LOWER COLUMBIA RIVER

Geographic Response Plan

(LCR-GRP)

Response Strategies and Priorities

October 2024

Before you print this document

This section and its appendices are provided in “landscape” page orientation. The detailed 2-page information sheets for response strategies, notification strategies, staging areas, and boat launch locations in the appendices have been designed for duplex printing (front and back side of paper), “open to top” configuration.

INTRODUCTION

This section provides information on GRP response strategies and the order they should be implemented, based on Potential Oil Spill Origin Points (POSOPs) and the proximity and relative priority of sensitive resources near those point locations. Area maps, sector maps, and information on staging areas and boat launch locations are also provided in this section. During a spill incident, GRP response strategies should be implemented as soon as possible. Unless circumstances unique to a particular spill situation dictate otherwise, the priority tables in Strategy and Response Priorities should be used to decide the order that GRP strategies are deployed. The downstream movement of oil and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting implementation priorities. Information on resources at risk, sensitive areas, and flight restrictions can be found in the Resources At Risk section. Information on shoreline countermeasures can be found in the Northwest Area Shoreline Countermeasures Manual (NWRCP Section 9420). The Northwest Regional Contingency Plan (NWRCP) is available online at http://www.rrt10nwac.com/NWACP/Default.aspx.

These GRP strategies have been created to reduce spilled oil's impact on sensitive resources. They are not everything that should or could be done during a response to lessen the chance of injury to natural, cultural, and economic resources. Control and containment of an oil spill is always a higher priority than the implementation of response strategies. Although designed to be implemented during the initial phase of an oil spill, strategies may continue to be used throughout a response at the discretion of Unified Command with guidance provided by the Environmental Unit.

On-site Considerations

Before Deploying a GRP Strategy

Will equipment or vehicles need to be staged on or near a roadway? If so, traffic control may be required. Contact the Washington State Patrol or local, county, municipality, or tribal police for assistance. At minimum, Washington Department of Transportation (WSDOT) guidelines for work zone traffic control should be followed when working on or near a roadway.

AREA OVERVIEW MAPS

The following maps provide a geographic overview of the Lower Columbia River GRP planning area. Sector maps provide more detail on the location of response strategies, notification strategies, staging areas, boat launch locations, and POSOPs. Detailed information for each location can be found in the matrices or in this section's appendices. Priority tables for potential oil spill origin points can be found below.

STRATEGY AND RESPONSE PRIORITIES

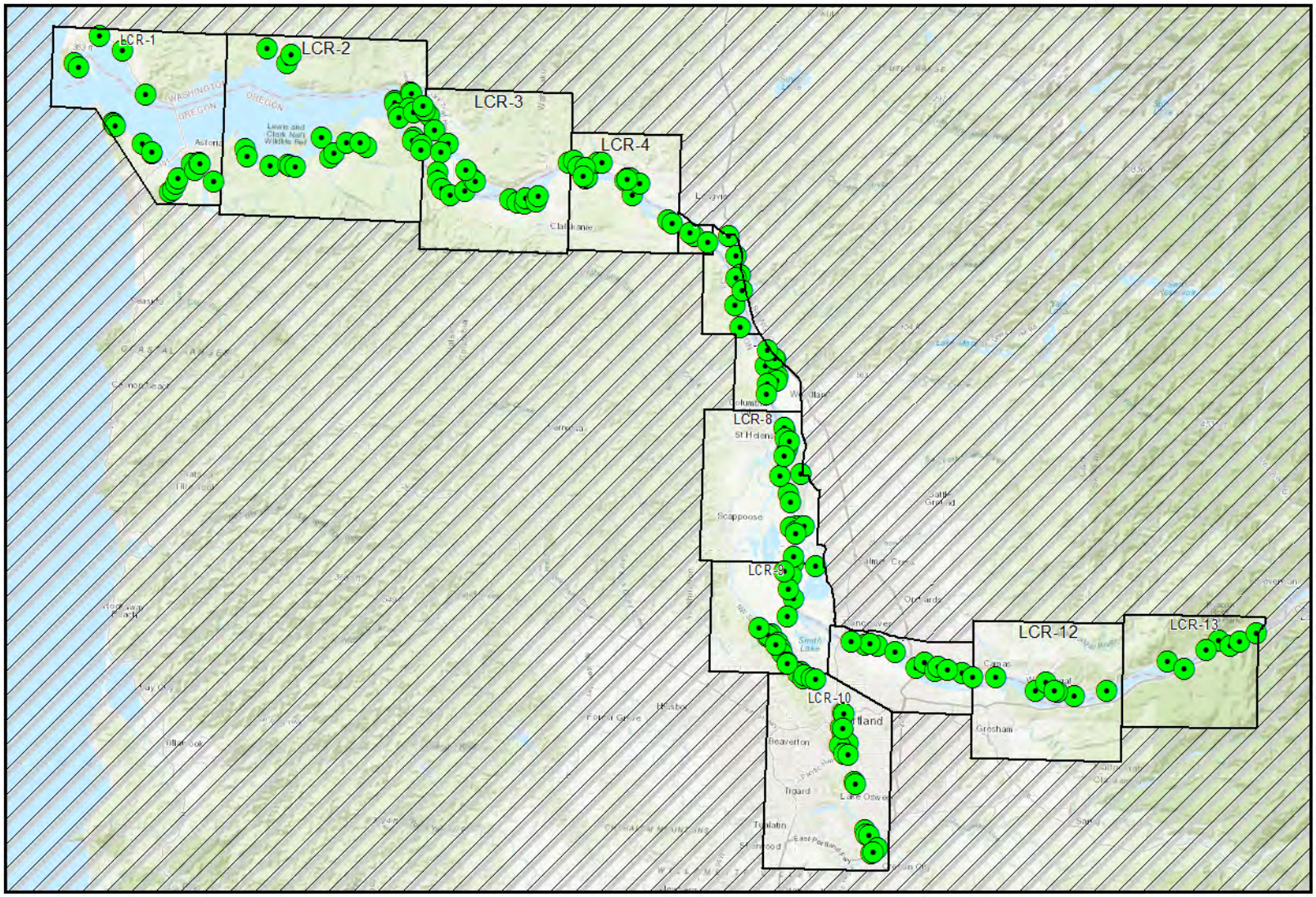
Strategy Priorities based on Potential Oil Spill Origin Points

