

**NW Natural Pre-Remedial Design Data Gaps Sampling  
B1 Navigation Channel Project Area – Fall 2020  
Field Change Request Form**

**Project Name:** B1 Navigation Channel Project Area      **Subconsultant:** Anchor QEA, LLC

**Field Activity:** Surface Sediment Sampling      **Request Number:** 1

**To:** Hunter Young, U.S. Environmental Protection Agency      **Date:** September 25, 2020

**Field Change Request (FCR) Title:** Reoccupation of NewFields surface grab sampling locations within the Project Area

**Description**

As detailed in Section 3.2 of the U.S. Environmental Protection Agency (EPA)-approved *Revised Final Pre-Design Investigation Work Plan (PDIWP)*, NW Natural has decided not to use the sediment data included in *The Nature and Sources of PAH in Sediments in the Vicinity of the Former ExxonMobil Terminal – 2014 Investigation, 9420 N.W. St. Helens Road, Portland, Oregon (NewFields 2015)* and *Concentrations and Character of PAH in Sediments in the Proposed Remedial Alternatives Area of the Portland Harbor Superfund Site, River Miles 5-6 – 2015 Investigation (NewFields 2016)* for sediment management area (SMA) refinement and remedial design (RD) for the following reasons:

- The data provided in these reports were collected without an EPA-approved work plan, field sampling plan, or quality assurance project plan, and EPA was not aware this work was being performed and did not provide oversight of the field work.
- Work plans, field sampling plans, and quality assurance project plans were provided only as appendices to the data reports. These documents were not subject to any review or EPA approval prior to sampling. Because of this, it is impossible to verify or confirm whether the work was performed consistent with these plans.
- The stated objective of these sampling events was for polycyclic aromatic hydrocarbon (PAH) source assessment, not data collection to understand Portland Harbor baseline conditions or to support RD. Therefore, the data quality objectives were not consistent with other remedial investigation and RD sampling plans.
- Focused contaminants of concern (COCs) other than PAHs (i.e., polychlorinated biphenyls [PCBs], DDX, dioxins/furans) were not sampled in 2014 and were sampled only for approximately 20% of the surface samples. As a result, the data are not useful for assessing potential risks requiring active remedy for all Record of Decision (ROD) COCs, and the disparity in data density between PAHs and other COCs would result in interpolation bias and anomalies.
- There is insufficient information provided in the 2016 NewFields report to accurately determine the sampling depths below mudline, and there is a discrepancy between depths in a more recent version of the data and the report. In the 2016 NewFields report, sample intervals are provided as an elevation (i.e., “-48 to -49 ft CRD” [NewFields 2016, Table 3]) rather than feet below mudline (i.e., depth). It is necessary to select bathymetry survey data from a different year and use interpolation to estimate the depth below mudline. Furthermore, the elevations provided in the 2016 NewFields report are all in whole feet, indicating each sample elevation is rounded to the nearest whole foot in elevation. Therefore, the true depth below mudline for individual samples is unknown. Finally, there are discrepancies between depths provided by NewFields to CDM Smith in 2020 and in the 2016

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NewFields report. The 2020 depth intervals do not all occur in 1-foot thicknesses (frequently less than 1 foot), which is inconsistent with the 1-foot intervals provided in the 2016 report.

The collection of sediment data for these two sampling events is inconsistent with all other sediment data included in the ROD database and the Pre-RD Group data. NW Natural, therefore, believes these data should not be used for RD. The PDIWP, therefore, did not include any of the data from these two sampling events that were collected within the Project Area.

However, in accordance with EPA's June 17, 2020, General Comment No. 2 on the PDIWP dated May 15, 2020, NW Natural reviewed the NewFields data in relation to ROD Table 21 remedial action level (RAL) and principal threat waste (PTW)-highly toxic threshold exceedances that would lead to refinements of the SMAs developed using the ROD and Pre-RD Group datasets. Based on this review, NW Natural revised the PDIWP to address EPA's request. The revised PDIWP included two additional subsurface sediment cores, six additional surface grabs, and slightly repositions 14 surface sediment grabs to reoccupy the NewFields surface sediment grabs and core sampling elevations within the ROD-identified or ROD-refined (incorporating the baseline harbor-wide Pre-RD Group data collected within the Project Area) SMAs. Per EPA's request during a discussion with NW Natural on September 21, 2020, NW Natural agrees to collect surface grabs from two additional NewFields sampling locations within the Project Area that are not associated with either the ROD-identified or ROD-refined SMAs.

