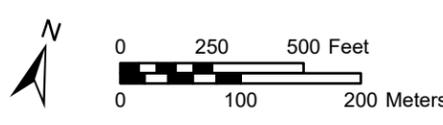
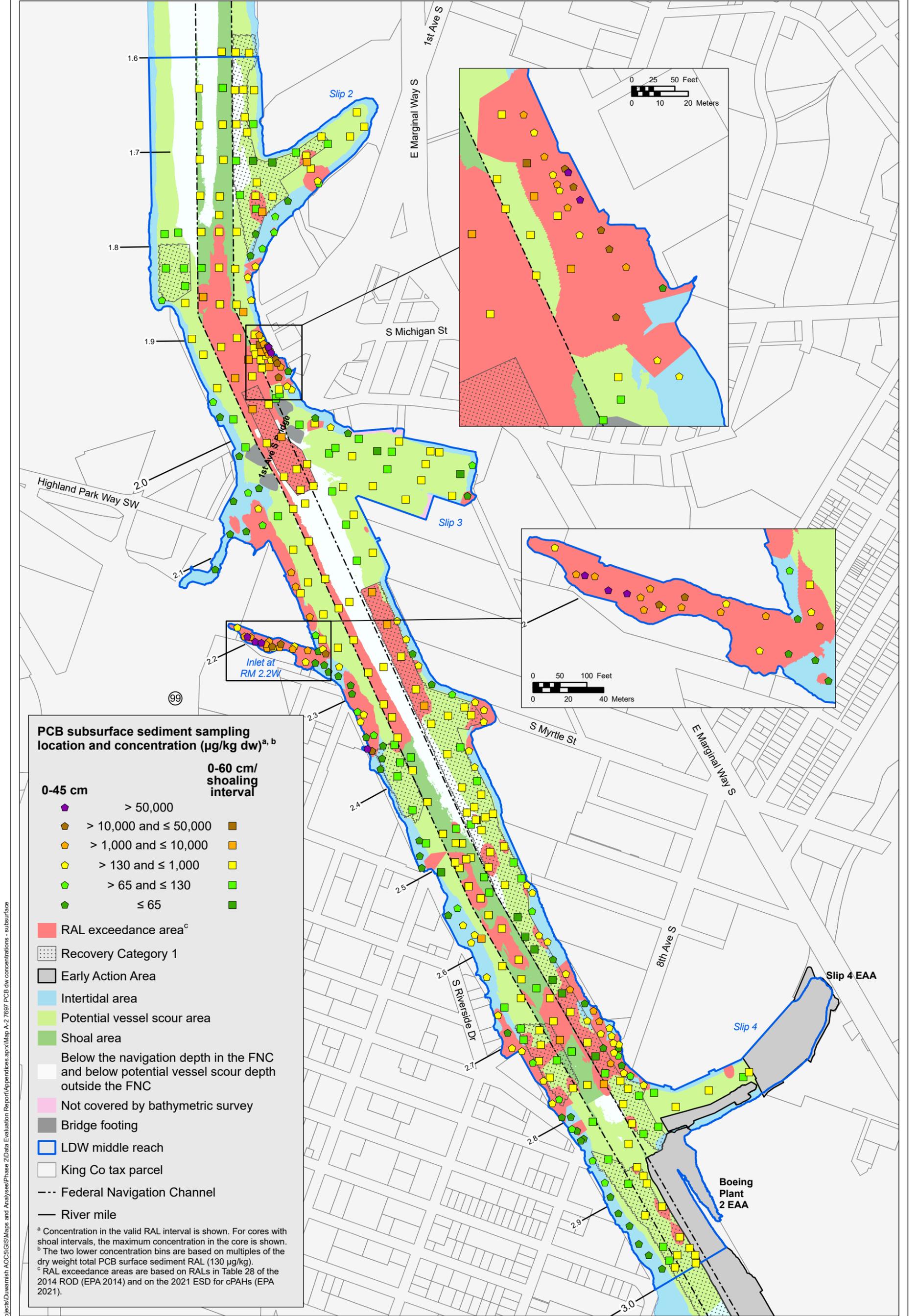


Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_A-1_7697_PCB dw concentrations - surface





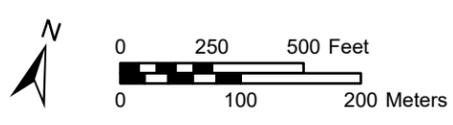
PCB subsurface sediment sampling location and concentration ($\mu\text{g}/\text{kg dw}$)^{a, b}

0-45 cm		0-60 cm/ shoaling interval	
	> 50,000		> 10,000 and \leq 50,000
	> 10,000 and \leq 50,000		> 1,000 and \leq 10,000
	> 1,000 and \leq 10,000		> 130 and \leq 1,000
	> 65 and \leq 130		> 65 and \leq 130
	\leq 65		\leq 65

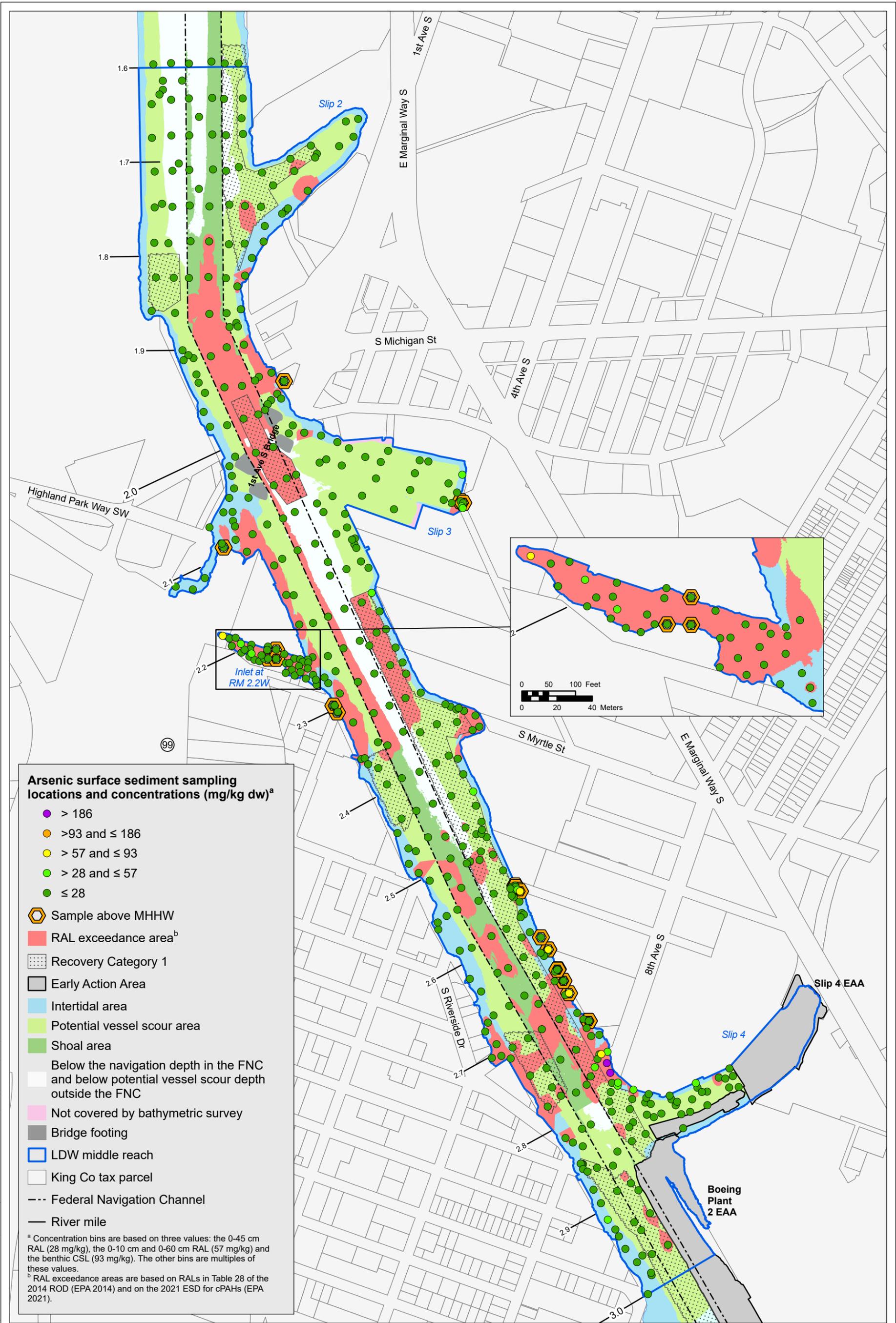
- RAL exceedance area^c
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Concentration in the valid RAL interval is shown. For cores with shoal intervals, the maximum concentration in the core is shown.
^b The two lower concentration bins are based on multiples of the dry weight total PCB surface sediment RAL (130 $\mu\text{g}/\text{kg}$).
^c RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).

Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation\Report\Appendices.aprx\Map A-2 7697 PCB dw concentrations - subsurface



Map A-2. Subsurface sediment total PCB Aroclor concentrations in the design dataset



Arsenic surface sediment sampling locations and concentrations (mg/kg dw)^a

- > 186
- >93 and ≤ 186
- > 57 and ≤ 93
- > 28 and ≤ 57
- ≤ 28

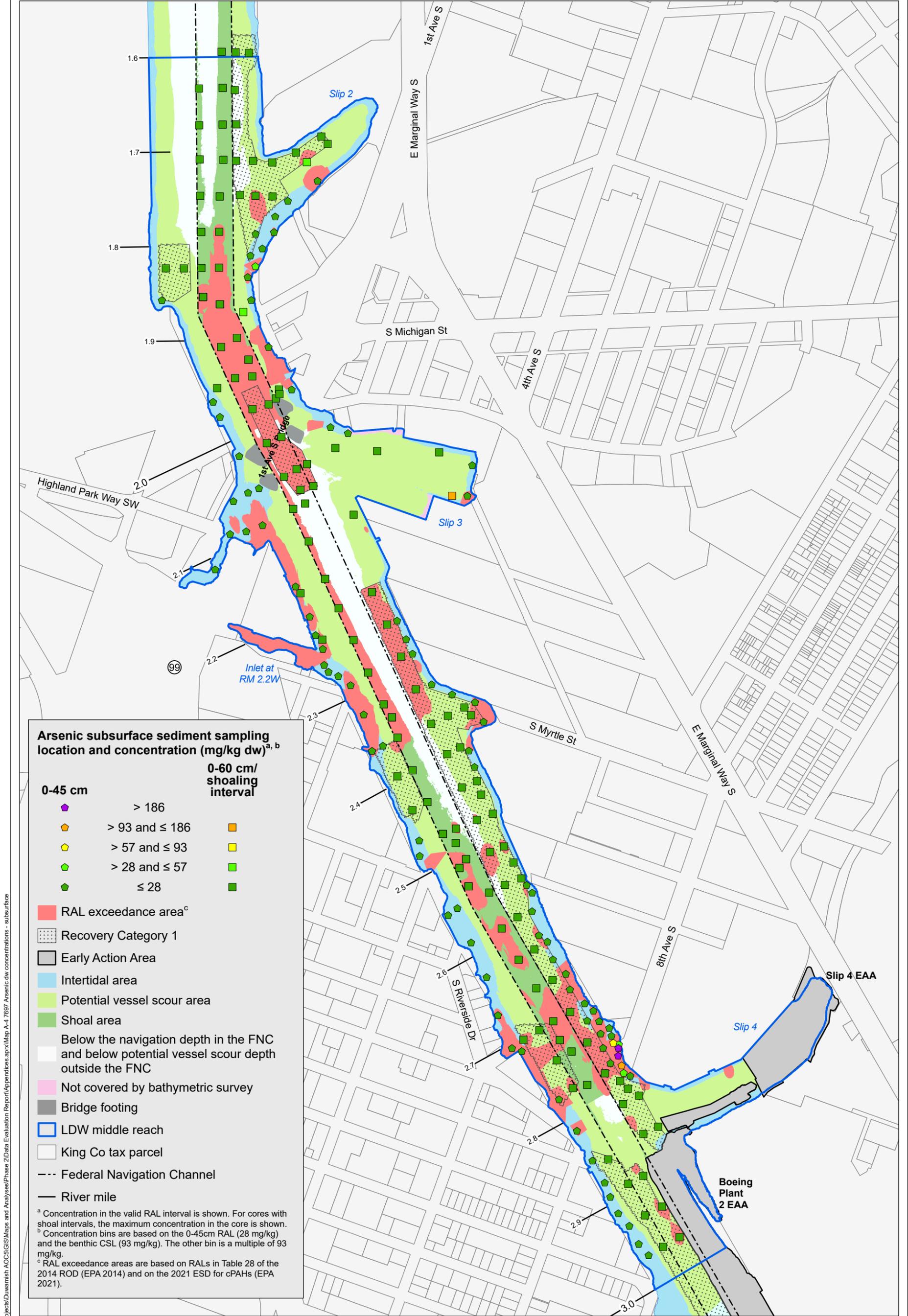
- Sample above MHHW
- RAL exceedance area^b
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Concentration bins are based on three values: the 0-45 cm RAL (28 mg/kg), the 0-10 cm and 0-60 cm RAL (57 mg/kg) and the benthic CSL (93 mg/kg). The other bins are multiples of these values.

^b RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).



Prepared by ClaireC. 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map A-3 7697 Arsenic.dwg concentrations - surface



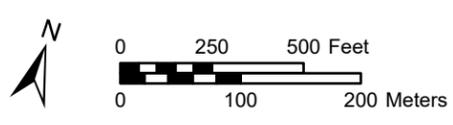
Arsenic subsurface sediment sampling location and concentration (mg/kg dw)^{a, b}

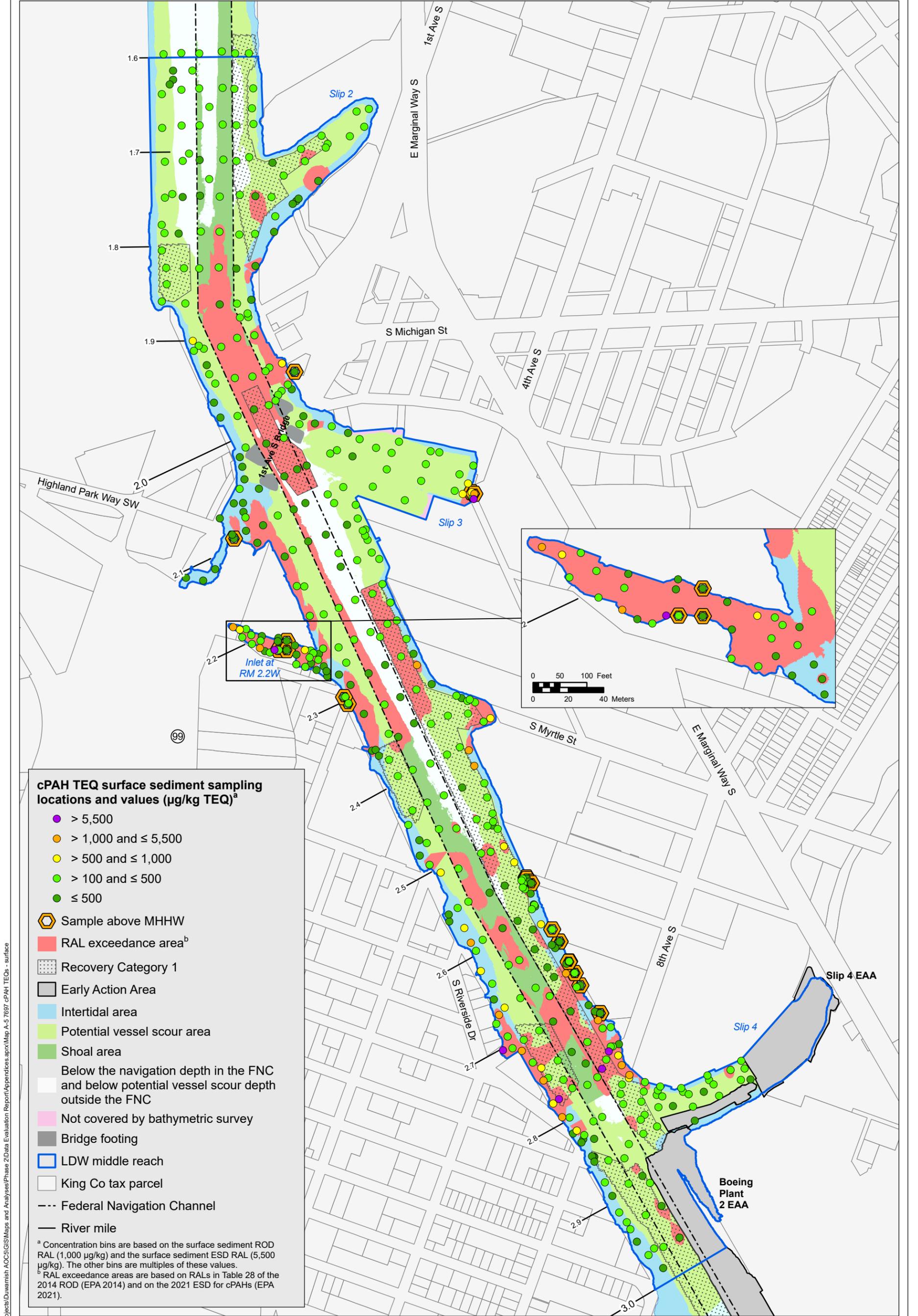
0-45 cm	0-60 cm/ shoaling interval
<ul style="list-style-type: none"> ◆ > 186 ◆ > 93 and ≤ 186 ◆ > 57 and ≤ 93 ◆ > 28 and ≤ 57 ◆ ≤ 28 	<ul style="list-style-type: none"> ◆ > 93 and ≤ 186 ◆ > 57 and ≤ 93 ◆ > 28 and ≤ 57 ◆ ≤ 28

- RAL exceedance area^c
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Concentration in the valid RAL interval is shown. For cores with shoal intervals, the maximum concentration in the core is shown.
^b Concentration bins are based on the 0-45cm RAL (28 mg/kg) and the benthic CSL (93 mg/kg). The other bin is a multiple of 93 mg/kg.
^c RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).

Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_A-4_7697_Arsenic_dw_concentrations - subsurface





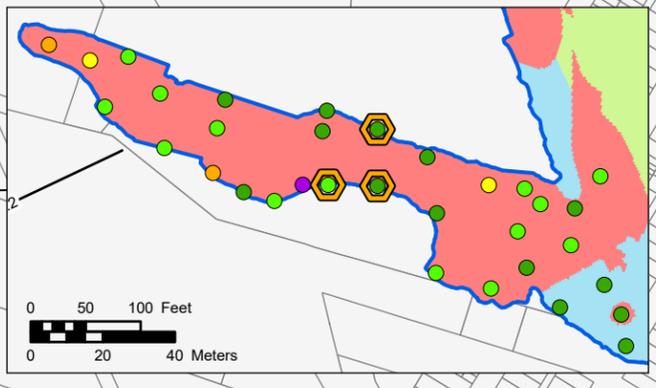
cPAH TEQ surface sediment sampling locations and values ($\mu\text{g}/\text{kg}$ TEQ)^a

- > 5,500
- > 1,000 and \leq 5,500
- > 500 and \leq 1,000
- > 100 and \leq 500
- \leq 500

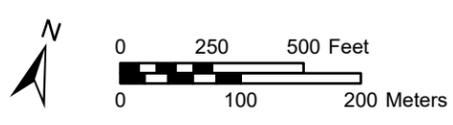
- Sample above MHHW
- RAL exceedance area^b
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

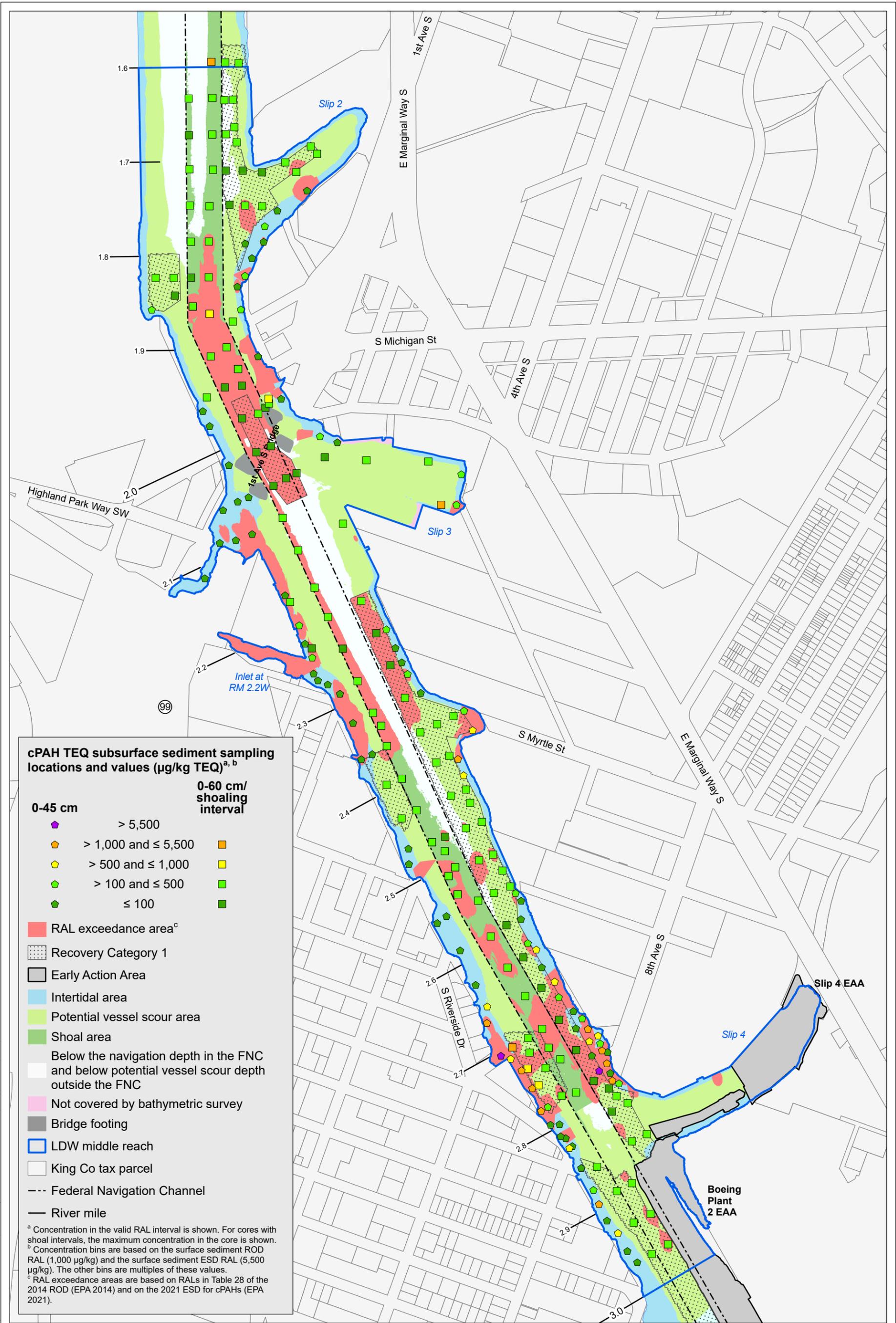
^a Concentration bins are based on the surface sediment ROD RAL (1,000 $\mu\text{g}/\text{kg}$) and the surface sediment ESD RAL (5,500 $\mu\text{g}/\text{kg}$). The other bins are multiples of these values.

