PORTLAND HARBOR PHASE 2 BUDGET NARRATIVE

General Trustee Council Activities (5-18)

The general Trustee Council activities line items primarily cover meetings of the Trustee Council and its various committees, as well as meetings, calls and other communications with Participating Parties and the Yakama Nation.

In general, the Trustee Council and committee meetings occur monthly. Therefore, budget line items 7-13 assume 12 meetings per year with council meetings averaging 8 hours/month and committee meetings averaging 2-3 hours/month. These lines also include preparation and travel time associated with these meetings. The Trustee Council also holds an annual retreat outside Portland to allow for in-depth discussion and resolution of long-term issues and strategies with minimal interruption. This budget line item includes the cost of attendance, rooms, food and necessary supplies for the retreat.

The NRDA Case Manager provides administrative and strategic support to the Trustee Council. This line item covers the Case Manager's salary and benefits.

The "PRP relations" line item refers to discussions with PRPs outside of regularly scheduled meetings or calls. This task is primarily undertaken by the Council chair with assistance from the head of the Restoration Committee.

Each Trustee has also budgeted time to prepare necessary interim and/or final cost documentation reports.

Finally, travel expenses cover the costs of necessary travel to Portland and/or to meet with authorized officials for each Trustee Council member.

Phase 1 Studies Continued (19-21)

- ***Finalize results of Lamprey ammocoete sediment exposure study (19).***

  In Phase 1 of the NRDA, the Trustees initiated a lamprey ammocoete sediment exposure study to evaluate responses of ammocoetes to sediments collected from Portland Harbor. However, this study was only partially funded in Phase 1. In Phase 2, Stratus Consulting will compile and summarize toxicity test results and analytical chemistry data, perform statistical

analyses, and prepare a data report that presents the results of the study. We anticipate that the data report will be available by the end of Year 1.

- ***Validate lamprey sediment exposure study results (20).***

  EcoChem, Inc., contracted via NOAA, will work with the Trustees and Stratus Consulting to ensure the lamprey pilot study follows adequate quality assurance and quality control (QA/QC). This will include establishment of procedures and protocols for conducting and documenting the work. EcoChem will also assist with validation of data generated via this study.

- ***Incorporate salmon data from Phase 1 study into database (21).***

  NOAA will take the lead on incorporating juvenile salmonid data from this study into the Query Manager database. (For more information on the Query Manager database, see the *Data management and database (NOAA Query Manager updates)* topic on the following page.)

Injury Assessment (22-29)

- ***Compile, evaluate, and organize currently available data for use in assessment (22).*** The Trustees intend to rely on existing data, to the extent practical, for use in the Phase 2 assessment. To facilitate analyses, the Trustees will begin with electronic datasets that have already been compiled, such as the NOAA Query Manager databases and databases compiled for the remedial investigation/feasibility study. Additional electronic and paper data sources will also be compiled for use in the assessment, as necessary, including contaminant data (e.g., data collected by Oregon DEQ from the Multnomah Channel and for the Toxics Monitoring Project or data collected by the Trustees on osprey egg contaminant concentrations), ecological data, and socioeconomic data[1]. Additional sources of information will be evaluated for their quality, reliability, and relevance. Preparing data for use in the Assessment will require comparisons of available electronic databases, entry of data from paper sources as needed, and QA/QC of the compiled data.

[1] Note that this task refers to compilation of data sources for use in the assessment. Some of these data were collected in Phase 1. Costs for additional collection of limited data and information is under appropriate line items in the budget.

- ***Data management and database (NOAA Query Manager updates) (23).***

  NOAA will manage, as necessary, updates to the Query Manager database for Portland Harbor. Exa-Data and Mapping Services will provide support to NOAA for this task. The Query Manager database includes all available sediment, sediment bioassay and tissue data collected and analyzed for the RI/FS by the Lower Willamette Group, as well as similar datasets collected within the Portland Harbor Assessment Area (PHAA) by other parties (e.g., City of Portland, ODEQ, EPA, private parties) and compiled by the Lower Willamette Group.

- ***Data validation (as necessary) (24).***

  EcoChem, Inc., contracted via NOAA, will work with the Trustees, Stratus Consulting and others as necessary to ensure any future studies follow appropriate QA/QC. This will include establishment of procedures and protocols for conducting and documenting the work. EcoChem will also assist with or perform data validation and QA/QC functions on behalf of the Trustees.