**Recommended Change**

To satisfy EPA's request, NW Natural agrees to reoccupy the two NewFields sampling locations (PH15-23 and S-19) with locations NCPDI-072 and NCPDI-073. The additional surface (0 to 1 foot below mudline) sampling locations, shown in Figures 1 and 2, will be sampled and analyzed for comparison against the ROD 21 RALs and PTW-highly toxic thresholds consistent with the PDIWP. The location geographic coordinates are provided in Table 1. These co-located data, collected using unbiased, EPA-approved sampling methodologies performed under EPA oversight, will be used to support RD. The NewFields data will not be needed or used by NW Natural.

Nik Bacher, Anchor QEA

**Respondent Field Coordinator (or Designee)**



**Signature**

09/25/2020

**Date**

**Approval:**

Ryan Barth, Anchor QEA

**Respondent Project Lead**



**Signature**

09/25/2020

**Date**

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# Table

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**Table 1**  
**Additional Surface Grab Sampling Locations**

<b>Location ID</b>	<b>Easting (X)</b>	<b>Northing (Y)</b>
NCPDI-072	7621331.02	708596.37
NCPDI-073	7622963.97	706637.59

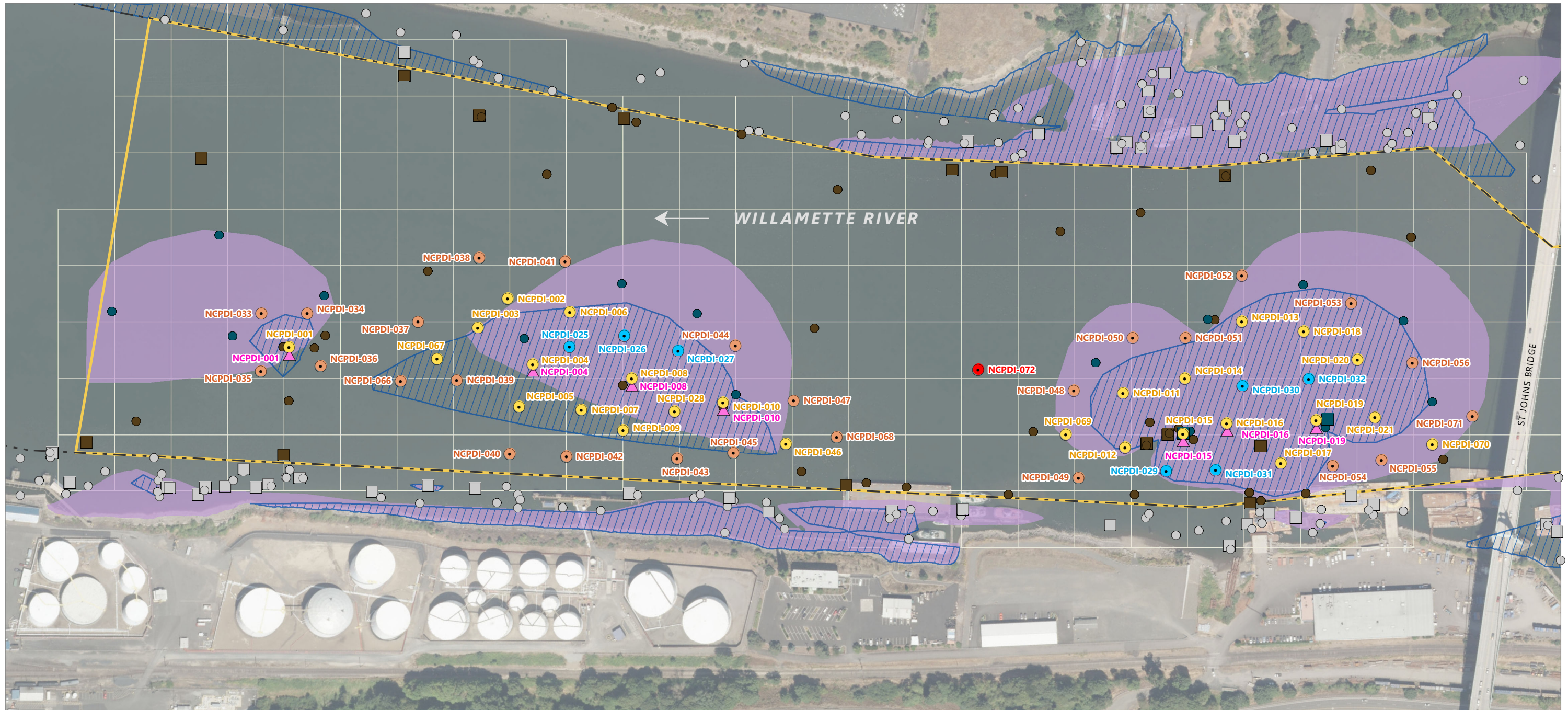
Notes:

Coordinates are in North American Datum of 1983 (HARN91), Oregon State Plane North, International Feet.  
HARN91: High Accuracy Reference Network 91

# Figures

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**LEGEND:**

Project Area Boundary	<b>Locations Inside Project Area</b>	<b>Locations Outside Project Area</b>	Proposed Surface Sediment Grab
Navigation Channel	<i>Pre-RD Group Data Inside Project Area</i>	Surface Sediment	Proposed Expedited Surface Grab
Post-ROD SMA5	Surface Sediment Location	Subsurface Sediment	Proposed Contingent Surface Grab
ROD-Identified SMA5	Subsurface Sediment Location		Proposed Contingent Bioassay (Location Colocated with Adjacent Expedited Surface Grab Station)
	<i>ROD Data Inside Project Area</i>		Proposed Additional Surface Sediment Grab
	Surface Sediment Location		
	Subsurface Sediment Location		

**NOTES:**

1. Arrow indicates direction of flow of river.
2. Horizontal datum is NAD83 (HARN 91) Oregon State Plane North, International Feet.
3. Vertical datum is City of Portland (COP), Feet.
4. Aerial imagery from City of Portland 2018.
5. Sediment management areas developed consistent with the ROD-identified methods using the post-ROD dataset identified in the Pre-Design Investigation Work Plan.
6. Shown grid is 150-feet by 150-feet dimensions to support data density determinations