^b RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).



Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_A-5_7897_cPAH TEQs - surface





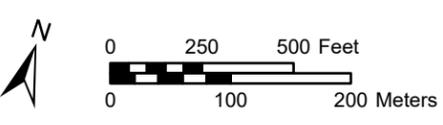
cPAH TEQ subsurface sediment sampling locations and values ($\mu\text{g}/\text{kg}$ TEQ)^{a, b}

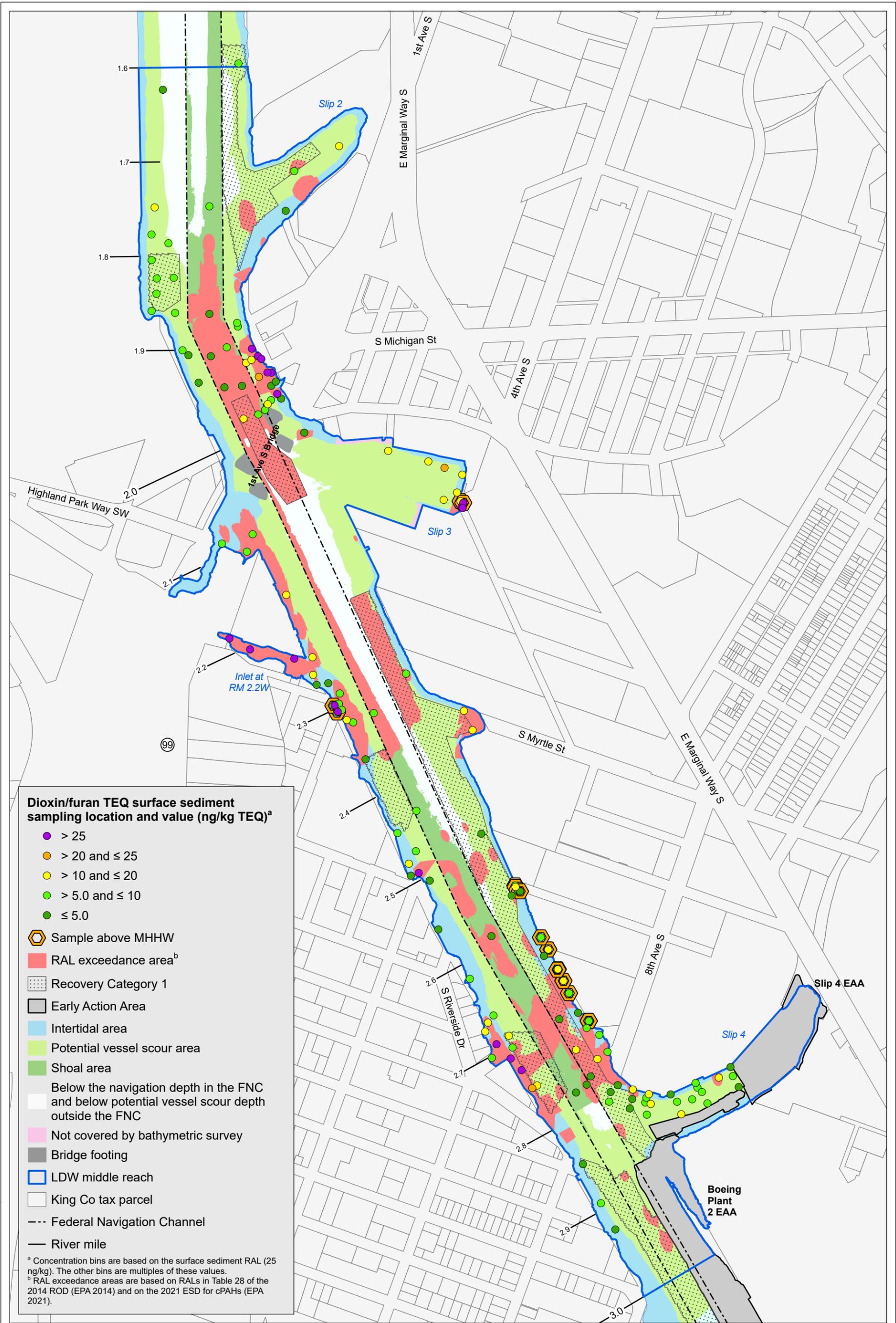
0-45 cm		0-60 cm/ shoaling interval	
	> 5,500		> 1,000 and \leq 5,500
	> 500 and \leq 1,000		> 100 and \leq 500
	> 100 and \leq 500		\leq 100

- RAL exceedance area^c
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

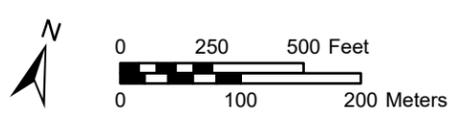
^a Concentration in the valid RAL interval is shown. For cores with shoal intervals, the maximum concentration in the core is shown.
^b Concentration bins are based on the surface sediment ROD RAL (1,000 $\mu\text{g}/\text{kg}$) and the surface sediment ESD RAL (5,500 $\mu\text{g}/\text{kg}$). The other bins are multiples of these values.
^c RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).

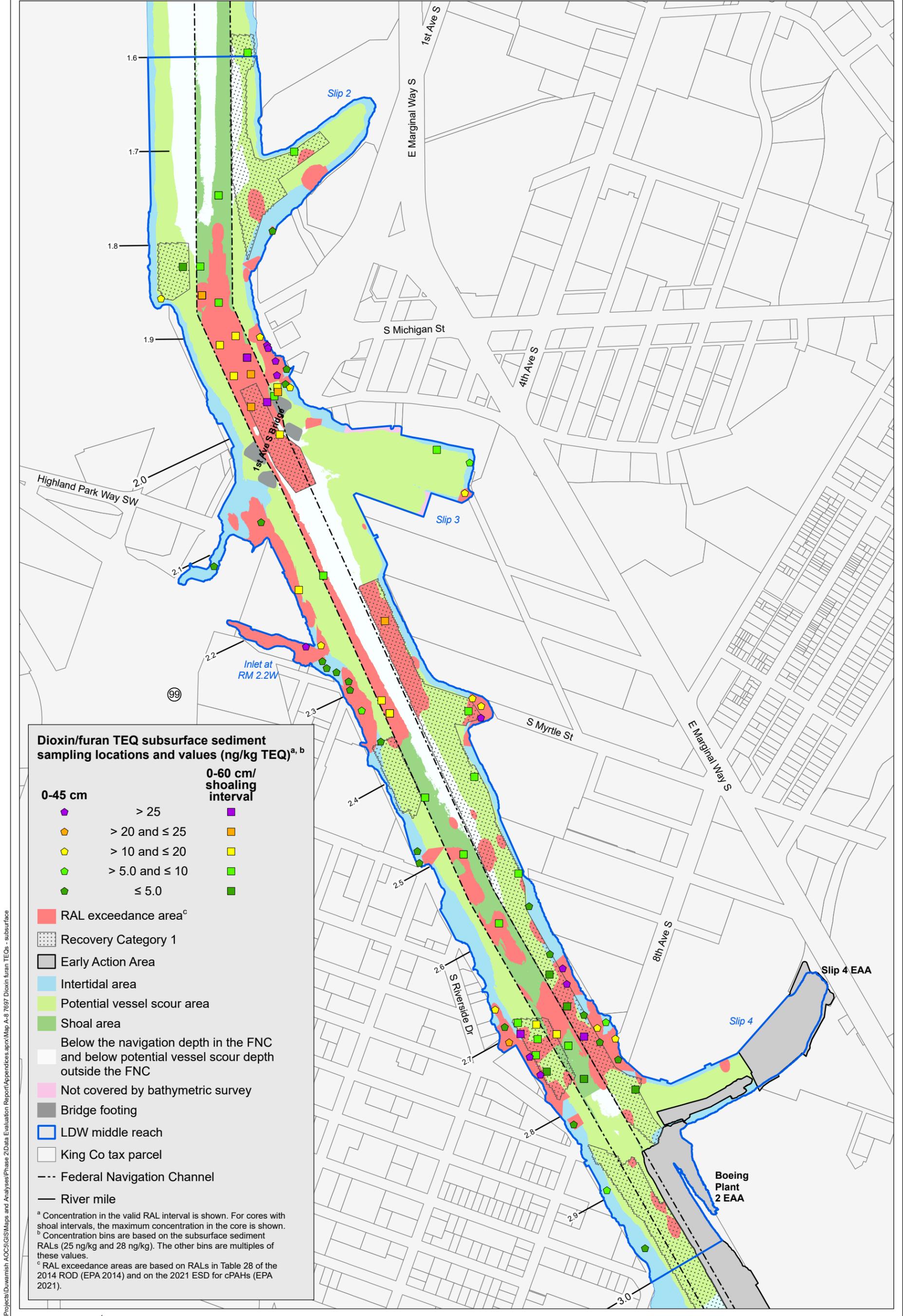
Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation\Report\Appendices\Map A-6 7697 cPAH TEQs - subsurface





Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2 Data Evaluation Report\Appendices.aprx\Map A-7 7697 Dioxin furan TEQs - surface



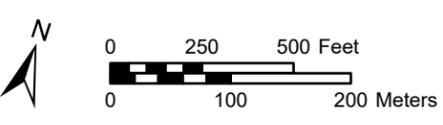


Dioxin/furan TEQ subsurface sediment sampling locations and values (ng/kg TEQ)^{a, b}

0-45 cm		0-60 cm/ shoaling interval	
■	> 25	■	> 25
■	> 20 and ≤ 25	■	> 20 and ≤ 25
■	> 10 and ≤ 20	■	> 10 and ≤ 20
■	> 5.0 and ≤ 10	■	> 5.0 and ≤ 10
■	≤ 5.0	■	≤ 5.0

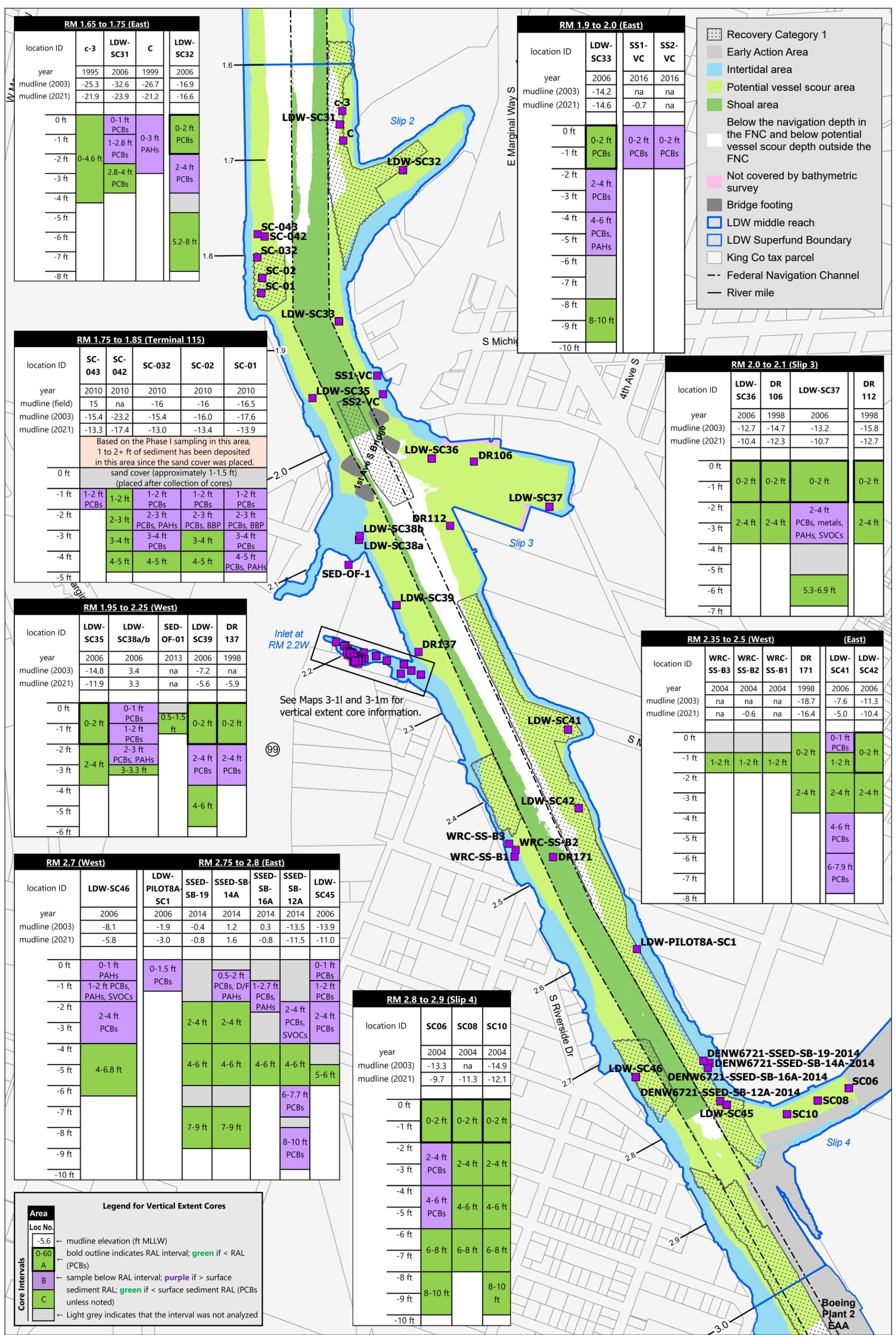
- RAL exceedance area^c
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Concentration in the valid RAL interval is shown. For cores with shoal intervals, the maximum concentration in the core is shown.
^b Concentration bins are based on the subsurface sediment RALs (25 ng/kg and 28 ng/kg). The other bins are multiples of these values.
^c RAL exceedance areas are based on RALs in Table 28 of the 2014 ROD (EPA 2014) and on the 2021 ESD for cPAHs (EPA 2021).



Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map A-8 7697 Dioxin furan TEQs - subsurface

Prepared by ClairC, 9/28/2025: W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices\Map A-9 7558 Pre-PDI Cores



RM 1.65 to 1.75 (East)				
location ID	c-3	LDW-SC31	C	LDW-SC32
year	1995	2006	1999	2006
mudline (2003)	-25.3	-32.6	-26.7	-16.9
mudline (2021)	-21.9	-23.9	-21.2	-16.6
0 ft		0-1 ft PCBs		0-2 ft PCBs
-1 ft		1-2.8 ft PCBs	0-3 ft PAHs	
-2 ft	0-4.6 ft			
-3 ft		2.8-4 ft PCBs		2-4 ft PCBs
-4 ft				
-5 ft				
-6 ft				5.2-8 ft
-7 ft				
-8 ft				

RM 1.9 to 2.0 (East)				
location ID	LDW-SC33	SS1-VC	SS2-VC	
year		2016	2016	
mudline (2003)		na	na	
mudline (2021)		-0.7	na	
0 ft	0-2 ft	0-2 ft	0-2 ft	
-1 ft	PCBs	PCBs	PCBs	
-2 ft	2-4 ft			
-3 ft	PCBs			
-4 ft	4-6 ft			
-5 ft	PCBs, PAHs			
-6 ft				
-7 ft				
-8 ft	8-10 ft			
-9 ft				
-10 ft				

RM 1.75 to 1.85 (Terminal 115)					
location ID	SC-043	SC-042	SC-032	SC-02	SC-01
year	2010	2010	2010	2010	2010
mudline (field)	15	na	-16	-16	-16.5
mudline (2003)	-15.4	-23.2	-15.4	-16.0	-17.6
mudline (2021)	-13.3	-17.4	-13.0	-13.4	-13.9
Based on the Phase I sampling in this area, 1 to 2+ ft of sediment has been deposited in this area since the sand cover was placed.					
sand cover (approximately 1-1.5 ft) (placed after collection of cores)					
0 ft					
-1 ft	1-2 ft PCBs	1-2 ft PCBs	1-2 ft PCBs	1-2 ft PCBs	1-2 ft PCBs
-2 ft		2-3 ft PCBs, PAHs	2-3 ft PCBs, BBP	2-3 ft PCBs, BBP	2-3 ft PCBs, BBP
-3 ft		3-4 ft PCBs	3-4 ft PCBs	3-4 ft PCBs	3-4 ft PCBs
-4 ft		4-5 ft	4-5 ft	4-5 ft	4-5 ft PCBs, PAHs
-5 ft					

RM 2.0 to 2.1 (Slip 3)				
location ID	LDW-SC36	DR 106	LDW-SC37	DR 112
year	2006	1998	2006	1998
mudline (2003)	-12.7	-14.7	-13.2	-15.8
mudline (2021)	-10.4	-12.3	-10.7	-12.7
0 ft				
-1 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft
-2 ft			2-4 ft	2-4 ft
-3 ft	2-4 ft	2-4 ft	PCBs, metals, PAHs, SVOCS	2-4 ft
-4 ft				
-5 ft				
-6 ft			5.3-6.9 ft	
-7 ft				

RM 1.95 to 2.25 (West)					
location ID	LDW-SC35	LDW-SC38a/b	SED-OF-01	LDW-SC39	DR 137
year	2006	2006	2013	2006	1998
mudline (2003)	-14.8	3.4	na	-7.2	na
mudline (2021)	-11.9	3.3	na	-5.6	-5.9
0 ft		0-1 ft PCBs	0.5-1.5 ft	0-2 ft	0-2 ft
-1 ft	0-2 ft	1-2 ft PCBs		2-4 ft	2-4 ft
-2 ft		2-3 ft PCBs, PAHs		2-4 ft	2-4 ft
-3 ft	2-4 ft	3-3.3 ft		4-6 ft	
-4 ft					
-5 ft					
-6 ft					

RM 2.35 to 2.5 (West) (East)						
location ID	WRC-SS-B3	WRC-SS-B2	WRC-SS-B1	DR 171	LDW-SC41	LDW-SC42
year	2004	2004	2004	1998	2006	2006
mudline (2003)	na	na	na	-18.7	-7.6	-11.3
mudline (2021)	na	-0.6	na	-16.4	-5.0	-10.4
0 ft					0-1 ft PCBs	0-2 ft
-1 ft	1-2 ft	1-2 ft	1-2 ft	0-2 ft	1-2 ft	0-2 ft
-2 ft				2-4 ft	2-4 ft	2-4 ft
-3 ft						
-4 ft						
-5 ft					4-6 ft PCBs	
-6 ft					6-7.9 ft PCBs	
-7 ft						
-8 ft						

RM 2.7 (West)		RM 2.75 to 2.8 (East)					
location ID	LDW-SC46	LDW-PILOT8A-SC1	SSED-SB-19	SSED-SB-14A	SSED-SB-16A	SSED-SB-12A	LDW-SC45
year	2006	2006	2014	2014	2014	2014	2006
mudline (2003)	-8.1	-1.9	-0.4	1.2	0.3	-13.5	-13.9
mudline (2021)	-5.8	-3.0	-0.8	1.6	-0.8	-11.5	-11.0
0 ft	0-1 ft PAHs	0-1.5 ft PCBs		0.5-2 ft PCBs, D/F PAHs	1-2.7 ft PCBs, PAHs	2-4 ft PCBs, SVOCs	0-1 ft PCBs
-1 ft	1-2 ft PCBs, PAHs, SVOCs					2-4 ft PCBs	1-2 ft PCBs
-2 ft	2-4 ft PCBs			2-4 ft	2-4 ft	2-4 ft PCBs, SVOCs	2-4 ft PCBs
-3 ft							
-4 ft							
-5 ft	4-6.8 ft			4-6 ft	4-6 ft	4-6 ft	5-6 ft
-6 ft							
-7 ft						6-7.7 ft PCBs	
-8 ft				7-9 ft	7-9 ft		
-9 ft						8-10 ft PCBs	
-10 ft							

