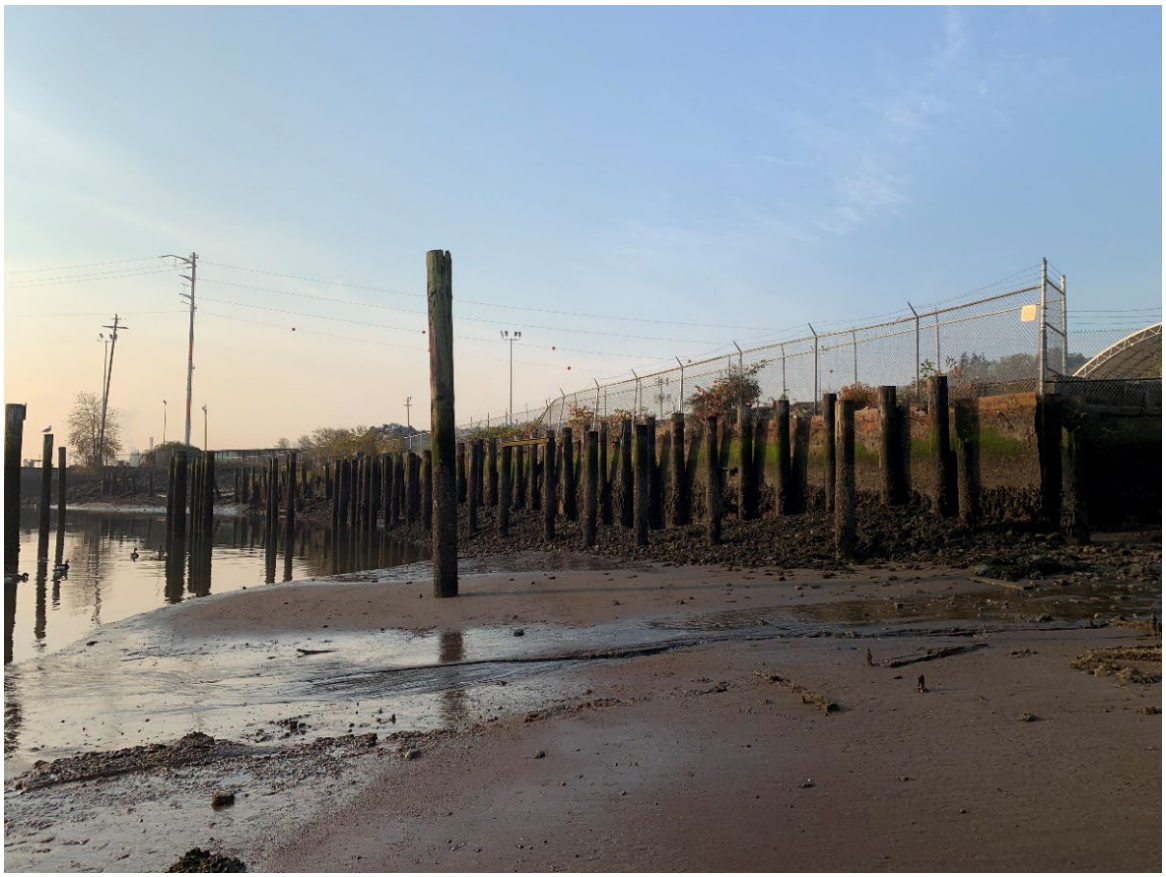
Lower Duwamish River Natural Resource Damage Assessment: General Recycling of Washington Habitat Project, Seattle, King County, Washington

Final Restoration Plan/Environmental Assessment

June 2024



(View of current conditions at General Recycling property from shoreline. Photo credit: NOAA)

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The State of Washington
The United States Department of the Interior

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Acronyms & Abbreviations

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CEQ – Council on Environmental Quality
CWA – Clean Water Act
DARRP – Damage Assessment, Remediation, and Restoration Program
DOI – U.S. Department of the Interior
DSAYs – discounted service acre years
EA – Environmental Assessment
EFH – Essential Fish Habitat
EIS – Environmental Impact Statement
EPA – United States Environmental Protection Agency
ESA – Endangered Species Act
FWCA – Fish and Wildlife Coordination Act
General Recycling - General Recycling of Washington
HFA – Habitat Focus Area
LDR – Lower Duwamish River
MBTA – Migratory Bird Treaty Act
MSA – Magnuson-Stevens Act
MTCA – Model Toxics Control Act
MLLW – Mean Lower Low Water
MOA – Memorandum of Agreement
NEPA – National Environmental Policy Act
NHPA – National Historic Preservation Act
NMFS – National Marine Fisheries Service
NOAA – National Oceanic and Atmospheric Administration
NPL – National Priorities List
NRDA – Natural Resource Damage Assessment
OPA – Oil Pollution Act
PAHs – polycyclic aromatic hydrocarbons
PCBs – polychlorinated biphenyls
RP/EA – Restoration Plan/Environmental Assessment
RP and PEIS – Restoration Plan and Programmatic Environmental Impact Statement
Project - General Recycling of Washington Habitat Project
SCO – Sediment Cleanup Objectives
SEPA – State Environmental Policy Act
SMS – Sediment Management Standards
SQS – Sediment Quality Standards
USFWS – U.S. Fish and Wildlife Service

Executive Summary

Beginning in the early twentieth century, the Lower Duwamish River (LDR) has been the site of extensive industrial activities, which have resulted in releases of hazardous substances and discharges of oil to the environment. Because of these releases and discharges, natural resources in the LDR have been, and continue to be, exposed to, and adversely affected by, hazardous substances and oil. The physical environment and habitats of the LDR have also been altered by dredging, straightening, and shoreline armoring associated with industrial development. Notwithstanding the presence of contamination in the LDR, the LDR remains an important area used by natural resources such as fish, migratory birds, and other wildlife.

Under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC § 9601, et seq. (CERCLA), the Oil Pollution Act of 1990, 33 USC § 2701, et seq. (OPA), and the Clean Water Act, 33 USC § 1251, et seq. (CWA), the Elliott Bay Trustee Council (Trustees) for the LDR have been conducting natural resource damage assessment (NRDA) activities for the LDR. The Trustees for the LDR are the United States Department of the Interior (DOI); the National Oceanic and Atmospheric Administration (NOAA); the Muckleshoot Indian Tribe; the Suquamish Indian Tribe of the Port Madison Reservation (Suquamish Tribe); and the State of Washington represented by the Washington State Department of Ecology (State lead Trustee), and the Washington Department of Fish and Wildlife. For the purposes of the NRDA, the LDR has been defined by the Trustees to encompass the lower seven miles of the Duwamish River, from bank to bank; the mouth of the Duwamish River and its confluence with Elliott Bay in the Puget Sound; and the delta area near Harbor Island, i.e., the nearshore areas adjacent to Harbor Island and the East and West Waterways (Section 2.1, Lower Duwamish River Natural Resource Damage Assessment: Injury Assessment Plan; EBTC, 2019).

To implement the NRDA process, the Trustees work together to determine the extent of injuries to natural resources caused by releases of hazardous substances and discharges of oil in the LDR. The Trustees then seek damages from potentially responsible parties to compensate for the injuries to natural resources and related lost services caused by the releases and discharges. Once the Trustees have recovered damages, the Trustees plan and implement restoration activities to restore, replace, or acquire the equivalent of those natural resources injured by releases of hazardous substances and discharges of oil and the services provided by those resources. To guide restoration decisions on specific projects, in 2013, the Trustees issued a Final Lower Duwamish River NRDA Restoration Plan and Programmatic Environmental Impact Statement (Final LDR RP and PEIS; EBTC, 2013). In the Final LDR RP and PEIS, the Trustees selected Integrated Habitat Restoration as the Preferred Alternative. Under that Preferred Alternative, the Trustees focus on projects that restore habitat that benefits a suite of injured natural resources in the LDR by creating and enhancing habitat that will provide food, foraging, and resting areas for fish, shorebirds, and other wildlife. The Trustees have reviewed the Final LDR RP and PEIS as part of this Environmental Assessment (EA) process, including reevaluating the analysis and underlying assumptions on which that document was based, consistent with the requirements of Fiscal Responsibility Act of 2023. The analysis and underlying assumptions of the Final LDR RP and PEIS remain valid.

The General Recycling of Washington Habitat Project (Project), which has been developed and will be implemented by General Recycling of Washington (General Recycling), will create habitat adjacent to and in the LDR that will provide benefits to multiple injured natural resources. The Trustees developed this Final Restoration Plan/Environmental Assessment (RP/EA) consistent with applicable legal authorities, e.g., Section 111(i) of CERCLA, to describe to the public and evaluate the type and amount of restoration that will be provided by the Project, including the Project's environmental impacts. This Final RP/EA tiers off the information and findings of the Final LDR RP and PEIS, cited earlier, which is incorporated into this document by reference. The National Environmental Policy Act, 42 USC § 4321, et seq. (NEPA), requires federal agencies to identify and evaluate impacts to the environment that may occur due to federal actions. In this Final RP/EA, the Trustees analyzed a reasonable range of restoration alternatives to identify and evaluate potential environmental impacts resulting from the implementation of those alternatives. This Final RP/EA evaluates a No Action Alternative (Alternative A) and an Accept the Project Alternative (Alternative B), describes the affected environment, and summarizes the likely impacts of the analyzed restoration alternatives. The Trustees made the Draft RP/EA available to the public for review and comment between March 18, 2024 and April 17, 2024. The Draft RP/EA and accompanying webstory were posted on the NOAA Damage Assessment, Remediation, and Restoration Program (DARRP) website (https://darrp.noaa.gov/hazardous-waste/lower-duwamish-river) on March 12, 2024, and on March 18, 2024 a Federal Register Notice of Availability was published (Notice of Lodging of Proposed Consent Decree Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Clean Water Act (CWA), and the Oil Pollution Act (OPA) and Notice of Availability of Draft Restoration Plan/Environmental Assessment of Restoration Project Incorporated Into Proposed Consent Decree, 89 FR 19,358 (Mar. 18, 2024)). The Trustees also released two newsletters with links to the webstory on the proposed consent decree and Draft RP/EA to the LDR NRDA Listserv on March 12, 2024 and March 18, 2024. The Trustees did not receive any public comments. The Trustees reviewed the Draft RP/EA and created this Final RP/EA, which identifies the Accept the Project Alternative (Alternative B) as the Preferred Alternative.

The Project is expected to restore, replace, or acquire the equivalent of natural resources injured and services lost due to releases of hazardous substances and discharges of oil from the General Recycling property on the LDR. The restoration analyzed by the Trustees in the Final RP/EA has been proposed by General Recycling to resolve their liability in a consent decree filed with the United States District Court for the Western District of Washington[1].