- ***Compile relevant criteria and benchmarks for evaluation of injuries in natural resources (25).***
  To the extent practicable, the Trustees will use criteria and benchmarks that have already been compiled for the Portland Harbor RI/FS, other NRDAs, or by Trustee or other government agencies. The Trustees may supplement this information with additional thresholds from the literature, as necessary, particularly where more recent literature might reasonably alter previously used threshold values. Thresholds will be evaluated for their relevance to the assessment of injuries for the Portland Harbor NRDA in terms of the definitions of injury in federal regulations at 43 CFR Part 11, contaminants, resources, environmental factors (e.g., salinity), and test conditions (e.g., exposure mechanism).

- ***Evaluate injuries to natural resources (26).***
  Where sufficient information is available, the Trustees will rely on the data and thresholds compiled (lines 22-25) to determine and quantify injuries. Injury determination and quantification conclusions will be presented in the Assessment Report (lines 50-55).

- ***Baseline - Develop habitat value factors to account for non-contaminant stressors and estimate the effect of background concentrations of contaminants in PHAA to account for non-site contaminant degradations to baseline (27 & 28).***

The Trustees will evaluate existing information relevant to determining the magnitude and causes of ecological stressors that result in service losses, including input from the Expert Panel, to assign relative values among habitats in the PHAA. This evaluation will distinguish between service losses caused by hazardous substance releases by potentially responsible parties and other causes. The Trustees will also evaluate existing information to estimate the effect of background concentrations of contaminants entering or present in the PHAA that are not associated with Portland Harbor facilities. This effort will primarily rely on Stratus Consulting, NOAA, and the Restoration Subcommittee.

- ***Review and understand plausible remedial and primary restoration scenarios, as well as ecological service improvements under various response actions. Develop estimated length of time for natural resources to recover under these scenarios (29).***

  The Trustees will use information developed for the remedial process to predict likely scenarios and to understand how these scenarios will contribute to recovery of natural resources. The Trustees will rely on the Feasibility Study, direct communications and coordination with the response agencies (EPA, ODEQ), an evaluation of relevant scientific information related to restoration and recovery, and other information as appropriate to estimate timelines for natural resource recovery.

Injury Assessment (REA methods and assumptions) (30-33)

- ***Develop Resource Equivalency Analysis (REA) methods and assumption, initial calculations to quantify injuries to specific natural resources (e.g. osprey and bald eagle), and conduct, review and finalize analysis (30-33)***

A Resource Equivalency Analysis approach will be used to estimate bald eagles and osprey losses in the Portland Harbor study area. DDE is primary associated with eggshell thinning, enhanced moisture loss, and embryo death in these birds. A regression analysis has shown an inverse relation between productivity of eagles and DDE concentrations in eagle eggs on a nationwide basis, and a similar relationship has been published for osprey. Injury to osprey will be evaluated by measuring egg concentrations of DDE and comparing values to those causing reduced productivity. Egg concentrations in bald eagles will be estimated by evaluating DDE concentrations in fish prey and using published biomagnification factors to estimate

concentrations expected in eagle eggs, then evaluating degree of injury in similar fashion to ospreys. Injury will be quantified in osprey by measuring productivity directly in ospreys currently nesting in the study area, and comparing that to egg concentrations of DDE and a regression equation. Injury to eagles will be quantified by evaluating modeled egg concentrations based on DDE in prey items from the study area and using those concentrations to predict productivity loss based on the published regression equation. The number of individuals and their progeny lost since 1980 will be calculated for both species based on the carrying capacity of the study area (i.e., calculations will be based only on the number of nest sites that would be present in the study area since 1980 based on the carrying capacity of the habitat). Losses will be estimated as number of young per nest site that could have been produced based on a healthy, sustainable reproduction rate in the area. Lost productivity will be expressed as the number of discounted bird-years lost from 1980 to when restoration is complete.

Assumptions: Osprey and eagles will be evaluated as if they were present in the study area since 1980 at full carrying capacity (based on the number of nest sites the habitat could support). Osprey and eagles would be nesting in the study area since 1980 but for the presence of contaminants, and DDE contamination in eggs is the primary reason why recolonization of the area by these species has been very slow.

