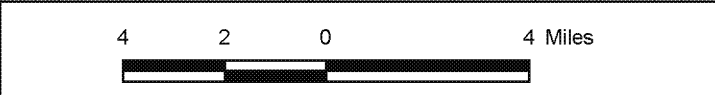


Path: P:\GIS\Portland\Harbor\Mapfiles\GISPH_Vicinity_Map.mxd

Legend
 Site Location

Notes:
 1. Topography map provided by ESRI Basemaps 2016

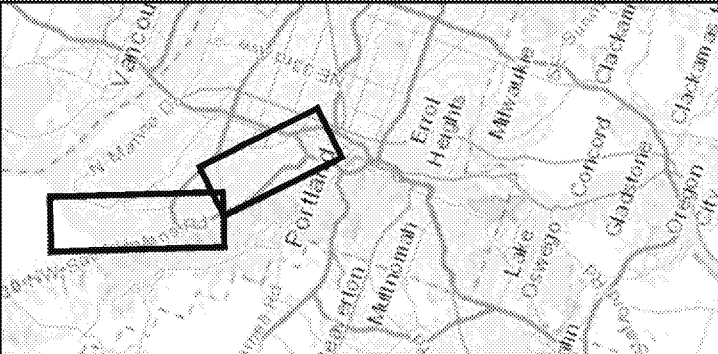
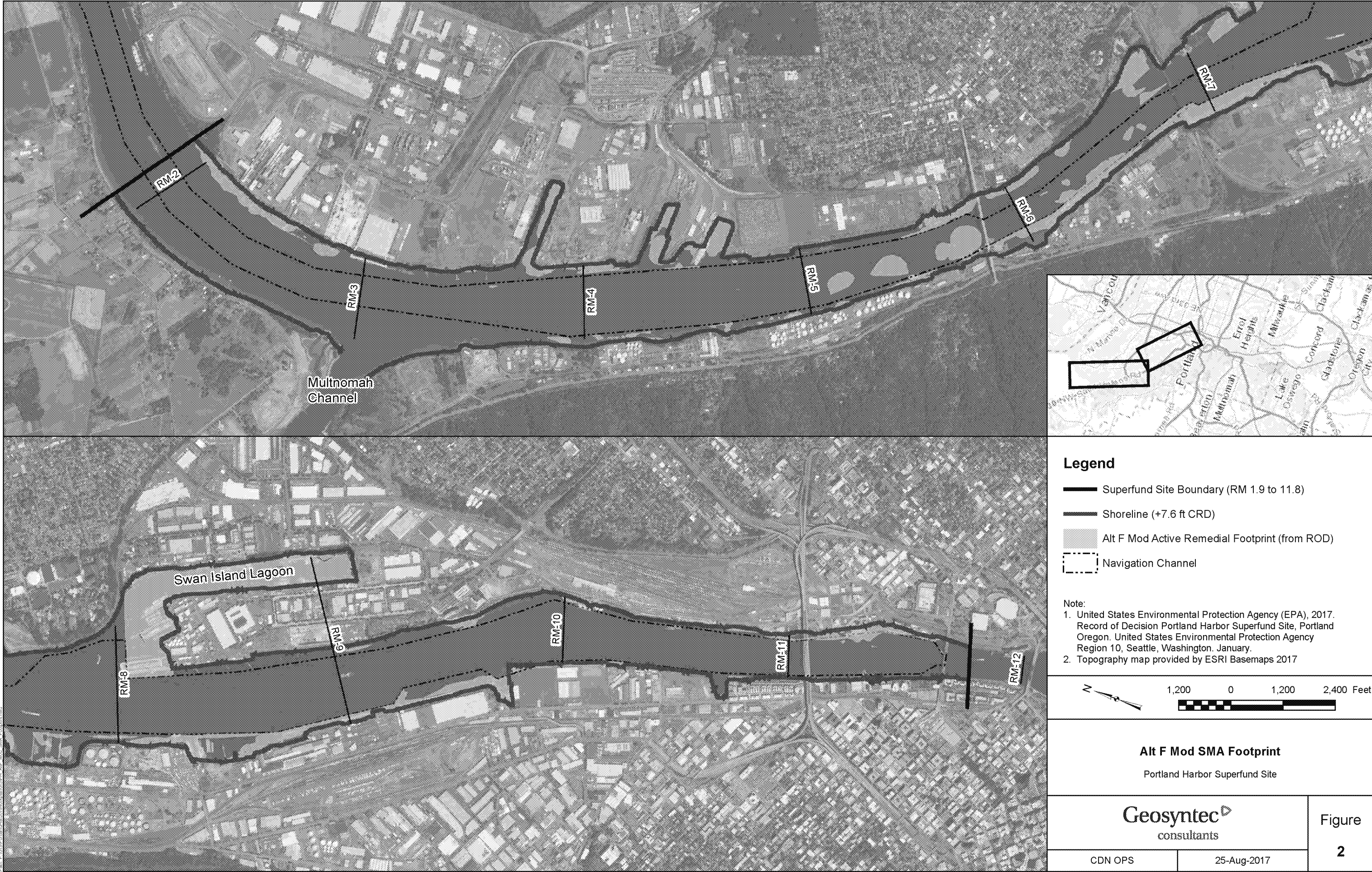


Vicinity Map
 Portland Harbor Superfund Site

Geosyntec
 consultants

Figure
1

Guelph 25-Aug-2017

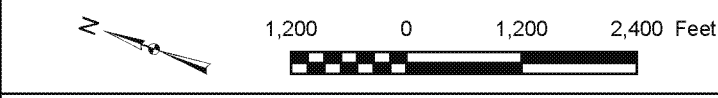


Legend

- Superfund Site Boundary (RM 1.9 to 11.8)
- Shoreline (+7.6 ft CRD)
- Alt F Mod Active Remedial Footprint (from ROD)
- Navigation Channel

Note:

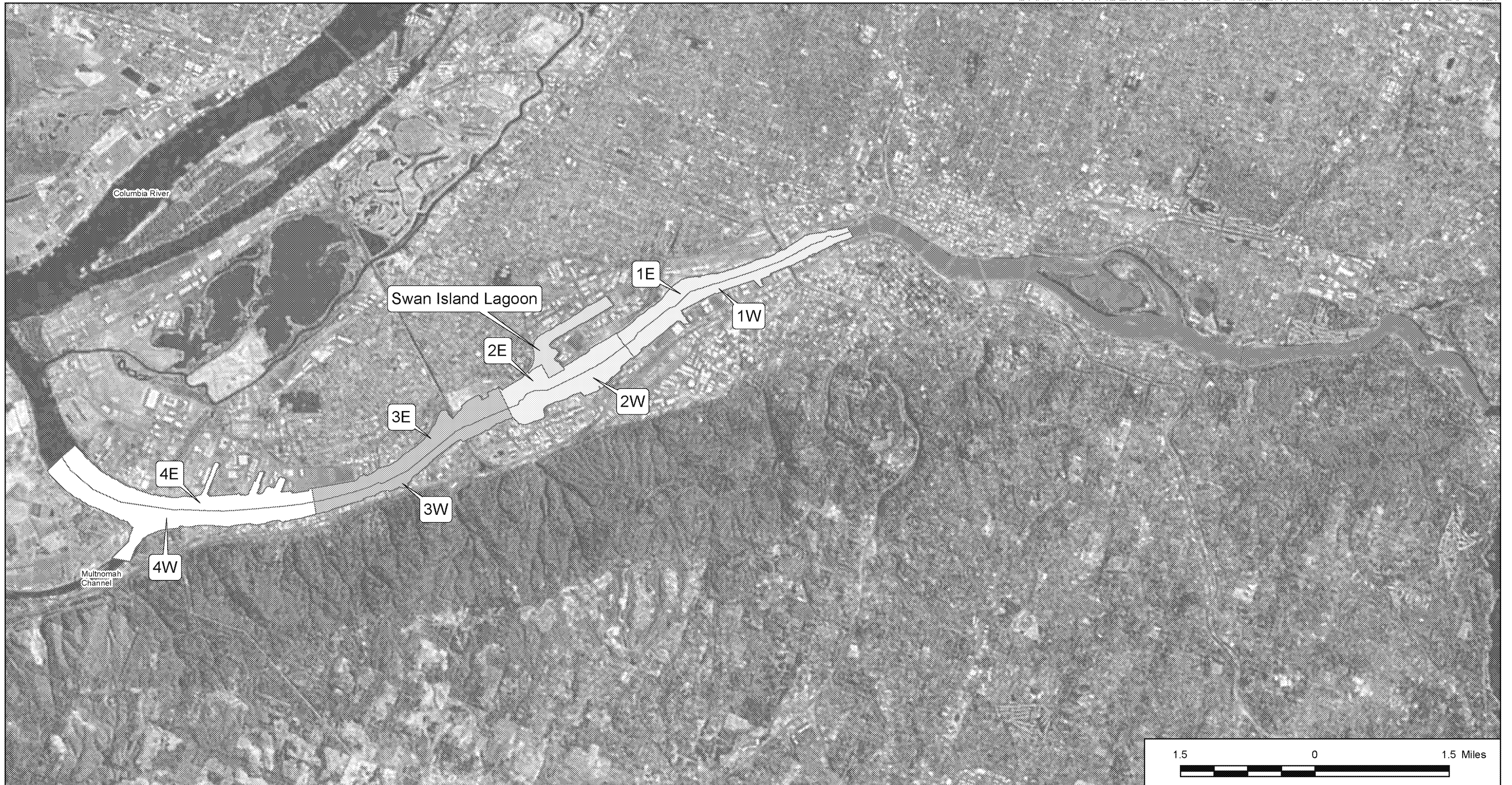
1. United States Environmental Protection Agency (EPA), 2017. Record of Decision Portland Harbor Superfund Site, Portland Oregon. United States Environmental Protection Agency Region 10, Seattle, Washington. January.
2. Topography map provided by ESRI Basemaps 2017



Alt F Mod SMA Footprint
Portland Harbor Superfund Site

		Figure 2
CDN OPS	25-Aug-2017	

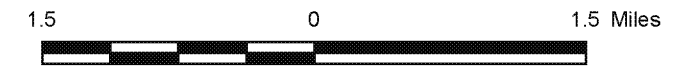
DATE PLOTTED: 08/24/2017 10:58:00 AM; FILE: M:\18cv3472_NDCA\18cv3472_NDCA_SMA_Footprint.mxd



Legend

- Segment 1 – RM 11.8 to RM 9: 1E and 1W represent the east and west sides of Segment 1, respectively
- Segment 2 – RM 9 to 7.5: 2E and 2W represent the east and west sides of the Segment 2, respectively
- Segment 3 – RM 7.5 to 5: 3E and 3W represent the east and west sides of the Segment 3, respectively
- Segment 4 – RM 5 to 1.9: 4E and 4W represent the east and west sides of the Segment 4, respectively
- Segment 5 – Swan Island Lagoon
- Upriver Area - RM 11.8 to 20

Notes:
 1. Aerial imagery provided by ESRI Basemaps 2017
 2. Site boundaries river mile 1.9 to 11.8
 3. RM = River Mile



**River Segments for
Portland Harbor Superfund Site**
Portland Harbor Superfund Site

Geosyntec
consultants

CDN OPS 25-Aug-2017

Figure
3



Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

Legend

- Unbiased Sediment Sample Location (n=258)
- ⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87)
- ⊗ Additional Sediment Grab Location for SMA Delineation (n=175)
- △ Additional Subsurface Core Location for SMA Delineation (n=90)

Historical Sample Locations

- △ Post RI/FS Subsurface Surface Sediment Location (2013 to 2016)
- Post RI/FS Surface Sediment Sample Location (2013 to 2016)
- FS Surface Sediment Sample
- ▲ FS Subsurface Sediment Sample

— River Mile Marker

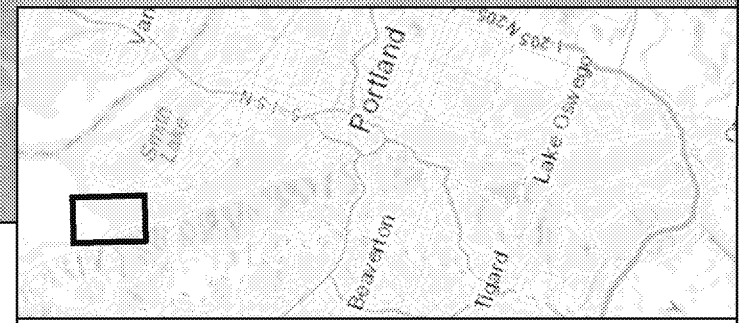
■ Alt F Mod SMA Footprint

□ Capped Area

500 250 0 500 1,000 Feet

Notes:

- FS - Feasibility Study
n - sample count
RI - Remedial Investigation
RM - river mile
SMA - sediment management area
- References:
FS samples obtained from USEPA, 2016.
Post RI/FS samples compiled from: GSI Water Solutions and Hart Crowser, 2008; GSI Water Solutions and Hart Crowser, 2010; GSI Water Solutions Inc., 2014; Kleinfelder, 2015; NewFields, 2016; and Geosyntec, 2016.
- Aerial Imagery provided by ESRI Basemaps 2017



**PDI Sediment Sampling Locations
RM 2-4**

Portland Harbor Superfund Site

Geosyntec
consultants

CDN OPS 22-Sep-2017

Figure
4a



Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

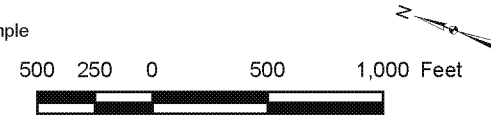
Legend

- Unbiased Sediment Sample Location (n=258)
- ⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87)
- ⊗ Additional Sediment Grab Location for SMA Delineation (n=175)
- △ Additional Subsurface Core Location for SMA Delineation (n=90)

Historical Sample Locations

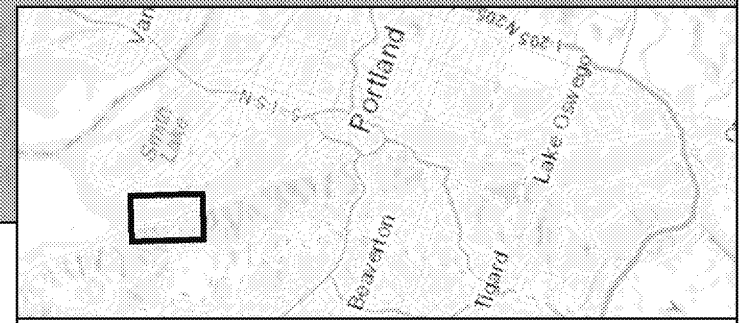
- △ Post RI/FS Subsurface Surface Sediment Location (2013 to 2016)
- Post RI/FS Surface Sediment Sample Location (2013 to 2016)
- FS Surface Sediment Sample
- ▲ FS Subsurface Sediment Sample