1. Introduction

This Final RP/EA was prepared by the Trustees to identify and analyze an action, the Project, to restore natural resources injured and natural resource services lost due to releases of hazardous substances and discharges of oil into the LDR. The Trustees developed this Final RP/EA to inform the public about the specific restoration activities that the Trustees are evaluating that will compensate for injuries to natural resources and related service losses caused by releases of

[1] As used in this Final RP/EA, General Recycling refers to all Defendants named in the proposed consent decree that was concurrently lodged with the Draft RP/EA, which are General Recycling of Washington, LLC, The David J. Joseph Company, and Nucor Steel Seattle, Inc.

hazardous substances and discharges of oil into the LDR from the General Recycling property. General Recycling entered into a proposed consent decree with the Trustees, which was lodged concurrently with the public notice and comment period for this Final RP/EA. The proposed consent decree was also subject to a public notice and comment period. In this Final RP/EA, the Trustees analyzed the restoration action proposed in the consent decree. The Project is projected to generate ecological benefits equivalent to 158.6 discounted service acre years (DSAYs).[2] The estimated ecological benefits to be created by the General Recycling Habitat Project will offset the injuries to natural resources resulting from releases of hazardous substances and discharges of oil from the General Recycling property.

Consistent with CERCLA, OPA, CWA, NEPA, and related legal authorities, this Final RP/EA:

- Explains the purpose and need for natural resource restoration;
- Summarizes the natural resource injuries and service losses associated with activities at the General Recycling property;
- Presents the restoration alternatives evaluated by the Trustees;
- Outlines the Trustees' restoration goals and restoration screening criteria;
- Evaluates the restoration alternatives under the restoration screening criteria; and
- Analyzes the restoration alternatives' likely impacts to the environment as well as cumulative effects that may result from implementation of the alternatives.

The Trustees sought public review and comment of the Draft RP/EA to inform this Final RP/EA and document their selection of the Accept the Project Alternative (Alternative B) as the Preferred Alternative. Accordingly, the Trustees will accept the Project as the basis of a settlement to compensate for General Recycling's natural resource damages liability.

1.1 Purpose and Need for Restoration

The Trustees developed the Final LDR RP and PEIS to evaluate restoration alternatives to restore, replace, or acquire the equivalent of those natural resources injured by releases of hazardous substances and discharges of oil in the LDR and compensate for lost resource services (See Final LDR RP and PEIS, Section 1.2; EBTC, 2013). Based on their analysis set forth in the Final LDR RP and PEIS, the Trustees selected Alternative Three, Integrated Habitat Restoration, as the Preferred Alternative to restore injured natural resources in the LDR.

The purpose of this Final RP/EA is to identify and analyze a specific action, restoration to settle the Trustees' natural resource damages claims against General Recycling, to restore natural resources injured and natural resource services lost due to releases of hazardous substances and discharges of oil into the LDR from activities at the General Recycling property. The Final RP/EA analyzes the restoration offered in the proposed consent decree for the Trustees to accept the Project in settlement. General Recycling has owned and operated the property located at 4260 West Marginal Way, Seattle, WA 98106-1210 (Tax Parcels 7666703540, 7666703630,

[2] A DSAY is a unit of measurement by the Trustees to quantify the total amount of ecological services provided by one acre of habitat over a single year. For more information about the Trustees' use of DSAYs and measuring natural resource injuries and restoration benefits, see Section 2 of the Final LDR RP and PEIS (EBTC, 2013).

1824049018) from about 2002 to the present. Historically, this property has been used for various activities including scrap metal storage, steel fabrication, log and container handling and storage, tug and barge maintenance, and others. The activities at the General Recycling property released hazardous substances and discharged oil that injured natural resources in the LDR. The need for this Final RP/EA is to describe the Project proposed in the consent decree between the Trustees and General Recycling related to General Recycling's outstanding natural resource damages liability for the LDR. This Final RP/EA identifies the Trustees' proposed action to restore, replace, or acquire the equivalent of those natural resources injured by releases of hazardous substances and discharges of oil associated with activities at the General Recycling property.

1.2 Restoration Objectives

Because natural resources that rely on the estuarine and riparian habitat in the LDR are injured by the releases of hazardous substances and discharges of oil, the Trustees identified restoration objectives that will restore the estuarine and riparian habitat that support these resources (See Section 6.5, Final LDR RP and PEIS; EBTC, 2013). To that end, the Trustees identified the following restoration objectives, which informed the development of this Final RP/EA:

1. Implement restoration with a strong nexus to the injuries caused by the releases of hazardous substances in the LDR.
2. Provide a functioning and sustainable ecosystem where selected habitats and species of injured fish and wildlife will be enhanced to provide a net gain of habitat function beyond existing conditions.
3. Integrate restoration strategies to increase the likelihood of success.
4. Coordinate restoration effort with other planning and regulatory activities to maximize habitat restoration.
5. Involve the public in restoration planning and implementation.

These restoration objectives are consistent with the types of restoration actions that are described under the Preferred Alternative identified in the Final LDR RP and PEIS (EBTC, 2013).

1.3 Natural Resource Trustee Authority

Pursuant to federal law, the Trustees are authorized to act on behalf of the public to assess injuries to natural resources and lost services resulting from releases of hazardous substances and discharges of oil and pursue claims against potentially responsible parties to seek compensation for such losses.[3] The goal of the NRDA process is for the Trustees to plan and implement actions that will restore, replace, or acquire the equivalent of those natural resources and services that were injured or lost due to releases of hazardous substances or discharges of oil.

The Trustees work together pursuant to a 2006 Memorandum of Agreement (MOA) signed by each of the Trustees. The MOA creates the Elliott Bay Trustee Council and formalizes the

[3] The designation of natural resource trustees is explained in CERCLA, 42 USC § 9607(f), and the National Contingency Plan, 40 CFR subpart G.

Trustees' cooperation and shared efforts to conduct a NRDA for the LDR and Elliott Bay. Participating Trustees are DOI; NOAA, on behalf of the United States Department of Commerce; the Muckleshoot Indian Tribe; the Suquamish Tribe; and the State of Washington represented by the Washington State Department of Ecology (State lead Trustee), and the Washington Department of Fish and Wildlife.

1.4 Relationship to Final Lower Duwamish River NRDA Restoration Plan and Programmatic Environmental Impact Statement

This Final RP/EA tiers from the Final LDR RP and PEIS (EBTC, 2013), which can be accessed here: https://pub-data.diver.orr.noaa.gov/admin-record/5501/Final%20Duwamish%20River%20NRDA%20Restoration%20Plan.pdf.

In 2013, the Trustees issued the Final LDR RP and PEIS to document the Trustees' evaluation of the restoration action alternatives and set forth the Trustees' restoration action selection process and criteria. In the Final LDR RP and PEIS, the Trustees analyzed three restoration alternatives and selected Integrated Habitat Restoration as the Preferred Alternative (See Final LDR RP and PEIS, Section 9.1.3; EBTC, 2013). Under Integrated Habitat Restoration, the Trustees focus on restoration projects that restore habitat that benefits a suite of injured natural resources in the LDR by creating habitat that provides food, foraging, and resting areas for fish, shorebirds, and other wildlife (See Final LDR RP and PEIS, Section 9.1.3; EBTC, 2013). This Final RP/EA tiers (40 CFR 102.20, 40 CFR 1501.11, and 43 CFR 46.140) from and incorporates by reference (40 CFR 1501.12 and 43 CFR 46.135) portions of the Final LDR RP and PEIS, where appropriate. Under NEPA, tiering is allowed if the future proposed activity is within the range of alternatives and that the nature of the proposed action's environmental impacts is considered in the programmatic document. Here, specific sections of the Final LDR RP and PEIS are cited and summarized to incorporate the Final LDR RP and PEIS by reference in the Final RP/EA. When preparing this Final RP/EA, the Trustees reviewed the Final LDR RP and PEIS in light of current LDR conditions and the recent requirements of the Fiscal Responsibility Act of 2023, and have found the Final LDR RP and PEIS, and the analysis therein, remains valid, relevant, and applicable to the LDR and the Project. The activities proposed in this Final RP/EA are consistent with the processes and criteria set forth in the Final LDR RP and PEIS and in line with the Preferred Alternative, Integrated Habitat Restoration, selected in the Final LDR RP and PEIS.

As explained in the Final LDR RP and PEIS, the Trustees are developing restoration plans, and selecting and implementing restoration projects, prior to completing the damage assessment processes that will identify and quantify injuries and losses to natural resources and associated natural resource services (See Final LDR RP and PEIS, Sections 1.2, 1.3, and 1.6.4; EBTC, 2013). Among other benefits, this has allowed the Trustees to reach early settlements with some potentially responsible parties, which in turn provide restoration of injured natural resources much sooner than without those early settlements. This Final RP/EA is part of that restoration plan development. The Trustees note, however, that the damage assessment process is ongoing, and selection by the Trustees of specific restoration projects in this Final RP/EA (or other restoration projects in subsequent RP/EAs) does not mean that the damage assessment process has been completed. The formal damage assessment process was announced by the Trustees on January 29, 2016, and remains ongoing.

1.5 Summary of Proposed Settlement Agreement

A proposed settlement between the Trustees and General Recycling is memorialized in a consent decree that was lodged on March 12, 2024 with the United States District Court for the Western District of Washington. The consent decree was subject to a thirty-day (30) public notice and comment period, which ran concurrently with the public notice and comment period for this Final RP/EA. A Notice of Lodging of the proposed consent decree and a Notice of Availability of the Draft RP/EA was published in the Federal Register on March 18, 2024 (89 FR 19,358). The proposed consent decree's terms provide that under the CWA, CERCLA, OPA, and the Washington Model Toxics Control Act (MTCA), Chapter 70A.305 RCW, the Trustees will settle General Recycling's natural resource damages liability related to their ownership of and operations at the General Recycling property. In exchange, General Recycling will be responsible for constructing and maintaining the Project. The Project will remove an existing bulkhead and ecology block retaining wall, shoreline debris, and creosote-treated pilings, and create approximately 2.33 acres of new, on- and off-channel marsh, intertidal, riparian, and vegetated slope habitat at the General Recycling property along the western shore of the LDR (Figure 1). The Project will also protect an additional 0.56 acres of subtidal habitat adjacent to the newly created habitat. General Recycling's full implementation of the Project is contingent on the court's entry of the consent decree between the Trustees and General Recycling. A copy of the proposed consent decree was made available during the public notice and comment period on the United States Department of Justice website: https://www.justice.gov/enrd/consent-decrees[4]. A Scope of Work attached as an appendix to the proposed consent decree provided more detail regarding the Project.

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[4] The United States Department of Justice posts proposed consent decrees at this website only during the public comment period. Since the comment period has closed, the General Recycling consent decree is no longer located at this website.