Injury Assessment (BT methods and assumptions) (34-38)

- ***Develop Benefit Transfer (BT) methods and assumptions, collect limited additional information, and conduct, review and finalize analysis (34-38).***

  This narrative describes the tasks to be undertaken during Phase 2 of the natural resource damage assessment by the natural resource Trustees to estimate the value of lost recreational use for the PHAA. Phase 2 consists of eight tasks that are described below. The main focus of our assessment will be on recreational fishing, boating, swimming, and wildlife viewing.

  Phase 1 Accomplishments

  During Phase 1 activities, the Trustees began an initial assessment of lost recreational uses. The Trustees began by collecting data and economic literature pertaining to the study of recreational use within the study area, with assistance from the Oregon Parks and Recreation Department, Oregon Department of Fish and Wildlife, and other resource managers. Working with experts at the Oregon Department of Human Services, the Trustees compiled and summarized past and current fish consumption advisories relevant to the study area.

They also compiled an inventory of recreational sites for water-based recreation within the study area. During a site visit in September 2008, they also began gathering anecdotal information regarding public perception of the injury, as well as an understanding of the public's interaction with the recreational resources of the area.

Phase 2 Tasks

As outlined below, the Trustees will undertake the following tasks during Phase 2. These tasks are based on their findings during Phase 1, with the end goal being an assessment of the value of lost recreational use at the Portland Harbor Site.

Development of Recreation Study work plan

To begin Phase 2, the Trustees will develop a detailed work plan for the lost recreation use assessment. This will occur within the first three months of Phase 2.

Data collection

During Phase 2, the Trustees will also continue their search for existing recreational use data relevant to all activities, including fishing, boating, swimming, and wildlife viewing. The Trustees will continue to work with experts at the Oregon Parks and Recreation Department, Oregon Department of Fish and Wildlife, and others in order to complete the search for existing data. They will also execute a comprehensive search of media reports related to perceptions of the injury at the Portland Harbor site, including reactions to the issuance of fish consumption advisories, swimming area closures, or other contaminant warnings. The existing information will be summarized and later applied to a preliminary estimate of recreational and human services losses.

Review of economic literature

The Trustees will identify and review relevant economic literature pertaining to all categories of affected recreational losses. Data from this review will be used in calculating the preliminary estimate of recreational and human services losses.

Develop initial estimate of losses

Based on the work completed in Phase 1 and Phase 2 activities, the Trustees will develop an initial estimate of the value of lost recreational use caused by contamination of the PHAA. Based on available data, they will define the categories of loss, the geographic scope and duration of losses. Based on site-specific data and literature-based values, they will estimate

the lost user days for each category of loss and then apply a literature-based value to the lost user days in order to estimate the value of lost recreational use. As part of this task, the Trustees will produce a draft report to summarize their findings. Once the initial estimate of damages is completed, the Trustees may seek peer review of the draft initial estimate.

Develop plan to collect additional data (if necessary)

Through much of the first year of Phase 2 the Trustees will evaluate the need for additional information for use in its assessment of lost recreational use. The need for additional information will be determined by the identification of gaps or shortcomings in the existing data. If the Trustees find that the existing data provides an adequate basis for the Phase 2 assessment of recreational and human service losses, no further data will be collected. However, if existing data is deemed inadequate for final assessment of losses (for example, if the geographic scope, length of time, or the types of activities covered by existing data is found to be insufficient for a complete analysis,) then additional data will need to be collected.

If the collection of additional information is deemed necessary, the Trustees will develop a plan for data collection. This plan may include: development and implementation of focus group materials for different groups of resource users, discussion of the appropriate survey method for use in the field, survey instrument development, survey instrument testing, and the development of sampling plans.

Collect additional data (if necessary)

The Trustees' plan for additional data collection will be implemented. Based on data needs, collection of additional information may include a range of survey modes and activities such focus groups, intercept surveys, or telephone surveys.

Develop draft final recreational loss estimate

Finally, the Trustees will draft a final lost recreational use estimate. During the development of the draft final recreational loss estimate, the Trustees will incorporate comments from peer reviewers, along with insights from any additional data that has been collected.

unknowns at this time

Until all existing data and relevant literature has been collected and reviewed, the need for additional data collection is unknown. The level of effort required in drafting a final estimate of recreational losses depends on whether or not additional data will be required after the

initial loss estimate is calculated. Activities and modes involved in the gathering of additional data will also be specific to the data Trustees are required to collect. While the necessity of tasks related to original data collection is currently unknown, these tasks are included in this narrative for completeness.