- River Mile Marker
- Alt F Mod SMA Footprint
- Capped Area

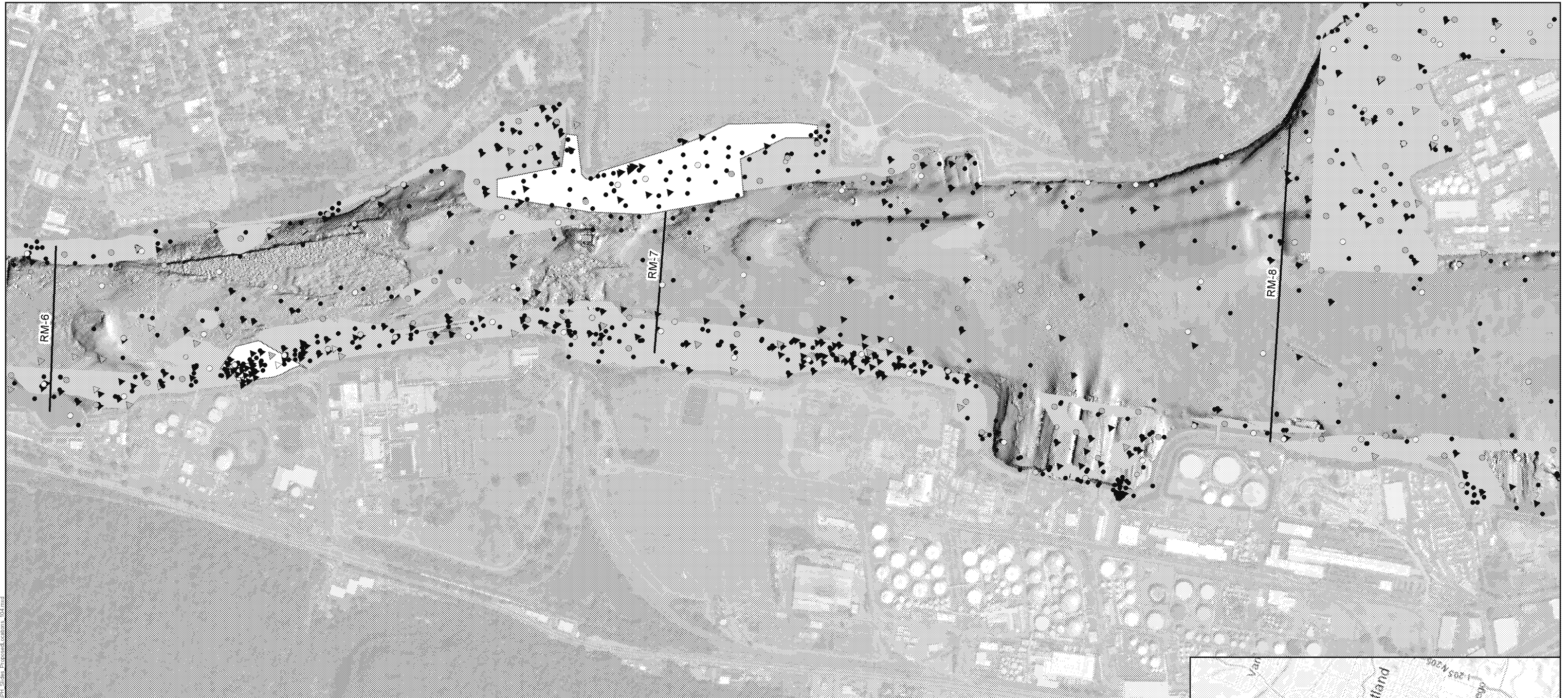


Notes:

1. FS - Feasibility Study
n - sample count
RI - Remedial Investigation
RM - river mile
SMA - sediment management area
2. References:
FS samples obtained from USEPA, 2016.
Post RI/FS samples compiled from: GSI Water Solutions and Hart Crowser, 2008; GSI Water Solutions and Hart Crowser, 2010; GSI Water Solutions Inc., 2014; Kleinfelder, 2015; NewFields, 2016; and Geosyntec, 2016.
3. Aerial Imagery provided by ESRI Basemaps 2017

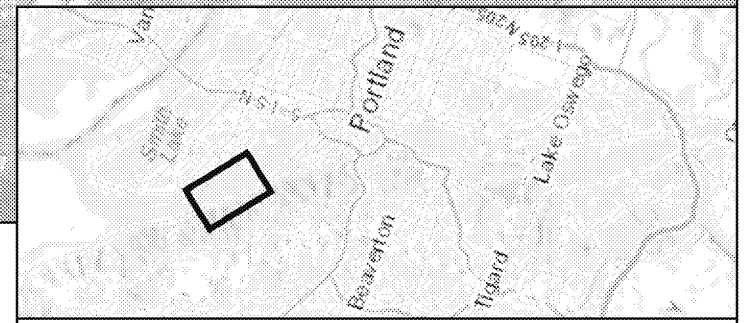


PDI Sediment Sampling Locations RM 4-6	
Portland Harbor Superfund Site	
Geosyntec consultants	
CDN OPS	22-Sep-2017
Figure 4b	



Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

<p>Legend</p> <ul style="list-style-type: none"> ○ Unbiased Sediment Sample Location (n=258) ⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87) ⊗ Additional Sediment Grab Location for SMA Delineation (n=175) △ Additional Subsurface Core Location for SMA Delineation (n=90) 	<p>Historical Sample Locations</p> <ul style="list-style-type: none"> △ Post RI/FS Subsurface Surface Sediment Location (2013 to 2016) ○ Post RI/FS Surface Sediment Sample Location (2013 to 2016) ● FS Surface Sediment Sample ▲ FS Subsurface Sediment Sample 	<ul style="list-style-type: none"> — River Mile Marker ■ Alt F Mod SMA Footprint □ Capped Area
<p>500 250 0 500 1,000 Feet</p>		
<p>Notes:</p> <ol style="list-style-type: none"> 1. FS - Feasibility Study n - sample count RI - Remedial Investigation RM - river mile SMA - sediment management area 2. References: FS samples obtained from USEPA, 2016. Post RI/FS samples compiled from: GSI Water Solutions and Hart Crowser, 2008; GSI Water Solutions and Hart Crowser, 2010; GSI Water Solutions Inc., 2014; Kleinfelder, 2015; NewFields, 2016; and Geosyntec, 2016. 3. Aerial Imagery provided by ESRI Basemaps 2017 		



PDI Sediment Sampling Locations RM 6-8	
Portland Harbor Superfund Site	
Geosyntec consultants	
CDN OPS	22-Sep-2017
Figure 4c	



