



## Portland Harbor Natural Resource Damage Assessment

### Frequently Asked Questions (FAQ) to Accompany the 2023 Consent Decrees

The Portland Harbor Natural Resource Trustee Council (Trustee Council) is comprised of representatives from the Five Tribes, which includes the Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon and the Nez Perce Tribe,<sup>1</sup> along with representatives of the U.S. Department of the Interior (DOI), National Oceanic and Atmospheric Administration (NOAA), and State of Oregon.

The Trustee Council is conducting a three-phase Portland Harbor natural resource damage assessment (NRDA) that will be followed by a fourth phase to litigate the natural resource damages liability of non-settling potentially responsible parties (PRPs). The NRDA identifies what natural resources have been injured, how they can be restored, what restoration will cost and who will contribute to the restoration efforts of Portland Harbor, a federal Superfund site.

As part of the second phase, Phase 2, the Trustee Council entered into settlement negotiations with 23 PRPs, and at the same time worked with restoration project developers to generate restoration credits that the Trustee Council and/or settling PRPs can purchase. This document provides answers to questions about the consent decrees, the NRDA process, restoration projects, and next steps for the Trustee Council.

Throughout this document, there are references to materials in the Trustee Council's administrative record which can be found here:

<https://www.diver.orr.noaa.gov/web/guest/portland-harbor-admin-record>

### **What is Natural Resource Damage Assessment?**

Natural resources at Portland Harbor, including water, fish, and wildlife, are held in trust for all people. Responsibility for protecting these resources is shared among the Trustee Council. When natural resources are injured by releases of hazardous substances or oil, federal laws empower the Trustee Council to obtain compensation and restore the injured resources and their habitats. This process is called natural resource damage assessment and is separate from the cleanup process at the Portland Harbor Superfund Site.

The Portland Harbor Natural Resource Trustee Council website provides information on the damage assessment process and how restoration activities are benefiting natural resources and the public. The four phases of the process are described briefly below:

- Phase 1, Assessment Planning and Field Studies, is complete. The Trustee Council developed a plan to assess natural resource injuries and damages in a focused, cost-effective manner, and conducted field studies to inform future phases of the Natural Resource Damage Assessment.

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<sup>1</sup> The Tribal trustees are collectively referred to as the "Five Tribes" throughout this document.

- Phase 2, Settlement-Oriented Assessment and Restoration Planning, is ongoing. The Trustee Council is holding early settlement discussions with potentially responsible parties and conducting restoration planning activities.
- Phase 3, Completion of the NRDA, is ongoing. The Trustee Council is conducting additional injury assessment activities, the results of which will be used to pursue claims against potentially responsible parties who do not settle during Phase 2.
- Phase 4, Recovery of Damages, will follow the completion of Phase 3. The Trustee Council will pursue recovery of natural resource damages to fund restoration.

More information is available at the Trustee Council's website:

<https://www.fws.gov/portlandharbor/>

## **Consent Decrees**

### **What is the purpose of these consent decrees?**

The purpose of these consent decrees is to legally bind settling potentially responsible parties to an agreement about how to resolve their liability for natural resource damages. These agreements, also called settlements, enable parties to resolve a dispute without the need for a lawsuit or trial, which is ultimately beneficial for natural resources and the public because the settlements reduce the amount of money and time spent on litigation.

### **How can potentially responsible parties resolve their natural resource damages liability?**

For Phase 2, potentially responsible parties can resolve their liability by agreeing to a consent decree:

- 1) The first consent decree option is for a PRP to pay the Trustee Council an amount of monetary damages agreed to in the settlement.
- 2) The second consent decree option is for a PRP to purchase sufficient restoration credits from restoration banks recognized by the Trustee Council to offset the PRP's ecological liability and pay monetary damages to the Trustee Council to offset remaining recreational and tribal cultural service losses.

### **How many parties are involved in this settlement, and who are they?**

The parties to this settlement include the members of the Trustee Council and 23 settling potentially responsible parties, some with additional named defendants (e.g., entities associated with a PRP through mergers or acquisitions).