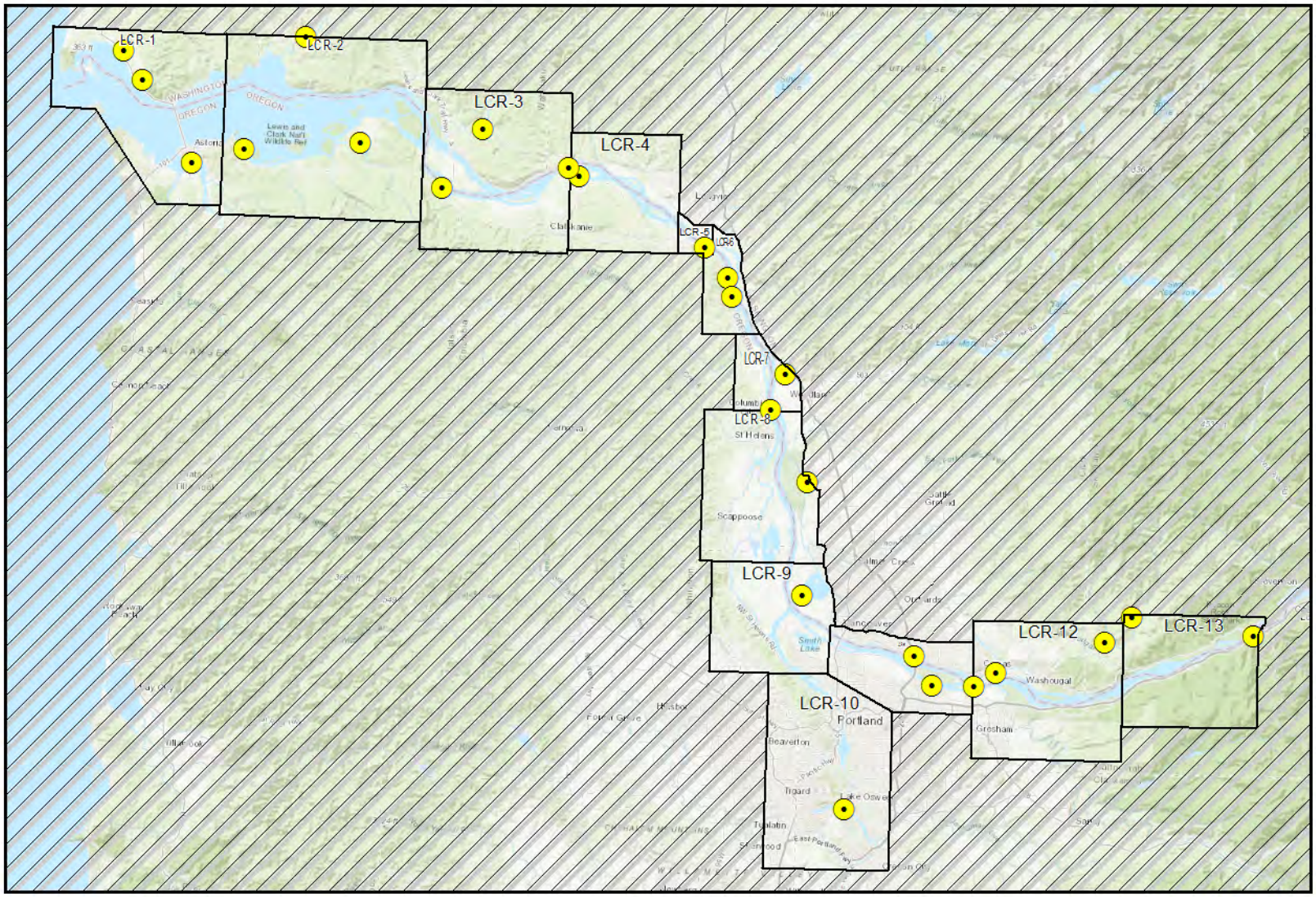
Potential Oil Spill Origin Points (POSOPs) are geographic locations that have a defined list of response strategy implementation priorities provided in a table within this section. The placement of each POSOP is often based on spill risks in the area. Occasionally POSOPs are generalized to ensure implementation priorities are developed throughout an entire planning area.

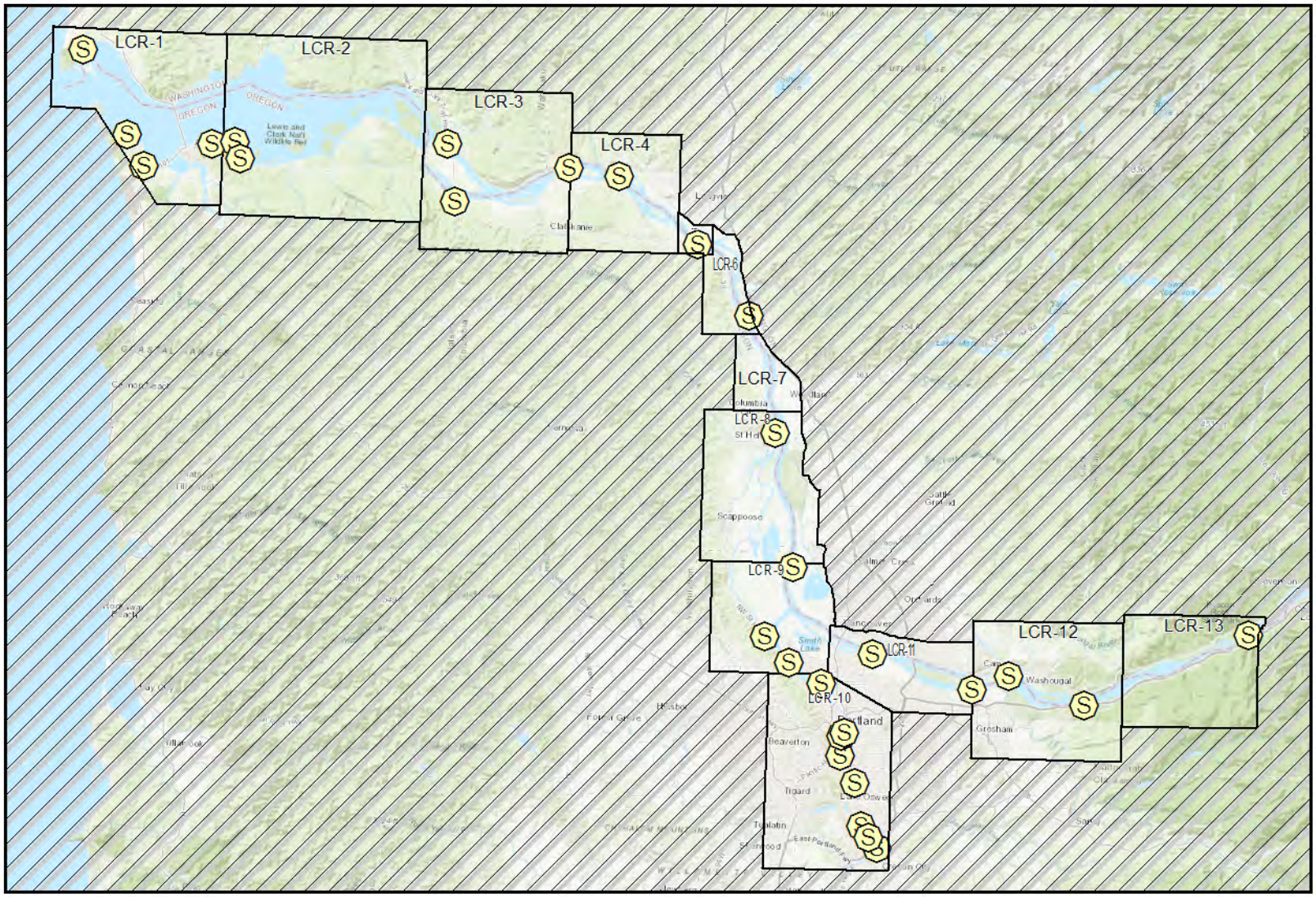
These points are displayed on area overview and sector maps as red squares. In establishing priorities during a response, or selecting an appropriate POSOP, the downstream movement of spilled oil and the time it takes to mobilize and deploy response resources must be considered. Generally, on streams, creeks, and rivers, GRP strategies should first be implemented downstream, well beyond the furthest extent of the spill, with deployments continuing upstream towards the spill source and in some cases slightly beyond. POSOPs are alphabetically designated.

