, the CWD was dissolved, and its assets and obligations were transferred to the Port pursuant to RCW Chapter 91.07. The Port, like the CWD before it, holds

¹See also Leidos. 2018. Lower Duwamish Waterway, Inventory of Lower Duwamish Waterway Slivers. Prepared for the Washington Department of Ecology. May.

²The 1909 legislation was found unconstitutional, and its defects were cured by 1911 legislation. See Laws of 1911, chs. 10, 11. Further amendments were made in 1913 and 1917. See Laws of 1913, ch. 46, Laws of 1917, ch. 152.







"the land acquired by purchase and condemnation within the 500-foot right of way for the construction of the waterway . . . in trust for the public." Id. at 513. The Corps continues to issue permits to adjoining landowners for activities such as dredging and construction of docks or bulkheads.

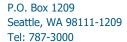
With respect to the Port Sliver specifically, based on aerial photographs, it appears that the origin of the sliver can be divided into approximate thirds: the northern section was a portion of the CWD-dredged channel that was later filled by Isaacson; the middle section was within the CWD right-of-way and either filled before the 1930s or never dredged; and the southern section was part of the original meander of the Duwamish River and was historically the mouth of Slip 5 before it was filled (Floyd | Snider 2023). Neither the CWD nor the Port constructed or ever used the sliver. A small central portion of the sliver is visible in aerial photographs from the 1930s, during which time the Duwamish Lumber Company (operating on what is today the Boeing Isaacson property) appears to have used the area as part of its operations. This portion of the sliver appears to be within the 500-foot right-of-way granted to the CWD. It is unclear whether Duwamish Lumber Company or another entity created this area with fill, or if it instead represents an area that was never dredged as part of the LDW construction. Aerial photos from the 1940s to 1950s show that the northern portion of the sliver was beginning to be filled, presumably by Isaacson Iron Works, then operator of the Site. By 1960, the southern portion of the sliver had been filled as well, connecting by 1969 with the Boeing Thompson property to the south, which had been constructed on fill replacing Slip 5 (one of the former Duwamish River meanders).

C. Access to the Port Sliver is Unimpeded

No Port permission is required in order to conduct sampling or remedial actions on the Port Sliver. The Washington Supreme Court has explicitly confirmed the extremely limited rights held by the CWD (and by extension the Port) in such areas. Specifically, the Port "has no power to lease [or alienate] any area within the 500-foot right of way," and adjacent landowners have "a right of access to the extent that neither navigation nor any other right of the general public is interfered with." Id. at 525. Thus, to the extent that remediation of the sliver—or even the removal of the sliver in its entirety—is required, no Port permission is required.

D. Reconstruction of the Port Sliver is Not Necessary

As noted, the Port did not construct the Port Sliver, nor has it ever conducted operations on, or contributed contamination to, the property. And insofar as the Port Sliver will



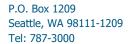


be excavated as part of Site remediation, from the Port's perspective, the property need not be reconstructed to its present state following remediation. If Boeing or another party wishes to utilize the area for habitat restoration, public Waterway access, or other usage that does not interfere with navigation or other public rights, the Port cannot and would not oppose such efforts. The Port has communicated this position to Boeing via email on November 10, 2022.

Port of Seattle

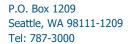
II. Specific Comments

Comment	Section	Comment
1	RI and FS – throughout	Use "Port Sliver" throughout the document. Currently, various terms are used, including "Port parcel" or "Port-owned parcel" which are incorrect (the area in question is not a discrete parcel). Recommend also referring (at first use of the term) to the Leidos 2018 LDW sliver inventory prepared for Ecology, wherein this sliver is identified as "Sliver 35E."
2	RI (multiple references)	" owned by the Port" "owned and/or controlled by the Port"
3	RI Executive Summary (CSM) RI Section 10.4.2.3	"Concentrations in soil behind the Port bulkhead have not been determined" Please revise "Port bulkhead" to "Port Sliver bulkhead."
4	FS Section 1.0	FS Section 1.0. Recommend defining here (at first use): "Port Sliver" not just as "also known as," but as how it will be referred to in the FS.
5	FS Section 1.1	The reference to parcel/property is confusing to readers. When all properties/parcels at the site have been established "for the purposes of this FS, these three parcels are referred to collectively as the Isaacson-Thompson Site." Once defined, then refer to a collective "Site" moving forward in the document rather than naming specific properties repeatedly.