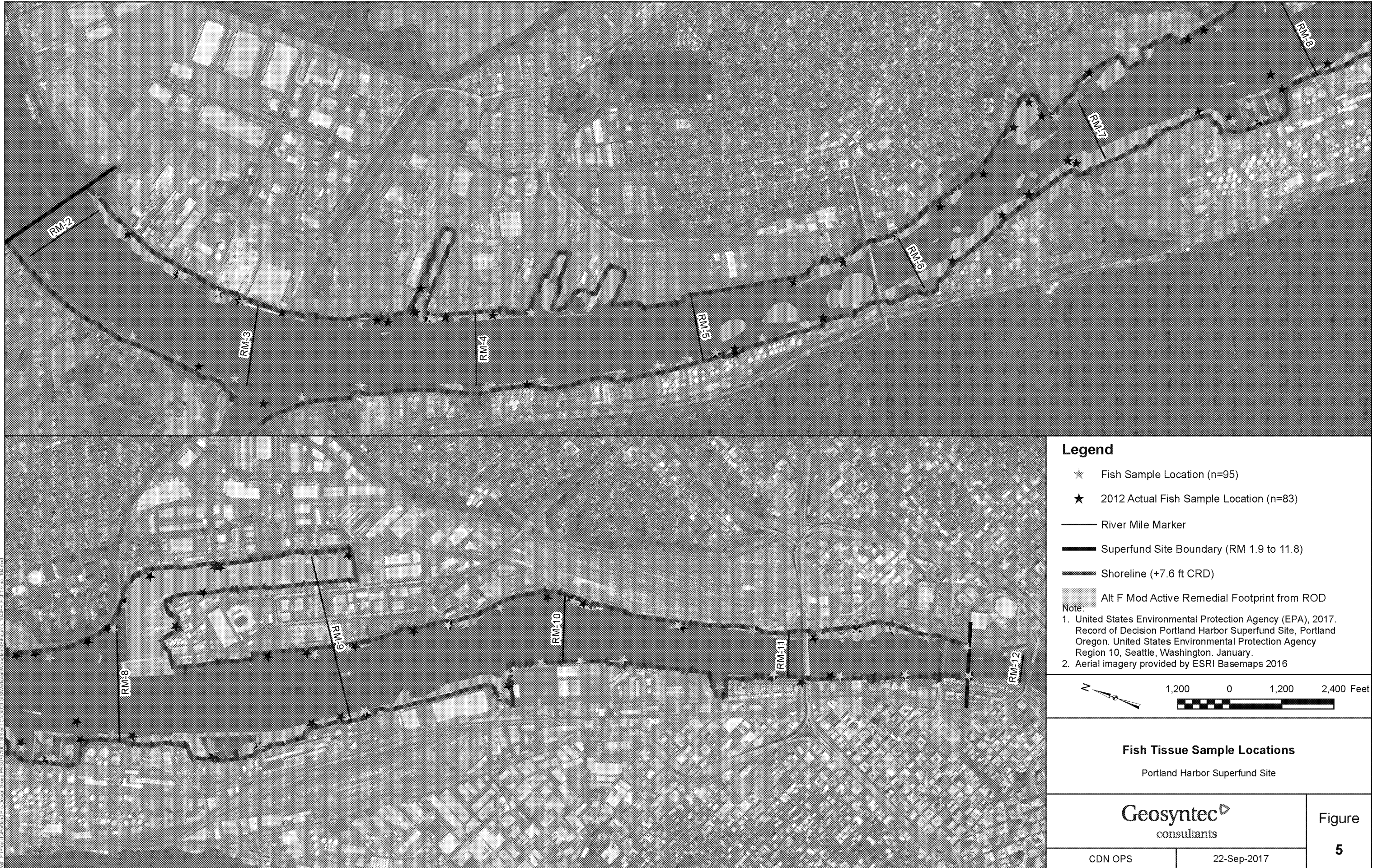
Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

<p>Legend</p> <ul style="list-style-type: none"> ○ Unbiased Sediment Sample Location (n=258) ⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87) ⊗ Additional Sediment Grab Location for SMA Delineation (n=175) △ Additional Subsurface Core Location for SMA Delineation (n=90) 	<p>Historical Sample Locations</p> <ul style="list-style-type: none"> △ Post RI/FS Subsurface Surface Sediment Location (2013 to 2016) ○ Post RI/FS Surface Sediment Sample Location (2013 to 2016) ● FS Surface Sediment Sample ▲ FS Subsurface Sediment Sample <p>— River Mile Marker</p> <p>■ Alt F Mod SMA Footprint</p> <p>□ Capped Area</p> <p>500 250 0 500 1,000 Feet</p>	<p>Notes:</p> <ol style="list-style-type: none"> 1. FS - Feasibility Study n - sample count RI - Remedial Investigation RM - river mile SMA - sediment management area 2. References: FS samples obtained from USEPA, 2016. Post RI/FS samples compiled from: GSI Water Solutions and Hart Crowser, 2008; GSI Water Solutions and Hart Crowser, 2010; GSI Water Solutions Inc., 2014; Kleinfelder, 2015; NewFields, 2016; and Geosyntec, 2016. 3. Aerial Imagery provided by ESRI Basemaps 2017 		<p>PDI Sediment Sampling Locations RM 8-10</p> <p>Portland Harbor Superfund Site</p>	<p>Geosyntec consultants</p> <p>CDN OPS 22-Sep-2017</p>	<p>Figure 4d</p>
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Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

<p>Legend</p> <ul style="list-style-type: none"> ○ Unbiased Sediment Sample Location (n=258) ⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87) ⊗ Additional Sediment Grab Location for SMA Delineation (n=175) △ Additional Subsurface Core Location for SMA Delineation (n=90) 	<p>Historical Sample Locations</p> <ul style="list-style-type: none"> △ Post RI/FS Subsurface Surface Sediment Location (2013 to 2016) ○ Post RI/FS Surface Sediment Sample Location (2013 to 2016) ● FS Surface Sediment Sample ▲ FS Subsurface Sediment Sample <p>— River Mile Marker</p> <p>Alt F Mod SMA Footprint</p> <p>Capped Area</p> <p>500 250 0 500 1,000 Feet</p>	<p>Notes:</p> <ol style="list-style-type: none"> 1. FS - Feasibility Study n - sample count RI - Remedial Investigation RM - river mile SMA - sediment management area 2. References: FS samples obtained from USEPA, 2016. Post RI/FS samples compiled from: GSI Water Solutions and Hart Crowser, 2008; GSI Water Solutions and Hart Crowser, 2010; GSI Water Solutions Inc., 2014; Kleinfelder, 2015; NewFields, 2016; and Geosyntec, 2016. 3. Aerial Imagery provided by ESRI Basemaps 2017 		<p align="center">PDI Sediment Sampling Locations RM 10-12</p> <p align="center">Portland Harbor Superfund Site</p>	<p align="center">Geosyntec consultants</p> <p>CDN OPS 22-Sep-2017</p>	<p align="center">Figure 4e</p>
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Legend

- ☆ Fish Sample Location (n=95)
- ★ 2012 Actual Fish Sample Location (n=83)
- River Mile Marker
- Superfund Site Boundary (RM 1.9 to 11.8)
- Shoreline (+7.6 ft CRD)
- Alt F Mod Active Remedial Footprint from ROD

Note:

1. United States Environmental Protection Agency (EPA), 2017. Record of Decision Portland Harbor Superfund Site, Portland Oregon. United States Environmental Protection Agency Region 10, Seattle, Washington. January.
2. Aerial imagery provided by ESRI Basemaps 2016

1,200 0 1,200 2,400 Feet

Fish Tissue Sample Locations
Portland Harbor Superfund Site

Geosyntec
consultants

Figure
5

CDN OPS 22-Sep-2017



Legend

- Surface Water Sample Location (n=21)
- Sediment Trap Sample Location (n=4)
- Surface Water Transect

Note:

1. Aerial Imagery provided by ESRI Basemaps 2016
2. One composited sample will be collected per transect. The sample will be vertically-composited and horizontally-composited along the transect.