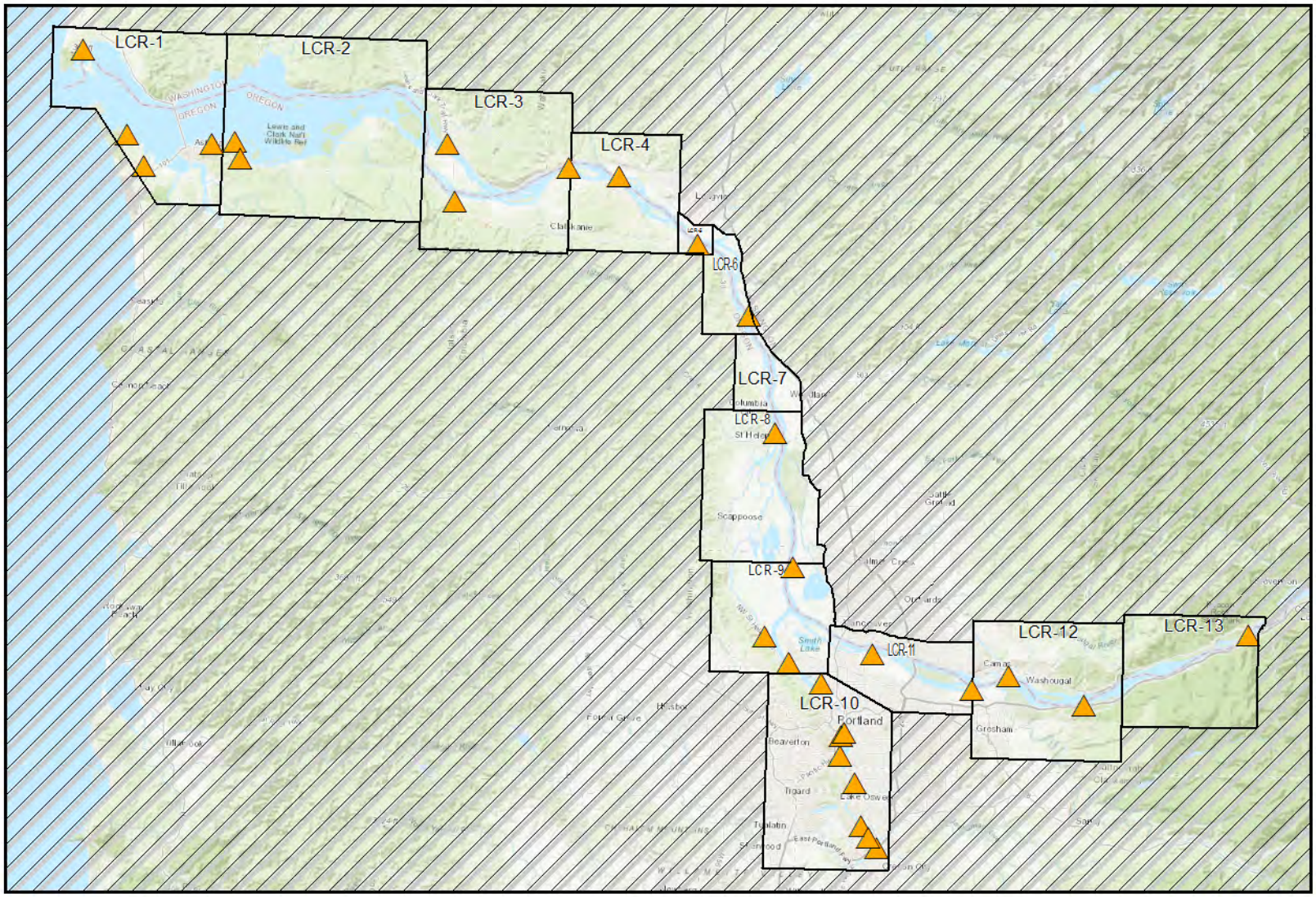
The following tables provide the strategy implementation order for Potential Oil Spill Origin Points in this GRP: points LCR-A through LCR-P. The priority tables provided in this section were developed using a combination of variables, including: notification time, travel time for responders and equipment, average and seasonal flow rates, average winds, deployment time, proximity to the spill source, trustee input, the relative priority of the resources at risk, and other considerations.

Source control and containment are a higher priority than GRP strategy implementation


LCR-1
LCR-2
LCR-3
LCR-4
LCR-8
LCR-9
LCR-10
LCR-12
LCR-13
WASHINGTON
OREGON
Response Strategy Locations
0 3 6 12
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,


LCR-1
LCR-2
LCR-3
LCR-4
LCR-5
LCR6
LCR-7
LCR-8
LCR-9
LCR-10
LCR-12
LCR-13
WASHINGTON
OREGON
Lewis and Clark Nat'l Wildlife Ref
Astoria
Clatskanie
Columbia City
St Helens
Scappoose
Portland
Beaverton
Tigard
Lake Oswego
Tualatin
Gresham
Washougal
Camas
Hillsboro
Forest Grove
Cannon Beach
Seaside
Manzanita
Nehalem
Tillamook
Bay City
Oceanside
Netarts
Rockaway Beach
Wheeler
Vernonia
Scappoose
Yankton
Orchards
Smith Lake
Sherwood
Notification Strategy Locations
0 3 6 12
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,


LCR-1
LCR-2
LCR-3
LCR-4
LCR-6
LCR-7
LCR-8
LCR-9
LCR-10
LCR-11
LCR-12
LCR-13
WASHINGTON
OREGON
Lewis and Clark Nat'l Wildlife Ref
Clatskanie
Scappoose
Portland
Beaverton
Tigard
Tualatin
Gresham
Washougal
Staging Area Locations
0 3 6 12
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,


LCR-1
LCR-2
LCR-3
LCR-4
LCR-6
LCR-7
LCR-8
LCR-9
LCR-10
LCR-11
LCR-12
LCR-13
WASHINGTON
OREGON
Lewis and Clark Nat'l Wildlife Ref
Portland
Beaverton
Tigard
Lake Oswego
Tualatin
Gresham
Camas
Washougal
Scappoose
Clatskanie
Columbia
Smith Lake
Boat Launch Locations
0 3 6 12
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,