Injury Assessment (Tribal Resource methods and assumptions) (39-43)

- ***Develop tribal resource approach to assess lost uses, collect limited additional information, and conduct, review and finalize analysis (39-43)***

The Phase 2 Tribal resource analysis will focus on the evaluation of resources important to the Tribal Trustees. Focus will be on aquatic resources. Specific efforts in Phase 2 include:

Refine assessment approach

During the initial Phase 2 efforts the Tribal Trustees will refine the assessment approach used for this category. The specific assessment approach implemented is in part a function of the available data. During this initial activity Tribal Trustees will:

a. Complete review of existing available information
b. Complete overall Tribal resource assessment approach
c. Identify potential data gaps

Initial Assessment

Tribal Trustees will develop an initial assessment that incorporates the available injury and loss information with the initial restoration options. This initial assessment will be used to identify significant data gaps and need for additional data collection.
The initial assessment will utilize the information collection activities described above and those completed in Phase 1 of the assessment. The assessment will focus on identifying and quantifying the damages to resources of special interest to Tribal Trustees, and develop potential restoration options as a way to offset any identified damages.

Collect limited additional information

If the need for additional information is identified during the initial assessment, the Tribal Trustees will undertake this limited additional data collect effort to fill the existing data gaps. The Tribal Trustees may utilize a number of methods to fill the existing data gaps including

interviews with tribal elders and members of the tribes and interviews with academics knowledgeable on tribal resource issues. Potential restoration options will also be updated.

Refine initial assessment

Based on the additional data collection efforts the Tribal resource assessment will be revised. Emphasis in the revision will be on closely linking the potential injuries with restoration opportunities to develop a reasonable scale of necessary restoration.

Injury Assessment (HEA methods and assumptions) (44-49)

- ***Develop Habitat Equivalency Analysis (HEA) approach, collect limited additional information, meet with Participating Parties to discuss input assumptions, and conduct, review and finalize analysis (44-49).***

The Trustees will use HEA methods and information developed for and applied at other relevant sites. In particular, the Hylebos HEA will serve as a launching point for evaluating HEA methods and inputs that may be applicable in Portland Harbor. This should improve the Trustees' ability to complete an assessment in a timely and efficient manner.

Develop contaminant-specific sediment injury threshold assumptions to quantify injuries to habitat

To the extent practical, the Trustees will use existing information to determine contaminant-specific sediment injury thresholds. These injury thresholds will be updated as necessary based on new information. At present, the Trustees have initial sediment-based injury thresholds for PCBs, DDx, PAH, metals and other contaminants relevant to Portland Harbor.

Define, weight and spatially delineate important habitat types to integrate into assessment

The Trustees will review existing information and solicit expert input to understand and delineate habitat types in the PHAA. The Trustees have already identified several relevant habitat types, primarily based on depth, and their relative importance to juvenile out-migrating salmonids. Additional work is necessary to further refine this approach, including

identifying habitats that are important to other key aquatic resources that will be included in the assessment, understanding the relative importance of these habitats, and weighting accordingly.

Estimate rates of recovery for ecological services based on understanding of response actions (including internal Trustee discussions and coordination with response agencies)

See narrative for line 29 above.

Estimate level(s) of past injury

The Trustees will compare past conditions with current conditions to determine how service losses have changed over time. This evaluation will be based on existing information, to the extent practical, including information about how chemical concentrations have changed over time, how releases have changed over time, how production and waste disposal operations have changed over time, and how hydrodynamic conditions have changed over time. Assumptions or modeling may also be used in this evaluation.

Develop initial HEA calculations. This process will include mapping of habitat types and concentrations; quantification of areas using GIS, and development of HEA models using these inputs

This process is underway. NOAA is conducting a preliminary estimate of damages on behalf of the Trustees pursuant to the DOI NRDA regulations. The methods being utilized to develop this estimate will inform the Phase 2 HEA and will be modified and updated as necessary. The Trustees will build on the preliminary analysis, integrating information for habitats, additional key resources (e.g., juvenile lamprey), updates to sediment injury thresholds, and so forth to map and integrate sediment injury footprints and develop inputs to the HEA model.