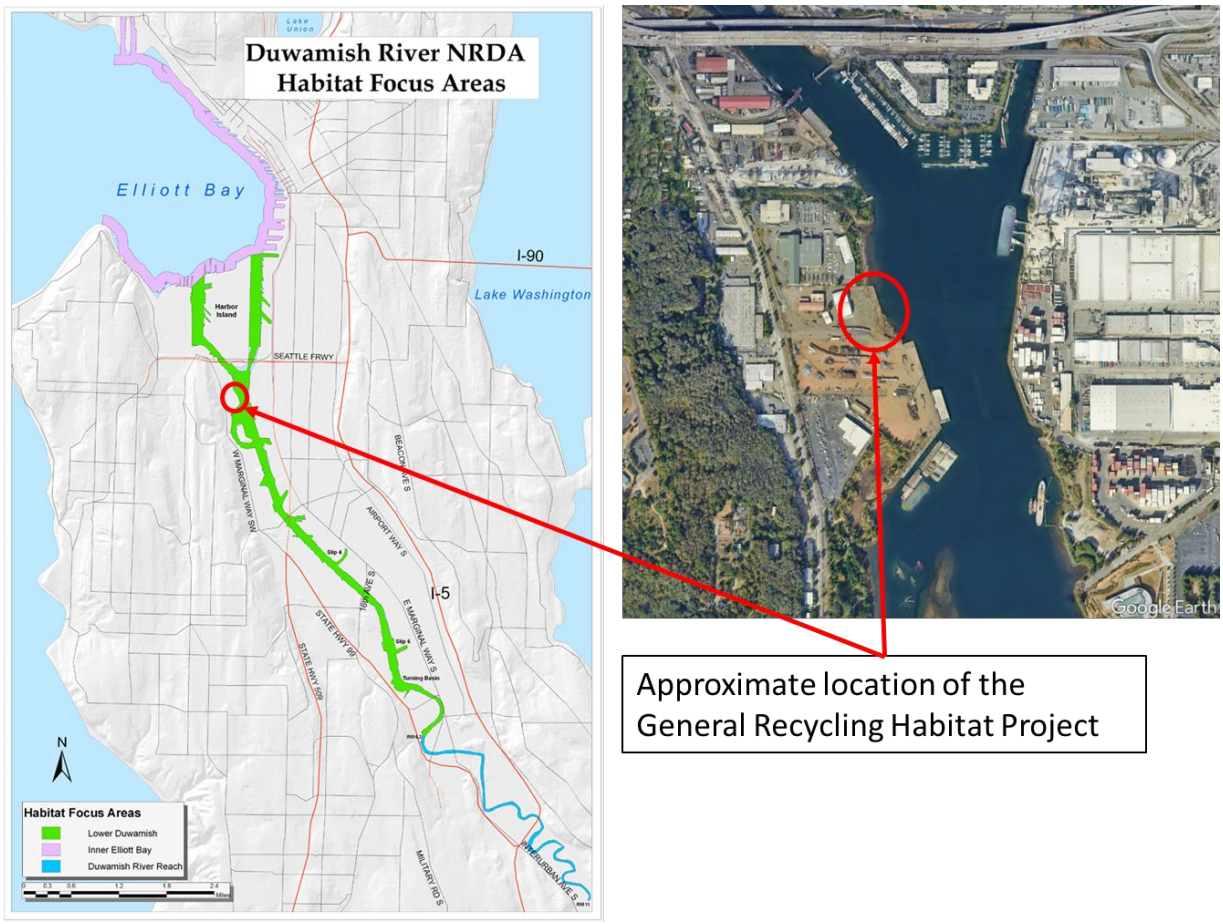

Figure 1: The General Recycling Habitat Project location along the LDR. Figure on the left shows a map of the LDR with the Project location and Habitat Focus Areas. Figure on the right shows an aerial image of the LDR with the Project location. Figure 1 credit: NOAA.

1.6 Public Participation

Public participation is an important part of the Trustees' restoration planning process and is also required under the CERCLA NRDA regulations (e.g., 43 CFR § 11.82(d)(2)). Under NEPA, federal agencies are also required to comprehensively analyze the impacts of their proposed actions and make information related to their analyses publicly available (40 CFR § 1506.6). The Trustees have and will continue to solicit public participation in the restoration planning and NEPA processes as required by law (Section 4.2, Final LDR RP and PEIS; EBTC, 2013).

The Draft RP/EA was made available for public review and comment for 30 days with the publication of the Notice of Availability in the Federal Register on March 18, 2024 (89 FR 19,358). The Draft RP/EA and accompanying webstory were posted on the NOAA DARRP website (https://darrp.noaa.gov/hazardous-waste/lower-duwamish-river) on March 12, 2024. The webstory was updated on March 18, 2024 with a link to the Federal Register notice. The Trustees also released two newsletters with links to the webstory on the proposed consent decree and Draft RP/EA to the LDR NRDA Listserv on March 12, 2024 and March 18, 2024.

The public was invited to submit comments electronically to lowerduwamishriver.nrda@noaa.gov or by writing to:

Lower Duwamish River NRDA
Attn: Terill Hollweg
National Oceanic and Atmospheric Administration
7600 Sand Point Way NE
Building 1 (DARC)
Seattle, WA 98115

The Trustees did not receive any public comments. Because there were no comments from the public, there were no substantive changes made by the Trustees when reviewing the Draft RP/EA to create this Final RP/EA.

The Trustees maintain records related to the LDR NRDA decision making process. These records are available on the LDR NRDA Administrative Record: https://www.diver.orr.noaa.gov/web/guest/diver-admin-record?diverWorkspaceSiteId=5501.

As the Trustees continue restoration planning, the Trustees may amend this Final RP/EA if significant changes are made to the type, scope, or impact of the restoration actions. If there is a significant modification made to the Final RP/EA, the Trustees intend to provide another public review and comment opportunity related to the modification.

1.7 Organization of the Final RP/EA

The following sections of this Final RP/EA describe the potential injuries to natural resources related to the General Recycling property (Section 2), proposed restoration alternatives (Section 3), as well as the affected environment, potential impacts of the implementation of the alternatives on the human environment, and the potential cumulative impacts of the proposed restoration alternatives (Section 4).

2. Summary of Potential Injury to Natural Resources

Data collected in the LDR indicate that natural resources including fish and migratory birds have been exposed to injurious levels of contaminants in the LDR (AECOM, 2012; Johnson et al., 2009; Windward, 2010). Investigations in the LDR found hazardous substances in sediments, soils, and groundwater, including but not limited to arsenic, cadmium, copper, mercury, lead, zinc, phthalates, hexachlorobenzene, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). The Trustees found over 30 hazardous substances in the LDR sediments (See NOAA, Lower Duwamish Waterway Sediment Characterization Study Report 1998; NOAA, 1998). Nine species of fish that are listed as threatened or candidate species under the Washington Department of Fish and Wildlife or the Endangered Species Act, 16 USC § 1531, et seq. (ESA), reside in or migrate through the LDR: Puget Sound Chinook salmon, coho salmon, Puget Sound steelhead, river lamprey, Coastal-Puget Sound bull trout, Pacific herring, Pacific cod, walleye pollock, and rockfish species (Section 2.3.2, Lower Duwamish River Natural Resource Damage Assessment: Injury Assessment Plan; EBTC, 2019). Of the more than eighty

bird species found to use and/or that may occur in the LDR, three are listed as threatened under the ESA: Marbled murrelet, Streaked horned lark, and Yellow-billed cuckoo (Section 2.3.2, Lower Duwamish River Natural Resource Damage Assessment: Injury Assessment Plan; EBTC, 2019).

3. Proposed Restoration Alternatives

Pursuant to 43 CFR § 11.82(a), the Trustees developed proposed alternatives to restore, replace, or acquire the equivalent of those natural resources and services lost or injured by releases of hazardous substances and discharges of oil from the General Recycling property. The Trustees first developed the Final LDR RP and PEIS and identified three broad restoration alternatives (Section 9, Final LDR RP and PEIS; EBTC, 2013). In the Final LDR RP and PEIS, the Trustees selected Alternative 3, Integrated Habitat Restoration, as the Preferred Alternative. Integrated Habitat Restoration involves restoration actions that will create and enhance habitat to provide food, foraging, and resting areas for juvenile salmonids, other fish, birds, and wildlife (Section 9.1.3, Final LDR RP and PEIS; EBTC, 2013). Integrated Habitat Restoration includes restoration actions such as removal of fill to restore mudflats, marsh, or riparian habitat; creation of off-channel habitat; altering shorelines to remove hardened banks and create gentler slopes; and removal of over- and in-water structures. The Trustees' Preferred Alternative (Alternative B), identified in Section 3.3 of this Final RP/EA, focuses on habitat creation and enhancement that benefits a suite of injured species and is consistent with Integrated Habitat Restoration, the Preferred Alternative identified in the Final LDR RP and PEIS.

To identify their Preferred Alternative in this Final RP/EA, the Trustees analyzed two proposed restoration alternatives under site-specific and regulatory criteria to determine whether the alternatives provided restoration of a type, quality, and quantity needed to compensate the public for the natural resources and resource services injured and lost as a result of releases of hazardous substances and discharges of oil from facilities operated by potentially responsible parties in the LDR, including from the General Recycling property. In this Final RP/EA, the Trustees analyzed Alternative A, No Action Alternative, and Alternative B, Accept General Recycling Habitat Project. The Trustees also analyzed the potential effects of the proposed restoration alternatives to the human environment as required under NEPA (40 CFR § 1501.5).

3.1 Restoration Screening Criteria

In order to determine whether the proposed alternatives would sufficiently compensate for the natural resource injuries and service losses caused by contamination in the LDR, the Trustees analyzed each proposed restoration alternative under the Trustees' LDR-specific restoration screening criteria. The Trustees developed two tiers of restoration screening criteria to identify and evaluate potential restoration projects (Section 8.2, Final LDR RP and PEIS; EBTC, 2013). These criteria also reflect and incorporate the Trustees' restoration objectives and the restoration alternative selection factors listed in 43 CFR § 11.82(d)(1) – (10).

Tier 1 Screening Criteria:

Habitat Focus Area: Is the potential restoration located within a high priority Habitat Focus Area (HFA)? The Trustees developed four HFAs based on nexus to resource injuries, important habitat features, and other considerations such as geographic boundaries, land and maritime uses, and proximity to other restoration (Section 6.6, Final LDR RP and PEIS; EBTC, 2013). The HFAs were prioritized with the highest priority given to HFA1 (the LDR as defined by the Trustees' Lower Duwamish River Natural Resource Damage Assessment: Injury Assessment Plan; EBTC, 2019) and HFA2 (the inner Elliott Bay shoreline between Duwamish Head and Port of Seattle Terminal 91) because restoration in these areas is more likely to provide benefits to the full suite of injured natural resources. Figure 1 depicts HFA1 and HFA2.

Benefits to Injured Resources: How similar are the habitats being created or enhanced to the natural resource injuries and lost services that resulted from the contaminant impacts? The Trustees will prioritize restoration that most directly benefits injured natural resources and services.

Future Management: Would the landowner agree to a conservation easement or other appropriate land management restriction? The Trustees cannot consider restoration without being able to estimate the potential benefits the action will provide, and future land management is critical to the Trustees' ability to estimate these potential benefits.