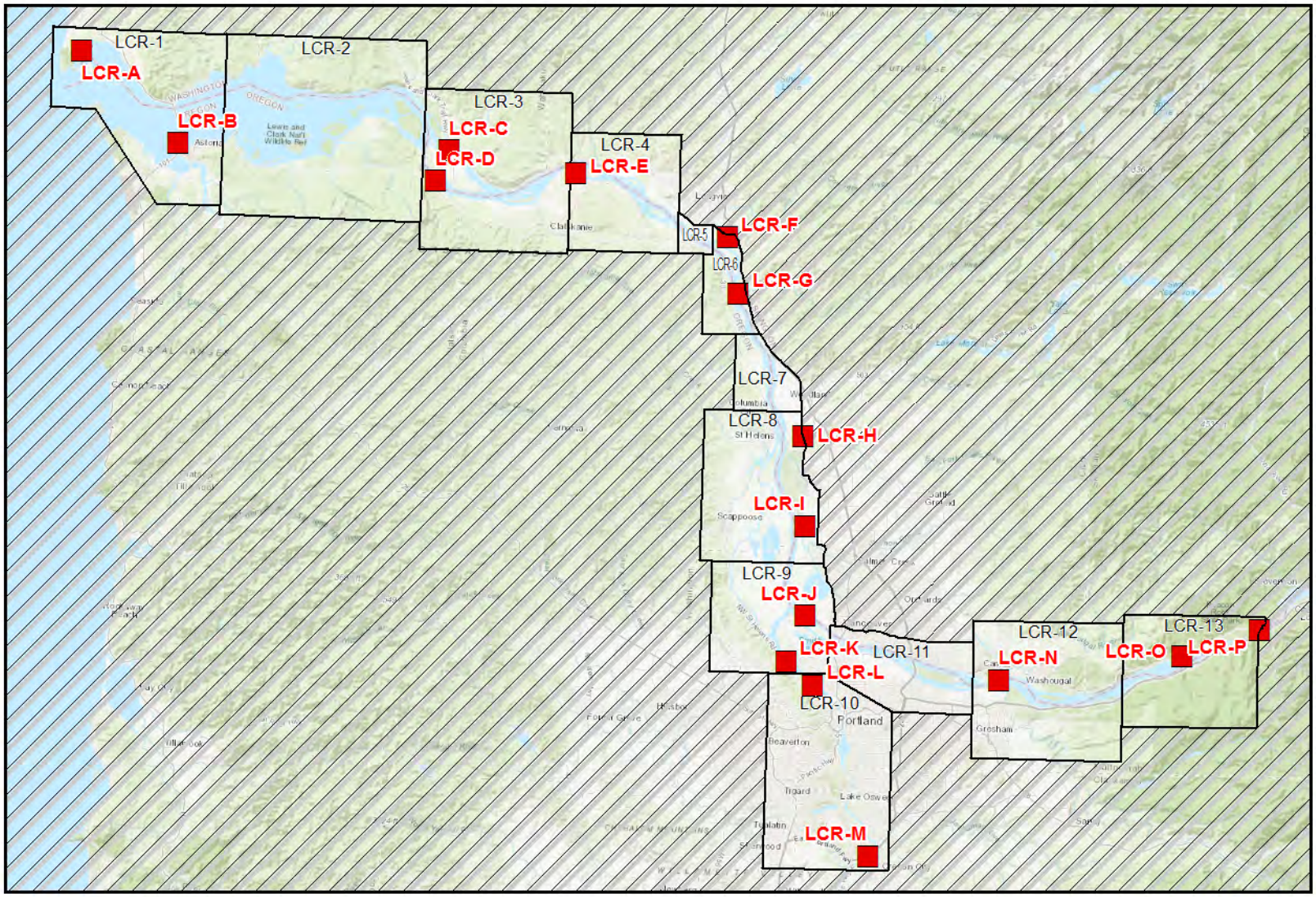

LCR-1
LCR-A
LCR-B
LCR-2
LCR-3
LCR-C
LCR-D
LCR-4
LCR-E
LCR-5
LCR-F
LCR-6
LCR-G
LCR-7
LCR-8
LCR-H
LCR-I
LCR-9
LCR-J
LCR-K
LCR-L
LCR-10
LCR-11
LCR-12
LCR-N
LCR-13
LCR-O
LCR-P
LCR-M
Portland
Potential Oil Spill Locations
0 3 6 12
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,

Table 1: LCR-A (Port of Ilwaco LCR-3.0R)

	LCR-A (Port of Ilwaco LCR-3.0R)				
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**WALR-0.7R**	200	LCR-1	431	Deploy by land
2	**LCR-2.2R**	600	LCR-1	145	Downstream Flow/Surface Wind
3	**LCR-2.4R**	600	LCR-1	147	Upstream Flow/Surface Wind
4	**CHINR-0.3**	100	LCR-1	119	Upstream Flow/Surface Wind
6	**LCR-8.4R**	800	LCR-1	155	Downstream Flow/Surface Wind
7	**LCR-7.5L**	500	LCR-1	153	High Water
8	**LCR-6.8L**	500	LCR-1	149	Upstream Flow/Surface Wind
9	**LCR-7.1L**	500	LCR-1	151	Upstream Flow/Surface Wind
10	**LCR-10.1L**	400	LCR-1	157	High Incoming Tide
11	**LCR-10.8L**	800	LCR-1	159	High Incoming Tide
12	**LCR-10.9L**	600	LCR-1	161	High Incoming Tide

Total Boom: 5,600 ft.

Table 2: LCR-B (Port of Astoria/US-101 Bridge LCR-13.0L)

LCR-B (Port of Astoria/US-101 Bridge LCR-13.0L)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**L&C-1.2**	1000	LCR-1	137	Upstream Flow/Surface Wind
2	**YOR-3.6L**	100	LCR-1	497	High Flow
3	**LCR-10.1L**	400	LCR-1	157	High Incoming Tide
4	**LCR-10.8L**	800	LCR-1	159	High Incoming Tide
5	**LCR-10.9L**	600	LCR-1	161	High Incoming Tide
6	**LCR-6.8L**	500	LCR-1	149	Upstream Flow/Surface Wind
7	**LCR-7.1L**	500	LCR-1	151	Upstream Flow/Surface Wind
8	**LCR-7.5L**	500	LCR-1	153	High Water
9	**L&C-1.7**	500	LCR-1	139	Upstream Flow/Surface Wind
10	**L&C-2.3**	300	LCR-1	141	Upstream Flow/Surface Wind
11	**L&C-2.6**	300	LCR-1	143	Upstream Flow/Surface Wind
12	**YOR-4.1R**	800	LCR-1	501	
13	**YOR-4.0R**	800	LCR-1	499	
14	**YOR-3.3R**	1600	LCR-1	495	

Total Boom: 8,700 ft.

Table 3: LCR-C (Julia Butler Hansen Bridge/Cathlamet Marina LCR-40.7R)

LCR-C (Julia Butler Hansen Bridge/Cathlamet Marina LCR-40.7R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-35.0M**	800	LCR-2	203	
2	**LCR-35.3R**	800	LCR-3	205	High Water
3	**LCR-35.7R**	800	LCR-3	207	Downstream Flow/Surface Wind
4	**LCR-36.0R**	800	LCR-3	209	
5	**LCR-37.7M**	500	LCR-2	213	Upstream Flow/Surface Wind
6	**LCR-37.2R**	800	LCR-3	211	
7	**LCR-38.2L**	500	LCR-2	215	
8	**LCR-38.5M**	800	LCR-2	217	Upstream Flow/Surface Wind
9	**LCR-38.8L**	500	LCR-2	221	

Total Boom: 6,300 ft.

Table 1: LCR-D (James River Mill LCR-41.6L)

LCR-D (James River Mill LCR-41.6L)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-35.0M**	800	LCR-2	203	
2	**LCR-34.6M**	500	LCR-2	197	
3	**LCR-33.6bR**	900	LCR-2	193	Upstream Flow/Surface Wind
4	**LCR-33.6aR**	900	LCR-2	191	
5	**LCR-35.3R**	800	LCR-3	205	High Water
6	**LCR-35.7R**	800	LCR-3	207	Downstream Flow/Surface Wind
7	**LCR-36.0R**	800	LCR-3	209	
8	**LCR-37.7M**	500	LCR-2	213	Upstream Flow/Surface Wind
9	**LCR-37.2R**	800	LCR-3	211	
10	**LCR-38.2L**	500	LCR-2	215	
11	**LCR-38.5M**	800	LCR-2	217	Upstream Flow/Surface Wind
12	**LCR-38.8L**	500	LCR-2	221	
13	**LCR-38.6R**	800	LCR-3	219	Downstream Flow/Surface Wind
14	**LCR-40.5M**	800	LCR-3	223	Upstream Flow/Surface Wind

Total Boom: 10,200 ft.

Table 1: LCR-E (Clatskanie Terminal LCR-55.0L)

LCR-E (Clatskanie Terminal LCR-55.0L)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-49.8L**	600	LCR-3	253	
2	**LCR-49.7L**	600	LCR-3	251	
3	**LCR-49.1M**	400	LCR-3	249	High Flow
4	**LCR-50.5L**	1800	LCR-3	255	
5	**LCR-48.1M**	600	LCR-3	243	High Flow
6	**LCR-48.8M**	500	LCR-3	247	High Flow
7	**LCR-48.6M**	500	LCR-3	245	High Flow
8	**LCR-54.4M**	500	LCR-4	261	High Flow
9	**LCR-55.1M**	700	LCR-4	263	High Flow
10	**LCR-55.4L**	200	LCR-4	267	
11	**LCR-55.3M**	800	LCR-4	265	High Flow
12	**LCR-55.5M**	400	LCR-4	269	High Flow
13	**LCR-54.2R**	300	LCR-4	259	
14	**LCR-45.0M**	400	LCR-3	239	

Total Boom: 8,300 ft.