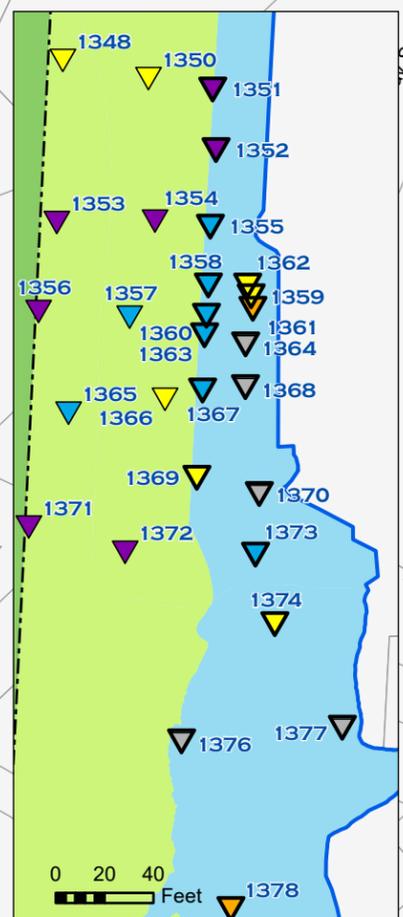
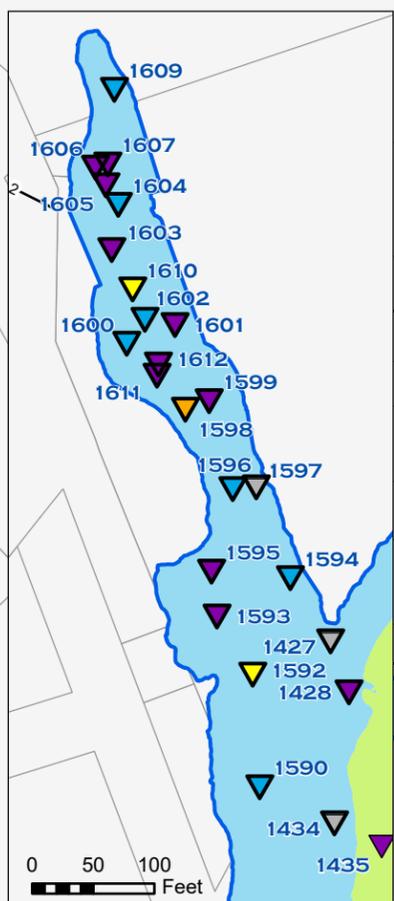
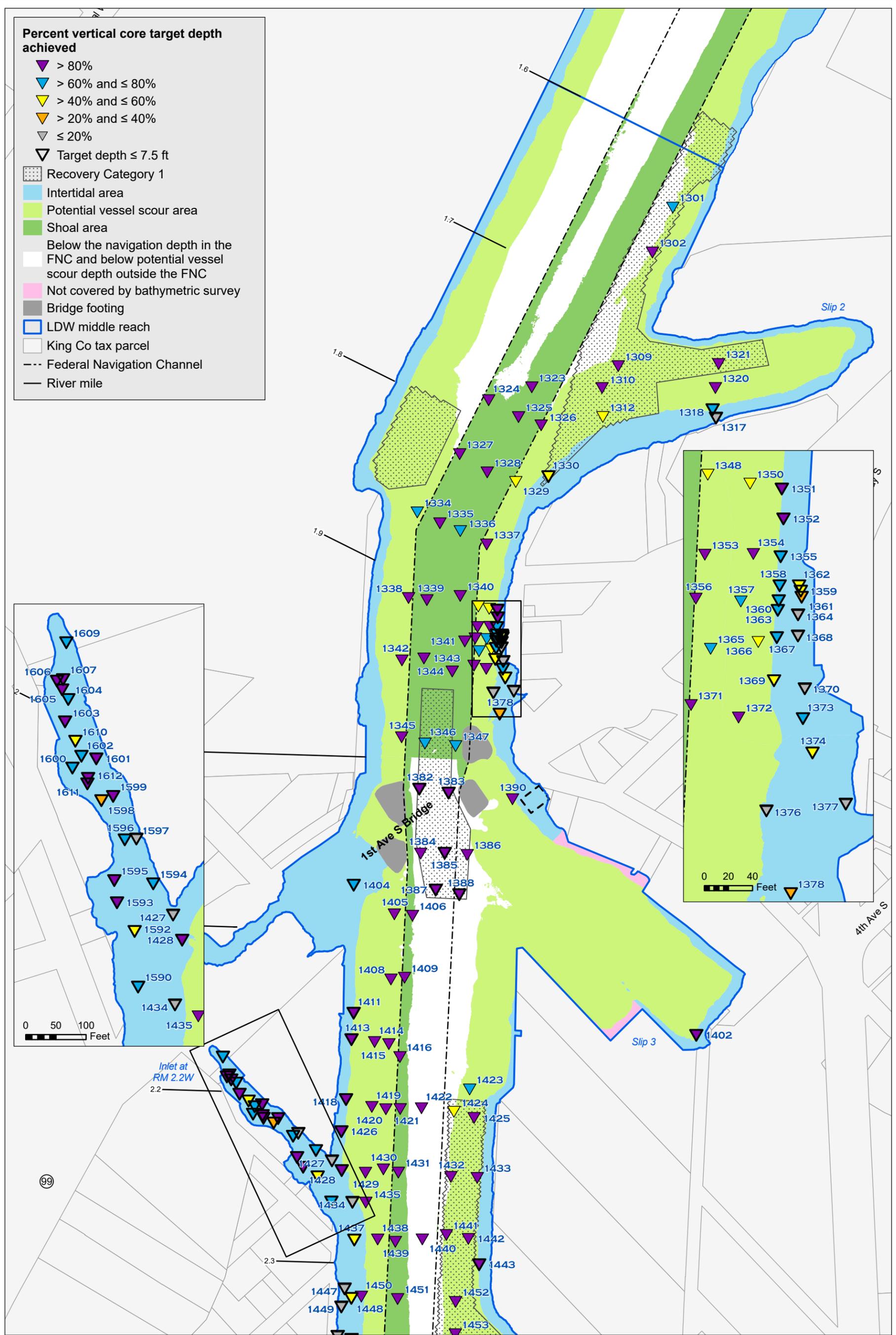
RM 2.8 to 2.9 (Slip 4)			
location ID	SC06	SC08	SC10
year	2004	2004	2004
mudline (2003)	-13.3	na	-14.9
mudline (2021)	-9.7	-11.3	-12.1
0 ft			
-1 ft	0-2 ft	0-2 ft	0-2 ft
-2 ft	2-4 ft	2-4 ft	2-4 ft
-3 ft	PCBs	2-4 ft	2-4 ft
-4 ft	4-6 ft	4-6 ft	4-6 ft
-5 ft	PCBs		
-6 ft	6-8 ft	6-8 ft	6-8 ft
-7 ft			
-8 ft	8-10 ft		8-10 ft
-9 ft			
-10 ft			

Legend for Vertical Extent Cores	
Area	
Loc No.	-5.6 → mudline elevation (ft MLLW)
A	bold outline indicates RAL interval; green if < RAL (PCBs)
B	sample below RAL interval; purple if > surface sediment RAL; green if < surface sediment RAL (PCBs unless noted)
C	Light grey indicates that the interval was not analyzed



Percent vertical core target depth achieved

- ▼ > 80%
- ▼ > 60% and ≤ 80%
- ▼ > 40% and ≤ 60%
- ▼ > 20% and ≤ 40%
- ▼ ≤ 20%
- ▼ Target depth ≤ 7.5 ft
- Recovery Category 1
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

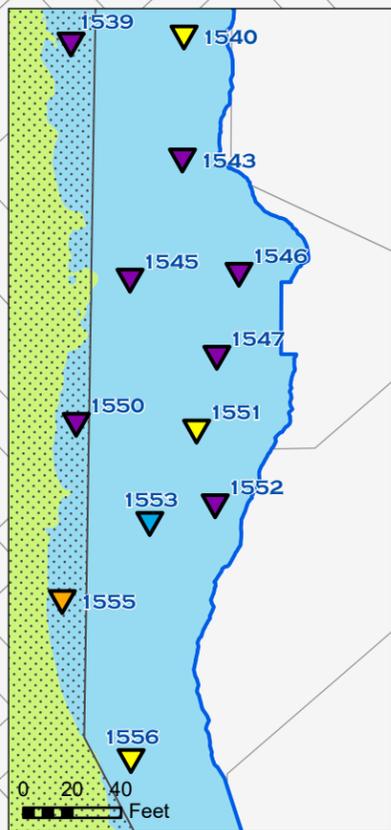


Prepared by ClairC, 9/28/2025, W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices\Map A-10 7660 Vertical core depths

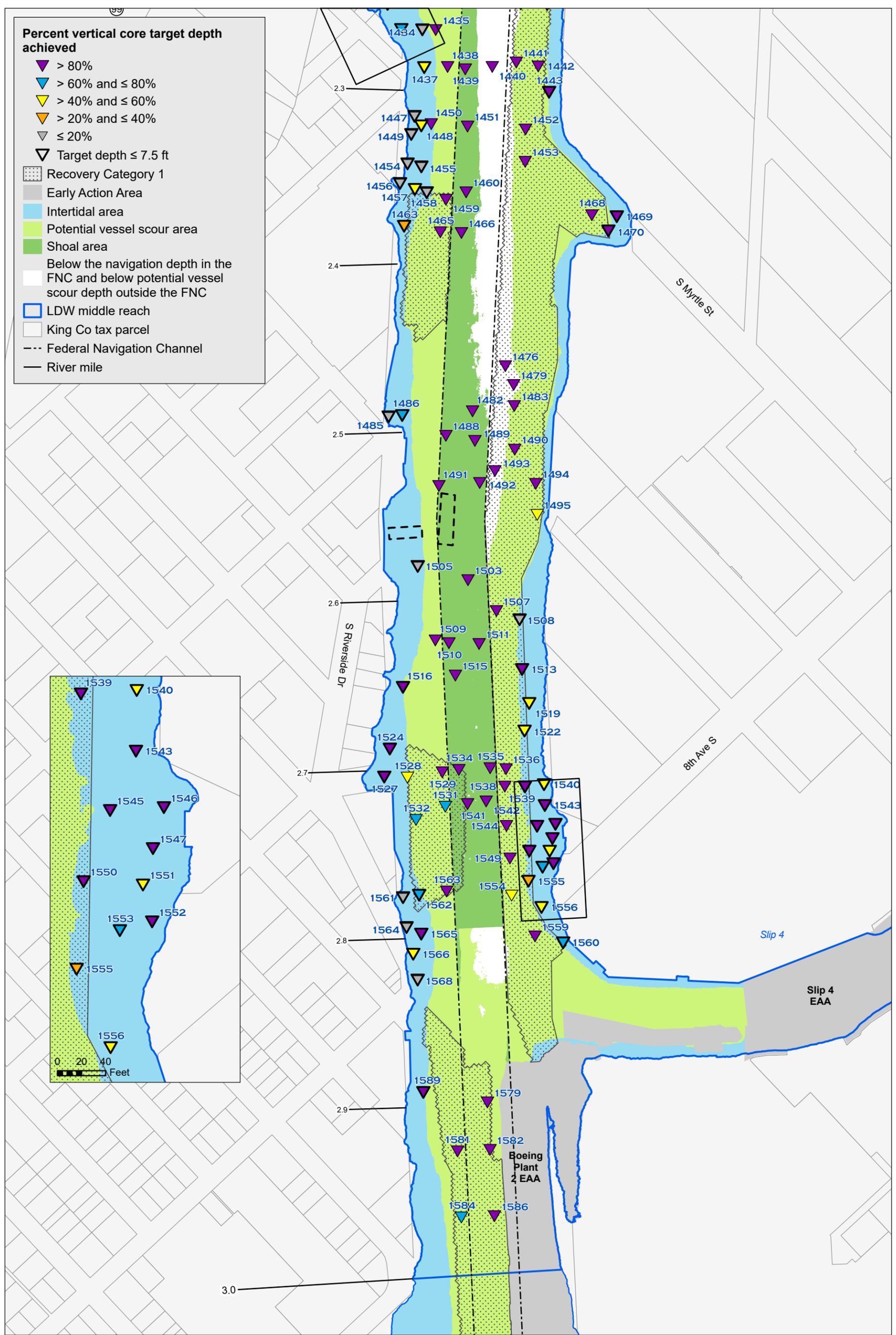
Percent vertical core target depth achieved

- ▲ > 80%
- ▲ > 60% and ≤ 80%
- ▲ > 40% and ≤ 60%
- ▲ > 20% and ≤ 40%
- ▲ ≤ 20%
- ▼ Target depth ≤ 7.5 ft

- ▨ Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile



Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices\Map A-10 7650 Vertical core depths



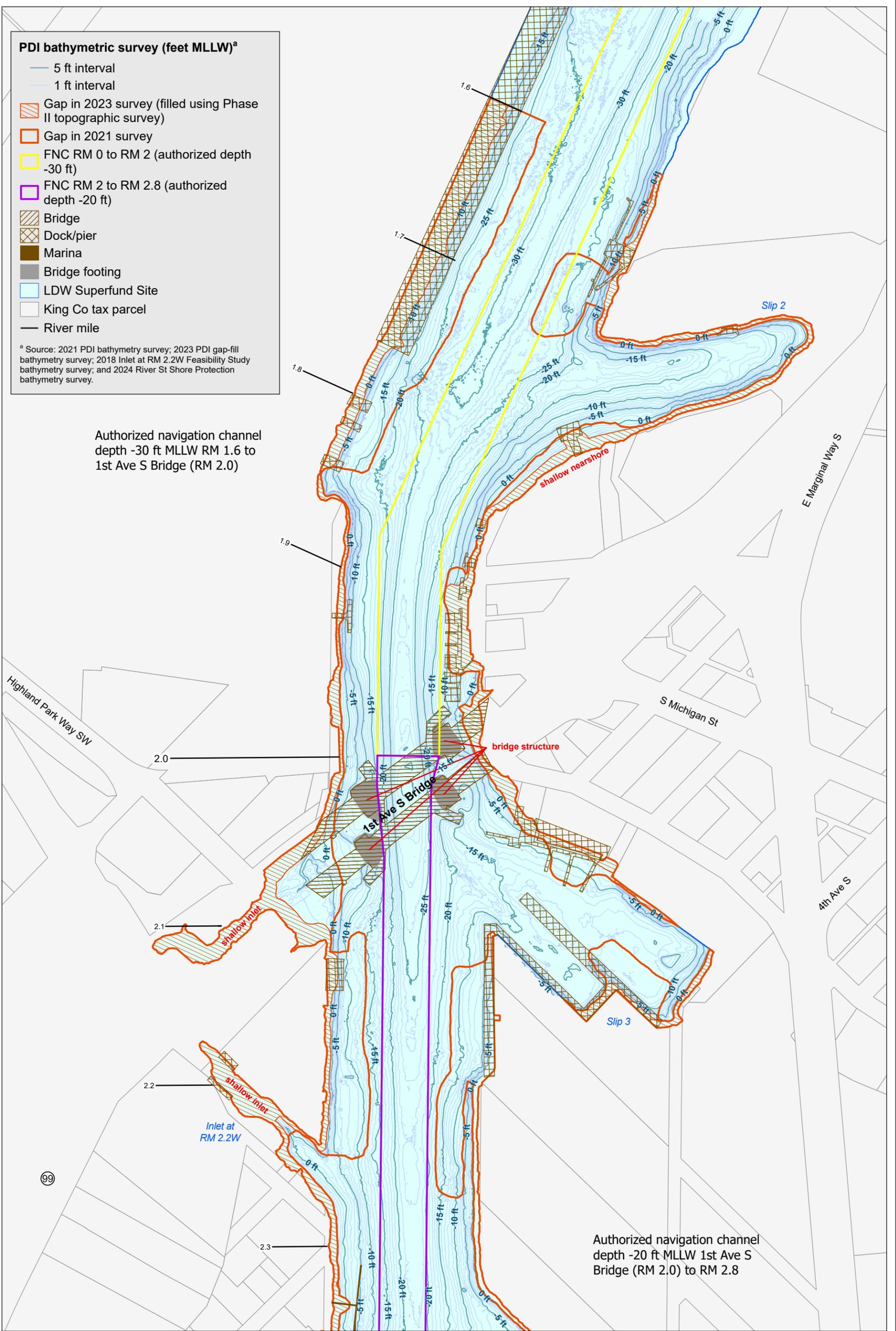
PDI bathymetric survey (feet MLLW)^a

- 5 ft interval
- 1 ft interval
- Gap in 2023 survey (filled using Phase II topographic survey)
- Gap in 2021 survey
- FNC RM 0 to RM 2 (authorized depth -30 ft)
- FNC RM 2 to RM 2.8 (authorized depth -20 ft)
- Bridge
- Dock/pier
- Marina
- Bridge footing
- LDW Superfund Site
- King Co tax parcel
- River mile

^a Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.

Authorized navigation channel depth -30 ft MLLW RM 1.6 to 1st Ave S Bridge (RM 2.0)

Authorized navigation channel depth -20 ft MLLW 1st Ave S Bridge (RM 2.0) to RM 2.8



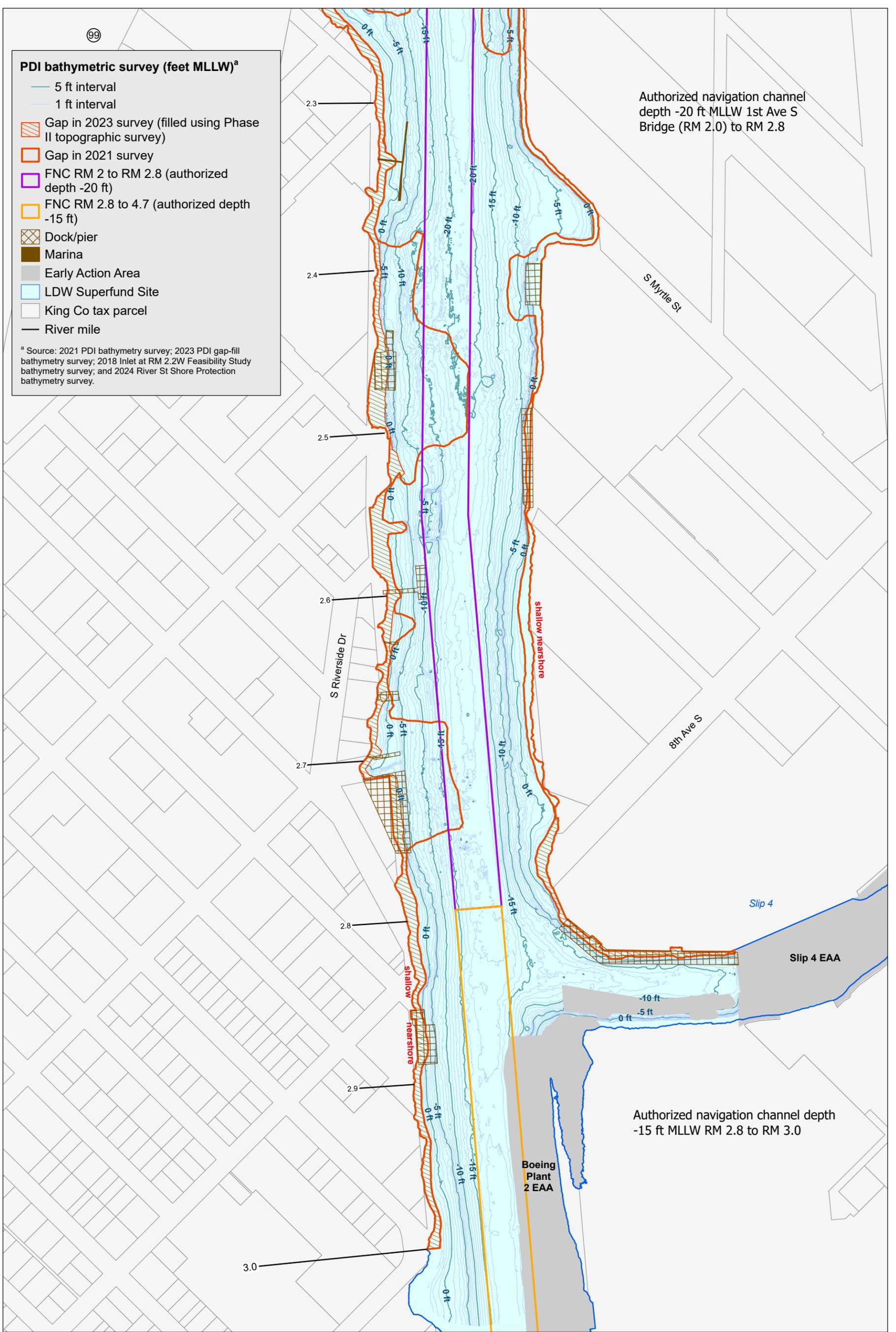
Prepared by ClaireC. 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map E-1 7421 2023 Bathymetric conditions

PDI bathymetric survey (feet MLLW)^a

- 5 ft interval
- 1 ft interval
- Gap in 2023 survey (filled using Phase II topographic survey)
- Gap in 2021 survey
- FNC RM 2 to RM 2.8 (authorized depth -20 ft)
- FNC RM 2.8 to 4.7 (authorized depth -15 ft)
- Dock/pier
- Marina
- Early Action Area
- LDW Superfund Site
- King Co tax parcel
- River mile

^a Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.

Authorized navigation channel depth -20 ft MLLW 1st Ave S Bridge (RM 2.0) to RM 2.8

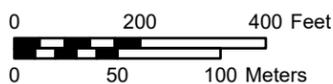


Authorized navigation channel depth -15 ft MLLW RM 2.8 to RM 3.0

Prepared by ClaireC, 9/28/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_E-1_7421_2023 Bathymetric conditions