In addition, the second consent decree option, where potentially responsible parties chose to purchase restoration credits to resolve their ecological liability, also includes as parties the restoration Project Developers whose restoration projects generated the restoration credits. The second consent decree outlines requirements that the restoration Project Developers must meet to ensure restoration credits provide sufficient, relevant ecological benefits to compensate for lost ecological services. Accordingly, the restoration Project Developers need to be bound to their restoration credit obligations and are parties to the second consent decree.

**How much are these settlements worth?**

In total, these settlements are worth 471.39 discounted service acre years (DSAYs), valued at approximately \$33.2 million dollars. This includes damages for ecological, recreational, and tribal service losses. (Note, the DSAY metric is further explained below under the Natural Resource Damage Assessment section.)

**Do these settlements resolve all the natural resource damages liability for Portland Harbor?**

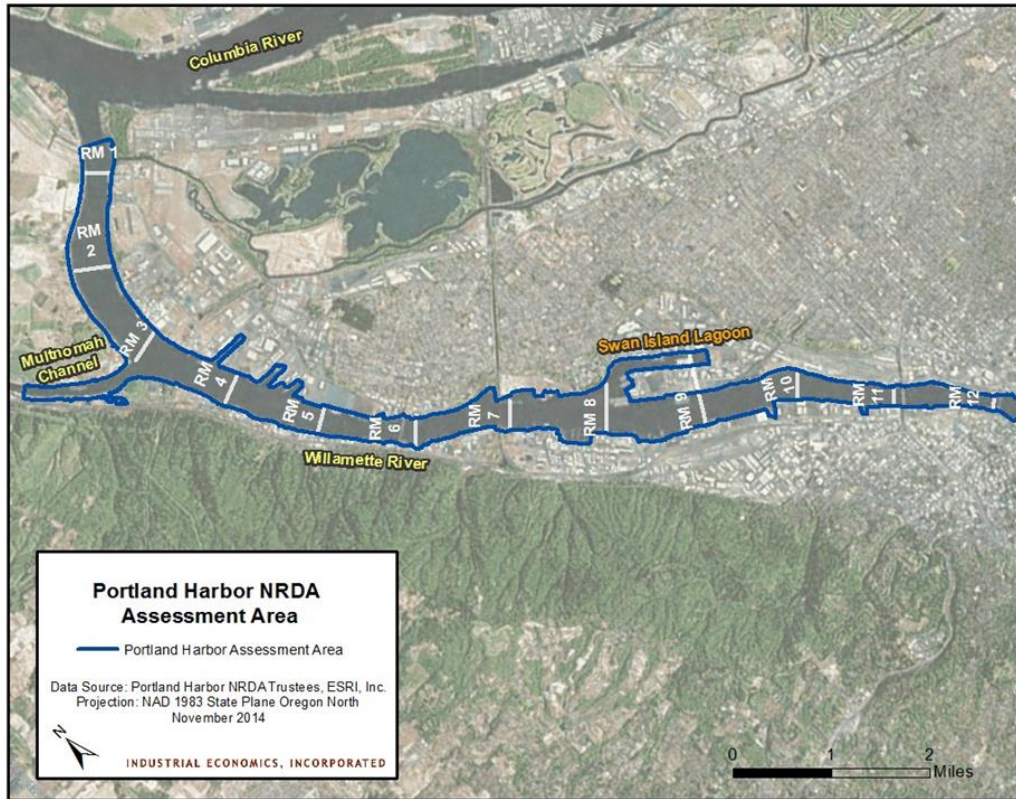
These settlements account for approximately 11% of the Phase 2 liability for natural resource damages in Portland Harbor.

**Natural Resource Damage Assessment****Is the NRDA part of the cleanup process?**

The NRDA is not part of the cleanup, which is also called the remedy; they are related but separate processes. The purpose of the NRDA is to restore the natural resources – and the services they provide – that were injured and lost over time (past, present, and future) due to releases of hazardous substances and discharges of oil into Portland Harbor. Restoration as part of the NRDA is in addition to cleanup, and accounts for both positive and negative impacts to natural resources caused by remedial actions. Unlike the NRDA, the purpose of the remedial process is to protect human health and the environment from further harm by reducing risks of adverse impacts from contaminants. Remedial actions in Portland Harbor will not fully address past natural resource injuries and may leave some residual contamination in the environment.