Tier 2 Selection Criteria:

Technical Feasibility (43 CFR § 11.82(d)(1)): Are the management, skill, and technology necessary to implement the proposed restoration alternative known and is there a reasonable likelihood of successful completion of the action in a reasonable time period? What are the conditions specific to the proposed alternative that might influence its success?

Cost to Carry Out the Restoration Alternative (43 CFR § 11.82(d)(3)): What are the costs associated with implementation of the proposed restoration alternative at the proposed location? The Trustees will take a comprehensive view of costs associated with the proposed alternative, and all else being equal, will prefer alternatives that cost less than others.

Source Control and Recontamination Potential (43 CFR §§ 11.82(d)(4), (5) & (8)): Does the alternative have adequate source control so that the restoration is not likely to be contaminated by releases of hazardous substances? Is there a likelihood that the proposed alternative will result in recontamination of restoration from sediments? The Trustees' preferred alternative should not result in further natural resource injury or pose a risk to natural resources or public health.

Extent to Which Each Location Will Maximize Benefits to Resources: When evaluating this selection criteria, the Trustees will determine benefits to injured natural resources by evaluating specific features of a proposed restoration site, the habitat type to be created, the location of the site, and the site's proximity to other restoration. The Trustees will consider six LDR-specific restoration attributes when evaluating a proposed restoration alternative under this selection

criteria and prefer proposed alternatives that incorporate one or more of these attributes (Section 7, Final LDR RP and PEIS; EBTC, 2013):

1. Overall size – The Trustees will prefer larger restoration projects.
2. Shape of the project – The Trustees' preference will depend on the type of habitat being created and its location.
3. Habitat type – The Trustees will prefer proposed alternatives that will create habitats that replace lost or scarce habitat types and/or habitats that are important to support injured natural resources.
4. Diversity – The Trustees' preference is for alternatives that support a diverse array of species and multiple ecological niches.
5. Location in the LDR – When evaluating this attribute, the Trustees will look at the historic condition of the LDR, resource access and use, societal/cultural factors, and potential for contamination.
6. Landscape connectivity – The Trustees will review the proposed restoration's relationship and location relative to existing habitat.

Any proposed restoration alternatives must also be compliant and consistent with all applicable federal, state, and tribal laws (43 CFR §§ 11.82(d)(9) & (10)).

Actions to restore, replace, or acquire the equivalent of injured natural resources and lost services are likely to have both long- and short-term impacts to the physical, biological, socioeconomic, and/or cultural environments. Below the Trustees analyze the potential beneficial and adverse impacts of two alternatives on the human environment. Table 1 provides a comparative analysis of the two restoration alternatives under the two-tiered restoration screening criteria.

3.2 Alternative A: No Action Alternative (Natural Recovery)

As required by NEPA and CERCLA regulations, the Trustees considered a No Action Alternative. A No Action Alternative means that the Trustees would not accept the Project. The Trustees would not take any affirmative action to restore injured natural resources or require any other party to do so. Instead, the Trustees would rely on natural recovery for injured natural resources to return to the condition they would otherwise be in but for releases of hazardous substances or discharges of oil. A No Action Alternative will not compensate for interim lost resource services. Additionally, this alternative assumes the ongoing federal and state activities such as institutional controls, source control, and remedial actions will continue, but does not include actions by the Trustees or any other party specifically targeting injured resource restoration such as habitat creation.

Under a No Action Alternative, General Recycling would not implement the Project and the Trustees would not accept the Project and its benefits as compensation to settle General Recycling's natural resource damages liability related to the General Recycling property. In this scenario, the existing bulkhead and ecology block retaining wall, shoreline debris, and creosote-treated pilings on the General Recycling property would remain. Furthermore, General Recycling would not create 2.33 acres of new, on- and off-channel marsh, intertidal, riparian, and vegetated slope habitat nor protect an additional 0.56 acres of subtidal habitat on and

adjacent to the LDR. Currently, there is very little off-channel habitat for salmonids and other resident fish existing along the LDR. The LDR is an important migration corridor and final refuge for juvenile salmonids as they adjust to the higher salinity in the Puget Sound before entering Elliott Bay. Without additional habitat creation, habitat supporting injured fish, migratory birds, and wildlife in the LDR will remain degraded and scarce. Under this alternative, additional riparian and upland habitat would not be available to migratory birds and wildlife for foraging, nesting, and refuge. The LDR ecosystem processes will continue to remain impaired because processes such as water filtration and nutrient input will not be enhanced by habitat restoration associated with the Project.

3.3 Alternative B: Accept General Recycling Habitat Project (Preferred)

Alternative B involves the Trustees accepting the Project in settlement from General Recycling to compensate for injuries caused by activities at the General Recycling property. The Project is not yet constructed, but once implemented, will create approximately 2.33 acres of new, on- and off-channel marsh, intertidal, riparian, and vegetated slope habitat and protect an additional 0.56 acres of subtidal habitat on and adjacent to the LDR (Table 1; Figure 2). The Project will also remove an existing bulkhead wall (260 linear feet) and ecology block retaining wall (130 linear feet), shoreline debris, and approximately 100 creosote-treated pilings (Table 1).

Table 1: General Recycling Habitat Project Elements.

Project Elements		**Habitat Restoration Quantification**
Habitat Area	Riparian	0.53 acres riparian buffer between +17 and +12 feet MLLW
	Marsh	1.04 acres marsh vegetation between +6 and +12 MLLW
	Vegetated slope	0.07 acres vegetated slope
	Intertidal	0.69 acres between -4 and +6 MLLW
	Subtidal	0.56 acres between -4 and -14 MLLW
Total Habitat Area (Riparian + Marsh + Vegetated Slope + Intertidal + Subtidal)		2.89 acres
Uplands (elevations greater than +11.36 MLLW)[1] Converted to Aquatic Habitat Area		66,780 sq. ft (or 1.53 acres)
Creosote-Treated Pilings Removed		Approximately 100 pilings
Steel Bulkhead Removed		Approximately 260 linear feet
Ecology Block Retaining Wall Removed		Approximately 130 linear feet

1. The uplands is bounded by the Mean Higher High Water (MHHW) elevation (i.e. +11.36 MLLW) based on the Elliot Bay Datum Station. https://tidesandcurrents.noaa.gov/datums.html?id=9447130

Prior to Project construction, General Recycling will first conduct environmental and geotechnical evaluations of the Project site, which will be further detailed in a Trustee approved Sampling and Analysis Plan/Quality Assurance Project Plan. The environmental evaluations will include soil, sediment, and groundwater sampling, and the results will be utilized to assess the potential risk of migration of chemicals to the habitat surface and to determine if any remedial

action will be conducted in conjunction with construction of the Project. The geotechnical evaluations will include the collection of geotechnical properties and parameters to support engineering design. Final design documents will be submitted to the Trustees for review and approval before construction begins.

During the construction phase, General Recycling plans to first remove the existing bulkhead and ecology block retaining wall, shoreline debris, and creosote-treated pilings within the proposed habitat area. Then, General Recycling plans to remove upland fill and regrade a 1.9 acre area to create an off-channel marsh and intertidal habitat between -2 and +12 feet Mean Lower Low Water (MLLW). The excavation is proposed to remove several feet of material below the final grade of the habitat and several feet of clean[5], imported fill would be placed to construct the habitat. The shoreline of the Project would be constructed so it connects to the restored shoreline at the adjacent Port of Seattle Terminal 105 Park (t̓uʔəlaltxʷ Village Park and Shoreline Habitat) to the north. Salmon and other fish would then be able to access the habitat from the LDR through a channel opening in the northern portion of the newly created habitat. A protective berm would be constructed between the habitat and the LDR to protect the off-channel habitat from vessel activity. Vegetation and substrates appropriate to the relevant habitat types will be selected and implemented by General Recycling with the Trustees' input and approval.

In Alternative B, the proposed consent decree stipulates that the Project will be permanently protected under a conservation easement. Uses that conflict with the conservation values created by the Project will be restricted. Per the terms of the proposed consent decree, and its attachments, General Recycling must also monitor and maintain the Project for a 30-year period following completion of construction. Additionally, General Recycling will provide funds to the Trustees for long-term stewardship to maintain the Project into perpetuity. Together, permanent property protection and on-going monitoring, maintenance, and stewardship will preserve the habitat created by the Project so that the habitat will continue to benefit natural resources injured by releases of hazardous substances and discharges of oil from activities at the General Recycling property.

[Remainder of page intentionally left blank.]

[5] Sampling and analysis will be performed to ensure that all imported material and all constructed habitat surfaces are confirmed less than criteria for all constituents per the Lower Duwamish River NRDA Trustee Injury Thresholds (EBNRT, 2013) and the Sediment Cleanup Objectives (SCOs) presented in Table 8-1 of the Washington State Department of Ecology's Sediment Cleanup User's Manual (Ecology, 2021).

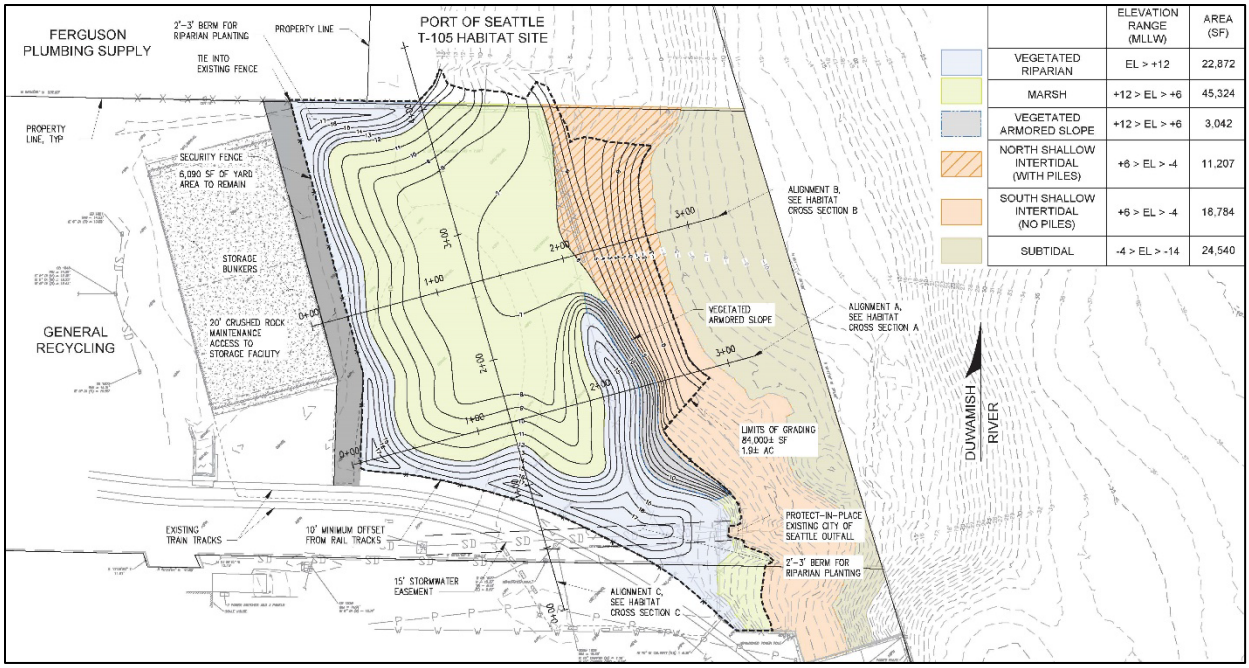

Figure 2: General Recycling Habitat Project conceptual design.