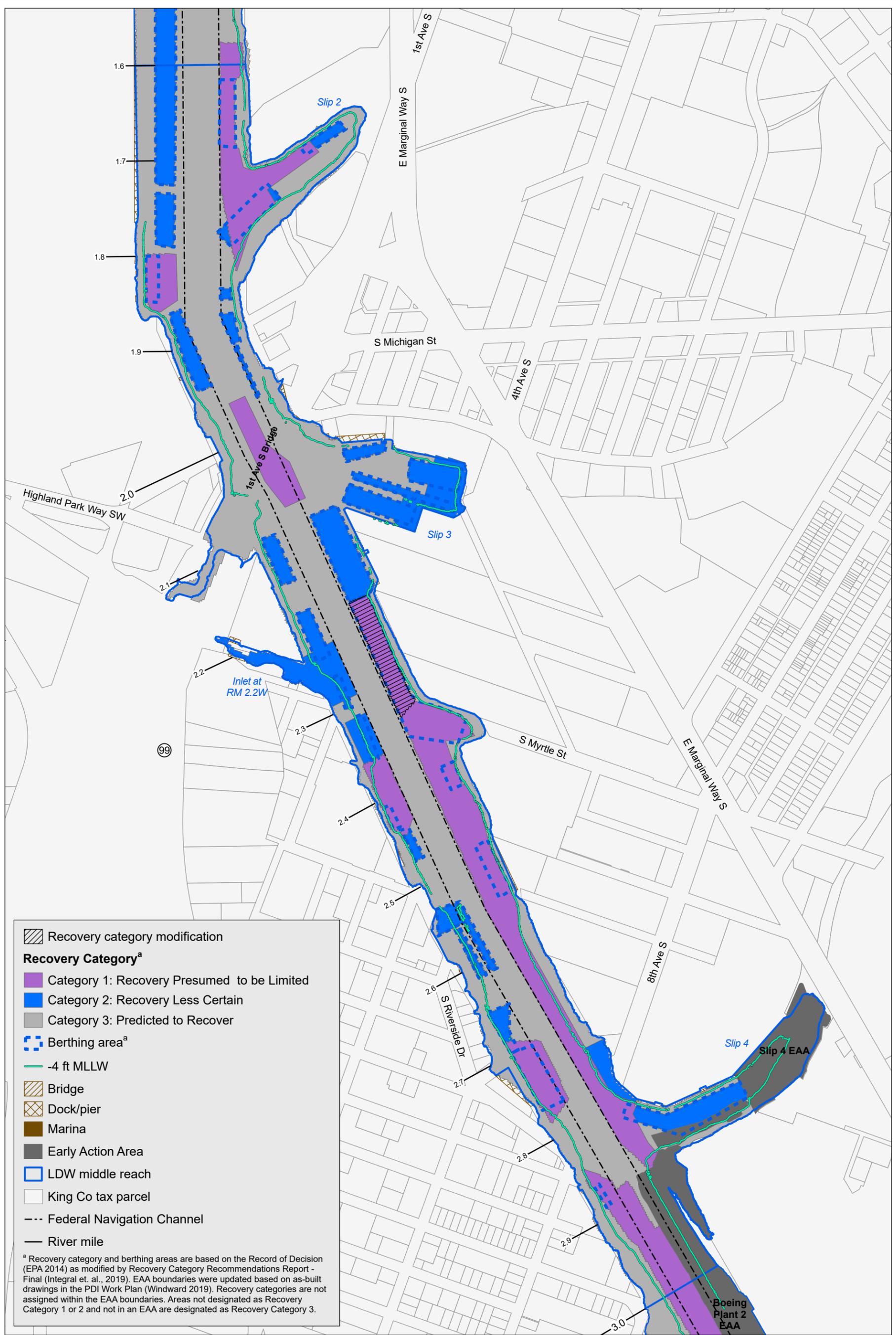


Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company

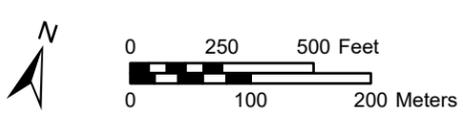


Map E-1b. PDI bathymetric survey, RM 2.3 to RM 3.0

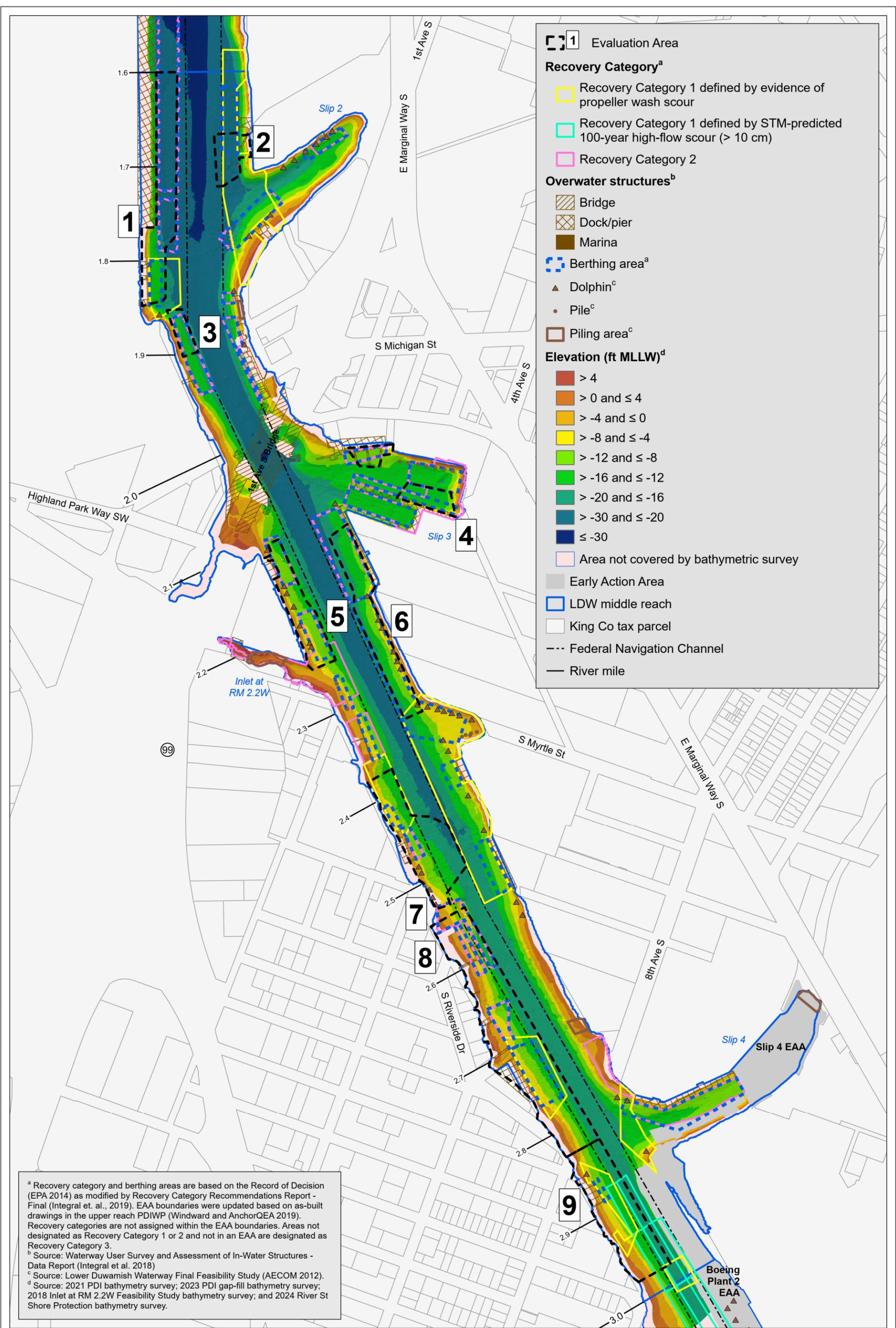
Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map I-1 7448 Phase 1 PDI\WP recovery categories



Recovery category modification
Recovery Category^a
 Category 1: Recovery Presumed to be Limited
 Category 2: Recovery Less Certain
 Category 3: Predicted to Recover
 Berthing area^a
 -4 ft MLLW
 Bridge
 Dock/pier
 Marina
 Early Action Area
 LDW middle reach
 King Co tax parcel
 Federal Navigation Channel
 River mile
^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et. al., 2019). EAA boundaries were updated based on as-built drawings in the PDI Work Plan (Windward 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.



Prepared by ClaireC, 9/29/2025; W:\Projects\Duwamish\AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map I-2 7078 Bathymetry sun illumination



1 Evaluation Area

Recovery Category^a

- Recovery Category 1 defined by evidence of propeller wash scour
- Recovery Category 1 defined by STM-predicted 100-year high-flow scour (> 10 cm)
- Recovery Category 2

Overwater structures^b

- Bridge
- Dock/pier
- Marina

Berthing area^a

- Dolphin^c
- Pile^c

Piling area^c

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30
- Area not covered by bathymetric survey

Early Action Area

LDW middle reach

King Co tax parcel

Federal Navigation Channel

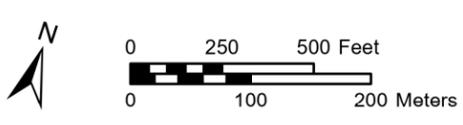
River mile

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

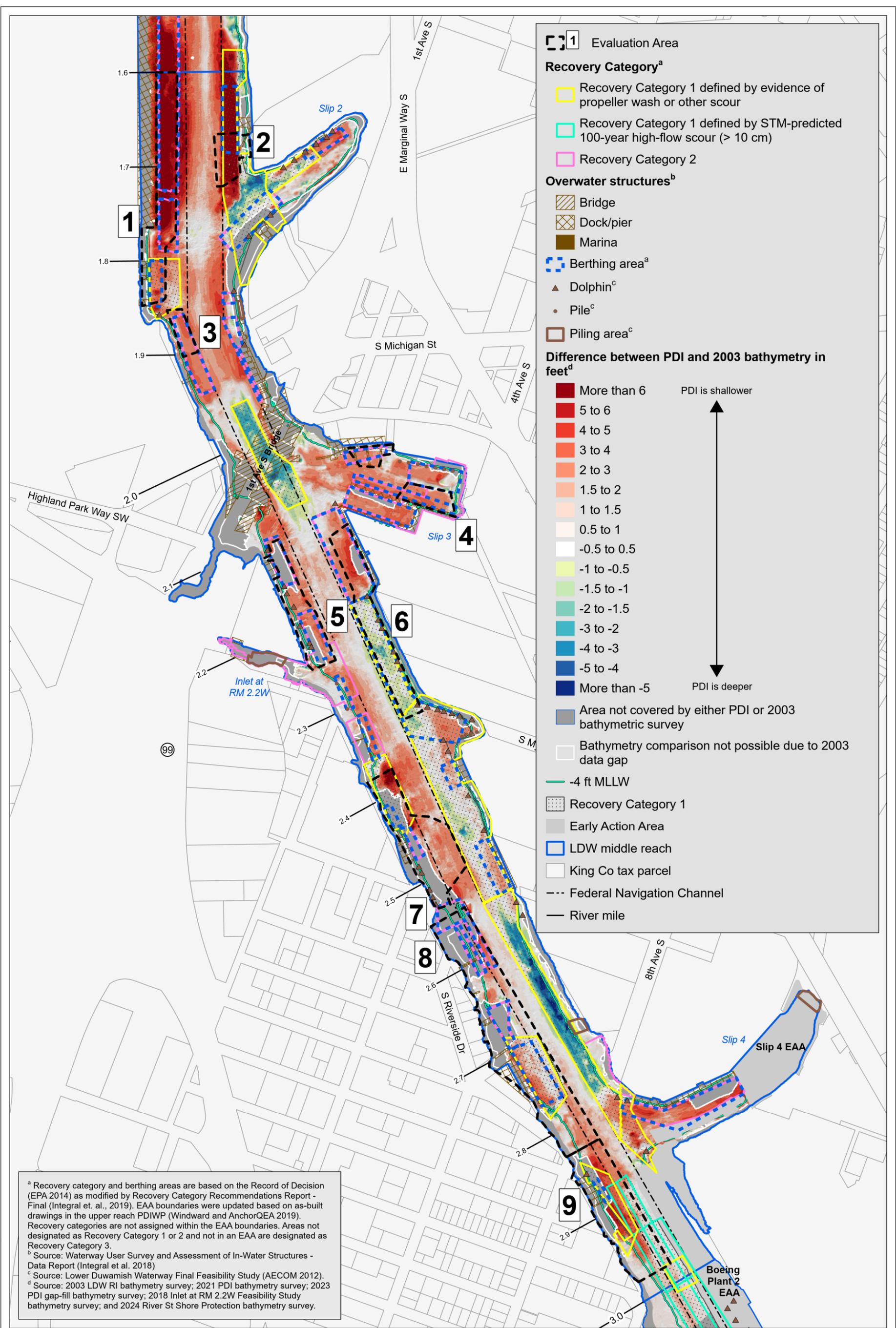
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



Prepared by ClaireC, 9/29/2025; W:\Projects\Duwamish\AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map I-3 7414 Bathym difference

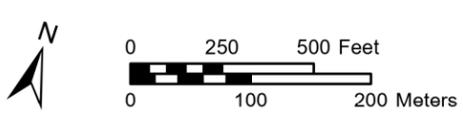


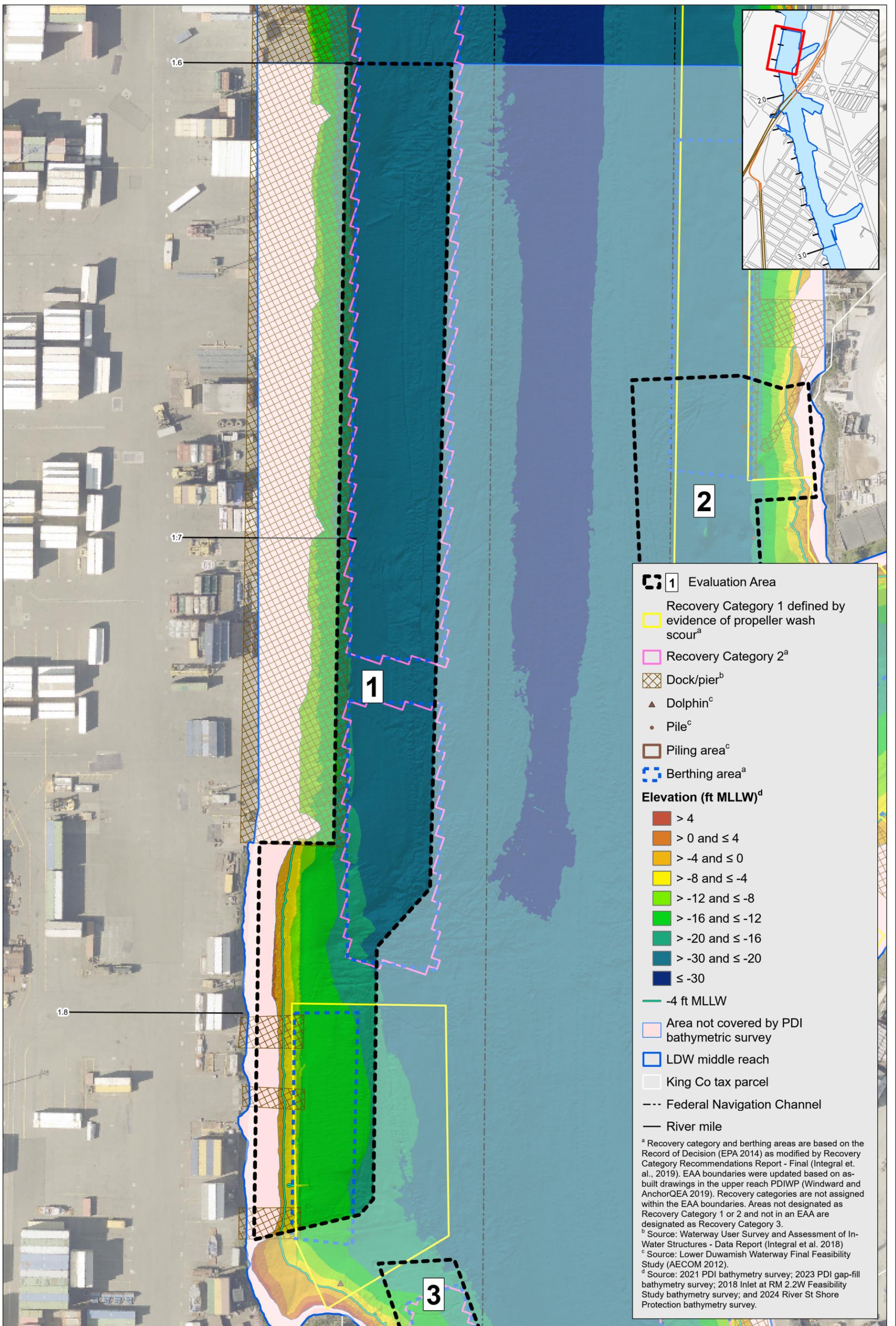
^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et. al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

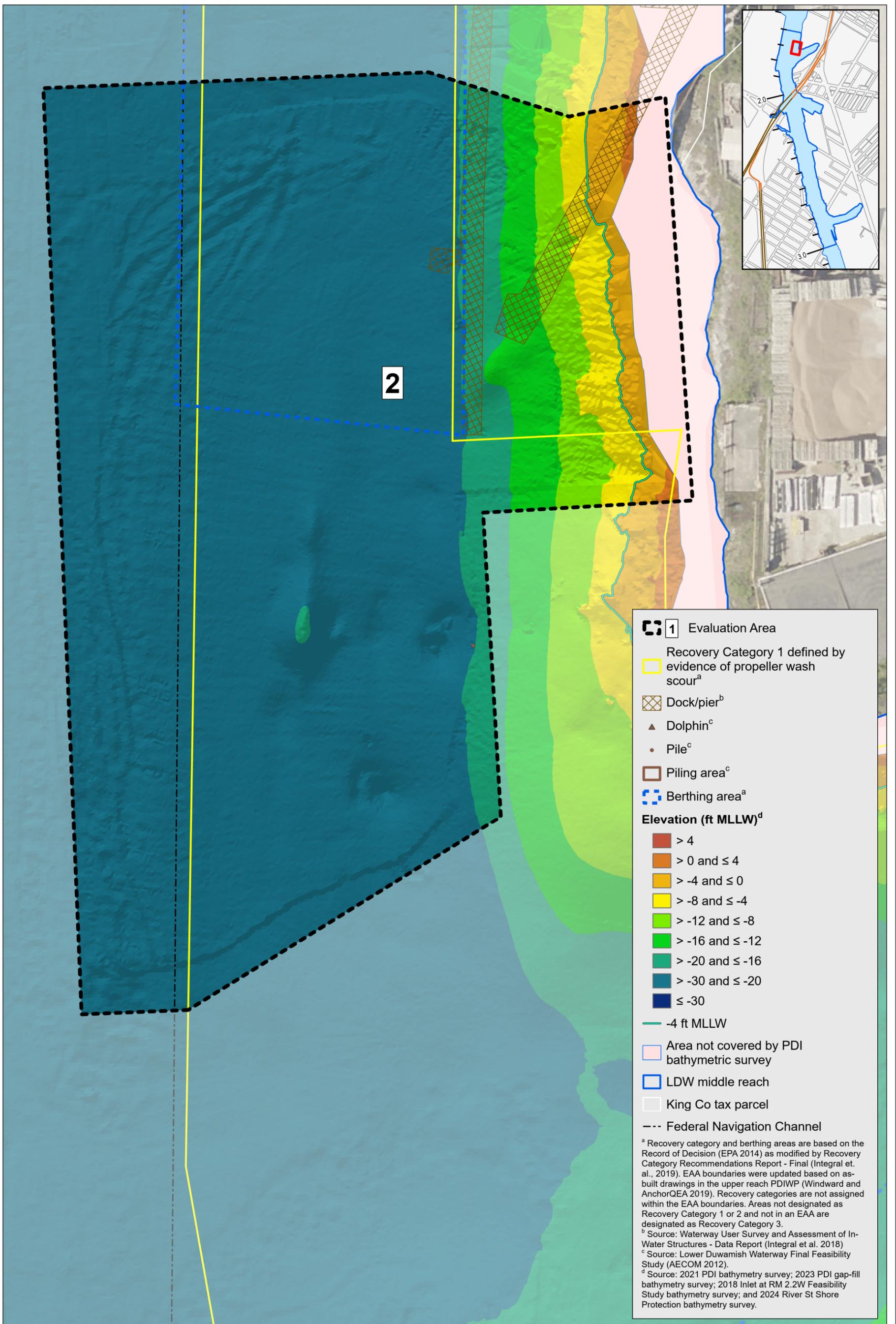
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2003 LDW RI bathymetry survey; 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.







1 Evaluation Area

- Recovery Category 1 defined by evidence of propeller wash scour^a
- Dock/pier^b
- ▲ Dolphin^c
- Pile^c
- Piling area^c
- Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

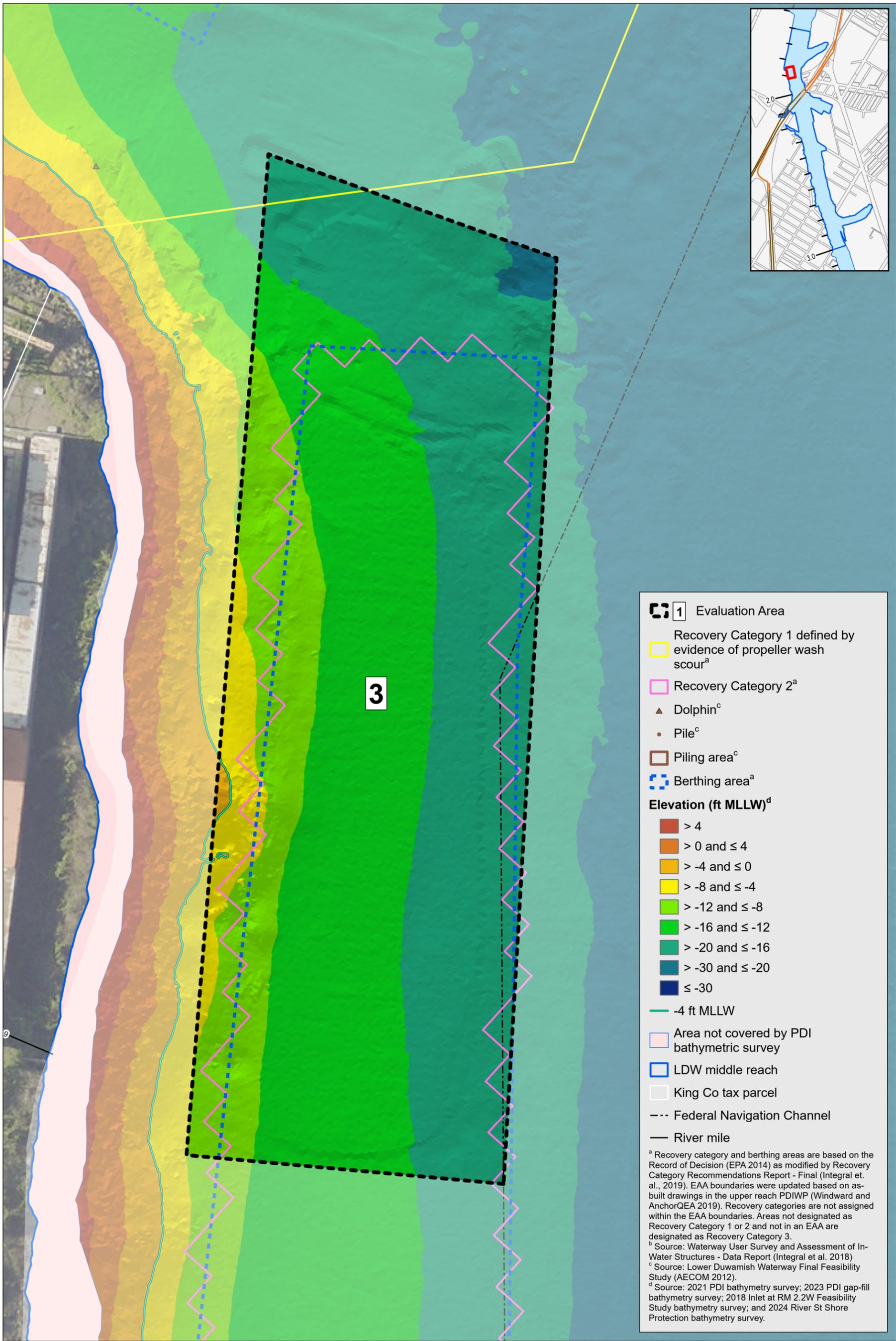
- 4 ft MLLW
- Area not covered by PDI bathymetric survey
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



1 Evaluation Area

- Recovery Category 1 defined by evidence of propeller wash scour^a
- Recovery Category 2^a
- ▲ Dolphin^c
- Pile^c
- Piling area^c
- Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

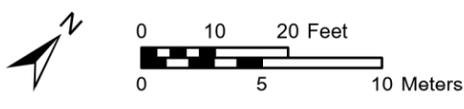
- 4 ft MLLW
- Area not covered by PDI bathymetric survey
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