Supporting spatial and statistical analyses for preliminary estimate of damages HEA (precursor to Phase 2, already underway)

NOAA is conducting a preliminary estimate of damages on behalf of the Trustees to enable Federal Trustees to respond to bankruptcy filings when and if they occur. The methods being utilized to develop this estimate will inform the Phase 2 HEA and will be modified and updated as necessary.

Supporting spatial and statistical analyses for phase 2 HEA

This item refers specifically to the spatial analysis/GIS and statistical support necessary to develop a multi-contaminant, habitat-based HEA (see narrative for line 51 above).

Meeting(s) with Participating Parties to discuss Trustee basis for key HEA input assumptions

Although the Trustees will likely seek significant input from participating parties in the form of comments on written work products, the Trustees also anticipate that in-person meetings and conference calls with Participating Parties will be necessary and desirable to keep the assessment and associated negotiations on track. The HEA-based assessment of ecological service losses for multi-contaminant, multi-party sites is a complex process involving a number of assumptions. The process of establishing HEA input assumptions will be iterative, but not open-ended. The Trustees are interested in seeking input from Participating Parties, but not in unnecessarily delaying the assessment.

Review HEA calculations, finalize and prepare documentation

The Trustees will review and revise, as necessary, HEA calculations generated by the Trustee HEA technical team. The Trustees will finalize HEA calculations and prepare supporting documentation prior to sharing the results of HEA run(s) with Participating Parties.

Assessment Report (50-55)

- ***Draft Annotated Outline for Phase 2 Assessment Report, write, review, and revise report, review public comments, and develop final report (50-55).***

The Trustees will prepare an assessment report that includes information relevant to injury determination, quantification, and damage determination conducted in Phase 2. Because this report will incorporate the results of many of the tasks described above, the majority of the work will be conducted in years 2 & 3. Interim deliverables will include an annotated outline and a draft assessment report. It is anticipated that the final assessment report will be complete near the end of year 3.

Public Involvement (56-58)

- ***Develop press releases, public outreach regarding Phase 2 assessment report, public notice and comment (56-58).***

The Trustees will develop and disseminate information via press releases, brochures, presentations and websites to inform the public of Trustee Council actions taken during Phase 2 of the assessment process. This public outreach process will include workshops to present draft reports (e.g., restoration planning, EIS, and so forth) and solicit public comments.

Restoration (59-74)

- ***Identify& evaluate potential tribal resource-specific and use-specific restoration projects and additional components of general restoration opportunities to address tribal resources and services (59 & 60).***

The Tribal Trustees will evaluate the opportunity to implement restoration actions specific for resources of interest to the Tribal Trustees and address potential Tribal-specific losses. The Tribal Trustees will seek out opportunities to enhance or expand existing restoration options identified by the Trustee Council where appropriate. The Tribal Trustees will also identify and evaluate the potential to implement original restoration projects designed to directly address lost Tribal resources and/or services. For the potential Tribal resource restoration actions, the Tribal Trustees will develop specific restoration evaluation criteria by which the restoration actions can be evaluated, which will be included and analyzed for potential effects in the Restoration Plan and Programmatic Environmental Impact Statement.

- ***Identify& evaluate potential recreational restoration projects and additional components of general restoration opportunities to address recreational resources and services (61 & 62).***

  The Trustees will work to identify and evaluate potential restoration project opportunities specific to the restoration of lost recreational services. Through discussions with the Restoration Planning Subgroup, details of existing restoration project options, locations, and goals will be gathered. Next, the Trustees will meet with State and City agencies, resource managers, and local user groups to identify additional projects with a focus on the restoration of lost recreational services within the study area. Additional information regarding recreation specific restoration opportunities may be gathered through focus groups or other discussions with members of the public, resource managers, and/or recreation experts. Eventually, the preferred restoration projects/opportunities will be developed into restoration project plans.