Table 1: LCR-F (Port of Longview/Cowlitz River LCR-68.5R)

LCR-F (Port of Longview/Cowlitz River LCR-68.5R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-58.7M**	800	LCR-4	277	Upstream Flow/Surface Wind
2	**LCR-58.8R**	600	LCR-4	279	
3	**LCR-58.9M**	600	LCR-4	281	
4	**LCR-59.0M**	800	LCR-4	283	Downstream Flow/Surface Wind
6	**LCR-59.8L**	600	LCR-4	285	Upstream Flow/Surface Wind
7	**LCR-60.2M**	500	LCR-4	287	Mid or Low Flow
8	**LCR-64.0M**	1600	LCR-4	289	Low Flow
9	**LCR-64.4L**	600	LCR-4	291	Downstream Flow/Surface Wind
10	**LCR-65.9R**	700	LCR-5	293	Downstream Flow/Surface Wind
11	**LCR-66.2R**	900	LCR-5	295	Downstream Flow/Surface Wind
12	**LCR-67.7R**	800	LCR-5	297	
13	**CWLZR-1.0**	600	LCR-6	123	Downstream Flow/Surface Wind

Total Boom: 9,100 ft.

Table 1: LCR-G (Port of Kalama/Kalama River LCR-73.1R)

LCR-G (Port of Kalama/Kalama River LCR-73.1R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-64.0M**	1600	LCR-4	289	Low Flow
2	**LCR-64.4L**	600	LCR-4	291	Downstream Flow/Surface Wind
3	**LCR-65.9R**	700	LCR-5	293	Downstream Flow/Surface Wind
4	**LCR-66.2R**	900	LCR-5	295	Downstream Flow/Surface Wind
5	**LCR-70.0M**	500	LCR-6	299	
6	**LCR-71.4R**	1000	LCR-6	301	
7	**LCR-71.5M**	800	LCR-6	303	Downstream Flow/Surface Wind
8	**KLMAR-0.7**	700	LCR-6	135	Downstream Flow/Surface Wind
9	**LCR-59.8L**	600	LCR-4	285	Upstream Flow/Surface Wind

Total Boom: 7,400 ft.

Table 1: LCR-H (Lewis River LCR-86.5R)

LCR-H (Lewis River LCR-86.5R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-87.3R**	600	LCR-8	331	
2	**LCR-87.6R**	900	LCR-8	333	
3	**LCR-81.0M**	900	LCR-7	317	
4	**LCR-81.2R**	800	LCR-7	319	
5	**LCR-81.8L**	900	LCR-7	321	
6	**LCR-82.4L**	400	LCR-7	323	
7	**LCR-85.6M**	700	LCR-8	325	
8	**LCR-85.8R**	1,000	LCR-8	327	
9	**LCR-86.2R**	800	LCR-8	329	Downstream Flow/Surface Wind
10	**LEWR-0.4R**	700	LCR-8	409	Downstream Flow/Surface Wind

Total Boom: 7,700 ft.

Table 1: LCR-I (Whipple Creek LCR-94.5R)

LCR-I (Whipple Creek LCR-94.5R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-85.6M**	700	LCR-8	325	
2	**LCR-85.8R**	1,000	LCR-8	327	
3	**LCR-86.2R**	800	LCR-8	329	Downstream Flow/Surface Wind
4	**LEWR-0.4R**	700	LCR-8	409	Upstream Flow/Surface Wind
6	**LCR-87.3R**	600	LCR-8	331	
7	**LCR-87.6R**	900	LCR-8	333	
8	**LCR-87.7R**	600	LCR-8	335	
9	**LCR-89.8R**	600	LCR-8	337	
10	**LCR-91.0R**	600	LCR-8	339	
11	**LCR-94.3R**	400	LCR-8	343	
12	**LCR-94.5L**	600	LCR-8	345	

Total Boom: 7,500 ft.

Table 1: LCR-J (Port of Vancouver LCR-103.0R)

LCR-J (Port of Vancouver LCR-103.0R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-94.5L**	600	LCR-8	345	
2	**LCR-94.8R**	400	LCR-8	347	
3	**LCR-95.0R**	400	LCR-8	349	
4	**LCR-97.0R**	500	LCR-8	351	Downstream Flow/Surface Wind
5	**LCR-97.5R**	400	LCR-8	353	
6	**LCR-98.6R**	600	LCR-9	357	
7	**LCR-99.9R**	500	LCR-9	359	Downstream Flow/Surface Wind
8	**LCR-100.8R**	400	LCR-9	361	
9	**WR-0.9R**	700	LCR-9	435	

Total Boom: 4,500 ft.

Table 1: LCR-K (Linnton Tank Farms WR-5.7R)

LCR-K (Linnton Tank Farms WR-5.7R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**MC-0.1**	2000	LCR-9	415	
2	**MC-0.5**	1000	LCR-9	421	
3	**MC-0.2**	700	LCR-9	417	
4	**MC-0.4**	500	LCR-9	419	
5	**WR-0.9R**	700	LCR-9	435	
6	**MC-1.5**	1000	LCR-9	423	
7	**WR-3.7R**	800	LCR-9	437	Downstream Flow/Surface Wind
8	**WR-3.8L**	800	LCR-9	439	Downstream Flow/Surface Wind
9	**WR-4.2R**	800	LCR-9	441	
10	**WR-4.3R**	600	LCR-9	443	
11	**WR-4.5R**	800	LCR-9	445	Downstream Flow/Surface Wind

Total Boom: 9,700 ft.

Table 1: LCR-L (Port of Portland WR-8.6)

LCR-L (Port of Portland WR-8.6)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**WR-7.5L**	800	LCR-10	457	Downstream Flow/Surface Wind
2	**WR-7.4R**	800	LCR-10	455	Downstream Flow/Surface Wind
3	**WR-6.9L**	800	LCR-9	453	Downstream Flow/Surface Wind
4	**SIL-0.4**	800	LCR-10	425	
5	**WR-6.9R**	800	LCR-9	451	
6	**WR-5.9L**	800	LCR-9	449	Downstream Flow/Surface Wind
7	**WR-5.8R**	800	LCR-9	447	Downstream Flow/Surface Wind
8	**MC-0.1**	2000	LCR-9	415	
9	**WR-4.5R**	800	LCR-9	445	Downstream Flow/Surface Wind
10	**WR-4.3R**	600	LCR-9	443	
11	**WR-4.2R**	800	LCR-9	441	
12	**WR-0.9R**	700	LCR-9	435	

Total Boom: 10,500 ft.

Table 1: LCR-M (Willamette Falls Locks WR-26.5)

LCR-M (Willamette Falls Locks WR-26.5)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**WR-26.1L**	200	LCR-10	493	
2	**WR-25.5R**	100	LCR-10	489	Low to Mid Flow
3	**WR-25.9R**	1000	LCR-10	491	Downstream Flow/Surface Wind
4	**WR-23.8L**	1300	LCR-10	485	Downstream Flow/Surface Wind
6	**WR-23.6L**	500	LCR-10	483	
7	**WR-23.9R**	100	LCR-10	487	
8	**WR-18.5R**	300	LCR-10	481	
9	**WR-15.9R**	100	LCR-10	477	
10	**WR-15.5M**	1000	LCR-10	475	Downstream Flow/Surface Wind

Total Boom: 4,600 ft.