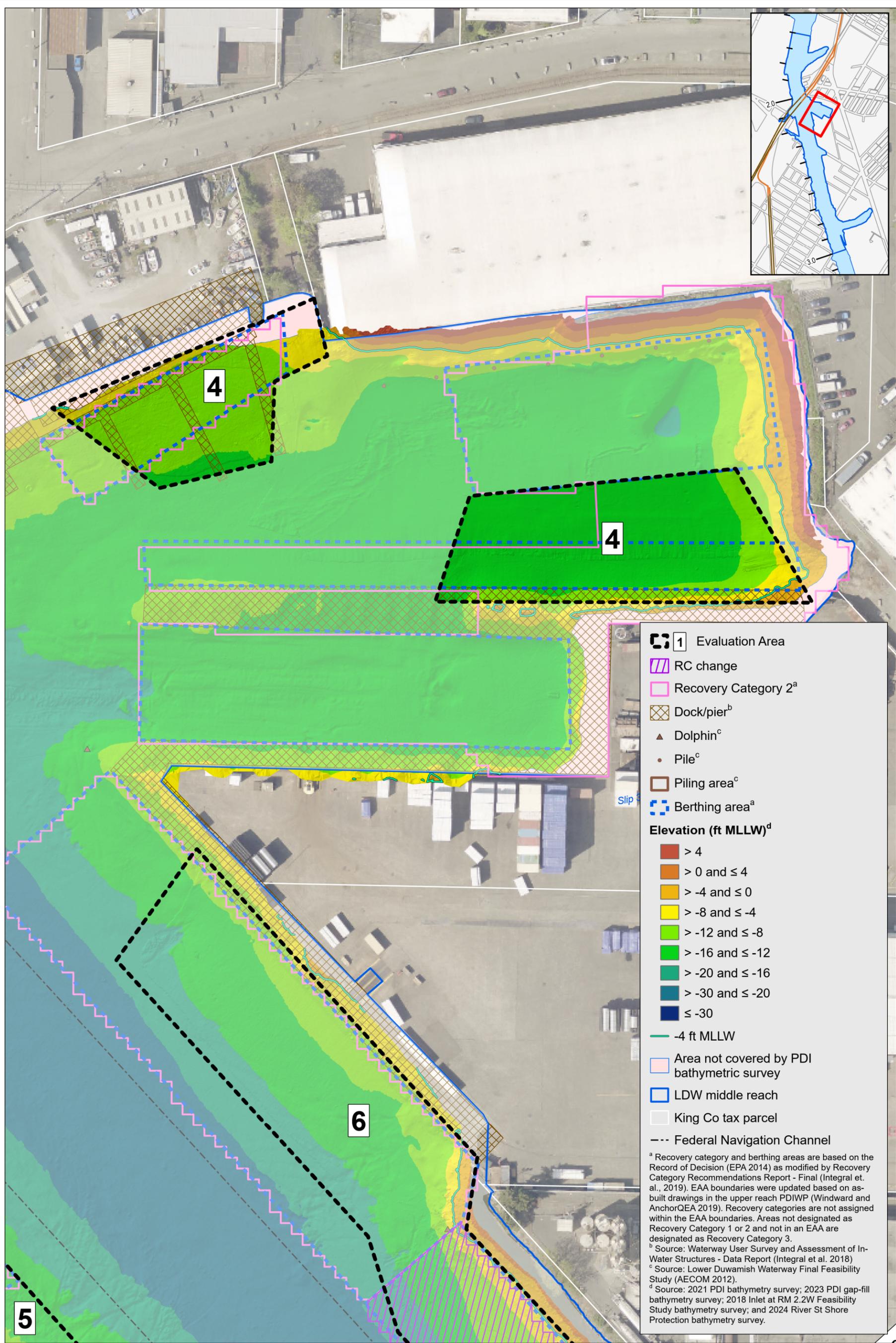
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



Prepared by ClaireC, 9/29/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map I-4 7109 Recovery Category modification evaluation areas



1 Evaluation Area

RC change

Recovery Category 2^a

Dock/pier^b

Dolphin^c

Pile^c

Piling area^c

Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

-4 ft MLLW

Area not covered by PDI bathymetric survey

LDW middle reach

King Co tax parcel

--- Federal Navigation Channel

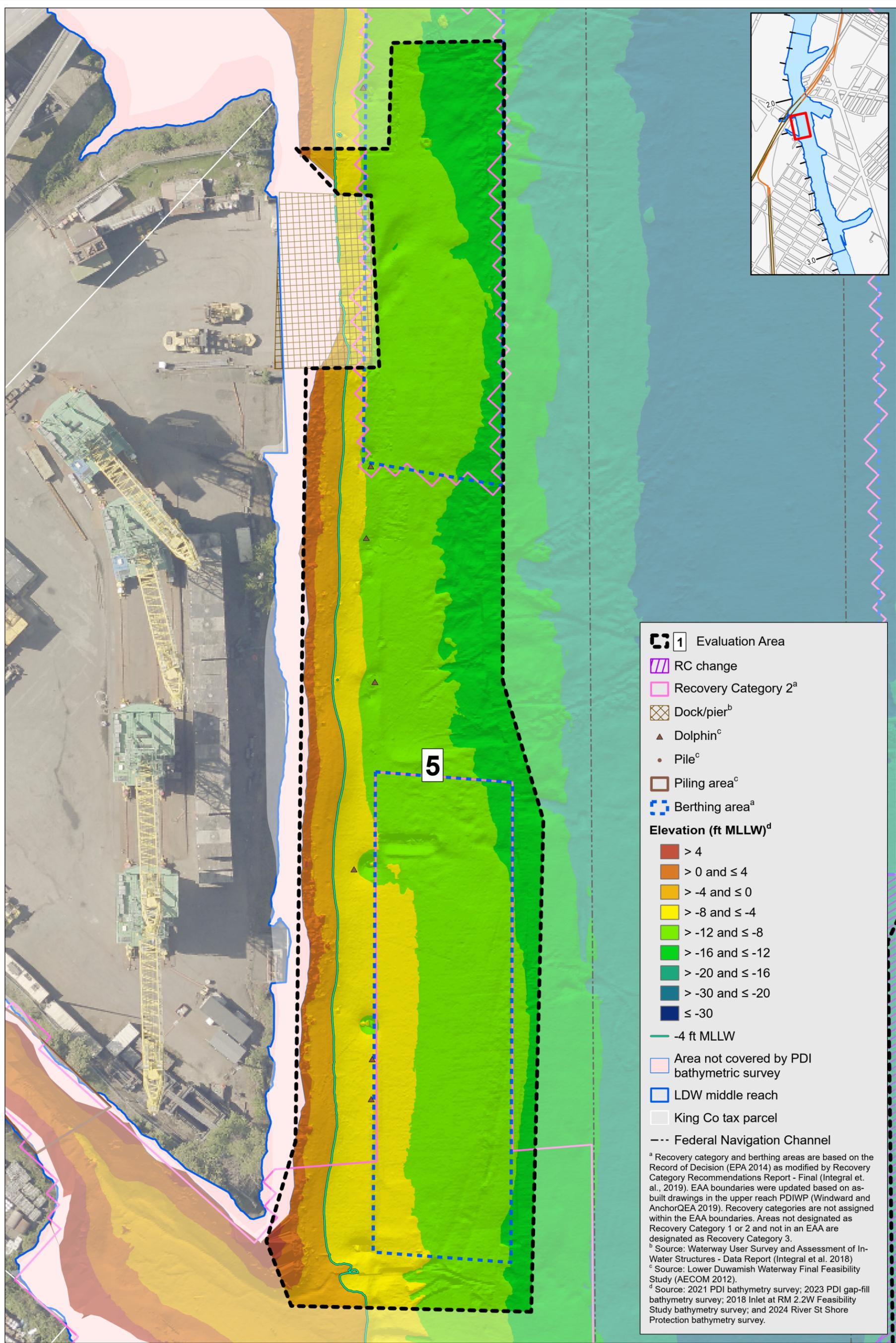
^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.

Prepared by ClaireC, 9/29/2025. W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map I-4 7109 Recovery Category modification evaluation areas



1 Evaluation Area

RC change

Recovery Category 2^a

Dock/pier^b

Dolphin^c

Pile^c

Piling area^c

Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

-4 ft MLLW

Area not covered by PDI bathymetric survey

LDW middle reach

King Co tax parcel

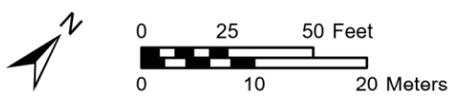
--- Federal Navigation Channel

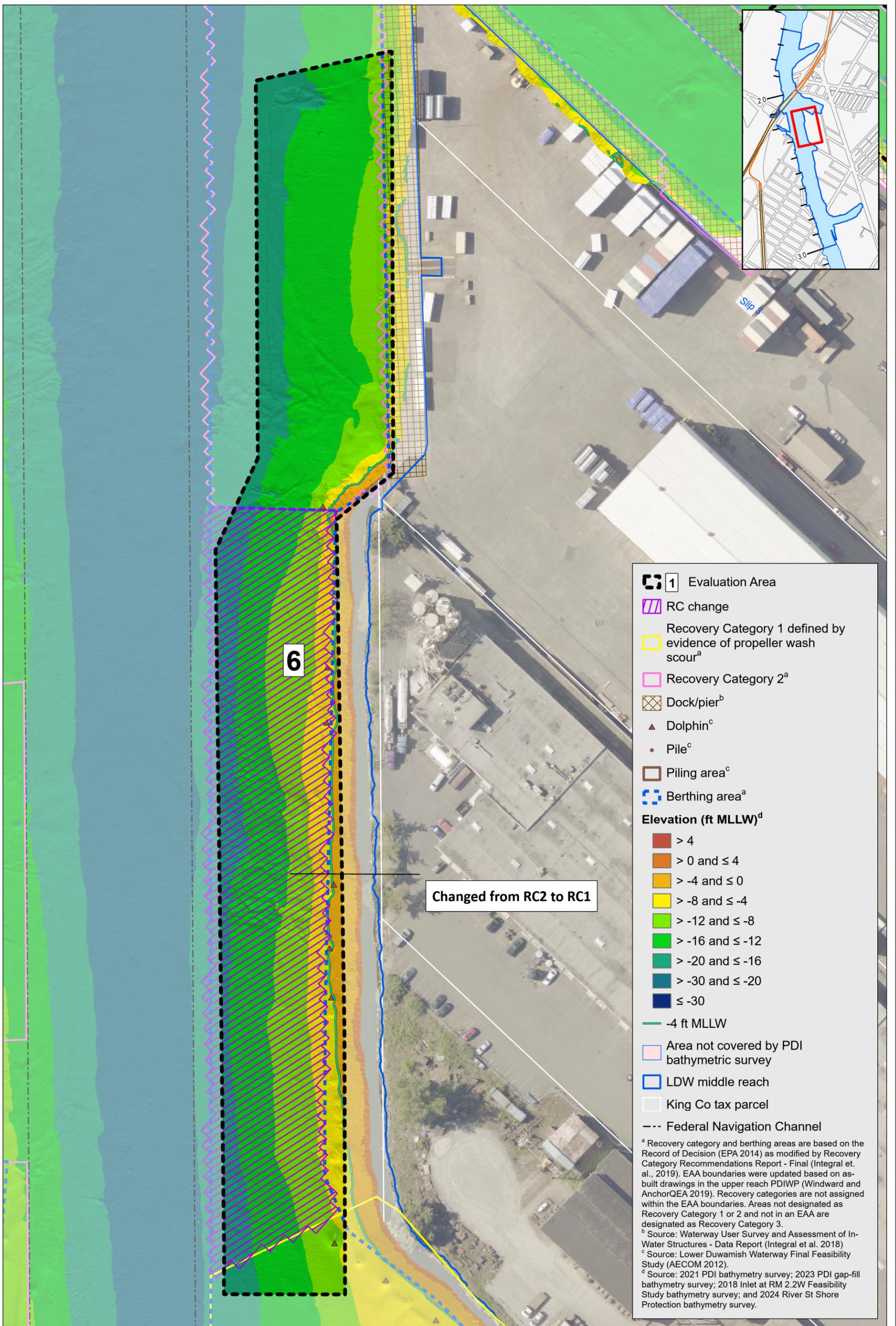
^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.





1 Evaluation Area

RC change

Recovery Category 1 defined by evidence of propeller wash scour^a

Recovery Category 2^a

Dock/pier^b

Dolphin^c

Pile^c

Piling area^c

Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

-4 ft MLLW

Area not covered by PDI bathymetric survey

LDW middle reach

King Co tax parcel

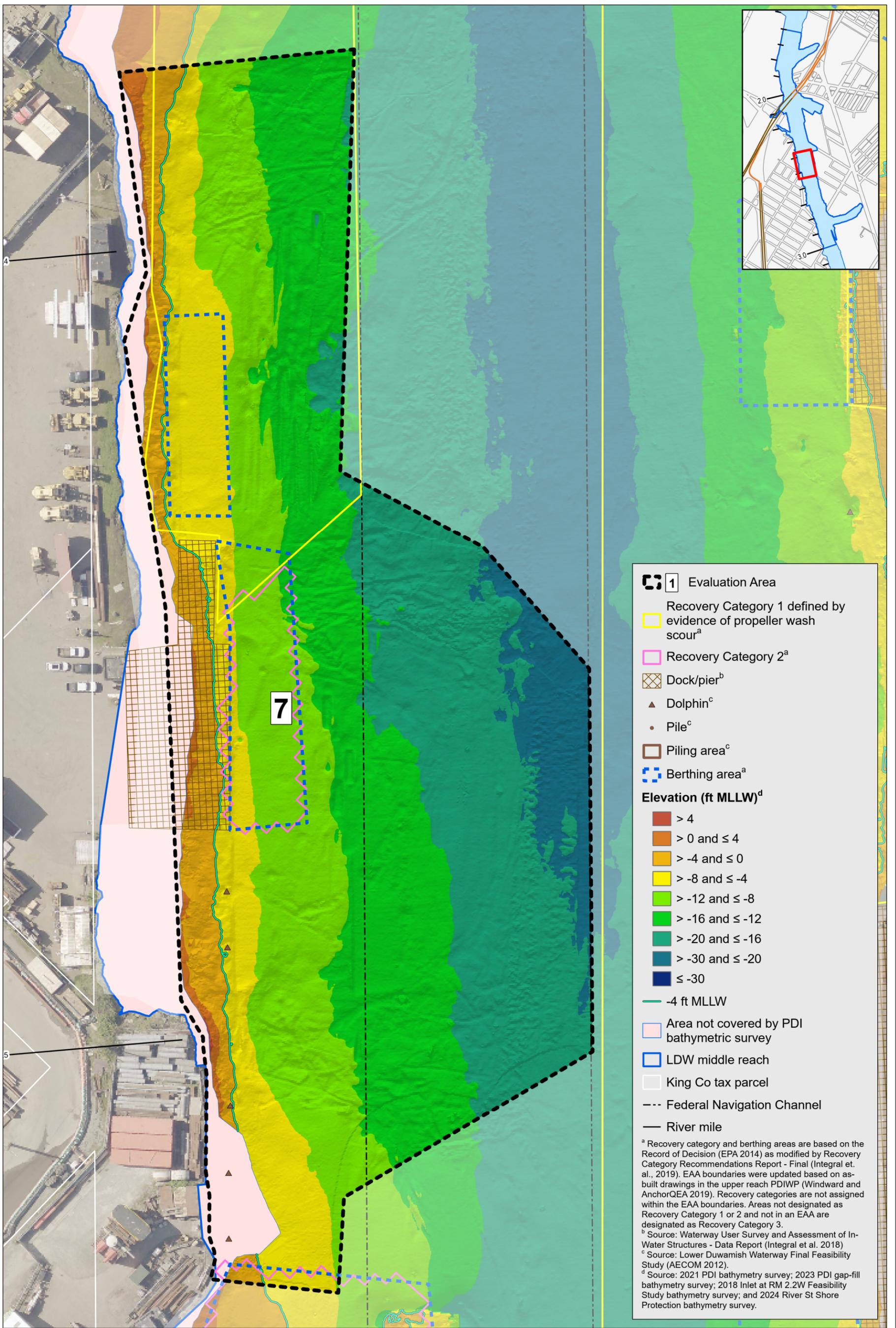
--- Federal Navigation Channel

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



1 Evaluation Area

- Recovery Category 1 defined by evidence of propeller wash scour^a
- Recovery Category 2^a
- Dock/pier^b
- Dolphin^c
- Pile^c
- Piling area^c
- Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

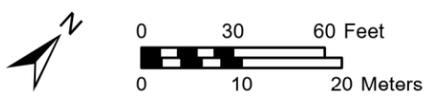
- 4 ft MLLW
- Area not covered by PDI bathymetric survey
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

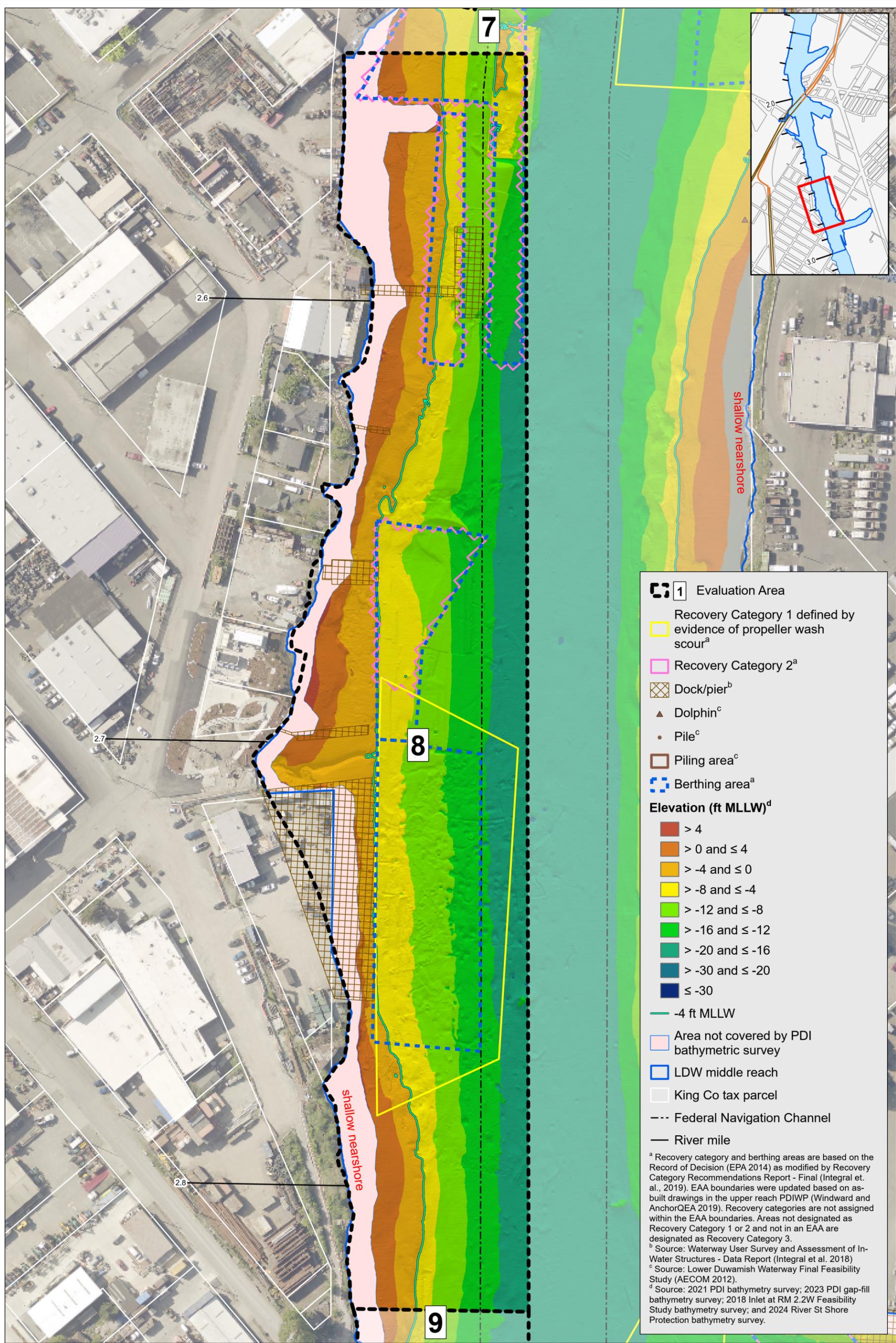
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



Prepared by ClaireC, 9/29/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map 1-4 7109 Recovery Category modification evaluation areas



1 Evaluation Area

- Recovery Category 1 defined by evidence of propeller wash scour^a
- Recovery Category 2^a
- Dock/pier^b
- ▲ Dolphin^c
- Pile^c
- Piling area^c
- Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

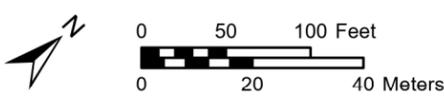
- 4 ft MLLW
- Area not covered by PDI bathymetric survey
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

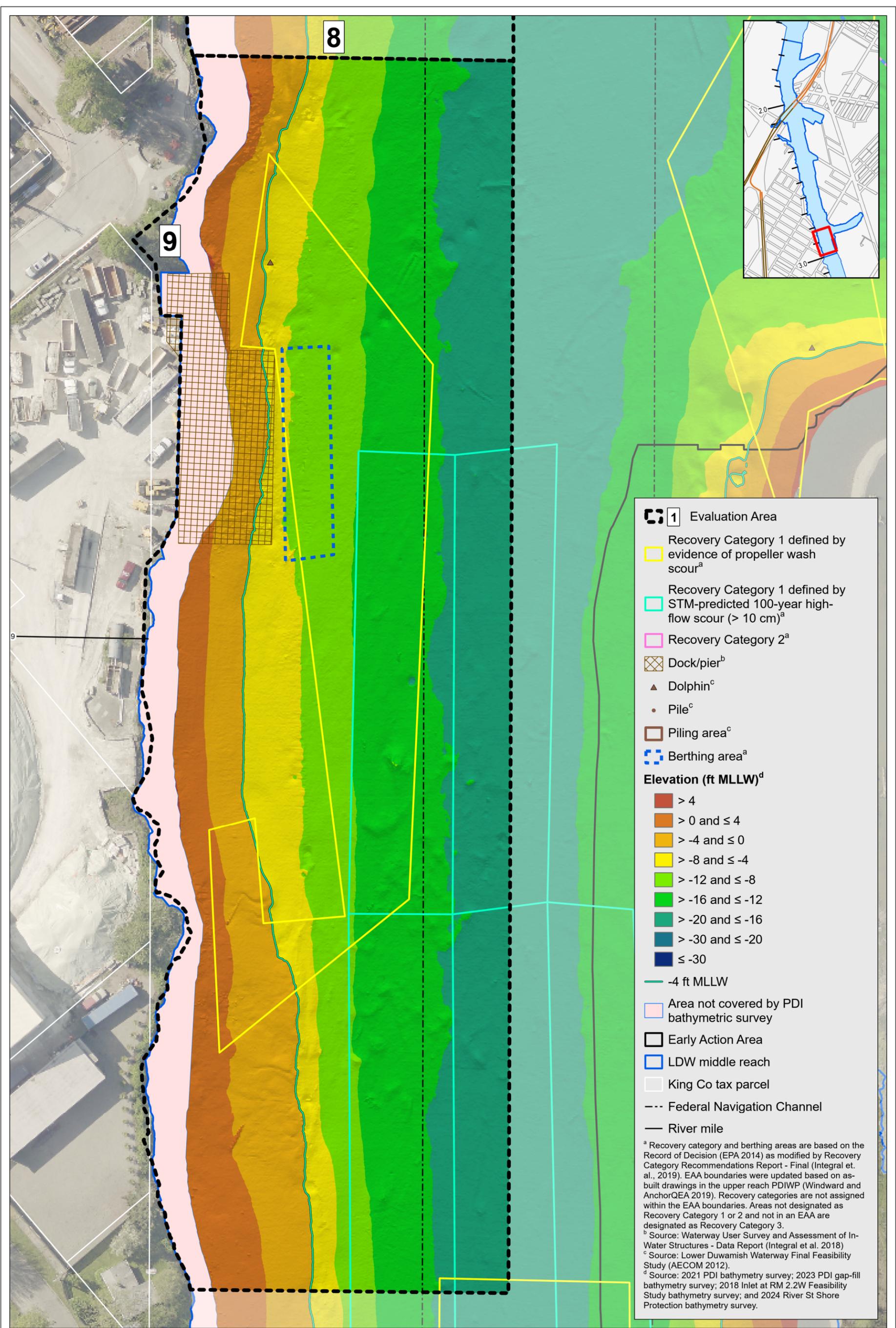
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



Prepared by ClaireC, 9/29/2025. W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map 1-4 7109 Recovery Category modification evaluation areas



1 Evaluation Area

- Recovery Category 1 defined by evidence of propeller wash scour^a
- Recovery Category 1 defined by STM-predicted 100-year high-flow scour (> 10 cm)^a
- Recovery Category 2^a
- Dock/pier^b
- Dolphin^c
- Pile^c
- Piling area^c
- Berthing area^a

Elevation (ft MLLW)^d

- > 4
- > 0 and ≤ 4
- > -4 and ≤ 0
- > -8 and ≤ -4
- > -12 and ≤ -8
- > -16 and ≤ -12
- > -20 and ≤ -16
- > -30 and ≤ -20
- ≤ -30

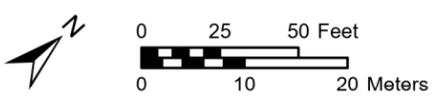
- 4 ft MLLW
- Area not covered by PDI bathymetric survey
- Early Action Area
- LDW middle reach
- King Co tax parcel
- Federal Navigation Channel
- River mile

^a Recovery category and berthing areas are based on the Record of Decision (EPA 2014) as modified by Recovery Category Recommendations Report - Final (Integral et al., 2019). EAA boundaries were updated based on as-built drawings in the upper reach PDIWP (Windward and AnchorQEA 2019). Recovery categories are not assigned within the EAA boundaries. Areas not designated as Recovery Category 1 or 2 and not in an EAA are designated as Recovery Category 3.