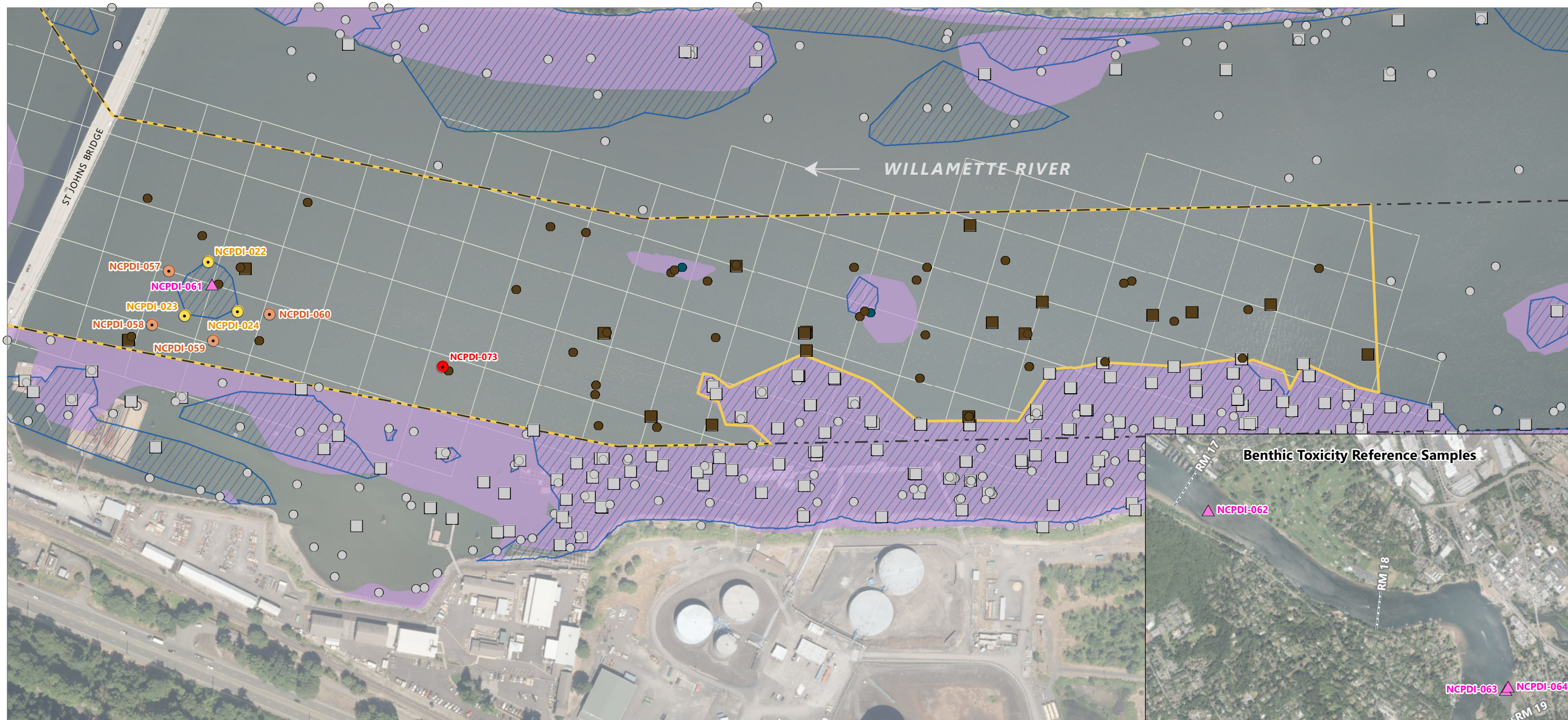
Publish Date: 2020/09/24, 8:33 AM | User: alesueur  
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**Figure 1**  
**Proposed Additional Surface Grab Location (Downriver Portion)**

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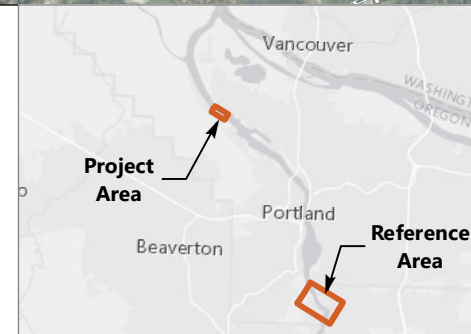
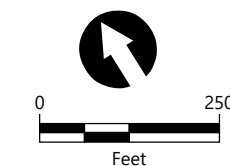


**LEGEND:**

- |                            |  |                             |   |
|----------------------------|--|-----------------------------|---|
| Project Area Boundary      | <b>Locations Inside Project Area</b>         | <b>Depth Classification</b> | Proposed Contingent Bioassay              |
| Navigation Channel         | <i>Pre-RD Group Data Inside Project Area</i> | Surface Sediment            | Proposed Surface Sediment Grab            |
| Post-ROD SMAs <sup>5</sup> | Surface Sediment Location                    | Subsurface Sediment         | Proposed Expedited Surface Grab           |
| ROD-Identified SMAs        | Subsurface Sediment Location                 |                             | Proposed Contingent Surface Grab          |
|                            | <i>ROD Data Inside Project Area</i>          |                             | Proposed Additional Surface Sediment Grab |
|                            | Surface Sediment Location                    |                             |   |
|                            | Subsurface Sediment Location                 |                             |   |

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**Figure 2**  
**Proposed Additional Surface Grab Location (Upriver Portion)**

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