**PDI Surface Water
and Sediment Trap Sampling Locations**
Portland Harbor Superfund Site

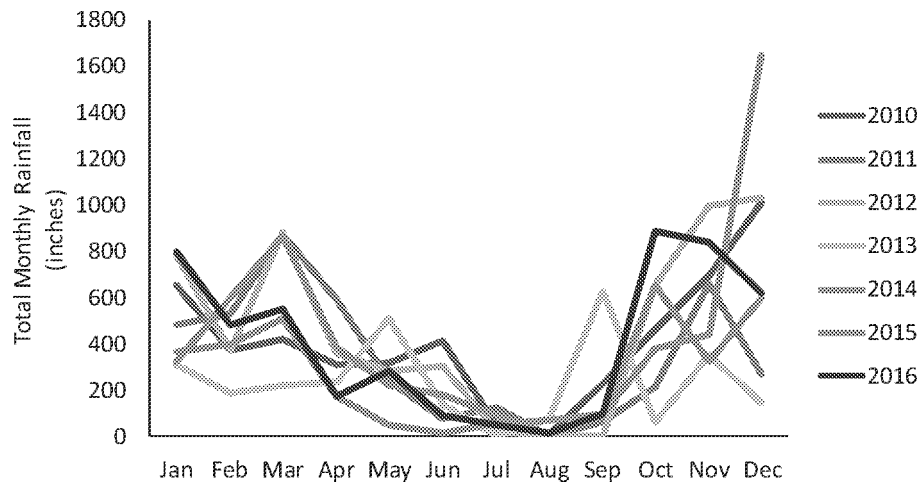
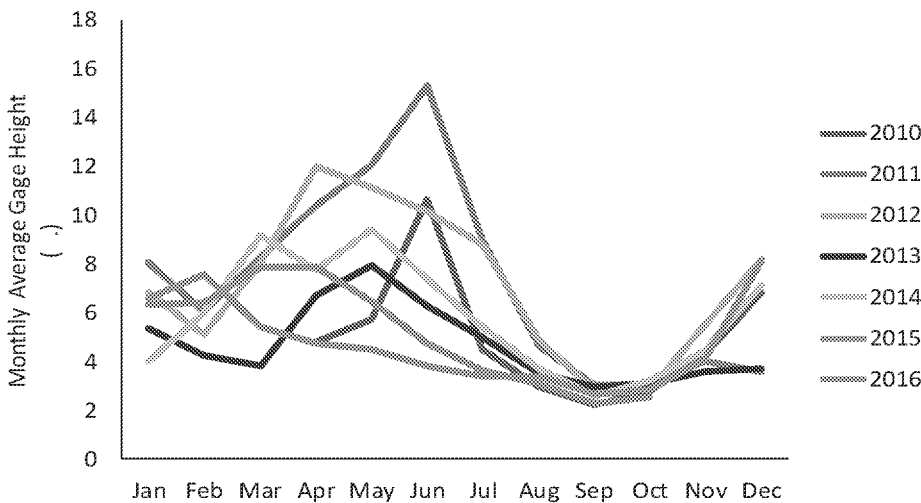
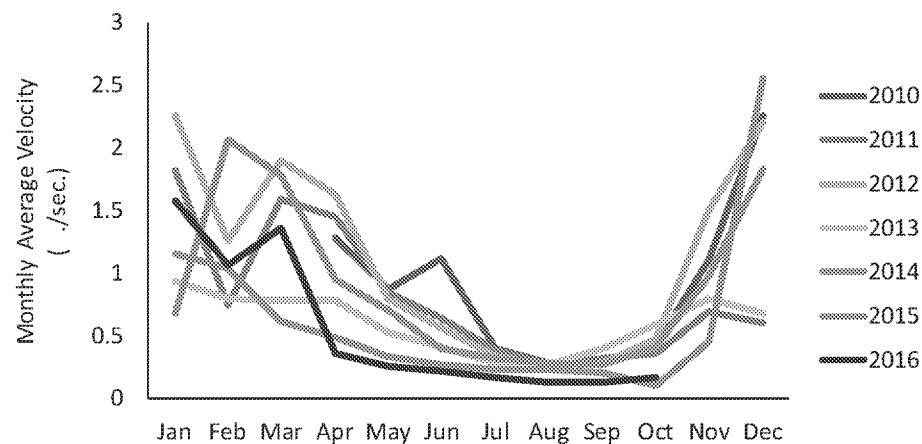
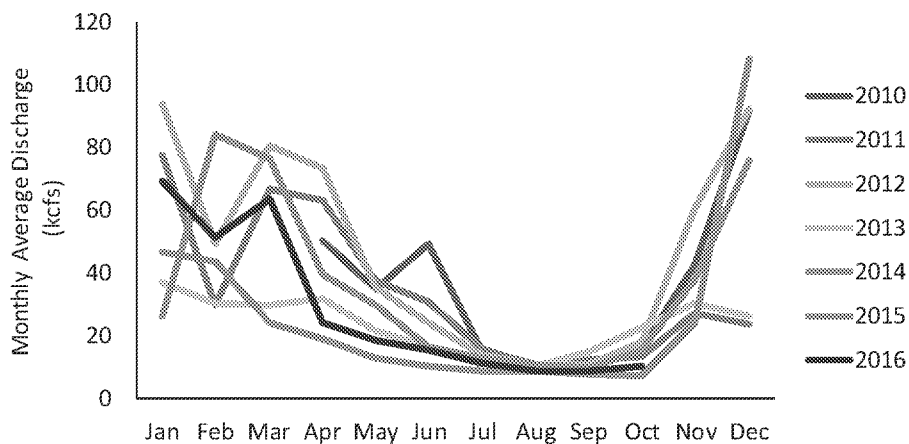
Geosyntec
consultants

Figure
6

CDN OPS

22-Sep-2017

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Notes:

kcfs – Thousand cubic feet per second
 ft./sec. – feet per second
 ft. – feet

1. Data were obtained from USGS Oregon Water Science Center for Station ID 14211720 Willamette River at Portland, OR near the Morrison Bridge (<https://or.water.usgs.gov>); and provisional, uncorrected raw data from the Swan Island Pump Station Rain Gauge for the City of Portland Hydra Network (https://or.water.usgs.gov/precip/swan_island_pump.rain).

Monthly Average Discharge, Velocity, Gauge Height, and Rainfall
 Portland Harbor Superfund Site

Geosyntec
 consultants

Figure
 7

CDN OPS

25-Aug-2017



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Note:
1. AECOM, 2017

Fish Tracking Pilot Study (June 2017) Vessel Routes and Hydrophone and Camera Locations at RM 11.5E Study Area Portland Harbor Superfund Site		Figure 8
Geosyntec consultants		
CDN OPS	25-Aug-2017	



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airborne DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Note:
1. AECOM, 2017

**Fish Tracking Pilot Study (June 2017)
Hydrophone and Camera Locations
at Willamette Cove Study Area**

Portland Harbor Superfund Site



Figure
9

CDN OPS

25-Aug-2017



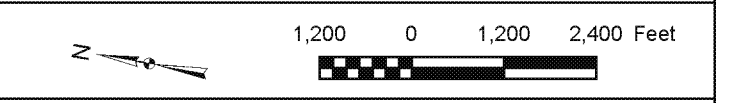
Legend

Percent Fines - Surface Sediment Zidell Cap

- < 15%
- 15% - 30%
- > 30%

Note:

1. Percent Fines defined as the percentage (mass) of material that passed through a 0.06 mm sieve.
2. Aerial Imagery provided by ESRI Basemaps 2017
3. RM = River Mile
4. RI samples obtained from USEPA 2016; Post RI samples obtained from GSI and Hart Croswr, Inc. 2008 and Kleinfelder 2015.
5. Zidell Cap is approximate only; Figure 5-4 Sediment Alternative 4 (ZRZ Realty Company), Dated 2004-11-01, Revised 2004-11-29.