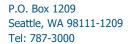
Port of Seattle

Comment	Section	Comment
6	FS Section 1.2 RI Section 2.1	The summary of site background makes no mention of the history of the Port Sliver and its relationship to historical operations at the Site. Suggest additional context to be added such as the following:
		"The Port Sliver falls within the 500-foot LDW right-of-way granted to the CWD in 1911 in the effort to straighten, widen, and deepen the lower 5 miles of the Duwamish River. Based on aerial photographs, it appears that the origin of the sliver can be divided into approximate thirds: the northern section was a portion of the CWD-dredged channel that was later filled by Isaacson; the middle section was within the CWD right-of-way and either filled before the 1930s or never dredged; and the southern section was part of the original meander of the Duwamish River and was historically the mouth of Slip 5 before it was filled. A small central portion of the sliver is visible in aerial photographs from the 1930s, during which time the Duwamish Lumber Company (operating on what is today the Boeing Isaacson property) appears to have used the area as part of its operations. This portion of the sliver appears to be within the 500-foot right-of-way granted to the CWD. It is unclear whether Duwamish Lumber Company or another entity created this area with fill, or if it instead represents an area that was never dredged as part of the LDW construction. Aerial photos from the 1940s to 1950s show that the northern portion of the sliver was beginning to be filled, presumably by Isaacson Iron Works, then operator of the Site. By 1960, the southern portion of the sliver had been filled, connecting by 1969 with the Boeing Thompson property to the south, which had been constructed on fill replacing Slip 5 (one of the former Duwamish River meanders). With respect to the Port Sliver specifically, neither the CWD nor the Port constructed or ever used the sliver. The Port inherited the sliver from the former CWD upon its dissolution in 1963."



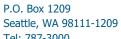
Port of Seattle

Comment	Section	Comment
Comment	Section	Citations for Fill History and Historical Use of the Sliver: • Dames & Moore. 1983. Report of Evaluation of Site Contamination Isaacson Steel Property for the Boeing Aerospace Company. 4 October. • Floyd Snider. 2023. Isaacson-Thompson Port of Seattle Sliver Property Site History and Aerial Photographs. September. (Provided as an attachment to comment submission.) • Foster, Richard F. 1945. Sources of Pollution in the
		 Duwamish-Green River Drainage Area. Pollution Control Commission Survey. 6 December. Landau Associates. 2009. Data Summary Report Thompson-Isaacson Property, Tukwila, Washington. Prepared for The Boeing Company. 2 September. Leidos. 2018. Lower Duwamish Waterway, Inventory of Lower Duwamish Waterway Slivers. Prepared for the Washington State Department of Ecology. May. Wicks and Sweet, Edwards & Associates, Inc. 1983. Evaluation of Potential Soil and Ground Water Contamination at the Isaacson Corporation Property, Seattle, Washington. Submitted to Isaacson Corporation and Graham & Dunn. 21 December.
7	FS Section 1.5, first paragraph, last sentence	With respect to the sentence "Future uses of the Port's Sliver Property are unknown." Recommend amending to the following: "Future uses of the Port Sliver are unknown. The Port inherited the sliver from the former Commercial Waterway District No. 1 of King County when it dissolved in 1963. The Port cannot lease or sell the sliver or exclude parties from it (unless they impede navigation or other rights of the public). The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes."





Comment	Section	Comment
8	Section 5.2	All proposed remedial alternatives involve excavating the Port Sliver, filling the excavated area with clean fill to an elevation above the high-water line, and replacing the existing bulkhead. However, the Port does not request or recommend that the Port Sliver be returned to grade or that the existing bulkhead is replaced. The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes (See comment 7)."
		If the Port Sliver is not reconstructed, the dilapidated bulkhead would not need to be replaced. For shoreline stability purposes, consider extending the wooden/steel bulkhead that exists along the Boeing Thompson shoreline northward along the Boeing Isaacson property and Port Sliver boundary.
9	Section 5.2.3, page 5-9	Regarding the remedial excavation statement that "The Port property excavation will include soil removal between the proposed PRB location and the Port property shoreline." This is incorrectly described. The extent of excavation extends from the shoreline into the Boeing Isaacson parcel. The Port Sliver encompasses only half the excavation area that is colored green. Suggest revising to "The planned soil removal excavation is shown in green on Figure 5-3 and includes the area between the proposed PRB location and existing shoreline."
10	Figures 3-2 through 3-8, and 3-25	The groundwater IDW interpolations should extend westward onto the Port Sliver similar to the soil concentration figures and not stop at the property line (Figures 3-2 to 3-8). This would help to inform the extent of metals contamination in groundwater as depicted in Figure 3-25. Is the extent of arsenic groundwater contamination north of the Site bounded by Jorgensen Site wells, which are not shown in the RI? Should the groundwater contour line for arsenic along this northern boundary be shown with question marks,







Comment	Section	Comment
		and how does the FS address groundwater contamination migration north (and off) of the Site?
11	Figures 5-5, 5-7, and 5-9	Existing and/or proposed bulkhead replacements should be added to cross sections. A reference or depiction of the range of anticipated LDW surface water levels would be helpful to assess remedial features relative to the adjacent surface water elevation. Surface water levels during a specific survey is provided in 3-1c, but these are not in a comparable datum and do not represent the range of anticipated surface water levels.
12	Figure 5-3	Clarify that the Port Sliver is upland only (above mean higher high water) and waterward of the Boeing property line. From this figure, it appears as if the green-colored area is all Port Sliver.



Elevating the voices of those impacted by the Duwamish River pollution and other environmental injustices to advocate for a clean, healthy, and equitable environment for people and wildlife. Promoting place-keeping and prioritizing community capacity and resilience.