**How did the Trustee Council determine the geographic extent of the Portland Harbor Assessment Area?**

The Trustee Council reviewed the scope of sediment contamination to determine the geographic extent of the Assessment Area. The Assessment Area encompasses the Willamette River, including Swan Island Lagoon, from approximately river mile 12.2 to approximately river mile 1.0 near the confluence with the Columbia River, as well as the upper one mile of Multnomah Channel. A map of the Assessment Area is provided below.



**How did the Trustee Council determine damages for early settlements in Portland Harbor?**

The Trustee Council determined the total natural resource damages under Phase 2 by calculating the amount of money needed to implement restoration. The funds will compensate the public for ecological, recreational, and tribal cultural losses resulting from contamination in the Portland Harbor Assessment Area. Damages were calculated using site-specific information and literature and methods typically used in the NRDA.

- To calculate ecological damages, the Trustee Council used a method called habitat equivalency analysis to quantify the amount of contaminant-related ecological injury and losses over space and time. This process converts these losses into a common metric of DSAYs, which represent how much ecological services one acre of habitat provides for one year. The Trustee Council calculated ecological service losses for the entire Portland Harbor Assessment Area to be 4,130 DSAYs (as noted above, the current settlements address about 11% of this total). The Trustee Council determined the amount of money it would cost to acquire DSAYs of ecological benefit to offset ecological losses. This yielded a cost of approximately \$69,025 per DSAY.
- Recreational fishing and boating damages were quantified in dollars as the value lost by the public who experienced lower quality recreational trips or did not take trips they would have otherwise taken because of contamination. Using information on both the number of impacted trips and the value of a trip, the Trustee Council calculated a harbor-wide lost value of more than \$5.4 million (or \$1,308 per DSAY).
- Damages resulting from losses of tribally important resources, that are not otherwise benefited under ecological restoration (e.g., lamprey), were quantified as monetary

damages for compensatory restoration. The Five Tribes identified two lamprey-specific efforts to supplement general harbor-wide monitoring: 1) compilation and evaluation of data regarding the health risks of consumption of contaminated lamprey, and 2) sampling of juvenile lamprey to determine habitat use and substrate characteristics to inform juvenile lamprey habitat preferences. The cost of these combined efforts is approximately \$695,100 (or \$168 per DSAY).

Total damages for Phase 2 are therefore \$70,500 per DSAY for 4,130 DSAYs. (Note, the total of the individual components above may not sum due to rounding.) The analysis is described in detail in a document available in the administrative record, “Summary of Portland Harbor Natural Resource Damage Assessment for Purposes of Settlement.”

### **Why did the Trustee Council focus on specific species and habitats?**

The Trustee Council focused the NRDA on species and habitats that are most likely to be injured by exposure to contamination in the Assessment Area, that are representative of the aquatic habitat, and for which losses and corresponding restoration gains can be quantified.

The Trustee Council’s investigations indicate that sediment, benthic invertebrates, fish (including Chinook salmon, white sturgeon, and lamprey), osprey, and mink are likely injured. However, evaluating lost services for every natural resource that uses Portland Harbor habitat would be unfeasible and unnecessary, considering that a smaller group of species and habitats can often serve as a reasonable proxy for broader injuries. In this case, the Trustee Council identified sediment to be representative of the aquatic habitat. The essential functions of sediment (e.g., base of the food web, critical role in nutrient and energy cycling) and the breadth of available contaminant concentration and effects data for sediment (e.g., effects on benthic invertebrates and fish), led the Trustee Council to conclude that sediment is an appropriate proxy for quantifying overall lost habitat services.

Likewise, the Trustee Council focused restoration on overall habitat services, with an emphasis on habitat projects that are expected to benefit the species most likely to have been injured. Since it is not necessary to calculate the benefits of habitat restoration to all species, the Trustee Council concentrated on restoration of injured species that represent guilds common in Pacific Northwest river systems and habitats. These include multiple aquatic habitats used by species such as juvenile salmon, Pacific lamprey, mink, and osprey.