- ***Develop draft Restoration Plan/Programmatic Environmental Impact Statement (PEIS), review draft Restoration Plan/Programmatic EIS, hold public meetings for EIS, and review and respond to comments (63-67).***

  The Trustees have determined that the most efficient way to approach NEPA for restoration in Portland Harbor is to develop a programmatic EIS, which will describe the scientific underpinnings of the Restoration Plan, describe various approaches to compensatory restoration considered by the Trustees, and identify the criteria and process by which the Trustees will evaluate, and value, restoration actions proposed by PRPs. This programmatic approach will streamline the NEPA process when specific restoration sites are selected at the time of settlements. When project sites are selected, individual environmental analyses can be "tiered" to the programmatic EIS. NOAA and USFWS are co-lead agencies for NEPA in this case; the state and Tribal Trustees are cooperators. The Trustees have developed a Notice of Intent (NOI) to begin scoping for the EIS, which was published in the Federal Register on February 1, 2010.

  The Trustees have engaged Parametrix, Inc. to support the development of the EIS. Parametrix has developed a schedule to complete the EIS and ROD before the end of 2012; meeting this timeline is only feasible with consultant support. The public scoping meeting is planned for March 3, 2010.

- ***Compile and publish scientific foundation for Restoration Plan (68).***

  On November 30-December 1, 2009, the Trustees convened a panel of experts on the ecology of the Lower Willamette River and the biology of juvenile Chinook salmon utilizing the area. The expert panel considered existing scientific information about juvenile Chinook life cycle and habitat requirements, and established guiding principles for the development of a Restoration Plan for juvenile Chinook. Although many articles and resources relevant to this topic were identified at the meeting, the expert panel strongly recommended a more rigorous literature search to augment the technical basis of the Plan. The Trustees anticipate engaging a consultant or graduate student to conduct this literature search and synthesis under the guidance of the Expert Panel. This will be conducted in 2010-2011. As the Trustees identify other (non-salmonid) species that the Restoration Plan must address, there may be a need for a similar search for existing literature related to the needs of these other species.

- ***Identify potential restoration projects outside the study area (69).***

  The Trustees have identified a strong preference for restoration projects inside the study area, for a number of reasons discussed extensively in the notes and conclusions from the Expert Panel. A list of potentially high-value restoration opportunities within the study area has been developed and shared with PRPs and the public. Although the expert panel identified projects inside the study area as the highest priority, the panelists also identified a broader geographic area (from Willamette Falls to the mouth of the Willamette River, including the immediate confluence areas of major tributaries and all of Multnomah Channel) where restoration would provide significant benefit to juvenile Chinook, as well as other potentially injured species. The Trustees will work with the Expert Panel, as well as community partners, to identify feasible and valuable potential restoration sites within this broader area, and will produce information (conceptual restoration vision, relevant background information) similar to what has already been developed for sites within the study area. This work will take place during 2010 and 2011.

- ***Develop HEA credit methodology and assumptions that incorporate other species besides juvenile chinook, if justified and apply HEA credit methodology to potential restoration actions to forecast the value of specific restoration actions (70 & 71).***

The Trustees are developing preliminary HEA values for habitats associated with juvenile Chinook, with the input of the Expert Panel. If the results of studies and evaluations being carried out through the Assessment Plan indicate likely injury to other species, the Trustees will follow a similar process to develop HEA values for habitats associated with these other species. Expert input and literature review are anticipated as components of this work, which will take place during 2010 and 2011. The Trustees will apply these HEA values to potential restoration sites, to estimate their potential value; these calculations will form the basis of settlement negotiations to be concluded around the time of the issuance of the ROD. The Trustees anticipate that these tasks will be supported by Stratus Consulting.

- ***Outreach and communication with PRPs, third parties and governmental agencies regarding restoration implementation and stewardship (72). Full conceptual design and/or Trustee input on design to move projects to implementation readiness (this may be funded by individual PRPs as part of settlement negotiations) (73).***

  The Trustees regularly receive requests from PRPs, third party restoration companies, government agencies, non-governmental community organizations and members of the public for feedback and guidance on potential restoration actions under the Portland Harbor NRDA. **Although extensive, detailed involvement by the Trustees in design of a specific restoration project may require an agreement with, and funding from, individual PRPs**, the task of providing information and technical assistance on restoration at a more general level is ongoing.