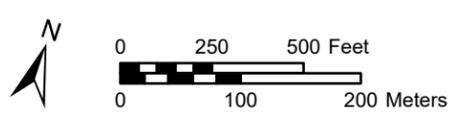
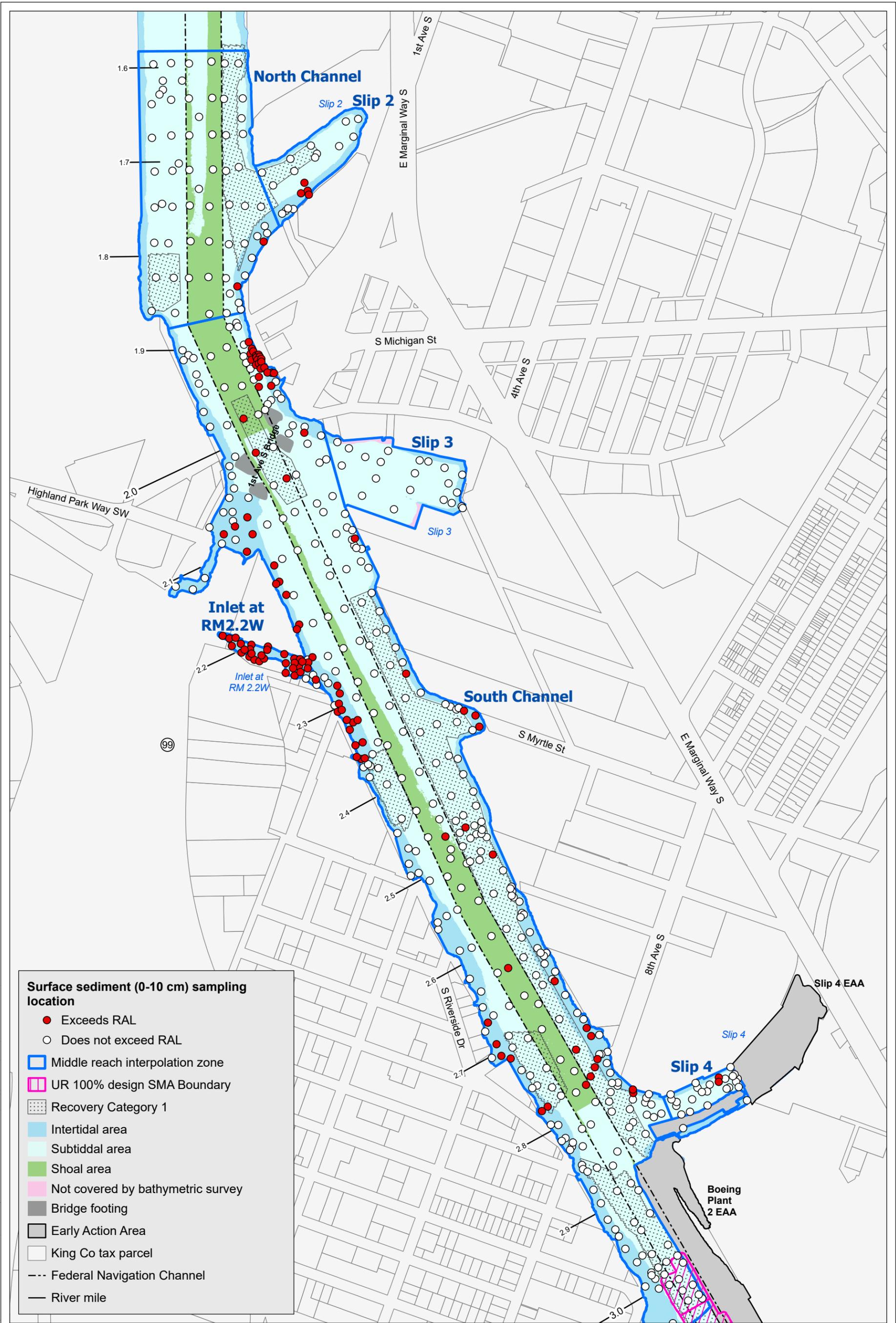
^b Source: Waterway User Survey and Assessment of In-Water Structures - Data Report (Integral et al. 2018)

^c Source: Lower Duwamish Waterway Final Feasibility Study (AECOM 2012).

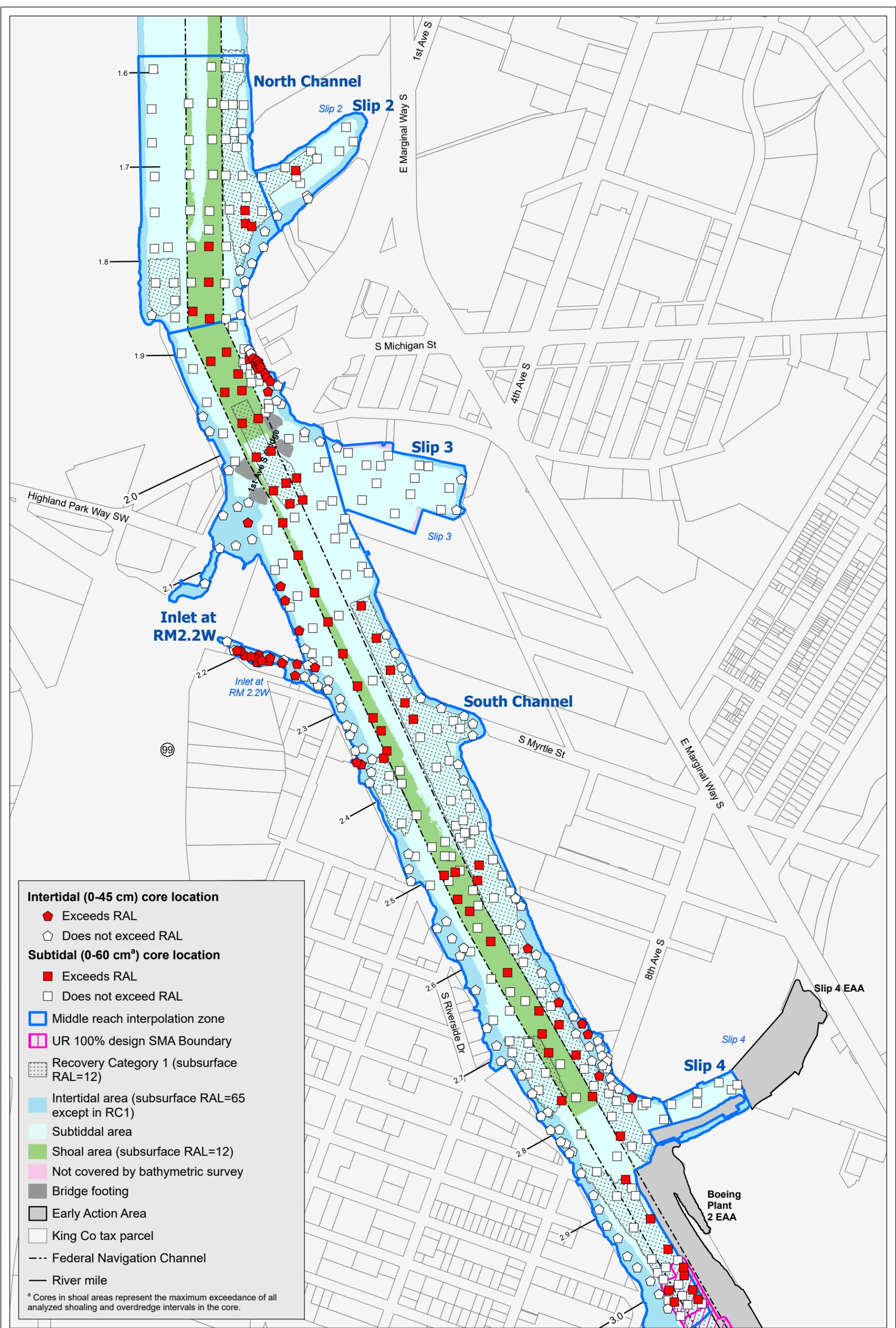
^d Source: 2021 PDI bathymetry survey; 2023 PDI gap-fill bathymetry survey; 2018 Inlet at RM 2.2W Feasibility Study bathymetry survey; and 2024 River St Shore Protection bathymetry survey.



Prepared by ClaireC_9/28/2025: W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-1_7546 P1\1\Interpolation dataset - surface



Prepared by ClaireC_9/28/2025: W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-2_7546_Phil interpolation dataset - subsurface

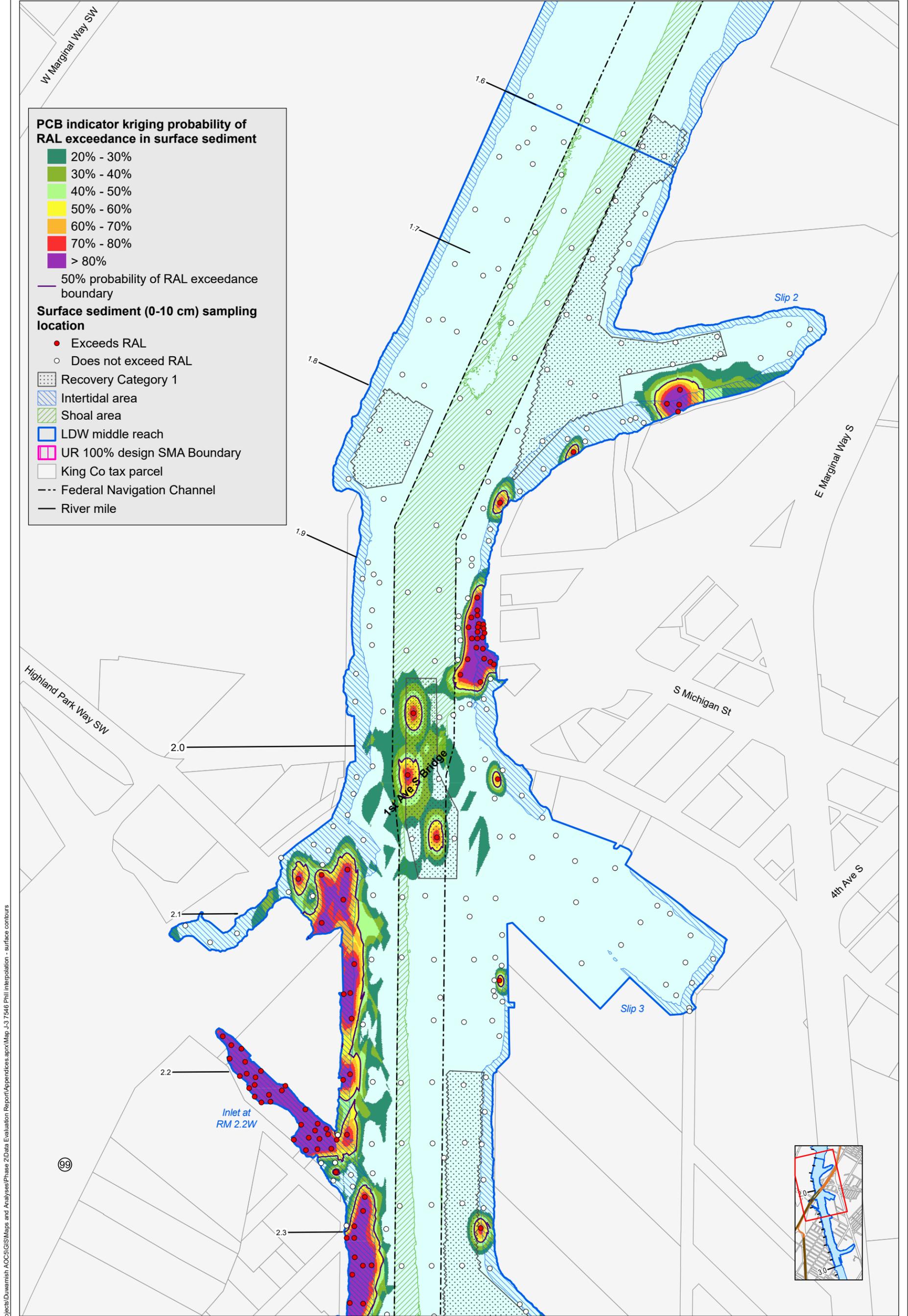


Lower Duwamish Waterway Group
 City of Seattle / King County / The Boeing Company

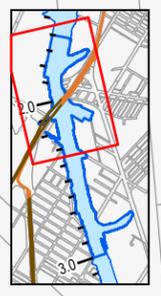


Map J-2. Design dataset (2025) PCB RAL exceedances and non-exceedances - subsurface sediment

PRE-DESIGN INVESTIGATION DATA EVALUATION
 REPORT FOR THE LDW - MIDDLE REACH SEPTEMBER 30, 2025



Prepared by ClairC, 9/28/2025, W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-3_7546_Phil interpolation - surface contours



99

PCB indicator kriging probability of RAL exceedance in surface sediment

- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- > 80%

50% probability of RAL exceedance boundary

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL
- Recovery Category 1
- Early Action Area
- Intertidal area
- Shoal area
- LDW middle reach
- UR 100% design SMA Boundary
- King Co tax parcel
- Federal Navigation Channel
- River mile

2.3

2.4

2.5

2.6

2.7

2.8

2.9

3.0

S Myrtle St

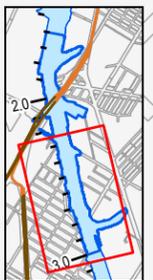
S Riverside Dr

8th Ave S

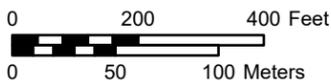
Slip 4

Slip 4 EAA

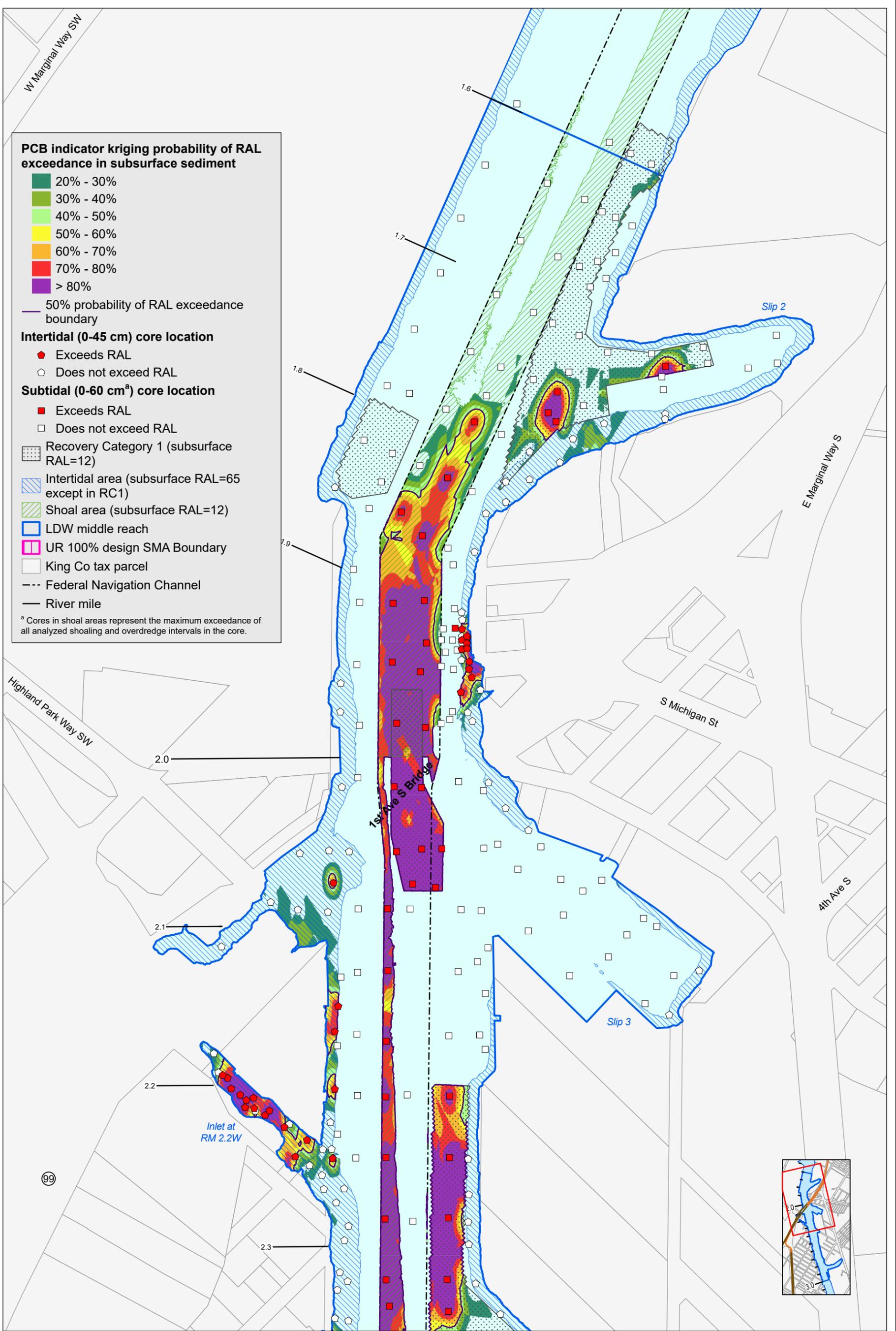
Being Plant 2 EAA



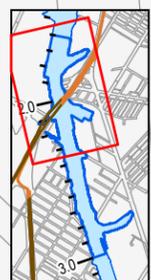
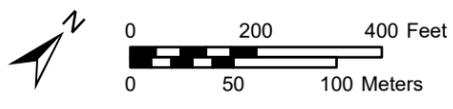
Lower Duwamish Waterway Group
 City of Seattle / King County / The Boeing Company

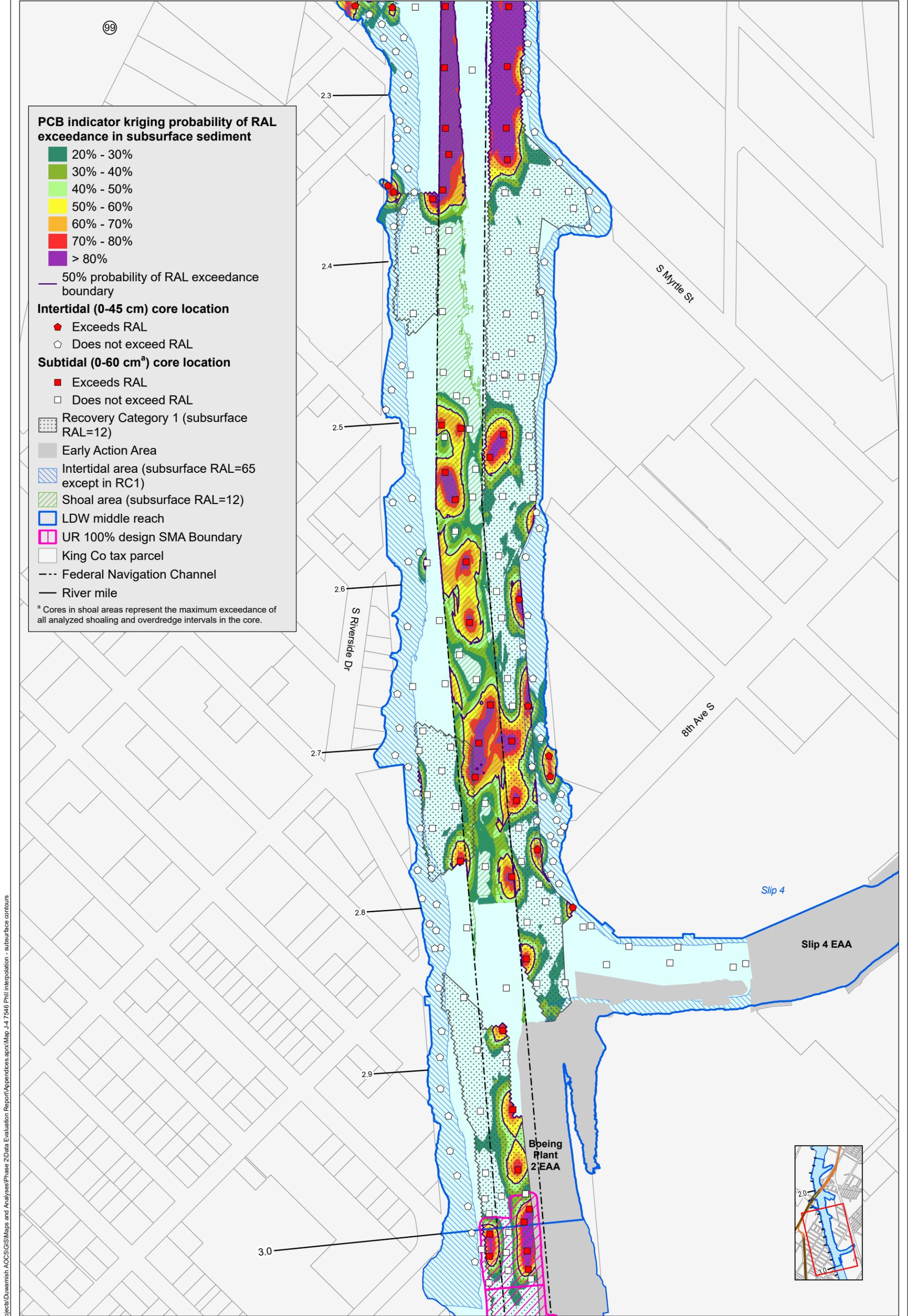


Map J-3b. Design dataset (2025) PCB indicator kriging results - surface sediment (RM 2.3 to RM 3.0)



Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-4_7546_Phil Interpolation - subsurface contours

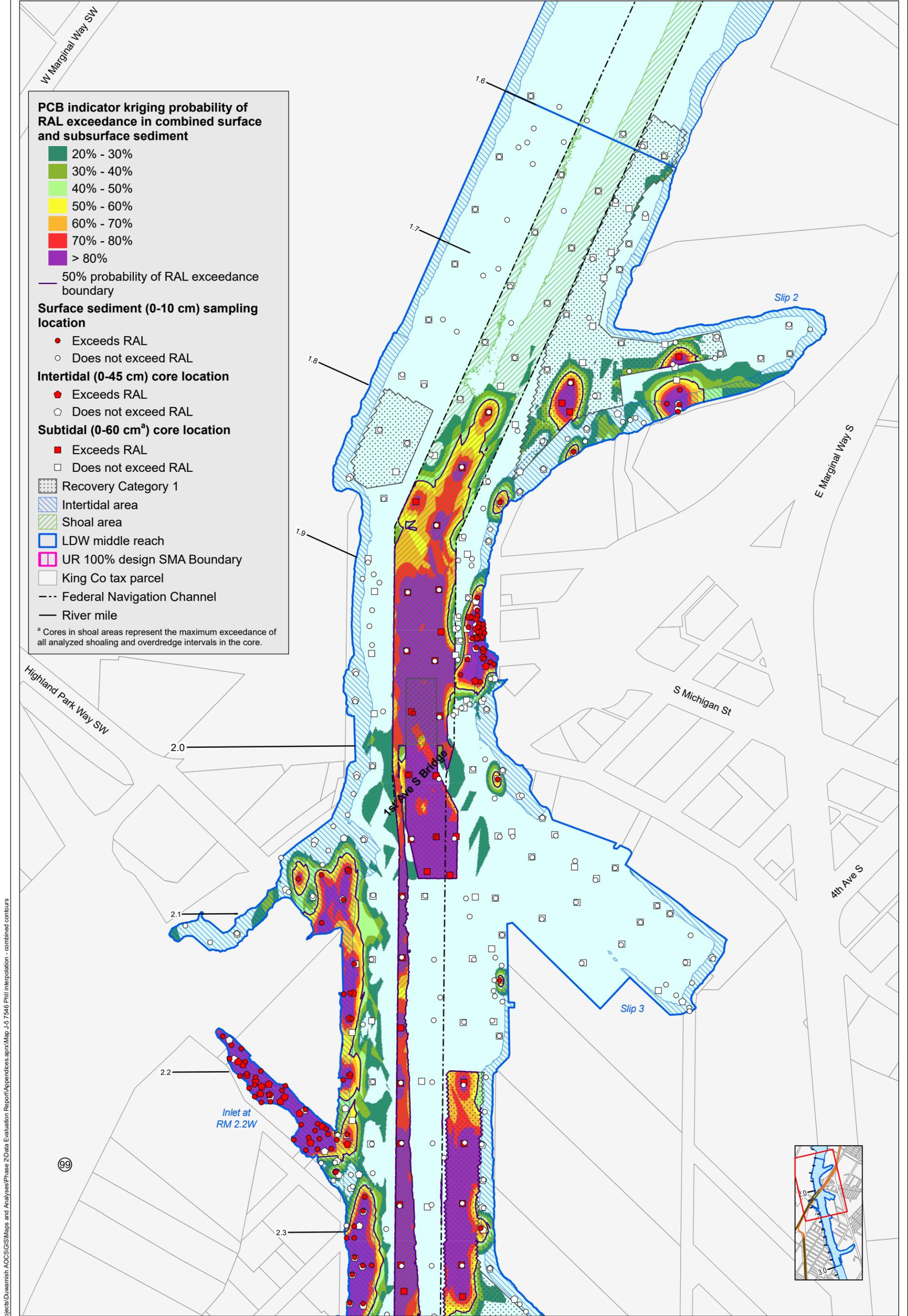




- PCB indicator kriging probability of RAL exceedance in subsurface sediment**
- 20% - 30%
 - 30% - 40%
 - 40% - 50%
 - 50% - 60%
 - 60% - 70%
 - 70% - 80%
 - > 80%
- 50% probability of RAL exceedance boundary
- Intertidal (0-45 cm) core location**
- Exceeds RAL
 - Does not exceed RAL
- Subtidal (0-60 cm^a) core location**
- Exceeds RAL
 - Does not exceed RAL
- ▨ Recovery Category 1 (subsurface RAL=12)
 - Early Action Area
 - ▨ Intertidal area (subsurface RAL=65 except in RC1)
 - ▨ Shoal area (subsurface RAL=12)
 - ▨ LDW middle reach
 - ▨ UR 100% design SMA Boundary
 - ▨ King Co tax parcel
 - Federal Navigation Channel
 - River mile
- ^a Cores in shoal areas represent the maximum exceedance of all analyzed shoaling and overdredge intervals in the core.

Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-4_7546_Phil Interpolation - subsurface contours





PCB indicator kriging probability of RAL exceedance in combined surface and subsurface sediment

- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- > 80%

— 50% probability of RAL exceedance boundary

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL

Intertidal (0-45 cm) core location

- ◆ Exceeds RAL
- ◇ Does not exceed RAL

Subtidal (0-60 cm^a) core location

- Exceeds RAL
- Does not exceed RAL

- ▨ Recovery Category 1
- ▧ Intertidal area
- ▩ Shoal area
- ▭ LDW middle reach
- ▮ UR 100% design SMA Boundary
- ▯ King Co tax parcel
- Federal Navigation Channel
- River mile

^a Cores in shoal areas represent the maximum exceedance of all analyzed shoaling and overdredge intervals in the core.

Prepared by ClairC, 9/28/2025, W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-5_7546_Phil Interpolation - combined contours



PCB indicator kriging probability of RAL exceedance in combined surface and subsurface sediment

- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- > 80%

50% probability of RAL exceedance boundary

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL

Intertidal (0-45 cm) core location

- Exceeds RAL
- Does not exceed RAL

Subtidal (0-60 cm^a) core location

- Exceeds RAL
- Does not exceed RAL

Recovery Category 1

Early Action Area

Intertidal area

Shoal area

LDW middle reach

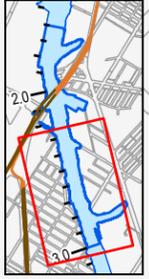
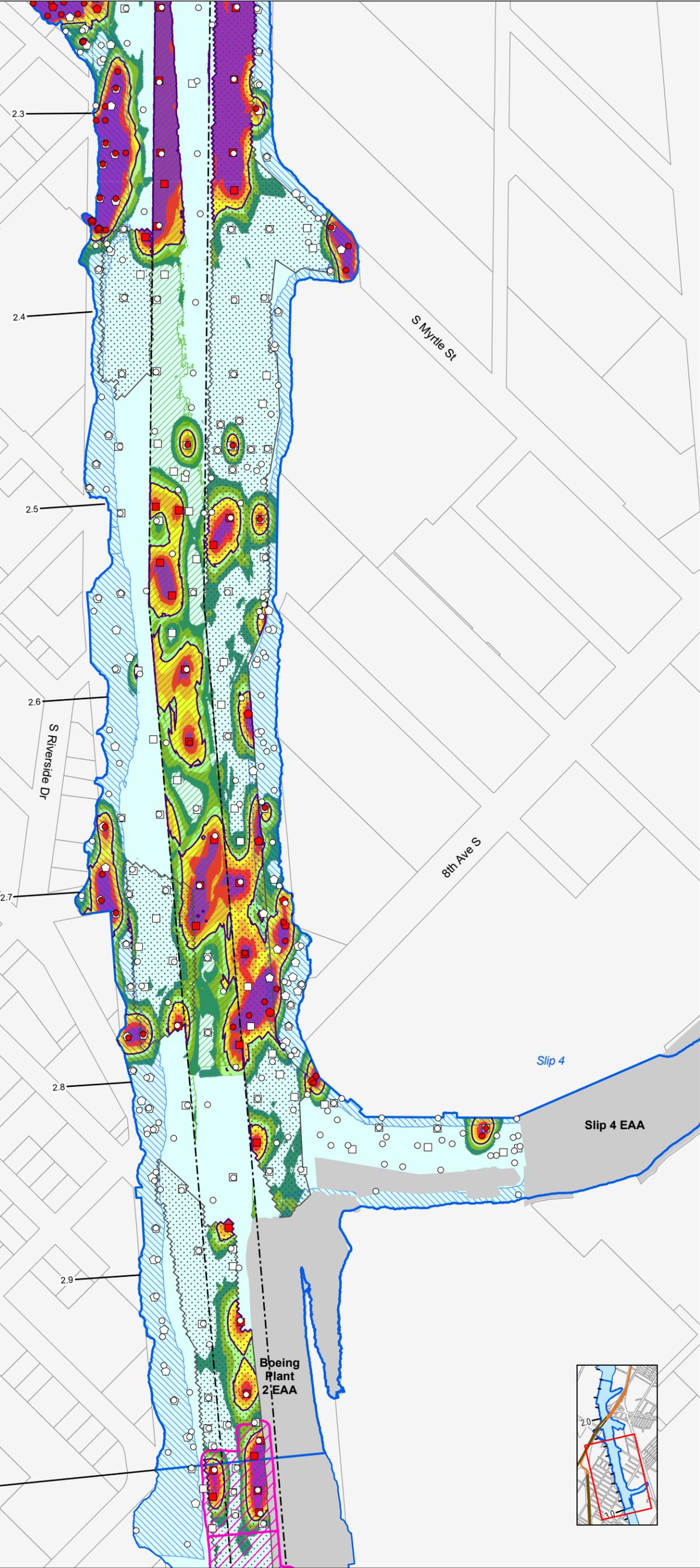
UR 100% design SMA Boundary

King Co tax parcel

Federal Navigation Channel

River mile

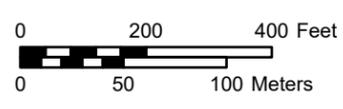
^a Cores in shoal areas represent the maximum exceedance of all analyzed shoaling and overdrudge intervals in the core.



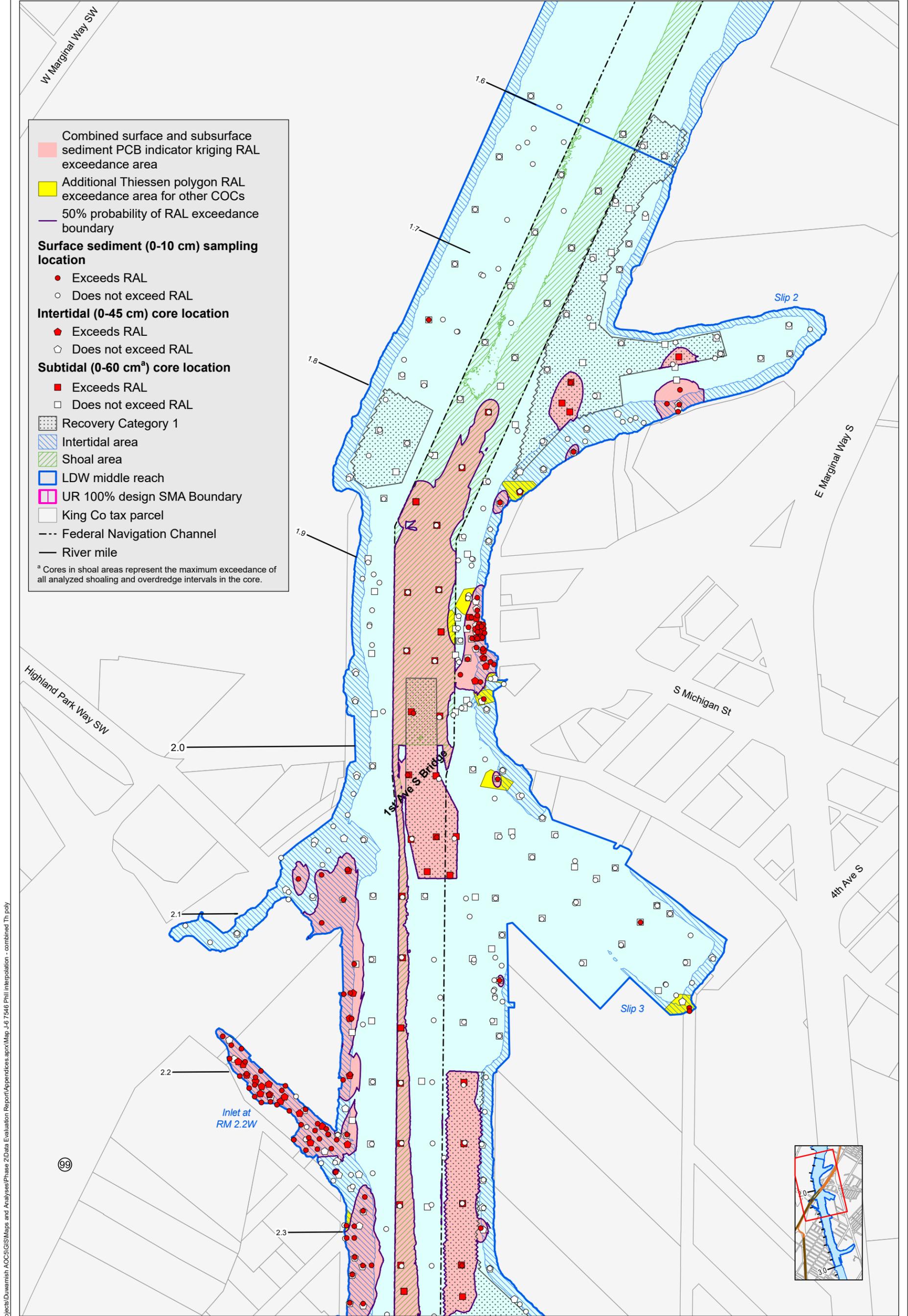
Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-5_7546_Phil interpolation - combined contours



Lower Duwamish Waterway Group
 City of Seattle / King County / The Boeing Company



Map J-5b. Design dataset (2025) PCB indicator kriging results - combined surface and subsurface sediment (RM 2.3 to RM 3.0)



- Combined surface and subsurface sediment PCB indicator kriging RAL exceedance area
 - Additional Thiessen polygon RAL exceedance area for other COCs
 - 50% probability of RAL exceedance boundary
 - Surface sediment (0-10 cm) sampling location**
 - Exceeds RAL
 - Does not exceed RAL
 - Intertidal (0-45 cm) core location**
 - Exceeds RAL
 - Does not exceed RAL
 - Subtidal (0-60 cm^a) core location**
 - Exceeds RAL
 - Does not exceed RAL
 - Recovery Category 1
 - Intertidal area
 - Shoal area
 - LDW middle reach
 - UR 100% design SMA Boundary
 - King Co tax parcel
 - Federal Navigation Channel
 - River mile
- ^a Cores in shoal areas represent the maximum exceedance of all analyzed shoaling and overdredge intervals in the core.

Map J-6a. Design dataset (2025) PCB RAL exceedance areas plus Thiessen polygons for other COCs (RM 1.6 to RM 2.3)

PRE-DESIGN INVESTIGATION DATA EVALUATION REPORT FOR THE LDW - MIDDLE REACH SEPTEMBER 30, 2025

Prepared by ClairC, 9/28/2025: W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-6_7546_Phil Interpolation - combined Th poly

Combined surface and subsurface sediment PCB indicator kriging RAL exceedance area

Additional Thiessen polygon RAL exceedance area for other COCs

50% probability of RAL exceedance boundary

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL

Intertidal (0-45 cm) core location

- ◆ Exceeds RAL
- ◇ Does not exceed RAL

Subtidal (0-60 cm^a) core location

- Exceeds RAL
- Does not exceed RAL

Recovery Category 1

Early Action Area

Intertidal area

Shoal area

LDW middle reach

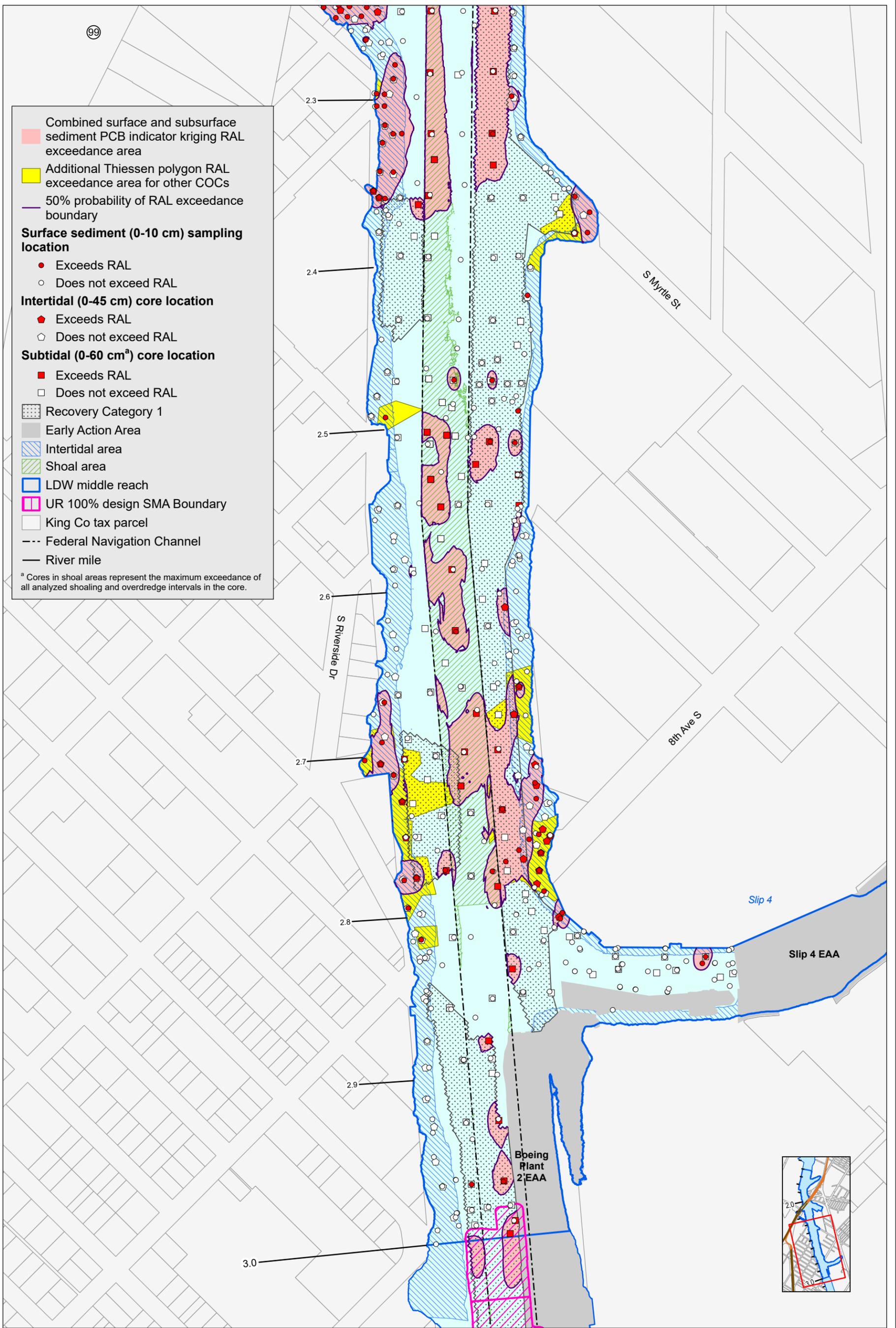
UR 100% design SMA Boundary

King Co tax parcel

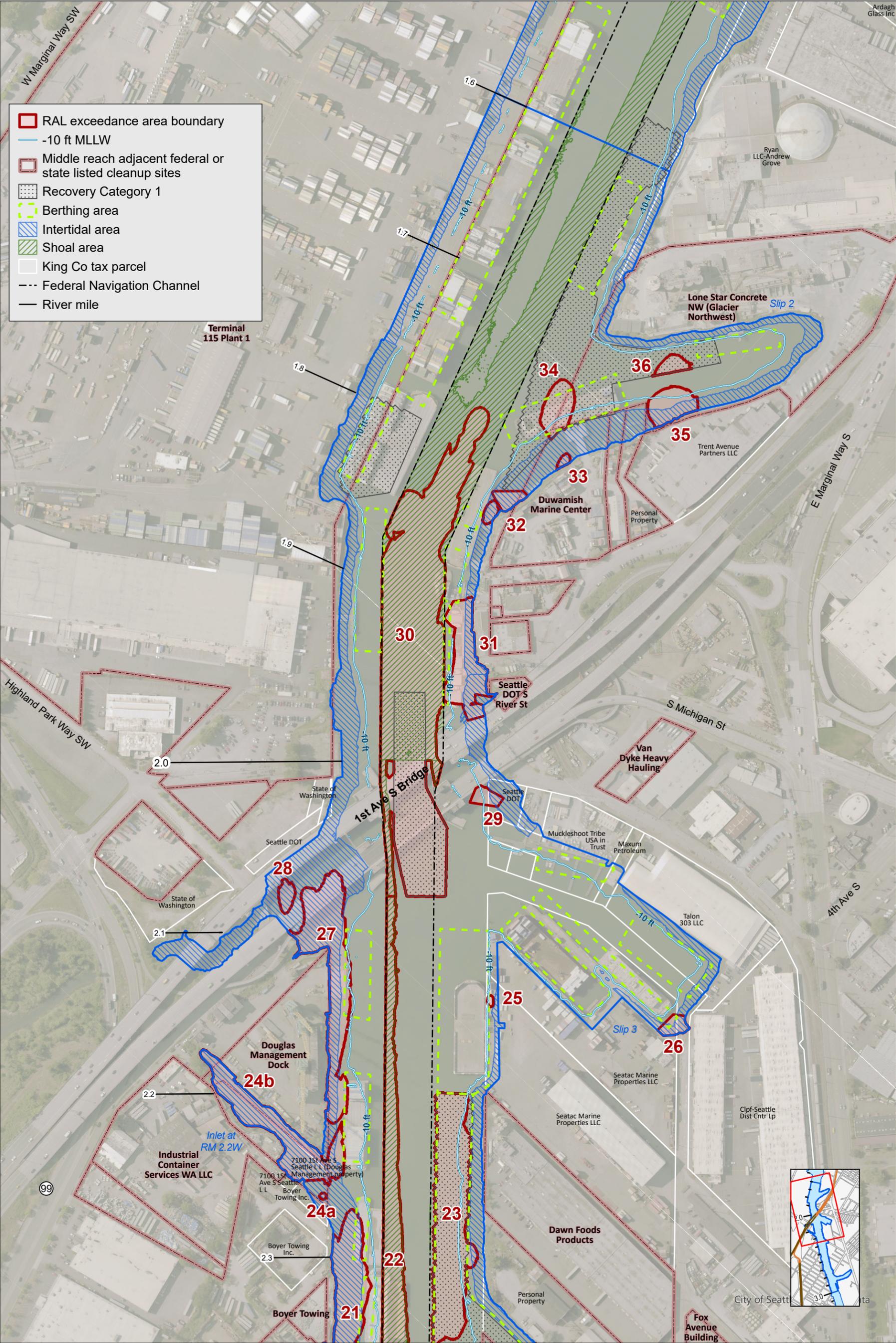
Federal Navigation Channel

River mile

^a Cores in shoal areas represent the maximum exceedance of all analyzed shoaling and overdrudge intervals in the core.