### **How did the Trustee Council split up natural resource damages liability among PRPs for early settlement?**

The Trustee Council relied on an allocation approach similar to that used for the Hylebos Waterway NRDA in Washington. The Trustee Council outlined “footprints” of contaminated sediments for a suite of twelve substances of concern. Ecological losses resulting from that contamination were calculated for each footprint using DSAYs as the metric. The Trustee Council limited the application of this method to early settlements as part of Phase 2.

Based on existing information, the Trustee Council allocated liability for the sediment footprints and associated ecological losses to sites that released the corresponding substances of concern into the Assessment Area. A site was defined as a tax parcel or group of contiguous tax parcels

(i.e., land) associated by ownership and/or related activities. The Trustee Council developed a list of more than 130 activities and associated substances of concern to standardize the parameters included in the allocation. For each site, the Trustee Council reviewed three threshold factors: 1) a pathway existed to transport site contamination to the Willamette River, 2) an activity was conducted that was a likely source of a specific substance of concern, and 3) evidence of sediment contamination was located in close proximity to the site or site-related outfall. If all three factors were satisfied, a site was assigned a relative liability for each relevant substance of concern footprint reflective of the proportion of that site's substance of concern releases compared to other sites contributing the same substance of concern. For settling potentially responsible parties, the Trustee Council used the same allocation method to determine liability between multiple potentially responsible parties associated with a single site, i.e., splitting the liability at each site based on each potentially responsible party's specific ownership and operations.

The Phase 2 allocation methodology is described in detail in a document available in the administrative record, "Portland Harbor Allocation Methodology Report 2023."

### **What happens with any remaining natural resource damages liability?**

To address remaining liability, the Trustee Council is currently engaged in settlement discussions with additional Phase 2 potentially responsible parties that are not signatories to these 2023 consent decrees. Again, Phase 2 consists of settlement-oriented assessment activities and early settlements.

The Trustee Council has also begun efforts under Phase 3 (Completion of the NRDA), which includes additional injury studies and restoration planning. The information gained through these studies will enable the Trustees to finalize the Phase 3 claim for damages and pursue litigation (Phase 4) against potentially responsible parties that have not settled their natural resource damages liability by that time. An info-graphic prepared by the Trustee Council outlines the Phase 3 and Phase 4 steps and opportunities for public comment, and is available at: <https://www.fws.gov/portlandharbor/sites/portland/files/resources/DamageAssessmentTimeline.pdf>.

### **How was the Trustee Council's NRDA funded?**

The Comprehensive Environmental Response, Compensation, and Liability Act and the Oil Pollution Act make potentially responsible parties responsible for natural resource damage assessment and restoration costs. Each settling potentially responsible party has been allocated a share of assessment costs, and some have already made considerable "down payments" on these costs as a condition of participating in the Phase 2 process. The Trustee Council will recover the remainder of costs from any additional potentially responsible parties that settle during Phase 2, and from non-settling potentially responsible parties during Phase 4.

### **What kind of information did the Trustee Council use to allocate natural resource damages liability to the settling potentially responsible parties?**

The Trustee Council incorporated site-specific information from a wide range of sources, many of which are publicly available. Publicly available data include, but are not limited to, tax parcel

data, historical owner and tenant names and years of operation, activity descriptions and associated substances of concern, and data and information from the Oregon Department of Environmental Quality, Lower Willamette Group, and technical and scientific literature. Potentially responsible parties that are participating in settlement discussions as part of Phase 2 also submitted to the Trustee Council packages of summarized technical information, which covered topics such as:

- Ownership, leases, and/or uses of a tax parcel;
- Information about each site at which a participating PRP may have liability (e.g., size, distance to the waterway, discharge outfalls); and
- Activities conducted or authorized by the participating PRP at each site.

Additional details are provided in a document available in the administrative record, “Portland Harbor Allocation Methodology Report 2023.”