**Percent Fines in Surface Sediment - Upriver
(Downtown/Upstream)**
Portland Harbor Superfund Site

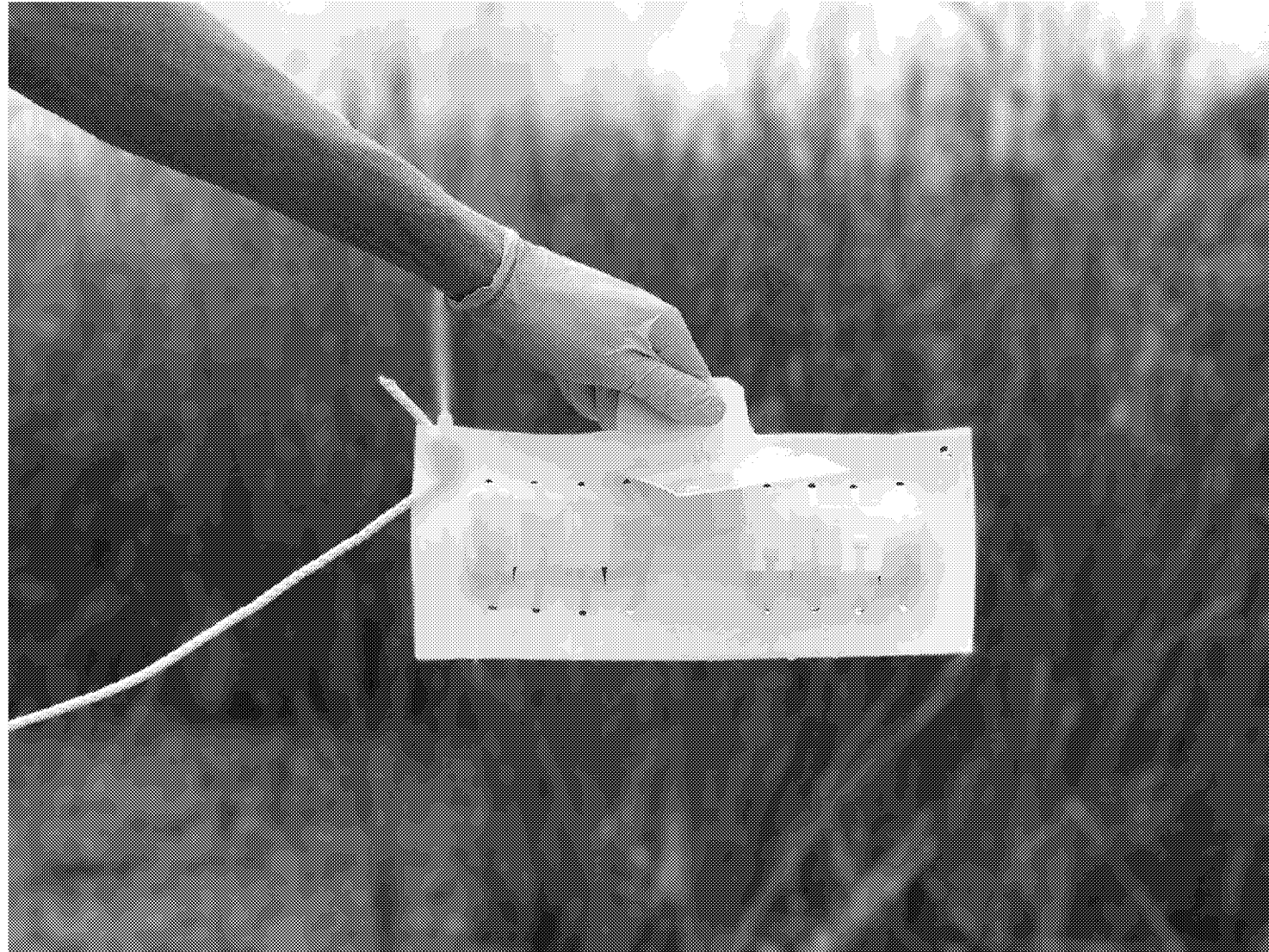
		Figure 10a
CDN OPS	25-Aug-2017	

CDN OPS



Path: P:\Projects\Portland Harbor\GIS\Map_Series\Map_Series_CSG_Portal_104581.aprx; M: 11791.mxd

<p>Legend</p> <ul style="list-style-type: none"> ● Upriver Sediment Grab Sample Location (n=40) ○ Additional Upriver Sediment Grab Sample Location (n=20) ★ Fish Tissue Sample Location (n=25) ✱ Additional Fish Tissue Sample Location (n=15) ◆ Surface Water Sample Location (n=6) ◇ Sediment Trap Sample Location (n=4) ▬ Surface Water Transect ● Historical Sediment Grab Sample □ Zidell Cap 		<p>Note:</p> <ol style="list-style-type: none"> 1. Aerial Imagery provided by ESRI Basemaps 2017 2. RM = River Mile 3. Upriver sampling area consists of the Downtown Reach (RM 11.8 to 16.6) and Upstream Reach (RM 16.6 to 20) (EPA, 2017) 4. RI samples obtained from USEPA 2016; Post RI samples obtained from GSI and Hart Croswar, Inc. 2008 and Kleinfelder 2015 5. Zidell Cap is approximate only; Figure 5-4 Sediment Alternative 4 (ZRZ Realty Company), Dated 2004-11-01, Revised 2004-11-29 6. Sediment grab locations to be confirmed in the field and placed in areas of fine-grained material 	<p>0.8 0 0.8 Miles</p> <p style="text-align: center;">Upriver (Downtown/Upstream) Sampling Area Portland Harbor Superfund Site</p> <p style="text-align: center;">Geosyntec consultants</p> <p style="text-align: center;">CDN OPS 21-Sep-2017</p>	<p style="text-align: center;">Figure 10b</p>
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Photographs of Porewater Peepers

Portland Harbor Superfund Site

Geosyntec[®]
consultants

Figure

11

CDN OPS

20-Aug-2017



Note (09/21/17) - Surface sediment sample locations shown in this figure are example placements only and will not reflect the final positioning and numbers of the final sampling design. Revised sampling locations will be included in the Sampling and Analysis Plan, and the reader is referred to the updated sample design description in the main text and Appendix B.