3.4 Evaluation of Alternatives Using Restoration Criteria

An evaluation of restoration alternatives based on the Tier 1 Screening Criteria and Tier 2 Selection Criteria is presented in the following "Table 1: Evaluation of Alternatives." Following their evaluation, the Trustees determined that Alternative B (the Preferred Alternative) meets the restoration alternative selection factors listed in 43 CFR § 11.82(d)(1) – (10), which are incorporated in the Tier 1 Screening Criteria and Tier 2 Selection Criteria.

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Table 2: Evaluation of Alternatives.

Restoration Criteria	Alternative A: No Action	Alternative B: Accept General Recycling Habitat Project (Preferred)
Tier 1 Screening:		
Habitat Focus Area (HFA)	The No Action Alternative would not restore, replace, or acquire the equivalent of natural resources and services injured or lost due to releases of hazardous substances and discharges of oil in the Trustees' defined HFAs.	This alternative would restore habitat in the Trustees' highest priority HFA, HFA1, that supports natural resources injured by releases of hazardous substances and discharges of oil.
Benefits to Injured Resources	The No Action Alternative would not restore, replace, or acquire the equivalent of natural resources and services injured or lost due to releases of hazardous substances and discharges of oil.	This alternative would be likely to restore habitat that provides benefits to a suite of natural resources injured by releases of hazardous substances and discharges of oil.
Future Management (Duration of Benefits)	The No Action Alternative would not restore, replace, or acquire the equivalent of natural resources and services injured or lost due to releases of hazardous substances and discharges of oil. This alternative would provide no potential benefits for the Trustees to estimate or seek to protect.	Under this alternative, the duration of the benefits would be long-term. General Recycling would be required to record a conservation easement to permanently restrict the uses of the Project footprint for restoration and habitat conservation. The permanent property restrictions would be paired with required long-term stewardship to ensure that the alternative would be more likely to continue to provide injured natural resources with benefits into the future.
Tier 2 Selection:		
Technical Feasibility	The No Action Alternative is technically feasible.	Activities included in this alternative are technically feasible and likely to result in the restoration of the suite of natural resources injured by releases of hazardous substances and discharges of oil.
Cost to Carry Out the Alternative	The No Action Alternative would not restore, replace, or acquire the equivalent of natural resources and services injured or lost due to releases of hazardous substances and discharges of oil; therefore, the No Action Alternative would not incur any costs.	The costs to federal, state, and tribal governments to carry out this alternative are zero. Costs for the Project are covered by General Recycling as part of their legal settlement with the Trustees. The Project would create and enhance habitat that is likely to support natural resources injured by releases of hazardous substances and discharges of oil.

Source Control and Recontamination Potential	The No Action Alternative would not cause further resource injury or pose additional risks to human health and the environment. Environmental and human health risks as they currently exist would likely remain the same under the No Action Alternative.	This alternative would have measures in place to prevent recontamination and post-restoration monitoring to determine if recontamination occurs and, if so, appropriate responses. This alternative would not elevate existing public health and safety issues.
Extent to Which Location Will Maximize Benefits to Resources	The No Action Alternative would not restore, replace, or acquire the equivalent of natural resources and services injured or lost due to releases of hazardous substances and discharges of oil and would not produce resource benefits.	This alternative would be in HFA1 and create approximately 2.33 acres of new, on- and off-channel marsh, intertidal, riparian, and vegetated slope habitat and protect an additional 0.56 acres of subtidal habitat that support and benefit the suite of natural resources injured by releases of hazardous substances and discharges of oil. This alternative would likely meet the Trustees' restoration criteria.
Compliance with Laws and Policies	The No Action Alternative would not comply with or be consistent with relevant laws and policies because it does not restore, replace, or acquire the equivalent of natural resources and services injured or lost by releases of hazardous substances and discharges of oil as required by CERCLA, OPA, and the CWA natural resource damage assessment authorities.	This alternative meets the requirements and goals of CERCLA, OPA, and the CWA to compensate the public by restoring, replacing, or acquiring the equivalent of natural resources injured by releases of hazardous substances and discharges of oil. The Trustees would comply with all applicable requirements. General Recycling would be responsible for complying with all relevant regulations and permitting requirements to implement the Project.
Time to Provide Resource Benefits	Under the No Action Alternative, the natural resource benefits may never be obtained as the No Action Alternative creates no new habitat and relies on natural recovery to provide benefits to injured natural resources.	The time for this alternative to provide natural resource benefits is less than the No Action Alternative because this alternative includes affirmative habitat creation and enhancement, which would likely start benefiting natural resources injured by release of hazardous substances and discharges of oil in a relatively short timeframe.

4. Environmental Assessment

Consistent with the CERCLA NRDA regulations, e.g., 43 CFR § 11.93, Section 3.0 documents the Trustees' evaluation of the restoration alternatives to compensate the public for natural resource injuries caused by releases of hazardous substances and discharges of oil from the General Recycling property. Section 4.0 evaluates the environmental impacts of the No Action Alternative and Alternative B (the Preferred Alternative) to determine whether the implementation of these alternatives will significantly affect the human environment (40 CFR § 1501.5). To evaluate the alternatives' potential impacts to the human environment, the Trustees focus on the physical, biological, socioeconomic, and cultural environments. Following the conclusion of their evaluation for each alternative and the public comment period, the Trustees determined that Alternative B, Accept the Project Alternative, is the Preferred Alternative. Alternative B, Accept the Project Alternative, will be implemented if a Finding of No Significant Impact is reached.

NOAA is acting as the lead federal agency for NEPA compliance for this Final RP/EA and DOI is a cooperating agency. DOI has made the determination that it is appropriate to adopt the Final EA in accordance with 40 CFR § 1506.3 and its agency-specific NEPA procedures.

The following definitions will be used to describe the environmental consequences evaluated in this Final RP/EA:

- *Short-term or long-term impacts*: These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. Short-term impacts are those impacts that would occur only with respect to a specific activity or a finite period. Long-term impacts are those that would more likely persist or be chronic.
- *Direct or indirect impacts (effects)*: Direct effects are caused by the action and occur at the same time and place (40 CFR § 1508.1(g)(1)). Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR § 1508.1(g)(2)).
- *Negligible, minor, moderate, or major impacts*: These relative terms are used to characterize the magnitude of an impact. Negligible impacts are generally not quantifiable and do not have perceptible impacts on the environment. Minor impacts are generally those that might be perceptible but, in their context, are not amenable to measurement because of their relatively inconsequential effect. Moderate impacts are those that are more perceptible and, typically, more amenable to quantification. Major impacts are those that, in considering the potentially affected environment and the degree of effects of the proposed action, have the potential to have significant effects (40 CFR § 1501.3(b)) and thus warrant heightened attention and examination for potential means for mitigation to fulfill NEPA requirements.
- *Adverse or beneficial impacts*: An adverse impact is one having adverse, unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial impact is one having positive outcomes on the man-made or natural environment. A single act might result in adverse impacts on one environmental resource and beneficial impacts on another resource.

- *Cumulative impacts (effects)*: Cumulative effects are defined as "effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR § 1508.1(g)(3)).

4.1 Affected Environment

For purposes of this Final RP/EA, the Trustees focused on the lower seven miles of the LDR, located in King County, Washington. The affected environment in the LDR is described in detail in Chapter 3 of the Final LDR RP and PEIS (EBTC, 2013). That information is incorporated in this Final RP/EA by reference and summarized briefly below.

4.1.1 Physical and Biological Setting

Historically, the LDR was forestland, intertidal flats, and freshwater and estuarine wetlands. LDR lies within the usual and accustomed harvest areas of the Muckleshoot Indian Tribe and the Suquamish Tribe. The Tribes retain treaty-protected rights and resources within the Project area (further described in Section 4.1.5). Beginning with industrialization in the early twentieth century, the LDR became increasingly altered and is now mainly industrial, commercial, and residential development. The LDR is restricted along both banks by levees or rock revetments and is periodically dredged between its mouth and river mile 5.5. Approximately 99% of the former estuarine wetlands and mudflats have been either dredged or filled for industrial purposes (USFWS, 2000; U.S. Army Corps of Engineers, 2000).

The Project location for the Preferred Alternative (Alternative B) is on and adjacent to the western shore of the LDR just upstream of Harbor Island in Seattle, King County, Washington (Figure 1). The Preferred Alternative will be located on General Recycling's property (Tax parcel 7666703540), which is adjacent to the CERCLA Lower Duwamish Waterway Superfund Site (Figure 3). The Preferred Alternative is in an industrialized area that has historically been used for various activities including, but not limited to, scrap metal storage, steel fabrication, log and container handling and storage, and tug and barge maintenance. Current infrastructure located at the site of the Preferred Alternative includes a bulkhead wall and ecology block retaining wall along the shoreline, shoreline debris such as rip rap, and creosote-treated pilings in the intertidal and subtidal areas.

The Preferred Alternative will create 2.33 acres of new, on- and off-channel marsh, intertidal, riparian, and vegetated slope habitat and protect an additional 0.56 acres of subtidal habitat on and adjacent to the LDR. Located within a heavily-industrialized stretch of the LDR, the Preferred Alternative will create habitat to benefit injured natural resources in a location within the LDR where existing habitat is scarce. Notably, however, along this reach of the river there is habitat in the vicinity of the Project, including the Port of Seattle Terminal 105 Park (t̓uʔəlaltxʷ Village Park and Shoreline Habitat) downstream and the Herring's House Park (həʔapus Village Park & and Shoreline Habitat) upstream (Figure 3). The Project will be located between these

two existing intertidal habitat areas, thus creating additional high quality habitat along this stretch of the LDR.

Habitat to be created under the Preferred Alternative will reflect the historic habitat types and conditions found in the LDR. The Preferred Alternative provides off-channel rearing habitat that is important for resident fish and juvenile salmonids to forage and rest, as well as riparian habitats for nesting birds. Additionally, habitat created under the Preferred Alternative will provide food sources benefitting the suite of natural resources injured by releases of hazardous substances and discharges of oil from the General Recycling property. Habitat enhancements or creation that will be part of the Preferred Alternative include, but are not limited to:

- Removal of existing bulkhead wall (260 linear feet) and ecology block retaining wall (130 linear feet), shoreline debris, and approximately 100 creosote-treated pilings;
- Creation of approximately 0.53 acres of riparian buffer;
- Creation of approximately 1.04 acres of vegetated marsh habitat, including within the off-channel and shoreline portions of the Project;
- Creation of approximately 0.69 acres of intertidal habitat;
- Habitat function improvement for approximately 0.56 acres of subtidal habitat due to adjacent, highly functioning intertidal and marsh habitat;
- Conversion of approximately 1.53 acres of uplands to aquatic habitat area; and
- Construction of vegetated armored slope as a protective berm (0.07 acres). [6]

The Preferred Alternative will be subject to initial maintenance and monitoring for a 10-year performance period followed by a 20-year stewardship period for actions intended to preserve, protect, and maintain the Project so that it can continue to provide ecological benefits to natural resources injured by releases of hazardous substances and discharges of oil. In addition, General Recycling will provide funds to the Trustees to permanently maintain and manage the Project, including protection of its ecological values, following the 30-year period into perpetuity. The property where the Preferred Alternative is located will also be subject to a conservation easement. The conservation easement will restrict the use of the underlying property to ensure that the Preferred Alternative's habitat and functions are permanently protected and continue to compensate for injured natural resources and related lost ecological services into the future.