Table 1: LCR-N (Port of Camas-Washougal LCR-121.0)

LCR-N (Port of Camas-Washougal LCR-121.0)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-111.0R**	800	LCR-11	371	Downstream Flow/Surface Wind
2	**LCR-113.3M**	500	LCR-11	373	
3	**LCR-113.8R**	800	LCR-11	375	Downstream Flow/Surface Wind
4	**LCR-114.8M**	100	LCR-11	377	High Water Only
5	**LCR-115.0R**	600	LCR-11	379	
6	**LCR-115.7R**	600	LCR-11	381	Downstream Flow/Surface Wind
7	**LCR-118.5R**	1000	LCR-11	385	
8	**LCR-120.6R**	600	LCR-12	387	

Total Boom: 5,000 ft.

Table 1: LCR-O (Franz Lake National Wildlife Refuge LCR-138.4R)

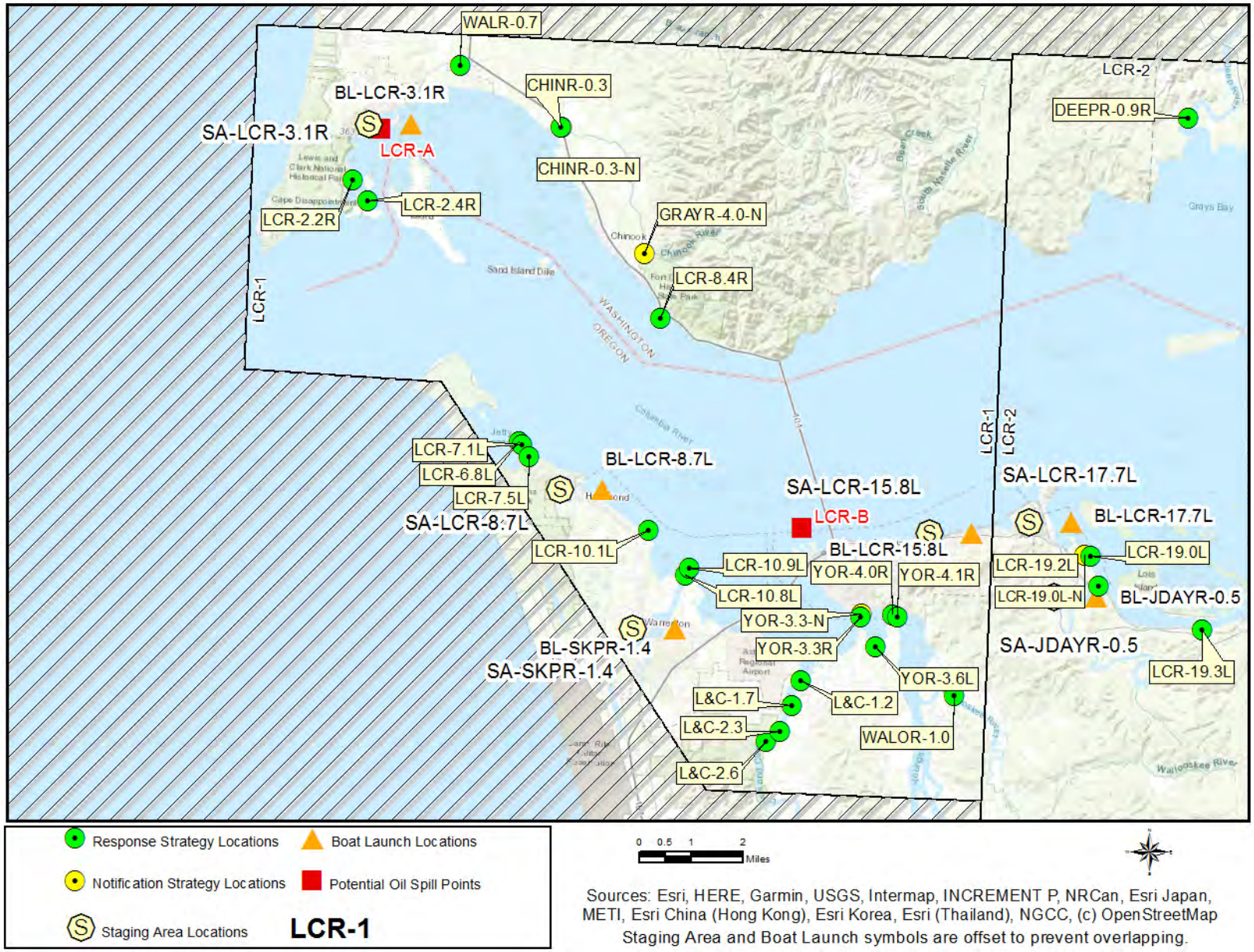
LCR-O (Franz Lake National Wildlife Refuge LCR-138.4R)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**GC-0.2**	100	LCR-12	129	
2	**GC-0.1**	100	LCR-12	127	
3	**LCR-128.0R**	600	LCR-12	391	Downstream Flow/Surface Wind
4	**LCR-131.0R**	800	LCR-12	393	Downstream Flow/Surface Wind
5	**LCR-137.0R**	400	LCR-13	395	
6	**LCR-138.0L**	100	LCR-13	397	

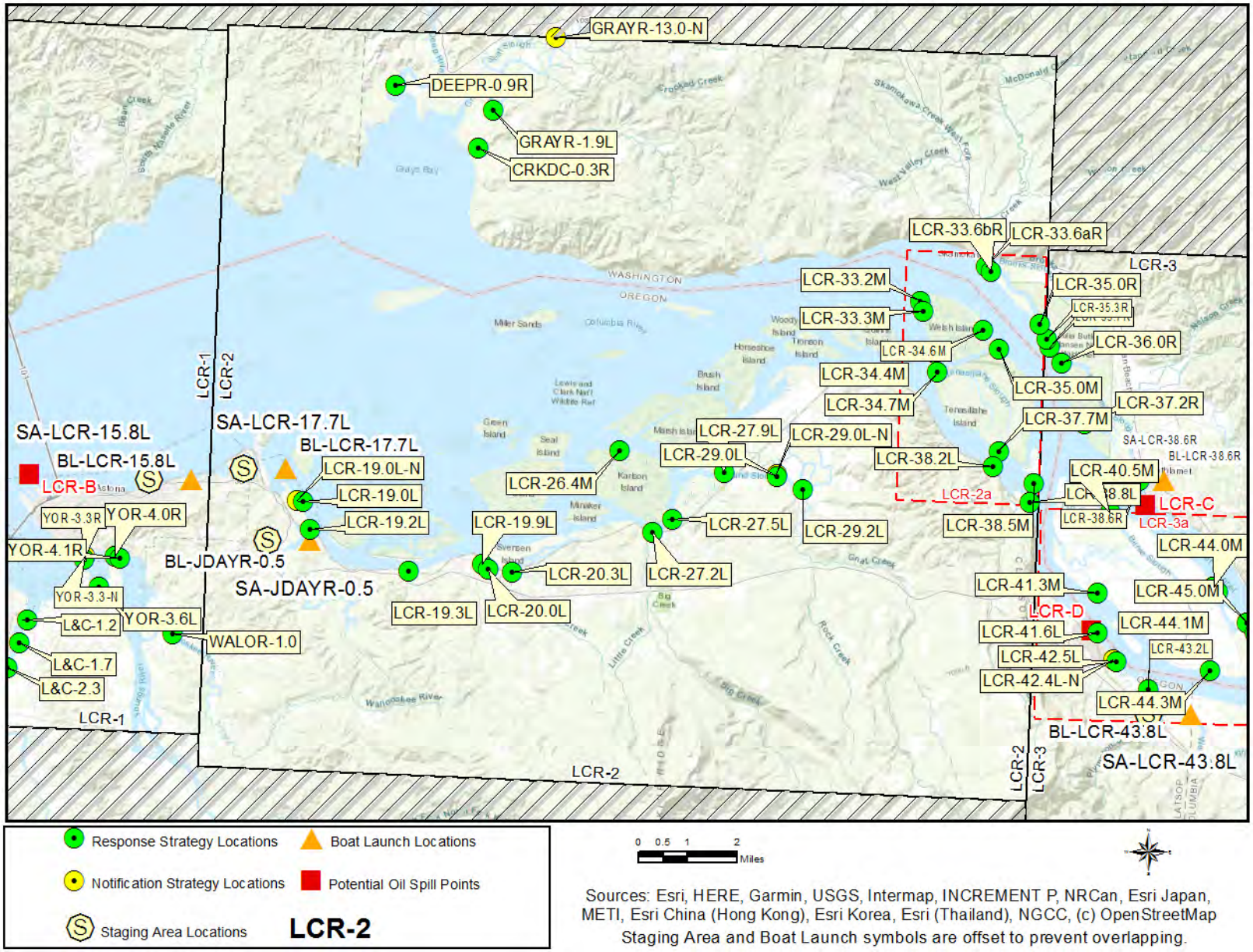
Total Boom: 2,100 ft.