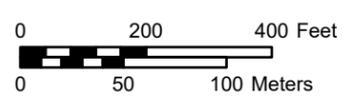
Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_J-6_7546 P1\1 Interpolation - combined Th poly



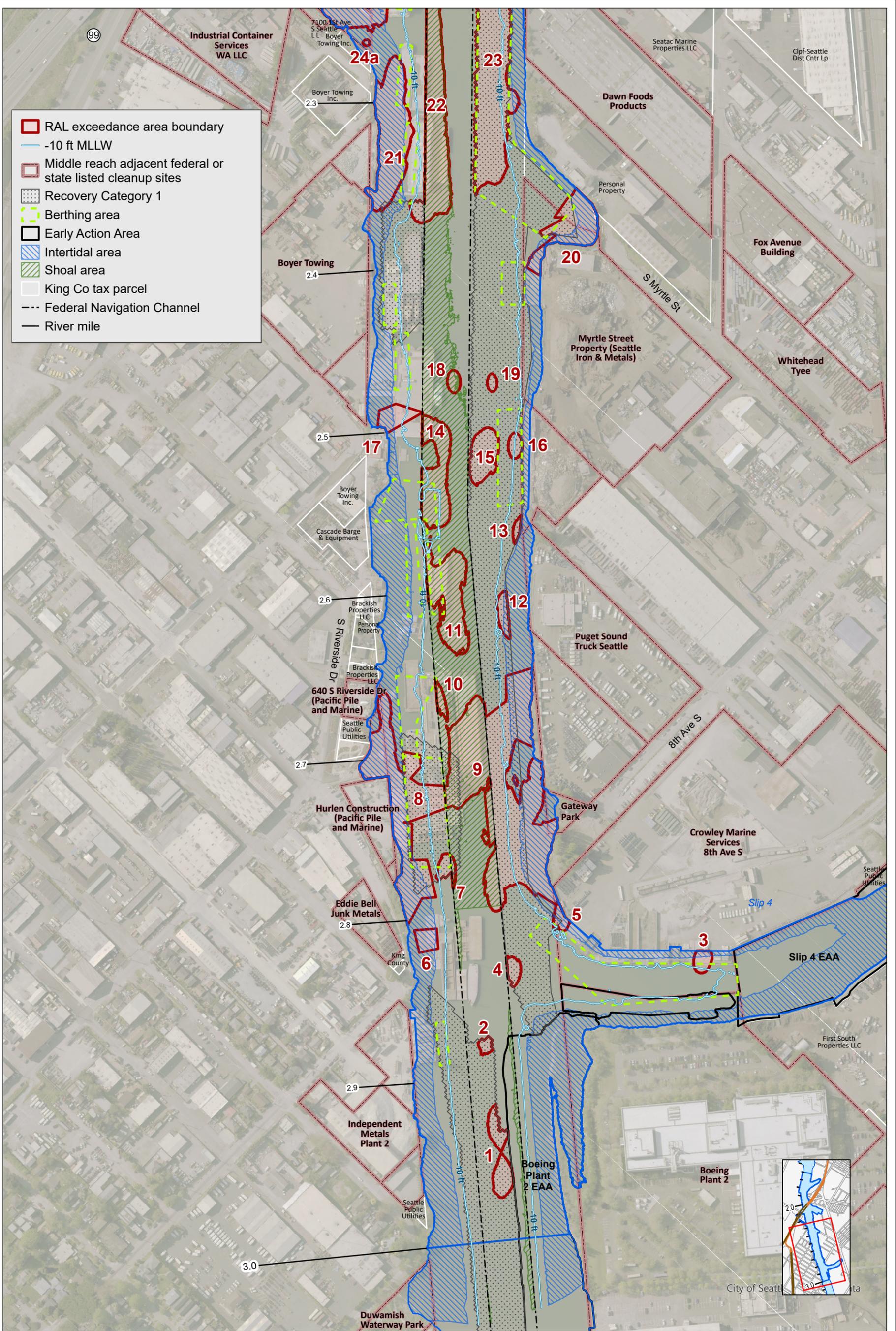
Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map K-1 7571 Preliminary technology assignment options.mxd



Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company



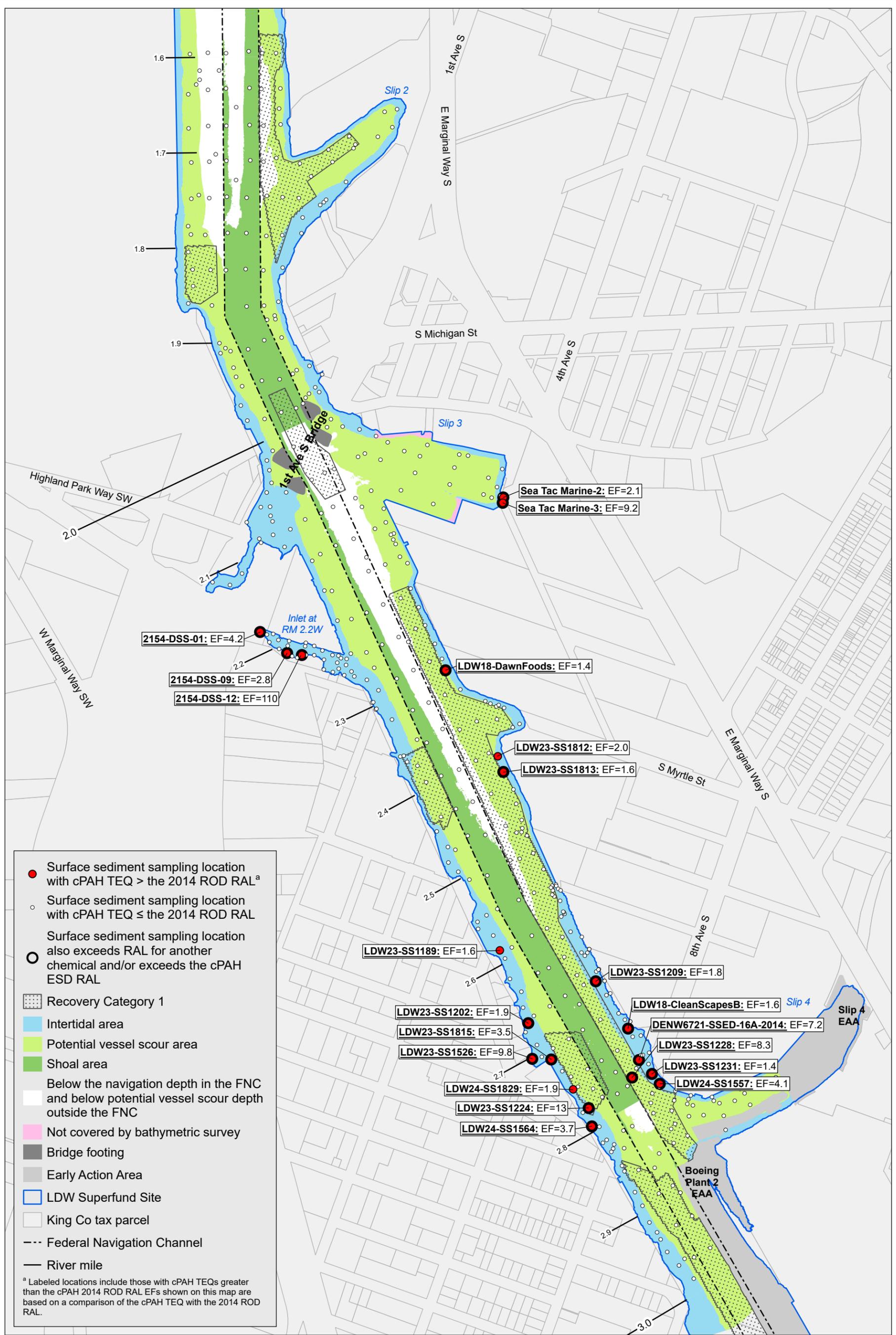
Map K-1a. Information used to evaluate middle reach preliminary remedial technology options, RM 1.6 to RM 2.3



Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map K-1 7571 Preliminary technology assignment options.mxd

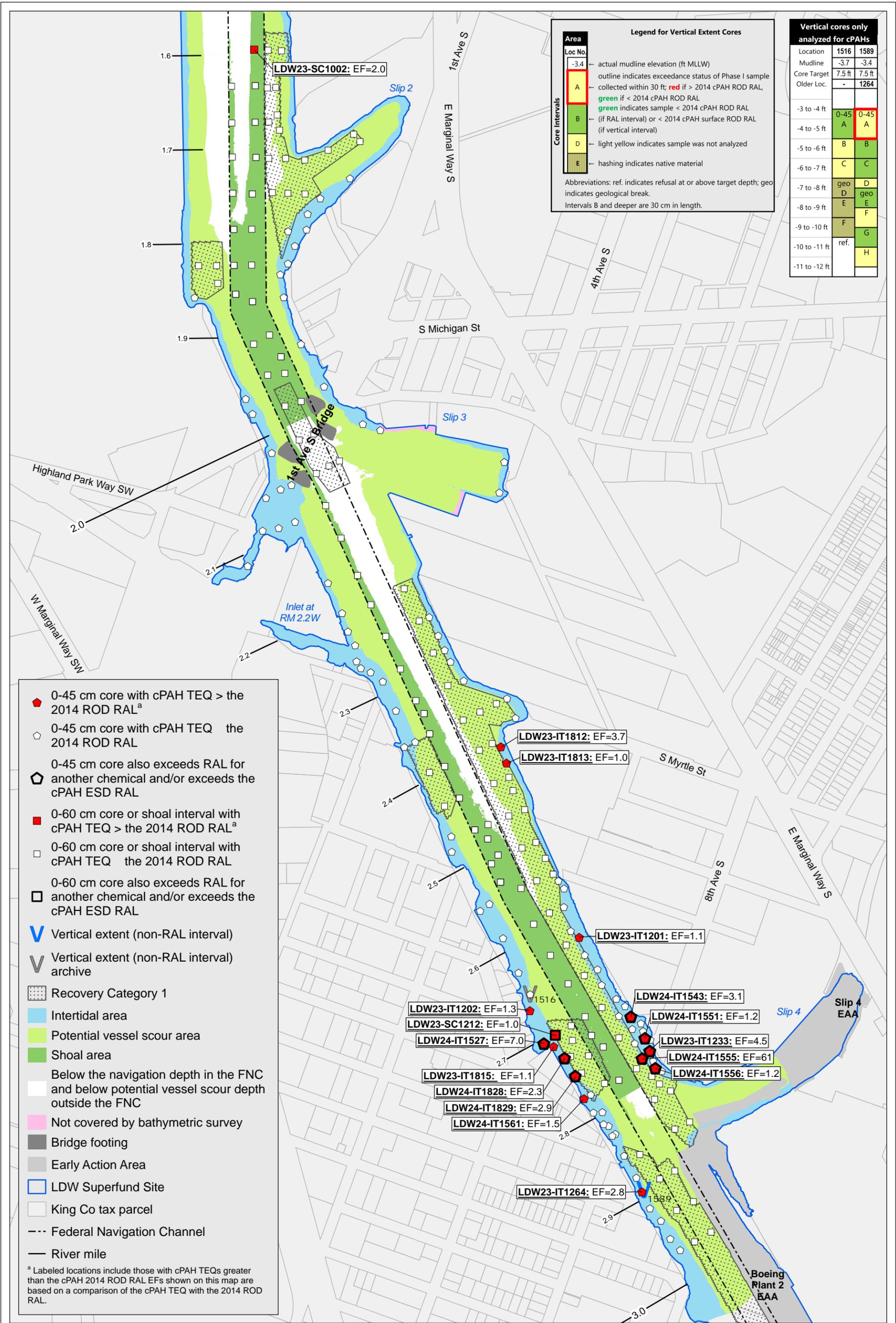


Prepared by ClairC, 9/28/2025; W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation\Report\Appendices\Map L-1_7297_cPAH ROD RAL etc - Surface



- Surface sediment sampling location with cPAH TEQ > the 2014 ROD RAL^a
 - Surface sediment sampling location with cPAH TEQ ≤ the 2014 ROD RAL
 - Surface sediment sampling location also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL
 - ▨ Recovery Category 1
 - Intertidal area
 - Potential vessel scour area
 - Shoal area
 - Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
 - Not covered by bathymetric survey
 - Bridge footing
 - Early Action Area
 - LDW Superfund Site
 - King Co tax parcel
 - Federal Navigation Channel
 - River mile
- ^a Labeled locations include those with cPAH TEQs greater than the cPAH 2014 ROD RAL EFs shown on this map are based on a comparison of the cPAH TEQ with the 2014 ROD RAL.





Legend for Vertical Extent Cores

Area	Loc No.	Description
-3.4		actual mudline elevation (ft MLLW)
A		outline indicates exceedance status of Phase I sample collected within 30 ft; red if > 2014 cPAH ROD RAL, green if < 2014 cPAH ROD RAL
B		green indicates sample < 2014 cPAH surface ROD RAL (if RAL interval) or < 2014 cPAH surface ROD RAL (if vertical interval)
D		light yellow indicates sample was not analyzed
E		hashing indicates native material

Abbreviations: ref. indicates refusal at or above target depth; geo indicates geological break.
Intervals B and deeper are 30 cm in length.

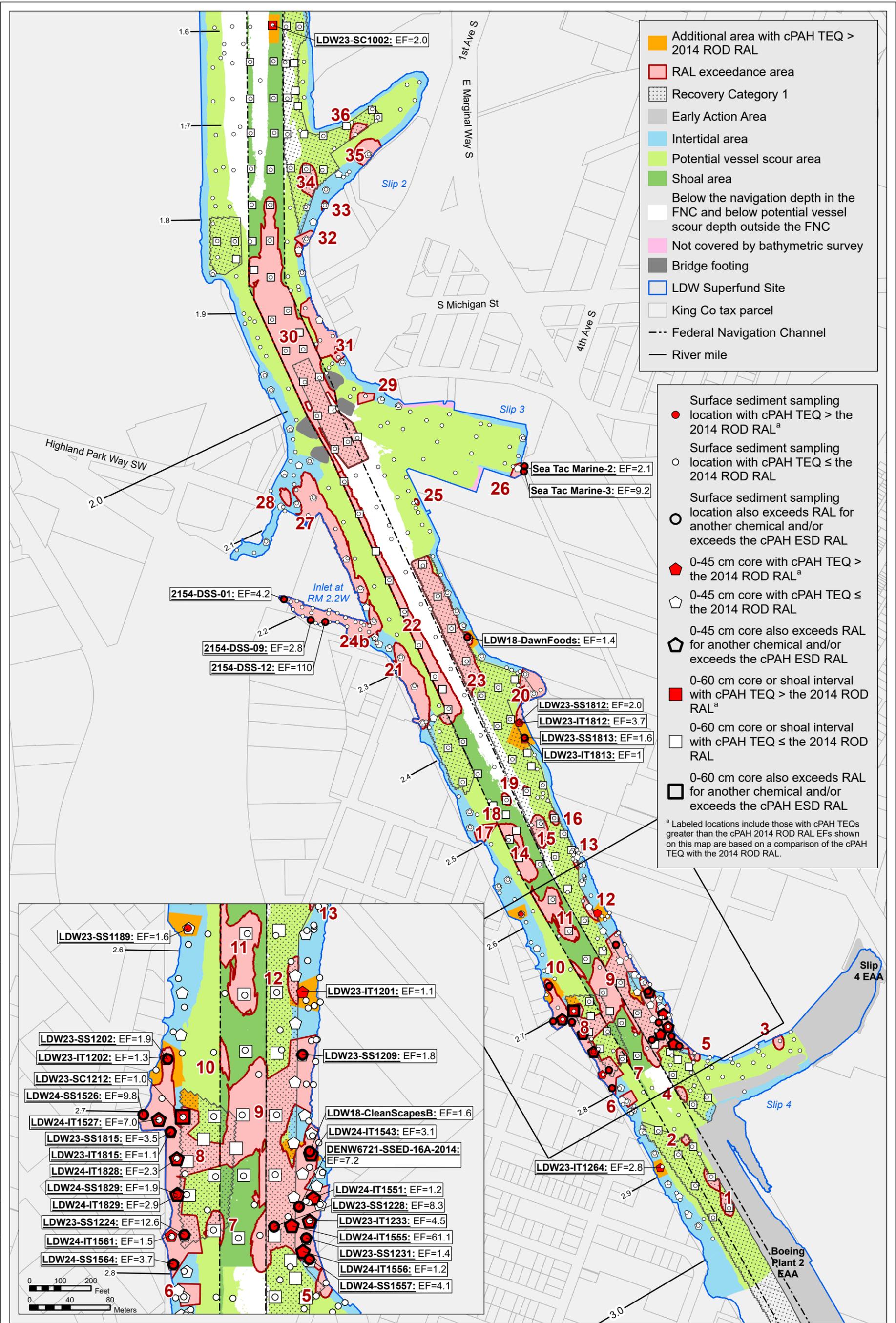
Vertical cores only analyzed for cPAHs

Location	1516	1589
Mudline	-3.7	-3.4
Core Target	7.5 ft	7.5 ft
Older Loc.	-	1264
-3 to -4 ft	0-45 A	0-45 A
-4 to -5 ft	A	A
-5 to -6 ft	B	B
-6 to -7 ft	C	C
-7 to -8 ft	geo D	D
-8 to -9 ft	E	geo E
-9 to -10 ft	F	F
-10 to -11 ft	ref.	G
-11 to -12 ft		H

- 0-45 cm core with cPAH TEQ > the 2014 ROD RAL^a
 - 0-45 cm core with cPAH TEQ ≤ the 2014 ROD RAL
 - ◡ 0-45 cm core also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL
 - 0-60 cm core or shoal interval with cPAH TEQ > the 2014 ROD RAL^a
 - 0-60 cm core or shoal interval with cPAH TEQ ≤ the 2014 ROD RAL
 - ◡ 0-60 cm core also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL
 - ∨ Vertical extent (non-RAL interval)
 - ∨ Vertical extent (non-RAL interval) archive
 - ▨ Recovery Category 1
 - Intertidal area
 - Potential vessel scour area
 - Shoal area
 - Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
 - Not covered by bathymetric survey
 - Bridge footing
 - Early Action Area
 - LDW Superfund Site
 - King Co tax parcel
 - Federal Navigation Channel
 - River mile
- ^a Labeled locations include those with cPAH TEQs greater than the cPAH 2014 ROD RAL EFs shown on this map are based on a comparison of the cPAH TEQ with the 2014 ROD RAL.



Prepared by ClaireC, 9/29/2025; W:\Projects\Duwamish_AOC\GIS\Maps_and_Analyses\Phase 2\Data Evaluation Report\Appendices.aprx\Map_L-2_7297_cPAH ROD RAL_etc - Subsurface



- Additional area with cPAH TEQ > 2014 ROD RAL
- RAL exceedance area
- Recovery Category 1
- Early Action Area
- Intertidal area
- Potential vessel scour area
- Shoal area
- Below the navigation depth in the FNC and below potential vessel scour depth outside the FNC
- Not covered by bathymetric survey
- Bridge footing
- LDW Superfund Site
- King Co tax parcel
- Federal Navigation Channel
- River mile

- Surface sediment sampling
 - location with cPAH TEQ > the 2014 ROD RAL^a
 - location with cPAH TEQ ≤ the 2014 ROD RAL
 - location also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL
 - 0-45 cm core with cPAH TEQ > the 2014 ROD RAL^a
 - 0-45 cm core with cPAH TEQ ≤ the 2014 ROD RAL
 - 0-45 cm core also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL
 - 0-60 cm core or shoal interval with cPAH TEQ > the 2014 ROD RAL^a
 - 0-60 cm core or shoal interval with cPAH TEQ ≤ the 2014 ROD RAL
 - 0-60 cm core also exceeds RAL for another chemical and/or exceeds the cPAH ESD RAL

^a Labeled locations include those with cPAH TEQs greater than the cPAH 2014 ROD RAL EF values shown on this map. The locations are based on a comparison of the cPAH TEQ with the 2014 ROD RAL.

Prepared by ClairC, 9/28/2025. W:\Projects\Duwamish_AOC\GIS\Maps and Analyses\Phase 2\Data Evaluation Report\Appendices\Map L-3 7297 cPAH REA changes



Map L-3. Additional RAL Exceedance Areas in the Middle Reach Based on the Use of the 2014 ROD RAL for cPAHs