As mentioned above, approximately 99% of existing marsh and mudflat habitat in the LDR was lost due to development, and little natural habitat remains. Fish species that were historically present in the LDR included Chinook, coho, sockeye, pink, and chum salmon, steelhead and sea-run cutthroat trout, Dolly Varden and bull trout, resident rainbow and cutthroat trout, and other resident fish (U.S. Army Corps of Engineers, 2000). Fifty-three resident and non-resident fish species were identified during the fish sampling conducted for the United States Environmental Protection Agency (EPA) Remedial Investigation (EPA, 2007). Significant numbers of Chinook, coho, and chum salmon, and steelhead trout are released from state and tribal hatcheries. Bird species in the area may include migrating shorebirds, loons, grebes, alcids, geese, surface feeding

[6]Because the LDR is a dynamic natural system, the Trustees anticipate that the exact acreages of each habitat type may slightly shift over time.

and diving ducks, raptors, kingfishers, gulls, and terns (Cordell et al., 1999; EBDRP, 2000; USFWS, 2006).

Federally-listed threatened species under the ESA known to be or that may occur in the vicinity of the Preferred Alternative project area include Marbled murrelet, Yellow-billed cuckoo, Coastal-Puget Sound bull trout, Puget Sound Chinook salmon, and Puget Sound steelhead (U.S. Army Corps of Engineers, 2000; NOAA, 2014a). The LDR, where the Preferred Alternative project is located, is essential fish habitat (EFH) for Chinook, coho, and pink salmon (NOAA, 2014b), groundfish (NOAA, 2006), and coastal pelagic species (PFMC, 2021). Federal species of concern under the ESA known to be or that may occur in the vicinity of the Preferred Alternative project area include the bald eagle (USFWS, 2007).

Figure 3: Habitat adjacent to the proposed General Recycling Habitat Project. View of restored shoreline at the adjacent Port of Seattle Terminal 105 Park (ṫuʔəlaltxʷ Village Park and Shoreline Habitat) to the north. Current conditions of the General Recycling Habitat Project can be seen in the background. Credit: NOAA

4.1.2 Demographics and Economy

The Preferred Alternative is located in the City of Seattle, King County, Washington. The City of Seattle is the eighteenth most populous city in the United States and, from 2010 to 2020, its

population grew by 21% (http://www.seattle.gov/opcd/population-and-demographics/about-seattle). The City of Seattle's Office of Planning and Community Development projects that the City of Seattle will add 120,000 people and 115,000 jobs between 2015 and 2035 (City of Seattle, 2017).

A summary of demographic data for the area in the vicinity of the Preferred Alternative at the Census Block Group, City, and County level is provided in Table 2.

Table 2: Demographic Data[7]

Demographic Category	Census Block Group (530330099004)	City of Seattle	King County
Population	1,212	725,918	2,240,876
People of color (%)	35%	38%	43%
Per capita income	$77,631	$69,157	$59,843
Low income[8] (%)	19%	18%	18%
Households	726	337,314	902,308
Population per square mile	489	5,109	971

In comparison, the estimated total percentage of Washington residents who are low income is 24% (https://ejscreen.epa.gov/mapper/) and the estimated total percentage of Washington residents who are people of color is 32% (https://ejscreen.epa.gov/mapper/).

4.1.3 Environmental Justice

Executive Order 14096, Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All, requires each federal agency, as appropriate and consistent with applicable law, "to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of [f]ederal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns" (EO 14096, §3(i)). Executive Order 14096 also requires that each agency shall, as appropriate and consistent with applicable laws, carry out environmental reviews under NEPA "in a manner that analyzes direct, indirect, and cumulative effects of [f]ederal actions on communities with environmental concerns" (EO 14096, §3(ix)(A)). Executive Order 14096 reiterates and strengthens Executive Order 12898 regarding federal actions and environmental justice. In a memorandum accompanying Executive Order 12898, the President emphasized the importance of the NEPA process to identify and address environmental justice concerns and stated that federal agencies shall provide opportunities for community input in the NEPA process.

[7] Statistics for the demographic data are from EPA's Environmental Justice Screening and Mapping Tool Version 2.2 (https://ejscreen.epa.gov/mapper/). Source data from the United States Census Bureau, American Community Survey, 2017 -2021.

[8] Low income is defined as the percent of population where the household income is less than or equal to twice the federal poverty level.

Focusing on environmental justice issues associated with implementing the Preferred Alternative, the Trustees reviewed demographic data from the City of Seattle, King County, the State of Washington, and the United States Census Bureau. To make a finding that disproportionately high and adverse effects would likely impact minority and/or low-income populations, three conditions must be simultaneously met:

1. There must be a minority or low-income population in the impact zone;
2. A high and adverse impact must exist; and
3. The impact must be disproportionately high and adverse on the minority or low-income population.

A comparison of demographic data presented in Section 4.1.2 indicates that the Preferred Alternative project area is not considered low-income because the low-income population at the Census Block Group level (19%) is similar to the low-income population at the City and County level (18%), and lower than the statewide low-income population (24%). Furthermore, the Preferred Alternative project area is not considered a minority population because the percent of the non-white population in the Census Block Group (35%) is lower compared to the City of Seattle (38%) and King County (43%); however, the minority population in the Preferred Alternative project area is relatively greater than the statewide non-white population (32%).

While this analysis does not indicate the population within the Preferred Alternative project area is considered low income or minority relative to City, County, or statewide averages, the Trustees acknowledge that these findings may change if the broader Duwamish Valley is included in the analysis. For example, in a 2013 Cumulative Health Impacts Analysis, the Duwamish Valley neighborhoods of Beacon Hill, Georgetown, and South Park (ZIP code 98108) were identified as a population with greater racial and ethnic diversity and a greater percentage of people who are below the poverty line, compared to other parts of Seattle (Gould and Cummings, 2013). Environmentally, this same population had the highest ranking in the City for air pollution and exposure to confirmed and suspected contaminated sites, and one of the highest rankings in the City for poor environmental characteristics (i.e., low tree canopy, low park area per resident). As stated in the report, "[c]umulatively, these poor environmental scores combined with high ranks for social vulnerabilities (socioeconomic factors and sensitive populations) and a medium ranking for public health effects resulted in the highest cumulative impact score of Seattle ZIP codes in the study" (Gould and Cummings, 2013).

The Trustees did not identify any high and adverse impacts that would result from the Preferred Alternative to the communities in the vicinity of the Preferred Alternative project area. Instead, the Trustees anticipate beneficial impacts to these communities, including minority populations and Tribes, in the vicinity of the Preferred Alternative project area, as further described in Section 4.3.1.

4.1.4 Recreation

The LDR is used for recreational purposes. Recreational fishing occurs in the LDR; however, there are fish consumption advisories for resident fish and shellfish (Washington State Department of Health, 2005). Other recreational activities include boating, kayaking, beach recreation, picnicking, and walking along the shoreline (Windward, 2010). There are also several

public parks along the river (e.g., Terminal 18 Park, Terminal 105 Park, Herring's House Park, Terminal 107 Park, and Duwamish Waterway Park), multiple public access points, and the Duwamish Trail is used for walking, running, and biking. The bulkhead and ecology block retaining walls and pilings in the vicinity of the Preferred Alternative project area are typically industrial in nature and not used for recreational activities or access. Even without public access, the Trustees anticipate beneficial impacts to those recreating along the Lower Duwamish River, in particular to any individuals at the adjacent Terminal 105 Park, in the vicinity of the Preferred Alternative project area, as further described in Section 4.3.1.

4.1.5 Cultural and Historic Resources

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of the Preferred Alternative on historic properties. Under NEPA, federal agencies must also consider historic properties. The proposed consent decree requires General Recycling to undertake activities to address cultural resource issues at the Preferred Alternative project site, including consulting with the Washington State Department of Archeology and Historic Preservation and federally recognized Tribes. Per the 1855 Treaty of Point Elliott, the Suquamish Tribe and the Muckleshoot Indian Tribe have reserved fishing, hunting, and gathering rights, and there are known culturally important places within the LDR. Additionally, the Muckleshoot Indian Tribe and the Suquamish Tribe have adjudicated usual and accustomed fishing areas located in the LDR. General Recycling will coordinate with the Tribes' representatives regarding net attachments at the Project for Tribes' members' use.

4.1.6 Components Not Affected or Analyzed in this Final RP/EA

The following components have been identified as not being present, affected, or analyzed. These components have not been included for additional analysis in this Final RP/EA.

- Health and Safety – No health or safety issues are likely related to the Preferred Alternative. General Recycling will conduct soil, sediment, and groundwater sampling per a Trustees approved Sampling and Analysis Plan/Quality Assurance Project Plan to determine if any remedial action will be conducted in conjunction with construction of the Project. General Recycling will also sample all imported material and all constructed habitat surfaces to confirm they are clean for all constituents per the Lower Duwamish River NRDA Trustee Injury Thresholds (EBTC, 2013) and the Sediment Cleanup Objectives (SCO) presented in Table 8-1 of the Washington State Department of Ecology's Sediment Cleanup User's Manual (Ecology, 2021).

4.2 Evaluation of Alternative A: No Action Alternative/Natural Recovery

The No Action Alternative is set forth in Section 9.1.1 of the Final LDR RP and PEIS (EBTC, 2013). The Final LDR RP and PEIS contains an evaluation of potential environmental impacts of the No Action Alternative in Section 9.2 of the Final LDR RP and PEIS. Additionally, the No Action Alternative's potential environmental impacts are summarized in Table 3 in the Final LDR RP and PEIS. This information in the Final LDR RP and PEIS is incorporated in this Final RP/EA by reference and summarized below.

4.2.1 Alternative A Environmental Impacts

While short-term negative impacts are expected to continue under the No Action Alternative as interim losses continue, the No Action Alternative would have no direct, indirect, or cumulative adverse or beneficial impacts to the human environment as compared to the Preferred Alternative. This is due to the fact that no new restoration actions are implemented under this alternative to improve water or sediment quality, habitat conditions, and fish and wildlife including threatened and endangered species.