Table 1: LCR-P (USACE Bonneville Dam LCR-145.4)

LCR-P (USACE Bonneville Dam LCR-145.4)					
Implementation Priority	**Strategy Number**	**Boom Length**	**Sector Map**	**Strategy Details (Page #)**	**Comments**
1	**LCR-131.0R**	800	LCR-12	393	Downstream Flow/Surface Wind
2	**LCR-137.0R**	400	LCR-13	395	
3	**LCR-138.0L**	100	LCR-13	397	
4	**LCR-140.3R**	400	LCR-13	399	
5	**LCR-141.4R**	400	LCR-13	401	Mid to High Flow
6	**LCR-142.4R**	700	LCR-13	403	
7	**LCR-143.4R**	500	LCR-13	405	Mid to High Flow
8	**LCR-144.9L**	600	LCR-13	407	

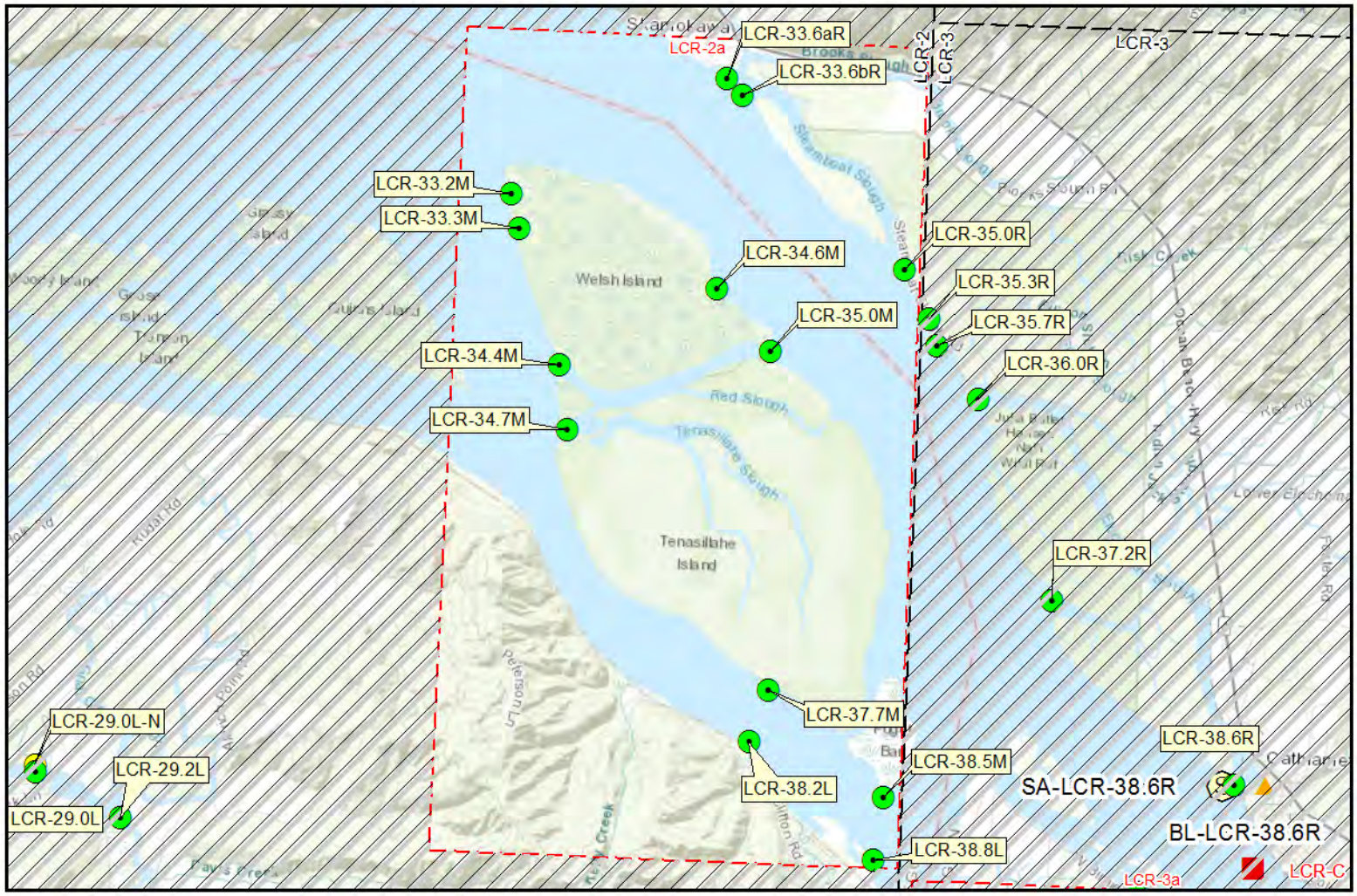
Total Boom: 3,900 ft.


WALR-0.7
CHINR-0.3
BL-LCR-3.1R
SA-LCR-3.1R
LCR-A
CHINR-0.3-N
LCR-2.4R
LCR-2.2R
GRAYR-4.0-N
LCR-8.4R
LCR-1
LCR-2
DEEPR-0.9R
LCR-7.1L
LCR-6.8L
LCR-7.5L
SA-LCR-8.7L
BL-LCR-8.7L
LCR-10.1L
SA-LCR-15.8L
LCR-B
BL-LCR-15.8L
LCR-10.9L
LCR-10.8L
YOR-4.0R
YOR-4.1R
YOR-3.3-N
YOR-3.3R
YOR-3.6L
L&C-1.7
L&C-1.2
L&C-2.3
L&C-2.6
WALOR-1.0
BL-SKPR-1.4
SA-SKPR-1.4
LCR-1
LCR-2
SA-LCR-17.7L
BL-LCR-17.7L
LCR-19.0L
LCR-19.2L
LCR-19.0L-N
BL-JDAYR-0.5
SA-JDAYR-0.5
LCR-19.3L
Response Strategy Locations
Boat Launch Locations
Notification Strategy Locations
Potential Oil Spill Points
Staging Area Locations
LCR-1
0 0.5 1 2
Miles
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap
Staging Area and Boat Launch symbols are offset to prevent overlapping.