## **Restoration**

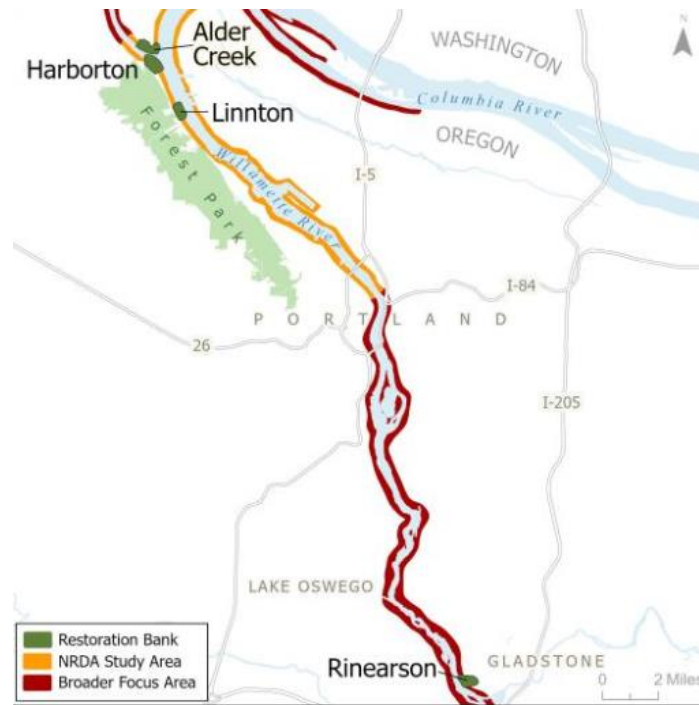
### **What restoration banks are involved in these consent decrees?**

There are four restoration banks whose NRDA restoration credits have been purchased by PRPs to resolve liabilities through the consent decree that accepts NRDA restoration credits to offset natural resource damages liability. They include:

- Alder Creek (managed by Wildlands, Inc.)
- Harborton (managed by Portland General Electric)
- Linnton Mill (managed by RestorCap)
- Rinearson Natural Area (managed by Columbia Restoration Group)

A map of the restoration bank locations is provided below.

Each restoration bank must implement a Trustee Council approved Habitat Development Plan and conduct annual monitoring. Detailed information on each of these restoration banks, including their Habitat Development Plans and annual Monitoring Reports, is available at: <https://www.fws.gov/portlandharbor/node/126>.



Portland Harbor Ecological Restoration Project Locations

### How do the restoration projects/banks work?

The restoration banks are large-scale, multi-habitat restoration projects developed with the intent of generating ecological restoration credits that can be used as compensation for ecological losses due to contamination in Portland Harbor. These restoration credits represent an amount of ecological benefit gained across those habitats over time.

After construction, the Trustee Council reviews documentation of the “as-built” condition of the project (i.e., amounts and types of habitats created) and determines the total amount of NRDA restoration credits the project will create. NRDA restoration credits become available for sale (i.e., “released” by the Trustee Council as approved NRDA restoration credits) according to a schedule that ties specific amounts of NRDA restoration credits to the achievement of project milestones. For example, the Trustee Council will “release” a portion of the potential total NRDA restoration credits available from a project after that project has met its pre-established performance standards for Year 5 of the project.

Under one scenario, NRDA restoration credits that are released can be sold to potentially responsible parties who can then use those NRDA restoration credits to resolve their natural resource damages liability. Alternatively, in cases where a potentially responsible party is resolving its liability with a cash settlement to the Trustee Council, the Trustee Council can use those funds to purchase available NRDA restoration credits from a project. The Trustee Council tracks all NRDA restoration credit releases and sales through an online system called Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS), which can be accessed at: [https://ribits.ops.usace.army.mil/ords/f?p=107:602:::RP:P602\\_NRDA\\_PROJECT\\_ID:81](https://ribits.ops.usace.army.mil/ords/f?p=107:602:::RP:P602_NRDA_PROJECT_ID:81).



In certain cases, a project may be generating ecological credits that can be used for purposes beyond NRDA. The RIBITS system allows the Trustee Council and others to track how many of the ecological credits generated by the project can be used as NRDA restoration credits, versus being identified as compensation for some other purpose (e.g., Clean Water Act Section 404 mitigation).