4.2.2 Alternative A Conclusion

The Trustees have determined that the No Action Alternative would not restore, replace, or acquire the equivalent of natural resources injured by releases of hazardous substances or discharges of oil from the General Recycling property. Accordingly, the No Action Alternative does not meet the purpose or need for restoration identified in this Final RP/EA or as required under CERCLA, OPA, and other legal authorities that govern the Trustees' NRDA process and responsibilities.

4.3 Evaluation of Alternative B: Accept the General Recycling Habitat Project (Preferred)

The Trustees evaluated the likely environmental impacts of the Preferred Alternative (Accept the Project) at the programmatic level in Section 9 of the Final LDR RP and PEIS (EBTC, 2013), the findings of which remain valid. This information in the Final LDR RP and PEIS is incorporated in this Final RP/EA by reference. As contemplated in the Final LDR RP and PEIS, the following section of this Final RP/EA tiers from the Final LDR RP and PEIS to analyze likely environmental impacts specific to the Preferred Alternative.

4.3.1 Alternative B Environmental Impacts

It is likely that implementation of the Preferred Alternative will result in long-term, direct and indirect, minor to moderate benefits that will outweigh any short-term or long-term minor adverse impacts. The Preferred Alternative will create, permanently protect, and maintain 2.89 acres of marsh, intertidal, riparian, and subtidal habitat (including 0.7 acres of vegetated slope) adjacent to and in the LDR. Located in and adjacent to a migration corridor, this habitat will provide a refuge for fish and birds, including ESA-listed species; provide a place for rearing; and serve as a food source. Under the Preferred Alternative, General Recycling will provide monitoring and maintenance for a 10-year period, stewardship for a 20-year period, and funds for permanent stewardship to maintain the Project to ensure that it will continue for many years to provide sufficient long-term benefits that compensate for injury to natural resources and their services.

The Preferred Alternative will result in minor to moderate, direct, long-term beneficial impacts to the Project site and the natural resources that rely on the scarce habitat types being created by the Preferred Alternative – including ESA-listed species, fish, birds, and other wildlife. The

Project will result in direct beneficial impacts to EFH with the creation of new intertidal marsh and mudflats. Juvenile salmonids and other fish will be able to rest and forage in the new off-channel habitat, including new EFH, being created at the Project site. Migratory birds and other wildlife will be able to use the newly created riparian and upland habitat to feed and nest.

The establishment of vegetation will likely result in minor, long-term benefits to air quality because vegetation can reduce local temperatures and enhance microclimates. The Trustees anticipate that the Preferred Alternative will likely result in long-term minor benefits to water quality as marsh vegetation becomes established and acts as a water filter. The visual impact of the created and enhanced habitat may result in minor, long-term benefits for recreational boaters and fishers in the LDR. There is the potential for direct and indirect, short-term, minor beneficial impacts to socioeconomics resulting from the employment opportunities for workers, and the local businesses they support, during the Preferred Alternative construction. The creation and establishment of new riparian buffer and marsh habitat under the Preferred Alternative will have direct and indirect, minor, and long-term benefits related to greenhouse gas emissions and climate change through increased carbon storage capacity of soils and vegetation, contributing to carbon sequestration. Shoreline and riparian habitat enhancements or creation associated with the Preferred Alternative are expected to improve local resilience to increased frequency of extreme weather events such as flooding associated with precipitation and storm surge.

Implementation of the Preferred Alternative, and the related benefits associated with the creation and protection of new marsh, intertidal, and riparian habitat (e.g., improved water quality, fishing and other recreational use opportunities), may result in indirect, minor, long-term beneficial impacts to communities with environmental justice concerns, including minority populations and Tribes and tribal resources in the Preferred Alternative project area. Moreover, enhanced resilience to climate change would extend to the broader community, including those underserved communities with environmental justice concerns.

Structure and debris removal, habitat creation, and maintenance associated with the Preferred Alternative may result in short-term, direct and indirect, and minor adverse impacts to fish, birds, riverbanks, air quality, sediments, and the water column – mainly resulting from physical disturbances, noise, dust, greenhouse gas emissions, and increased in-stream turbidity caused by construction activities and equipment. EFH at the Preferred Alternative project site and vicinity is generally lacking, so adverse impacts to EFH are not expected. Any impacts will be limited to periods when construction and maintenance will be actively performed at the Project's property. Potential adverse impacts will be further lessened because activities to implement and maintain the Preferred Alternative will be undertaken in conjunction with best management practices (e.g., silt curtains, conducting in-water work when salmonids are not present, and erosion control measures). General Recycling will consult with the State Historic Preservation Office and Tribal Historic Preservation Officers to ensure the proposed project will have no adverse effect on cultural or historic sites. General Recycling will also be required to seek and comply with all relevant permits from appropriate governmental entities.

4.3.2 Alternative B Conclusion

The Trustees determined that Alternative B, Accept the Project, meets all the Trustees' Tier 1 and Tier 2 restoration screening criteria as well as the restoration alternative selection factors listed in 43 CFR § 11.82(d)(1) – (10) (See Table 1) and is consistent with the restoration goals and objectives identified in the Final LDR RP and PEIS (EBTC, 2013). Moreover, this alternative meets the purpose and need statement in Section 1.1 of this Final RP/EA. Based on their analysis, the Trustees anticipate that this alternative will result in beneficial direct and indirect long-term impacts to the environment by creating and preserving important habitat for natural resources and the services they provide. In light of the forgoing, Alternative B is the Preferred Alternative.

4.4 Cumulative Impacts

Cumulative impacts related to the Preferred Alternative in the Final LDR RP and PEIS are documented in Section 9.2 of the Final LDR RP and PEIS (EBTC, 2013). The cumulative impacts analysis in the Final LDR RP and PEIS is incorporated in this Final RP/EA by reference. This section tiers from the Final LDR RP and PEIS cumulative impacts analysis, which remains valid, to discuss project-specific cumulative impacts.

Because the Preferred Alternative is anticipated to restore, replace, or acquire the equivalent of injured natural resources and lost services, the Preferred Alternative's cumulative impact is long-term and beneficial. The Preferred Alternative includes the creation and protection of approximately 2.89 acres of marsh, intertidal, riparian, and subtidal habitat (including 0.7 acres of vegetated slope) adjacent to and in the LDR. These habitat types are important for natural resources injured by releases of hazardous substances and discharges of oil in the LDR. The Preferred Alternative serves as a refuge for natural resources present at a predominantly industrial site.

The cumulative impacts analysis in this Final RP/EA is commensurate with the degree of direct and indirect environmental impacts that are a likely result of the Preferred Alternative. The Trustees anticipate that the Preferred Alternative will result in predominantly beneficial impacts to the environment and, therefore, this analysis focuses on the incremental effects of the Preferred Alternative in the context of other remedial and restoration activities in the LDR.

The Preferred Alternative is one component of a potential suite of restoration actions that have already occurred or will occur in the LDR and its vicinity – these include activities associated with the following Trustee-prepared restoration planning documents that tier from the Final LDR RP and PEIS (EBTC, 2013):

- Lower Duwamish River Natural Resource Damage Assessment and Restoration: Bluefield Holding Inc.'s Project One, King County, Washington – The preferred alternative involves the Trustees accepting 28 DSAY restoration credits generated by Restoration Project One from the City of Seattle. Restoration Project One converted approximately one acre of riprap and unvegetated land into habitat to benefit injured natural resources in the LDR. The created habitat includes an off-channel inlet, restored uplands, intertidal marsh and mudflat, and shallow subtidal mudflat.

- Lower Duwamish River Natural Resource Damage Assessment and Restoration: Vigor Shipyards Habitat Projects, Seattle, King County, Washington – The preferred alternative involves the Trustees accepting the Vigor Shipyards Habitat Projects in settlement from Vigor and Exxon to compensate for injuries caused by activities at the Vigor Harbor Island facility. The Trustees accepted the two elements that together constitute the Vigor Shipyards Habitat Projects: the West Waterway Habitat Bench Project and the Southwest Yard Habitat Project. The Vigor Shipyards Habitat Projects are anticipated to result in the removal of 5,770 creosote-treated pilings and 2.74 acres of overwater coverage. In total, the Vigor Shipyards Habitat Projects are expected to create approximately 3.14 acres of riparian, marsh, and intertidal habitat on or adjacent to the West Waterway and generate ecological benefits at least equivalent to 340 DSAYs.

Additionally, the LDR is subject to related CERCLA remedial activities and source control measures conducted by the EPA and the Washington State Department of Ecology. Potential future remedial and source control actions at other locations in the LDR could contribute to the cumulative effects of the Preferred Alternative and could result in increased beneficial environmental effects such as improved water and sediment quality.

Alone, or in combination with future restoration and remedial activities conducted pursuant to federal and/or state law, it is unlikely that the Preferred Alternative will result in significant cumulative impacts to the human environment. The Preferred Alternative's physical footprint of approximately 2.89 acres is a relatively small area in the context of the LDR. It will be an area permanently altered from industrial infrastructure to habitat, but given the size of the LDR, creation and enhancement of habitat as part of the Preferred Alternative will have minor beneficial impacts, to the recreation, land-use, and socioeconomic activity in the LDR. The conversion of the land use related to the Preferred Alternative is minor even when considered in conjunction with the impacts of other potential remedial and restoration activities in the LDR.

Minor or negligible short-term impacts on air quality, water quality, soil, and sediments can be anticipated as a result of active habitat creation and maintenance associated with the Preferred Alternative. These minor or negligible short-term impacts are unlikely to result in cumulative adverse environmental impacts because the Preferred Alternative, and any other concurrent restoration or remedial action, would be conducted using best management practices designed to minimize adverse environmental impacts. Any minor short-term negative impacts are likely to be offset by the Preferred Alternative's minor to moderate, long-term, beneficial cumulative impacts.

5. Compliance with Laws, Regulations, and Policies

This section presents a review of the potentially applicable laws and regulations that govern restoration projects built with Trustee funding or on behalf of Trustees to address NRDA liability. The Project will need to comply with many federal, state, tribal, and local laws and regulations, including obtaining all required federal, state, and local permits and approvals. A brief review of potentially applicable laws and regulations that may pertain to this Project is presented below. The Trustees and General Recycling will ensure that there is coordination

among these programs where possible and that project implementation and monitoring complies with all applicable laws and regulations.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 USC §§ 9601, et seq., and National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. pt. 300. CERCLA, also known as Superfund, provides the basic legal framework for cleanup and restoration of the nation's hazardous substances sites. CERCLA establishes a hazard ranking system for assessing the nation's contaminated sites and contaminated sites prioritized for response actions go on the National Priorities List (NPL). There are three Superfund sites within the LDR: the Lower Duwamish Waterway Superfund site, the Harbor Island Superfund site, and the Lockheed West Superfund site. CERCLA also establishes natural resource trustees' ability to bring claims for damages to natural resources injured by releases of hazardous substances, and requires recovered damages be used to restore, replace, rehabilitate, or acquire the equivalent of those injured natural resources. DOI promulgated CERCLA NRDA regulations, 43 C.F.R. pt. 11, which establish procedures for natural resource trustees in the assessment of damages for injury to, destruction of, loss of, or loss of use of natural resources. Additionally, the CERCLA regulations specify how natural resource trustees present claims, recover damages, and develop and implement plans for the restoration, rehabilitation, replacement, or acquisition of the equivalent of the injured natural resources under their trusteeship.