January 9, 2024

David Butler david.butler@ecy.wa.gov Site Manager

RE: Boeing Isaacson Thompson Remedial Investigation and Feasibility Study

To Mr. Butler:

The Duwamish River Community Coalition (DRCC) has long been a community steward for environmental justice in the Duwamish Valley, which is one of the most polluted areas in the entire Pacific Northwest following 100 years of industrial dumping and release of toxic waste. DRCC has worked tirelessly alongside community groups and neighbors for 20 years to clean up the water, land and air while fighting to eliminate ongoing industrial pollution that makes our communities among the least healthy in the County.

Our MTCA work over the past several years has included engaging the community in creative ways such as through in-person gatherings, community events, and multilingual social media and video interactions to bring some of this information to the community and gather their input. We prioritize the voices of those who are directly impacted by these changes to ensure that our impacted low-income and black/indigenous/people of color immigrant, refugee, and fisher communities who already suffer the greatest exposures and health disparities can be meaningfully informed and engaged.

As we have expressed in previous comment letters, communities should be meaningfully engaged in decisions that will most heavily impact them. As a community steward, we are committed to keeping our community informed and ensuring that they access information in a way that allows them to provide their input. However, DRCC did not receive an Ecology Public Participation Grant for 2023-2025. This means that we are no longer able to support the type of engagement that we had been doing previously, including but not limited to: multilingual advertising and attending community meetings; sharing MTCA site details at community-hosted events with DRCC created materials; and detailed comment letters informed by thorough review of all site document with consultation by technical advisors. In light of this fact, Ecology can no

longer rely on DRCC's community expertise and it will need to conduct its own community outreach.

We include this background information in order to remain transparent as a community-based organization and as a request to the Department of Ecology to reevaluate the way their existing funding structures and reliance on overburdened communities and grassroot organizations to perform uncompensated labor is antithetical to principles of environmental justice and equity.

With regard to DRCC's review of the Boeing Isaacson Thompson (Boeing IT) Remedial Investigation and Feasibility Study and associated documents, we offer this limited review:

DRCC does not concur with the proposed Preferred Alternative, as we are concerned about its long term protectiveness. We are also concerned that the FS does not adequately discuss climate change impacts or Green Remediation alternatives such as habitat restoration along the Duwamish River and its communities:

- Extent of soil excavation/remediation: The arsenic concentrations in groundwater migrating to the Lower Duwamish Way (LDW) Superfund site are excessively high. We believe that the placement of the Permeable Reactive Barrier (PRB) is too close to the river and should be moved back farther into the site order to achieve better source control for the Lower Duwamish Way (LDW). This would require more soil excavation than recommended in the Preferred Alternative. Moving the PRB farther inland would give more room for possible failure of technology and subsequent response.
- Steel bulkhead installation to replace Port Sliver wooden bulkhead: We do not agree that placing a steel bulkhead to deter groundwater contamination and/or prevent erosion along the riverfront is appropriate. While we understand that installation of bulkheads and/or slurry walls are intended to contain onsite contamination, we do not believe that they contribute to restoring the environment, including supporting increased water storage during flood events due to sea level rise and climate change. They do not improve nor protect habitat for the river.
- <u>South portion of shoreline:</u> The discussion on what will occur south of the Port sliver is inadequate. It is unacceptable to use a "wait and see" approach. It is important to develop some alternatives in the FS on how the south portion of the site will be treated. We strongly recommend that this area is considered for a new habitat restoration area (see below).
- Climate Change Vulnerability Assessment:
 - Revised MTCA (WAC 173-340) regulations call for attention to climate change at MTCA clean up sites. We request that all MTCA cleanup sites in the Duwamish Valley follow Sustainable Remediation: Climate Resiliency/Green Remediation

- *Guidance* (Ecology Publication No 17-09-052), and conduct Climate Change Vulnerability Assessments (CCVA).
- ii. For the Boeing IT FS, the climate section is weak and does not follow the Sustainable Remediation Guidance. We request that the CCVA be fully presented.
- Green Remediation: According to the Sustainable Remediation: Climate Resiliency/Green Remediation Guidance (Ecology Publication No 17-09-052), Boeing IT would be classified as a Tier 3 complex site. DRCC believes that the FS should have included a Green Remediation analysis and its costs as part of the Remedial Alternatives. We propose installation of a habitat restoration area similar to T117 (People's Park) and Boeing Plant 2. Both of these restoration sites have proved to be climate resilient by increasing water storage during flood events such as the one on December 27, 2022. They have also improved fish and wildlife habitat which has supported Chinook recovery goals. In addition, both sites improve human health by increasing the beauty of the river and access to the environment. We request that pilot studies be incorporated into CAPs for sites that include or are in close proximity to public access areas to determine how restoration work can be utilized as part of cleanup.
- The CAP should include an in-depth assessment of how landscaping and vegetation management plans can be utilized as part of the selected remedy in accordance with Shoreline Management Act compliance.

We appreciate this opportunity to provide comments. Please do not hesitate to contact us if you have any questions.

Jamie Hearn

Director of Environmental Law and Climate Policy

Duwamish River Community Coalition

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