### **How were these restoration projects/banks designed and how do they meet the Trustee Council’s restoration goals?**

As described in the Programmatic Restoration Plan (2017), the Trustee Council’s goal is to improve habitat conditions along the lower Willamette River, focusing on the most important habitat needs of injured fish and wildlife. This involves “Integrated Habitat Restoration,” which is the restoration of a combination of related habitats (e.g., riparian habitat with a soft shoreline adjacent to shallow water habitat and marsh with off channel tributaries) to benefit multiple species. Restored areas need to be of sufficient size to achieve this habitat complexity and provide benefits to injured resources for years into the future.

In the Trustee Council’s Supplemental Restoration Plan (2021), each of the four restoration bank projects was screened and determined to meet the Trustee Council’s Integrated Habitat Restoration goal. Projects are designed to restore multiple inter-related habitats that support injured species such as juvenile Chinook salmon, mink, and osprey. Each habitat must satisfy specific parameters such as elevation, amount of time inundated with water, vegetation community characteristics, and habitat features (e.g., large woody debris that can provide fish with protection from predators). More details are available in the project-specific Habitat Development Plans, which can be found in the Trustee Council’s administrative record here: <https://www.diver.orr.noaa.gov/web/guest/portland-harbor-admin-record>; search for “habitat development plan.”

### **How is the Trustee Council ensuring that the restoration banks are providing the ecological benefits that are intended?**

There are several mechanisms the Trustee Council has put in place to ensure that the restoration banks are providing the intended ecological benefits. First, each restoration bank is required to provide financial assurances and permanently restrict the uses of the project’s property to ensure completion of construction and implementation of longer-term project components.

Second, required annual monitoring and reporting to the Trustee Council tracks the progress of the site towards restoration objectives and proactively identifies where adaptive management interventions may be needed to ensure that a project provides ecological functions to benefit injured resources. Each Project Developer has set aside funding specifically to pay for actions necessary to correct issues that may be limiting the site’s ability to achieve its intended benefits.

Finally, each Project Developer is funding a Long-Term Stewardship Fund to support a project steward who will be charged with ongoing site maintenance for many years into the future. The details of each restoration bank, including financial assurances, performance criteria, and monitoring plans, can be found in the project-specific Habitat Development Plans in the Trustee Council’s administrative record here: <https://www.diver.orr.noaa.gov/web/guest/portland-harbor-admin-record>; search for “habitat development plan.”

**How can these settlements compensate the public when the restoration banks have already been built? In other words, how can a potentially responsible party resolve its liability by paying for something that already exists?**

The benefits of restoration banking may not feel completely intuitive because the restoration banks in question have already been built. It may be helpful to reframe the question – not as what changed when the NRDA restoration credit purchase took place, but what change resulted because of the possibility of the NRDA restoration credit purchase. Then, the benefits become much clearer.

Because of the NRDA restoration credit sales that took place for these consent decrees (as well as additional future sales), the Portland Harbor community experienced the restoration of over 165 acres to high quality habitat – including the conversion of industrialized properties that prior to restoration were providing little to no habitat benefits at all. These restoration bank projects would not have been constructed, and the ecological benefits would not have been generated, absent the potentially responsible parties’ need for the ecological benefits measured as “NRDA restoration credits” to resolve their natural resource damages liability. In other words, the public has been experiencing harm for many years and the NRDA process provided an impetus to construct improvements that benefit natural resources and the public.

The Portland Harbor community has been experiencing ecological uplift for nearly a decade prior to the settlements because the ecological benefits provided by the restoration banks began accruing from the time of construction. The restoration banks will continue to provide these benefits into the future.

Restoration banking has the added benefit of potentially encouraging larger, more robust projects. Restoration bankers construct large-scale projects because they intend to generate large numbers of restoration credits that can be sold to multiple potentially responsible parties. This incentivizes larger, landscape-scale projects that provide a greater volume and diversity of benefits.

**How will the Trustee Council conduct restoration to address the public’s lost recreational uses?**

The Trustee Council is collecting information and beginning to evaluate how to best identify and implement projects that will improve public river access and recreational opportunities to compensate for the impacts of contamination. This includes reviewing information compiled by other governmental agencies that manage and plan for recreation in Portland, as well as feedback from public outreach activities such as interviews, surveys, and public meetings.