Model Toxics Control Act (MTCA), Ch. 70A.305 RCW (1989) and Ch. 173-340 WAC (1992). MTCA, Washington's toxic cleanup law, is the state equivalent of the federal Superfund program and is managed by Washington State Department of Ecology. The Statewide regulations set forth cleanup standards and requirements for managing contaminated sites in Washington. Washington State Department of Ecology is a participant in the Trustee Council and ensures MTCA compliance.

National Environmental Policy Act (NEPA), as amended, 42 U.S.C. §§ 4321, et seq.; 40 C.F.R. Pts. 1500-1508. NEPA was enacted in 1969 to establish a national policy for the protection of the environment. The Council on Environmental Quality (CEQ) was established to advise the President and to carry out certain other responsibilities relating to implementation of NEPA by federal agencies. CEQ's NEPA regulations (40 C.F.R. pts. 1500-1508) outline the responsibilities of federal agencies under NEPA and provide specific procedures for preparing environmental documentation to comply with NEPA. Where appropriate, NEPA requires that an Environmental Impact Statement (EIS) or Environmental Assessment (EA) be prepared in order to analyze the effects of a proposed federal action on the quality of the human environment. The Final LDR RP and PEIS serves the purpose of analyzing anticipated impacts from restoration projects consistent with the preferred alternative, Integrated Habitat Restoration. This Final RP/EA evaluates the impacts from accepting the Project, and supports the finding that the proposed action would not significantly impact the quality of the human environment, because of the Project's consistency with the Integrated Habitat Restoration Alternative's impact analysis in the Final LDR RP and PEIS. The Draft RP/EA was made available for a 30-day public review and comment period.

State Environmental Policy Act (SEPA), Chapter 43.21C RCW and Chapter 197-11 WAC. SEPA sets forth Washington State's policy for protection and preservation of the natural environment. Local jurisdictions must also implement the policies and procedures of SEPA. The SEPA process for the Project will occur during the permitting process.

Clean Water Act (CWA) (Federal Water Pollution Control Act), 33 USC §§ 1251, et seq. The CWA is the principal law governing pollution control and water quality of the nation's waterways. The CWA requires the establishment of guidelines and standards to control the direct or indirect discharge of pollutants to waters of the United States. Discharges of material into navigable waters are regulated under §§ 401 and 404 of the CWA. The U.S. Army Corps of Engineers has the primary responsibility for administering the § 404 permit program. Under § 401 of the CWA, actions that involve discharge or fill to wetlands or navigable waters must obtain certification of compliance with state water quality standards. CWA compliance will be handled by General Recycling during the permitting process.

Oil Pollution Act of 1990 (OPA), 33 USC §§ 2701, et seq. OPA, provides for the prevention of, liability for, removal of, and compensation for the discharge, or the substantial threat of discharge, of oil into or upon the navigable waters of the United States, adjoining shorelines, or the Exclusive Economic Zone. Section 1006(e) requires the President, acting through the Under Secretary of Commerce for Oceans and Atmosphere, to develop regulations establishing procedures for natural resource trustees in the assessment of damages for injury to, destruction of, loss of, or loss of use of natural resources covered by OPA. Section 1006(b) provides for the designation of federal, state, Indian tribe, and foreign natural resource trustees to determine resource injuries, assess natural resource damages (including the reasonable costs of assessing damages), present a claim, recover damages, and develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources under their trusteeship.

Rivers and Harbors Act, 33 USC §§ 401, et seq. This Act regulates development and use of the nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests U.S. Army Corps of Engineers with authority to regulate discharges of fill and other materials into such waters. Actions that require § 404 CWA permits are also likely to require permits under § 10 of this Act.

Endangered Species Act of 1973 (ESA), 16 USC §§ 1531, et seq.; 50 C.F.R. pts. 17, 222, 224. The ESA directs all federal agencies to conserve endangered and threatened species and their habitats and encourages such agencies to utilize their authorities to further these purposes. Under the ESA, the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) publish lists of endangered and threatened species. Section 7 of the Act requires that federal agencies consult with these agencies if their action may affect endangered and threatened species or adversely modify or destroy designated critical habitat. Consultation under the ESA for the Project will occur during the permitting process and the consultation terms and conditions will set forth a number of required measures to follow during Project implementation.

Magnuson-Stevens Act (MSA) (formerly Magnuson-Stevens Fishery Conservation and Management Act, MSFCMA), 16 USC §§ 1801, et seq., 50 C.F.R. pt. 600. The MSA requires

consultation for all federal agency actions that may adversely affect EFH. In 1996, the Act was reauthorized and changed by amendments to require that fisheries be managed at maximum sustainable levels and that new approaches be taken in habitat conservation. EFH is defined broadly to include "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" (50 C.F.R. § 600.10). Under § 305(b)(4) of the Act, NMFS is required to provide advisory EFH conservation and enhancement recommendations to federal and state agencies for actions that adversely affect EFH. Where federal agency actions are subject to ESA § 7 consultations, such consultations may be combined to accommodate the substantive requirements of both ESA and MSA. General Recycling will consult NMFS regarding MSA-managed species residing or migrating through the LDR, and required conditions that result from this consultation will be followed during Project implementation.

Fish and Wildlife Coordination Act (FWCA), 16 USC §§ 661, et seq.; Migratory Bird Treaty Act (MBTA) of 1918, 16 USC §§ 703, et seq.). The FWCA requires that federal agencies consult with the USFWS, NMFS, and state wildlife agencies for activities that affect, control, or modify waters of any stream or bodies of water, in order to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. These consultations are generally incorporated into § 404 of the CWA, NEPA, or other federal permit, license, or review requirements. Similarly, the MBTA requires the protection of ecosystems of special importance to migratory birds against detrimental alteration, pollution, and other environmental degradation.

National Historic Preservation Act (NHPA), 16 USC §§ 470, et seq. The National Historic Preservation Act (NHPA) has the goal of establishing historical and cultural preservation programs within states and tribal governments in order to preserve historic and archeological sites. Section 106 of the NHPA requires that federal agencies identify and assess the effects its actions may have on historic buildings and cultural resources before action occurs. General Recycling will consult with the Muckleshoot Indian Tribe, the Suquamish Tribe, and the Washington State Department of Archeology and Historic Preservation prior to Project implementation.

Washington State Aquatic Land Use Authorization: Chapters 79.36.355 and 79.105, Revised Code of Washington and WAC 332-30-122. Washington Department of Natural Resources reviews applications for use of state-owned aquatic lands and a use-authorization from them is required to undertake activities such as restoration on such properties. The restoration footprint of the Project does not overlap with state-owned aquatic lands, so a use-authorization is not anticipated to be required.

Executive Order 11988: Floodplain Management. This Executive Order, as amended by Executive Order 12148, requires each federal agency to provide opportunity for early public review of any plans or proposals for actions in floodplains, in accordance with § 2(b) of Executive Order 11514, as amended, including the development of procedures to accomplish this objective. The Project will provide some extra floodplain water holding capacity by removing fill and creating off-channel habitat.

Executive Order 11990: Protection of Wetlands. This Executive Order, as amended by Executive Order 12608, requires each federal agency to provide opportunity for early public

review of any plans or proposals for new construction in wetlands, in accordance with § 2(b) of Executive Order 11514, as amended, including the development of procedures to accomplish this objective.

Executive Order 12898: Environmental Justice, as amended. On February 11, 1994, President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This Executive Order, as amended by Executive Order 12148, requires each federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. EPA and CEQ have emphasized the importance of incorporating environmental justice review in the analyses conducted by federal agencies under NEPA and of developing mitigation measures that avoid disproportionate environmental effects on minority and low-income populations.

The Muckleshoot Indian Tribe and Suquamish Tribe constitute distinct, separate communities of Native Americans who rely on treaty-reserved fish and shellfish resources in the LDR for subsistence, economic, cultural, and spiritual purposes. Other members of the population in the Preferred Alternative project area may also rely on LDR fishery resources for subsistence purposes. The Trustees have not identified any disproportionate, adverse impacts on human health or environmental effects due to implementation of the Preferred Alternative on minority or low-income populations, and believe that this Project will be beneficial to these communities. The Tribes are participants in the project planning and their representation will be inherent in the Trustee Council's decision-making process.

Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All. On April 21, 2023, President Biden issued Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All. This Executive Order requires each federal agency, as appropriate and consistent with applicable law, "to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of [f]ederal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns" (EO 14096, §3(i)). Executive Order 14096 also requires that each agency shall, as appropriate and consistent with applicable laws, carry out environmental reviews under NEPA "in a manner that analyzes direct, indirect, and cumulative effects of [f]ederal actions on communities with environmental concerns" (EO 14096, §3(ix)(A)). Executive Order 14096 reiterates and strengthens Executive Order 12898 regarding federal actions and environmental justice.

Information Quality Guidelines issued Pursuant to Public Law 106-554. Information disseminated by Federal agencies to the public after October 1, 2002, is subject to information quality guidelines developed by each agency pursuant to § 515 of Public Law 106-554 that are intended to ensure and maximize the quality of such information (i.e., the objectivity, utility and integrity of such information). This Final RP/EA is an information product covered by the information quality guidelines established by NOAA and DOI for this purpose. The information collected herein has undergone § 515 pre-dissemination review and complies with applicable guidelines.

1855 Treaty of Point Elliott. The 1855 Treaty of Point Elliott sets forth articles of agreement between the United States and the Muckleshoot Indian Tribe, the Suquamish Tribe, and other federally-recognized tribes within the Puget Sound area. Under the Supremacy Clause of the United States Constitution, treaties are superior to any conflicting state laws or constitutional provisions.

Other potentially applicable federal, state, tribal, and local laws that are integrated into the regulatory process include:
• Archaeological Resources Protection Act, 16 U.S.C. §§ 469, et seq.
• Clean Air Act, as amended, 42 U.S.C. §§ 7401, et seq.
• Coastal Zone Management Act of 1982, as amended, 16 U.S.C. § 1451, et seq.
• Marine Mammal Protection Act, 16 U.S.C. §§ 1361, et seq.
• Shoreline Management Act, Ch. 90.58 RCW and Ch. 173-14 WAC
• Hydraulic Code, Ch. 77.55 RCW and Ch. 220-110 WAC
• Historic Preservation Act, Ch. 27.34 RCW, Ch. 27.44 RCW, and Ch. 27.53 RCW

6. Coordination

Muckleshoot Tribe of Indians

Suquamish Indian Tribe of the Port Madison Reservation

National Oceanic and Atmospheric Administration

U.S. Fish and Wildlife Service

Washington State Department of Ecology

Washington Department of Fish and Wildlife

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