  In addition, the Trustees maintain regular contact with community organizations that can help facilitate restoration by distributing public information, generating community involvement, participating in conceptual design and feasibility discussions, and ultimately maximizing the benefits of restoration actions by providing community-based, long-term stewardship of restored sites. This task is carried out by the Trustees through participation in meetings of community groups (including the Portland Harbor Citizens Advisory Group), development of materials for public education and outreach (accomplished in part through Parametrix contract), maintaining the restoration section of the case web site, and regular communication and updates (in person and electronic).

- ***Meetings and discussions with third party restoration companies (74).***

  The Trustees anticipate that third party restoration "entrepreneurs" may play an important role in implementing restoration in Portland Harbor, since many of the potential restoration opportunities may require the participation of multiple PRPs. In addition, the Trustees are hopeful that third parties can help secure and protect restoration opportunities from non-restoration uses, and perhaps even catalyze restoration implementation at an earlier point in time than would otherwise occur. In order to encourage and facilitate third party interest and involvement, the Trustees will work with restoration entrepreneurs to evaluate potential site values, identify and address obstacles to implementation, and facilitate contacts and communication with Phase 2 participating parties. This will take place throughout Phase 2.

Allocation (75)

The Trustees assert that hazardous substances have become so commingled in Willamette River sediments that any party responsible for releasing hazardous substances to the site is jointly and severally liable for all the resulting natural resource damages. However, the Trustees recognize that settlement with individual parties will likely only occur on a several basis where each party is allocated a share of the overall liability. To maximize the potential for proposed individual settlements to obtain court approval, the Trustees believe it is necessary to rely upon a formal process for allocating liability among the parties. The proposed Phase 2 budget includes a line item for the allocation process that presumes the Trustees will have to conduct a natural resource damages liability allocation completely independent of the allocation process being planned to address remedial liability. These costs can be very significantly reduced if PRPs agree that the two processes can be coordinated, with the tasks to be completed by Trustee contractors and the costs of the NRD allocation varying greatly depending upon the extent of coordination.

Legal work related to the allocation process includes coordination with the Trustees' contractor(s) and review of the contractor(s)' deliverables; meetings with interested potentially liable parties; resolution of legal issues related to the allocation process; and coordination with those involved with the remedial allocation process to the extent possible.

Navigational Clam Assessment (76)

(*pending approval by Trustee Council*)

If the Trustee Council decides to include a Navigational Claim in the Phase 2 Assessment, the State Trustee will collect and evaluate information about any injuries and damages to navigational services caused by hazardous substances in the Portland Harbor Superfund site. The assessment will focus on three main categories of potential loss:

- Damages resulting from restriction or loss of access by deep draft vessels to terminals on the Lower Willamette River, and associated loss of public revenue;
- Increased operational costs, including reducing cargo loads in order to reduce the draft of ships, maneuverability, added tug assistance to avoid shoals, awaiting tide windows, lightering of vessels at mouth of Willamette River to reduce draft; and
- Increased maintenance costs for the navigational channel.

The assessment will quantify any such losses, and assess when they occurred (i.e., past damages, interim damages and future damages per U.S. DOI NRDA regulations). Other Trustees, particularly NOAA, will provide oversight on this assessment and those costs are included in line 76. The cost of collecting and evaluating the information by the State is not included in this budget. Those costs will be considered unreimbursed past assessment costs at the time of settlement.

Legal (77-79)

In addition to its monthly conference calls (line 8), the legal committee provides support to the Trustees on a number of issues and activities. Those items include, but are not limited to: analysis of court decisions potentially impacting the NRDA process; advice to Trustee committees on applicable laws and regulations and identification of legal issues related to the committees' work; review of work products; presentations to interested parties; coordination with EPA and/or DEQ on overlapping remedial/NRDA issues; and creation of model legal documents (e.g., consent decrees).

The Trustee attorneys will work with third party restoration developers to consider and evaluate restoration proposals; to determine what role, if any, the Trustees may play in restoration banking and how to facilitate the development of third party projects. They also will negotiate the funding agreement for Phase 2 participation.

The "PP negotiations/communications" line item refers to communications with individual participating parties (PPs) and groups of PPs to provide updates, answer questions and inquiries and develop the Phase 2 Funding and Participation Agreement.

Not included in this category of cost estimates is any legal work associated with a single potentially liable party such as review of party specific restoration proposals, confidentiality agreements or settlement agreements. Those costs will be borne by that party.