

3.3 Task 3: Data Evaluation

Data collected as part of the Work will be summarized and analyzed to meet several DUOs (see Table 5). Table 8 outlines the data evaluation and interpretation plan. Following completion of field work and chemical analyses, data analyses will be completed and a PDI Evaluation Report will be submitted to EPA. The PDI Evaluation Report will include the following elements:

- Summary of the investigations performed;
- Summary of investigation results and identification of existing conditions;
- Summary of validated data (i.e., tables and graphics);
- Data validation reports (Tier II) and laboratory data reports;
- Photographs documenting the work;
- Angler survey information processed to eliminate all PII;
- Evaluation of current sediment/biota conditions along with background loading to refine active remedy and monitored natural attenuation (MNA) areas;
- Use of bathymetry data to refine the elevation requirements of the active remedy footprint, especially in the intermediate and shallow areas;
- Refinement of the CSM and understanding of current conditions;
- Refinement of sediment recovery curves based on empirical data changes (and confirm RALs);
- Re-calculation of Site-wide and segment-wide surface sediment SWACs using new data; may also consider other spatial scales;
- Evaluation of fish tracking results to refine the extent and segmenting of the river (for calculation of SWACs) and assess fish home ranges used in the FWM;
- Update the surface sediment, fish tissue, and surface water data based on the validated 2017/2018 information obtained during this investigation;
- Assessment of new bathymetry for bed stability and fish/sediment data for monitored natural recovery potential;
- Evaluation of current (2017/2018) upstream background concentrations;
- Update the active remedial footprint by running the new data through the ROD decision tree for assigning remedial technologies,
- Use of new data to refine our understanding of the FWM and update calculations of baseline fish consumption risks; and

- Support and advance PCI allocation.

Technology assignments will be identified based on sampling data in all areas of the river, as indicated by the decision tree described in the ROD (2017 ROD Figure 28, Appendix I). The decision tree provides detail regarding how design data will influence design and construction and future maintenance dredging. The decision tree allows caps to be used in dredge areas if RALs are not achieved or if PTW remains. This is based on area-specific analysis (EPA 2017). The ROD decision tree describes four compliance regions (ROD Figure 28):

- Navigation Channel and Future Maintenance Dredge area;
- Intermediate Region (outside the navigation channel to -2 feet CRD);
- Shallow Region (-2 feet CRD to shore); and
- Riverbank Region (top of bank down to the river).

The riverbank areas are currently being evaluated under ODEQ-led investigations.

One important component of re-baselining the Site is to evaluate the extent of natural recovery processes as measured by changes in concentrations since the RI. As stated in the ROD (responsiveness summary), *“EPA concurs that natural recovery is occurring within Portland Harbor and that it should be utilized in sediment remedies, as evidenced by the fact that MNR represents the response action assigned to between 64 and 90 percent of the total area of the Site for all alternatives carried through the detailed analysis in the June 2016 feasibility study. However, the rate of natural recovery is expected to vary by location. Pre-design sampling will be used to ensure that the natural recovery is factored into the design...”*.

The Work sampling program will be statistically robust to support calculation of Site-wide SWACs and assess spatial patterns without reliance on older data. Figure 12 presents a summary of the PDI field sampling tasks.

5. SCHEDULE AND DELIVERABLES

5.1 Schedule

The goal is to complete the Work by June 2019. Figure 13 presents the proposed project schedule through 2019. The field schedule for the Work includes time for development of QAPP and other project plans in 2017 and completion of field investigation activities by the end of 2018. The PDI scope of work is planned for completion by June 2019 and the draft PDI Evaluation Report is targeted for delivery to EPA by June 2019.

5.2 Deliverables

Laboratories will provide all data for field investigations in electronic format and QA/QC reports, including a narrative of the standard QA/QC protocols. Data validation of laboratory results will be performed by Geosyntec. Following data validation, all data, supplementary information, and validator qualifiers will be compiled into an SQL Server database for the project. Data summary files will be provided to EPA as they become available after data validation and database management. Deliverables include:

- FSP, QAPP, and DQMP describing how the work will be conducted;
- HASP describing worker safety for hazards posed by the Work;
- Monthly Progress Reports;
- Pre-RD Remedial Footprint Report; and
- PDI Evaluation Report.

Deliverables for the PDI Evaluation Report will include data summary tables, data graphics such as box-and-whisker plots, maps depicting the spatial distribution of sediment chemistry for selected analytical parameters, a comparison of Site conditions to the active Alt F Mod remedial footprint, analysis of differences and changes, and new SMA boundary maps.

This document comprises the total work scope agreed upon by the Pre-RD Group and EPA.