Legend

○ Unbiased Sediment Sample Location (n=258)	◆ Surface Water Sample Location (n=21)	■ Alternative F Mod Technology Assignment
⊙ Unbiased Surface Sediment Sample at 2004 Reoccupied Station (n=87)	◇ Sediment Trap Sample Location (n=4)	
⊗ Additional Sediment Grab Location for SMA Delineation (n=175)	— Surface Water Transect	
▲ Additional Subsurface Core Location for SMA Delineation (n=90)	● Upriver Sediment Grab Sample Location (n=40)	
* Fish Tissue Sample Location (n=120)	⊙ Additional Upriver Sediment Grab Sample Location (n=20)	
⋄ Additional Upriver Fish Tissue Sample Locations (n=15)		

Note:
 1. Aerial Imagery provided by ESRI Basemaps 2017
 2. RM = River Mile
 3. Site defined as RM 1.9 to 11.8
 4. Upriver defined as RM 11.8 to 20
 5. Upriver sediment grab locations to be confirmed in the field and placed in areas of fine-grained material

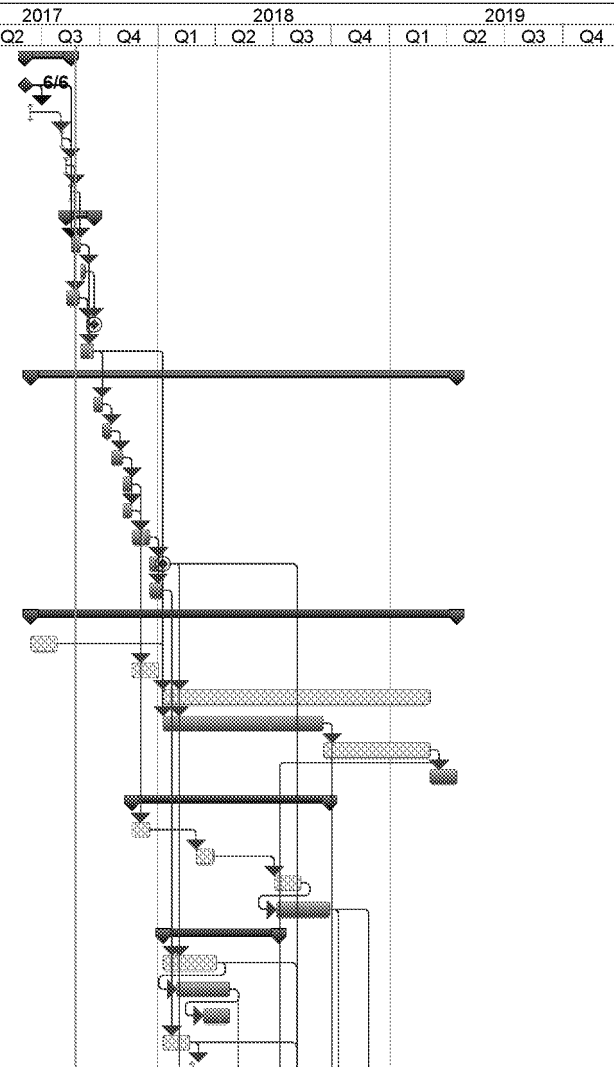
Summary of PDI Sampling Locations Portland Harbor Superfund Site	
CDN OPS	22-Sep-2017
Figure 12	

Project Start Date: Sun 1/1/17
 Project Finish Date: Thu 8/15/19

Portland Harbor Superfund Site Pre-RD Work Plan Project Schedule - Portland, OR

Draft for discussion purposes only

ID	Task Name	Duration	Start	Finish	Predecessors	2017				2018				2019				
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	Initial Scoping Meetings	53 days	Tue 6/6/17	Thu 8/17/17														
2	Receipt of Pre-RD Draft Scoping Plan from EPA	1 day	Tue 6/6/17	Tue 6/6/17														
3	June 14, 2017	1 day	Wed 6/14/17	Wed 6/14/17	2													
4	August 2, 2017	1 day	Wed 8/2/17	Wed 8/2/17	3													
5	August 9, 2017	1 day	Wed 8/9/17	Wed 8/9/17	4													
6	August 17, 2017	1 day	Thu 8/17/17	Thu 8/17/17	5													
7	Negotiate SOW, AOC, MOA	32 days	Thu 8/10/17	Fri 9/22/17														
8	Draft AOC/SOW (EPA due date Sept 6, 90 days later)	10 days	Fri 8/18/17	Thu 8/31/17	6,2													
9	Final AOC/SOW	6 days	Fri 9/1/17	Fri 9/8/17	8													
10	Draft Work Plan	14 days	Thu 8/10/17	Tue 8/29/17	5													
11	Signed AOC and Final Work Plan	10 days	Mon 9/11/17	Fri 9/22/17	9,10													
12	Select/Amend Contractors and Contracting	15 days	Fri 9/1/17	Thu 9/21/17	8													
13	Field Planning	478 days	Thu 6/15/17	Mon 4/15/19														
14	Expedite SAP for SW sampling and bathymetry	10 days	Fri 9/22/17	Thu 10/5/17	12													
15	Expedited SW QAPP/FSP to EPA	10 days	Fri 10/6/17	Thu 10/19/17	14													
16	EPA review/discuss expedited SAP	12 days	Fri 10/20/17	Mon 11/6/17	15													
17	Finalize expedited SW QAPP and Approval	10 days	Tue 11/7/17	Mon 11/20/17	16													
18	Draft FULL QAPP/FSP to EPA	10 days	Tue 11/7/17	Mon 11/20/17	16													
19	EPA review/discuss the SAP/QAPP	20 days	Tue 11/21/17	Mon 12/18/17	18													
20	Finalize Field Plans	15 days	Tue 12/19/17	Mon 1/8/18	19													
21	Contact site owners for access/ Sub Contracting	15 days	Tue 12/19/17	Mon 1/8/18	19													
22	Field Sampling and Lab Analysis	478 days	Thu 6/15/17	Mon 4/15/19														
23	Fish Tracking Pilot Study	30 days	Thu 6/15/17	Wed 7/26/17														
24	Collect Bathymetry Data	30 days	Tue 11/21/17	Mon 1/1/18	17													
25	Camera Survey	300 days	Tue 1/9/18	Mon 3/4/19	23,12,20													
26	Fish Tracking Full Study 0 to 7 months	180 days	Tue 1/9/18	Mon 9/17/18	23,12,20													
27	Fish Tracking Full Study 7 to 12 months	120 days	Tue 9/18/18	Mon 3/4/19	26													
28	Fish Tracking Analysis Results to EPA	30 days	Tue 3/5/19	Mon 4/15/19	27													
29	Collect Surface Water	223 days	Tue 11/21/17	Thu 9/27/18														
30	Collect SW transects -winter flood (Target Dec.)	20 days	Tue 11/21/17	Mon 12/18/17	17													
31	Collect SW transects - storm (Target Feb/March)	20 days	Fri 3/2/18	Thu 3/29/18	30													
32	Collect SW transects - summer low (Target Aug)	30 days	Tue 7/3/18	Mon 8/13/18	31													
33	data analysis and validation	60 days	Fri 7/6/18	Thu 9/27/18	32FS-90%													
34	Collect Surface Sediment Data	130 days	Tue 1/9/18	Mon 7/9/18														
35	Boat 1 - collect sediment grabs (200 grabs/mth)	60 days	Tue 1/9/18	Mon 4/2/18	20,21													
36	Lab testing and data validation (sediment)	60 days	Tue 1/30/18	Mon 4/23/18	35FS-75%													
37	Data analysis / database	30 days	Tue 3/13/18	Mon 4/23/18	36FS-50%													
38	Boat 2 - collect upstream sediment (10 grabs/wk)	30 days	Tue 1/9/18	Mon 2/19/18	21													
39	Boat 2 - deploy upstream porewater samples	5 days	Tue 2/20/18	Mon 2/26/18	38													