For example, a subgroup of Trustee Council representatives conducted early, informal outreach to representatives of various community coalitions, Tribes, recreation groups, conservation groups, and educational organizations to gather a baseline understanding of the types of recreation the public engages in, values the public holds for river-related recreation, and barriers to the public’s participation in recreation associated with the Willamette River.

The Trustee Council's current geographic focus for recreational restoration is the Assessment Area, which is adjacent to many Portland neighborhoods. As described in the Programmatic Restoration Plan, the Trustee Council's recreational objectives include:

- Increasing access to the river for residents of local neighborhoods;
- Providing improved fishing-based opportunities for local communities through increased shoreline access to the river;
- Ensuring that recreational restoration projects do not conflict with clean-up and restoration goals; and
- Minimizing conflict with ecological restoration projects.

The Trustee Council recognizes that there may be constraints on improving or increasing recreational opportunities due to remedial actions or ongoing restrictions on resource use (e.g., fish consumption advisories). The Trustee Council will work to identify and design projects that maximize recreational benefits while accounting for those restrictions. Prior to implementing any of those projects, the Trustee Council will release a plan for restoration of recreational opportunities, providing an opportunity for the public to provide additional feedback and comments.

### **How is the Trustee Council addressing tribal resource losses?**

The Five Tribes are concerned for the wellbeing of all resources. For Phase 2 of the Portland Harbor NRDA, the Five Tribes identified resources of special interest that have been exposed to contamination in the Assessment Area, including salmon, sturgeon, Pacific lamprey, and native plants.

As described above, the Trustee Council selected integrated habitat restoration as the preferred method of generating ecological benefits to compensate for contaminant-related losses. The Trustee Council developed specific criteria to identify benefits to salmon from habitat restoration, with the understanding that other species of importance to the Five Tribes would also benefit from such ecological restoration (e.g., sturgeon). Habitat restoration projects are also required to include planting native vegetation based on a list of species identified by the Five Tribes as native to the Willamette Valley and having cultural significance to one or more of the Tribes. With the understanding that resources are interconnected and interdependent, the Five Tribes believe that restoration will provide broader benefits to a variety of valued resources.

For lamprey, data are insufficient to specifically identify lamprey habitat needs and preferences, particularly for juvenile lamprey, so the benefits of ecological restoration projects to lamprey are uncertain. Therefore, Tribal representatives developed a compensatory restoration claim for losses related to Tribal use of lamprey in Portland Harbor that includes:

- Compilation and evaluation of existing data regarding risks to human health resulting from consumption of contaminated lamprey; and
- Monitoring of restoration efforts to assess ecological benefits to lamprey over 20 years, both harbor-wide and as part of specific restoration projects.

## **What's next?**

### **How can we get access to more detailed information about what the Trustee Council has done (data, documentation, etc.)?**

The Trustee Council has a public website that can be accessed at:

<https://www.fws.gov/portlandharbor/>. The website has a library of helpful resources, including a project timeline, a site map, fact sheets, and newsletters.

In addition, the Trustee Council maintains an administrative record of documents prepared in support of the NRDA. The Trustee Council relies on or considers these documents in its decision making. The record is updated on an ongoing basis and can be accessed at:

<https://www.diver.orr.noaa.gov/web/guest/portland-harbor-admin-record>.

### **What is the next step for the Consent Decrees?**

The consent decrees are released for public comment. When the public comment period closes, the Trustee Council will review and respond to the comments received, and then submit the summary of comments and responses to the court. The summary and responses will also be released to the public.

### **What is next for the Trustee Council?**

The Trustee Council is engaged in settlement discussions with additional potentially responsible parties that are participating in Phase 2. In addition, the injury study design and implementation (also referred to as Phase 3) is ongoing, as the Trustee Council conducts studies to understand the effects of contaminants released into the Assessment Area.

The information gained through these studies will enable the Trustee Council to finalize the Phase 3 claim for damages against those potentially responsible parties that have not settled their liability for natural resource damages by that time. An info-graphic prepared by the Trustee Council outlines the Phase 3 and Phase 4 steps and opportunities for public comment, and is available at:

<https://www.fws.gov/portlandharbor/sites/portland/files/resources/DamageAssessmentTimeline.pdf>.