Task		Summary		External Milestone		Deadline	
Split		Project Summary		Manual Task			
Milestone		External Tasks		Progress			

C:\Anne Fitzpatrick\Portland Pre-Design Study (WIP)\Admin\Schedule\PHPRD_Gannt Schedule_V6_for EPA.mpp
 Red Font = deliverable to EPA
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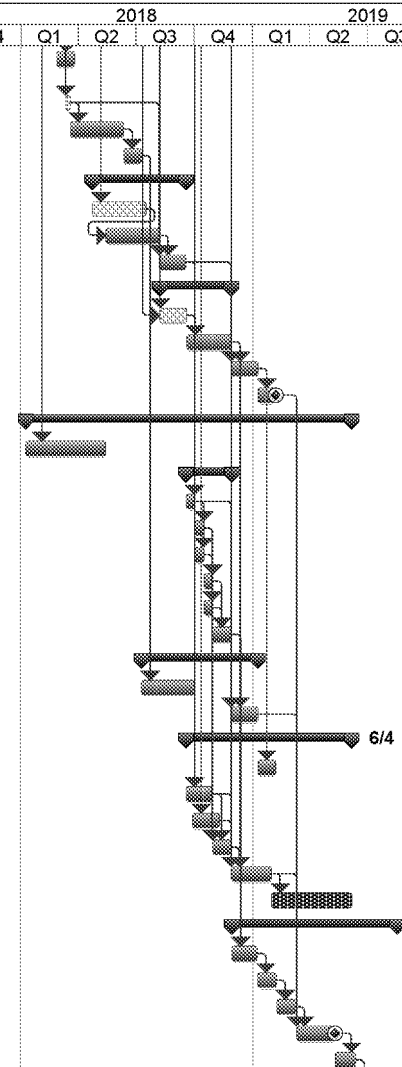
Note: Timeline is shown in working days, not calendar days.
 Last Updated: Fri 8/25/17
 Figure 13: Page 1 of 3

Project Start Date: Sun 1/1/17
 Project Finish Date: Thu 8/15/19

Portland Harbor Superfund Site Pre-RD Work Plan Project Schedule - Portland, OR

Draft for discussion purposes only

ID	Task Name	Duration	Start	Finish	Predecessors	2017				2018				2019					
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
40	Boat 2 - Help finish surface grabs while waiting to retrieve upstream porewater samples	20 days	Tue 2/27/18	Mon 3/26/18	39														
41	Boat 2 - collect upstream porewater samples	5 days	Tue 3/13/18	Mon 3/19/18	39FS+10 days														
42	Lab testing and data validation (PW)	60 days	Tue 3/20/18	Mon 6/11/18	41														
43	Database	20 days	Tue 6/12/18	Mon 7/9/18	42														
44	Collect Sediment Cores	105 days	Tue 4/24/18	Mon 9/17/18															
45	Boat 3 - collect sediment cores (50/mth)	60 days	Tue 4/24/18	Mon 7/16/18	36														
46	Lab testing and data validation	60 days	Tue 5/15/18	Mon 8/6/18	45FS-75%														
47	Database	30 days	Tue 8/7/18	Mon 9/17/18	35,38,41,46														
48	Collect Fish Tissue	80 days	Wed 8/8/18	Tue 11/27/18															
49	Collect Fish tissue (August/September 2018)	30 days	Wed 8/8/18	Tue 9/18/18	27FS-150%,20														
50	Data analysis and validation	50 days	Wed 9/19/18	Tue 11/27/18	49														
51	Database Management	30 days	Wed 11/28/18	Tue 1/8/19	47,50,33														
52	Send ALL validated data to EPA	20 days	Wed 1/9/19	Tue 2/5/19	51														
53	Data Analysis and Evaluation	366 days	Tue 1/9/18	Tue 6/4/19															
54	Evaluate technology decision tree	90 days	Tue 1/9/18	Mon 5/14/18	20														
55	Evaluate Sediment and SMAs	52 days	Tue 9/18/18	Wed 11/28/18															
56	Compile data into GIS maps and tables	10 days	Tue 9/18/18	Mon 10/1/18	47														
57	Calculate new sediment SWACs	10 days	Tue 10/2/18	Mon 10/15/18	56														
58	Evaluate MNR changes - sediment	10 days	Tue 10/2/18	Mon 10/15/18	56														
59	Refine SMA boundaries	10 days	Tue 10/16/18	Mon 10/29/18	57,58														
60	Evaluate technologies based on new elevations	10 days	Tue 10/16/18	Mon 10/29/18	57														
61	Run new footprints through decision tree	22 days	Tue 10/30/18	Wed 11/28/18	60,59														
62	Re-baseline Upstream	131 days	Tue 7/10/18	Tue 1/8/19															
63	Evaluate upstream - sediment	60 days	Tue 7/10/18	Mon 10/1/18	43														
64	Evaluate upstream - tissue, water, traps	30 days	Wed 11/28/18	Tue 1/8/19	50,33														
65	Re-baseline Site - Tissue and Risk	186 days	Tue 9/18/18	Tue 6/4/19															
66	Evaluate changes - tissue	20 days	Wed 1/9/19	Tue 2/5/19	51														
67	Evaluat Prelim Fish Tracking Results	30 days	Tue 9/18/18	Mon 10/29/18	26														
68	Evaluate surface water data	30 days	Fri 9/28/18	Thu 11/8/18	33														
69	Evaluate SWAC segment size from fish tracking study	20 days	Tue 10/30/18	Mon 11/26/18	57,67														
70	Calculate new baseline HH site risk	45 days	Wed 11/28/18	Tue 1/29/19	50,33,56,67,68,69														
71	Preliminary Foodweb modeling analysis (separate)	90 days	Wed 1/30/19	Tue 6/4/19	70														
72	Deliverables	186 days	Thu 11/29/18	Thu 8/15/19															
73	Remedial SMA Footprint Report to EPA	28 days	Thu 11/29/18	Mon 1/7/19	61														
74	EPA Review	22 days	Tue 1/8/19	Wed 2/6/19	73														
75	Revisions to the SMA Footprint to EPA	22 days	Thu 2/7/19	Fri 3/8/19	74														
76	PDI Evaluation Report to EPA	44 days	Mon 3/11/19	Thu 5/9/19	52,64,70,75														
77	EPA review	22 days	Fri 5/10/19	Mon 6/10/19	76														



Task		Summary		External Milestone		Deadline	
Split		Project Summary		Manual Task			
Milestone		External Tasks		Progress			

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Note: Timeline is shown in working days, not calendar days.
 Last Updated: Fri 8/25/17
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Project Start Date: Sun 1/1/17
 Project Finish Date: Thu 8/15/19

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 Portland, OR**

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ID	Task Name	Duration	Start	Finish	Predecessors	2017				2018				2019						
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
78	Revisions and Final PDI Evaluation Report to EPA	35 days	Tue 6/11/19	Mon 7/29/19	77															
79	Posting of Electronic Final Files	10 days	Tue 7/30/19	Mon 8/12/19	78															
80	ASAOC/SOW Notice of Completion (TBD)	3 days	Tue 8/13/19	Thu 8/15/19	79															

Task		Summary		External Milestone		Deadline	
Split		Project Summary		Manual Task			
Milestone		External Tasks		Progress			

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