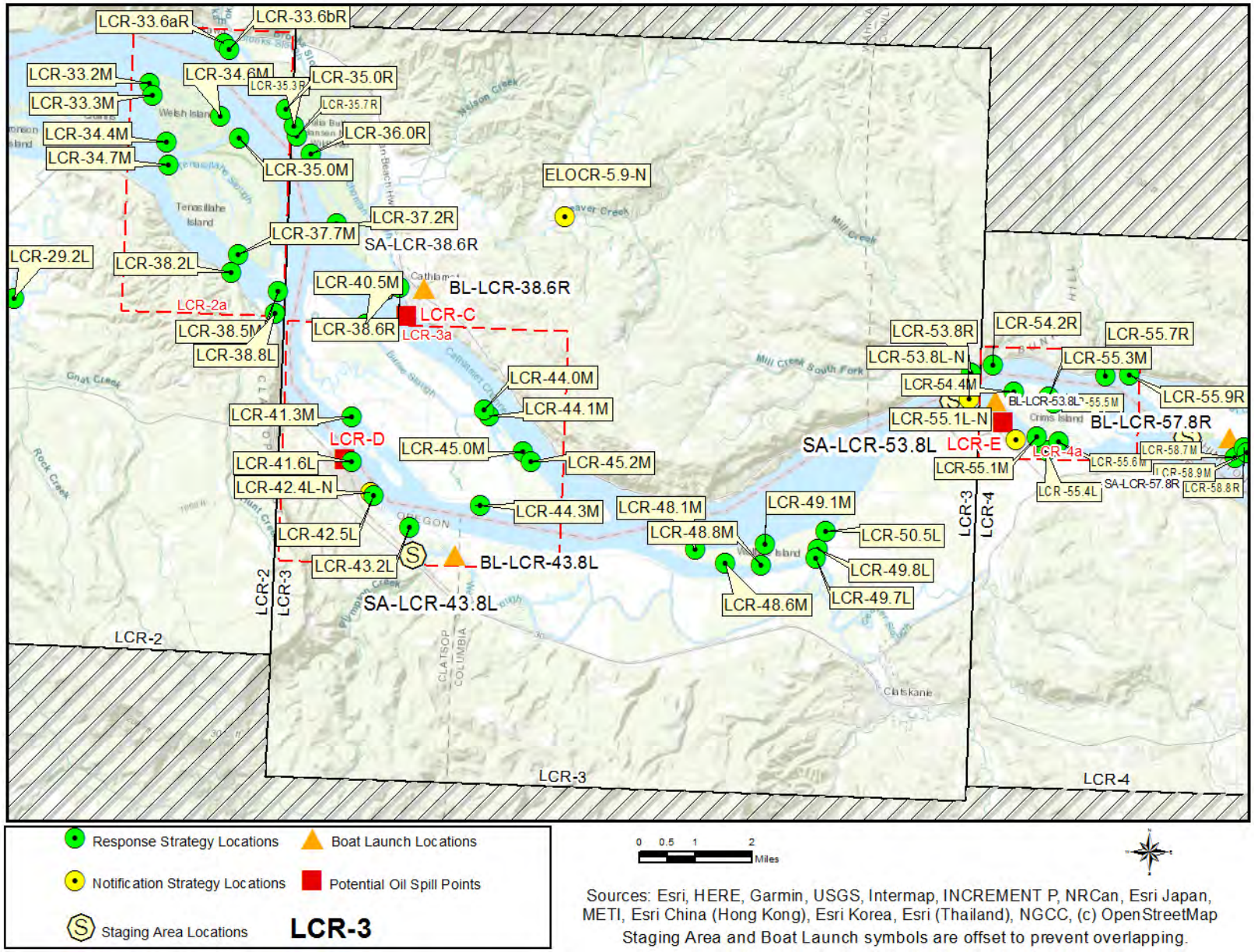
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



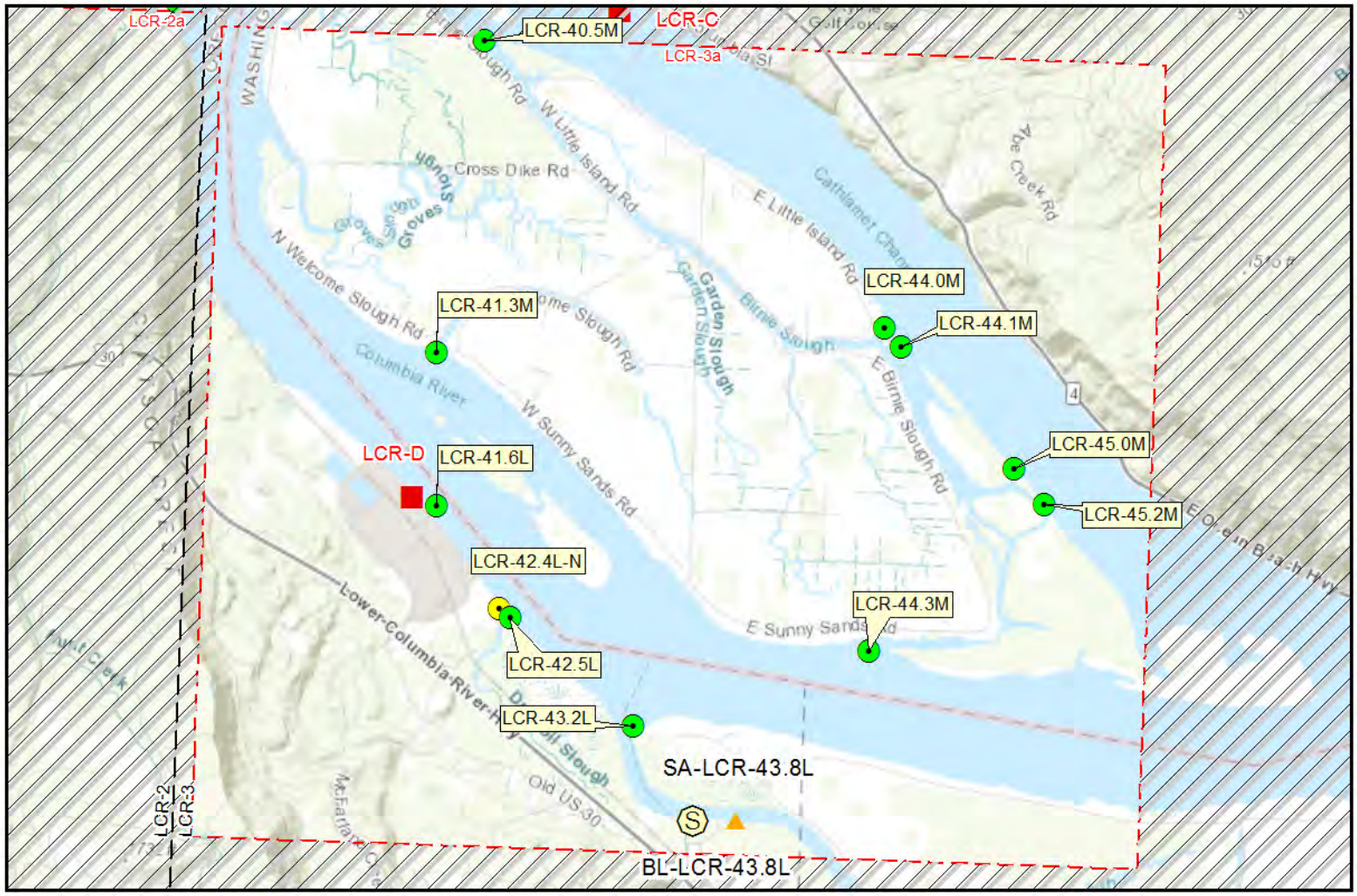
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

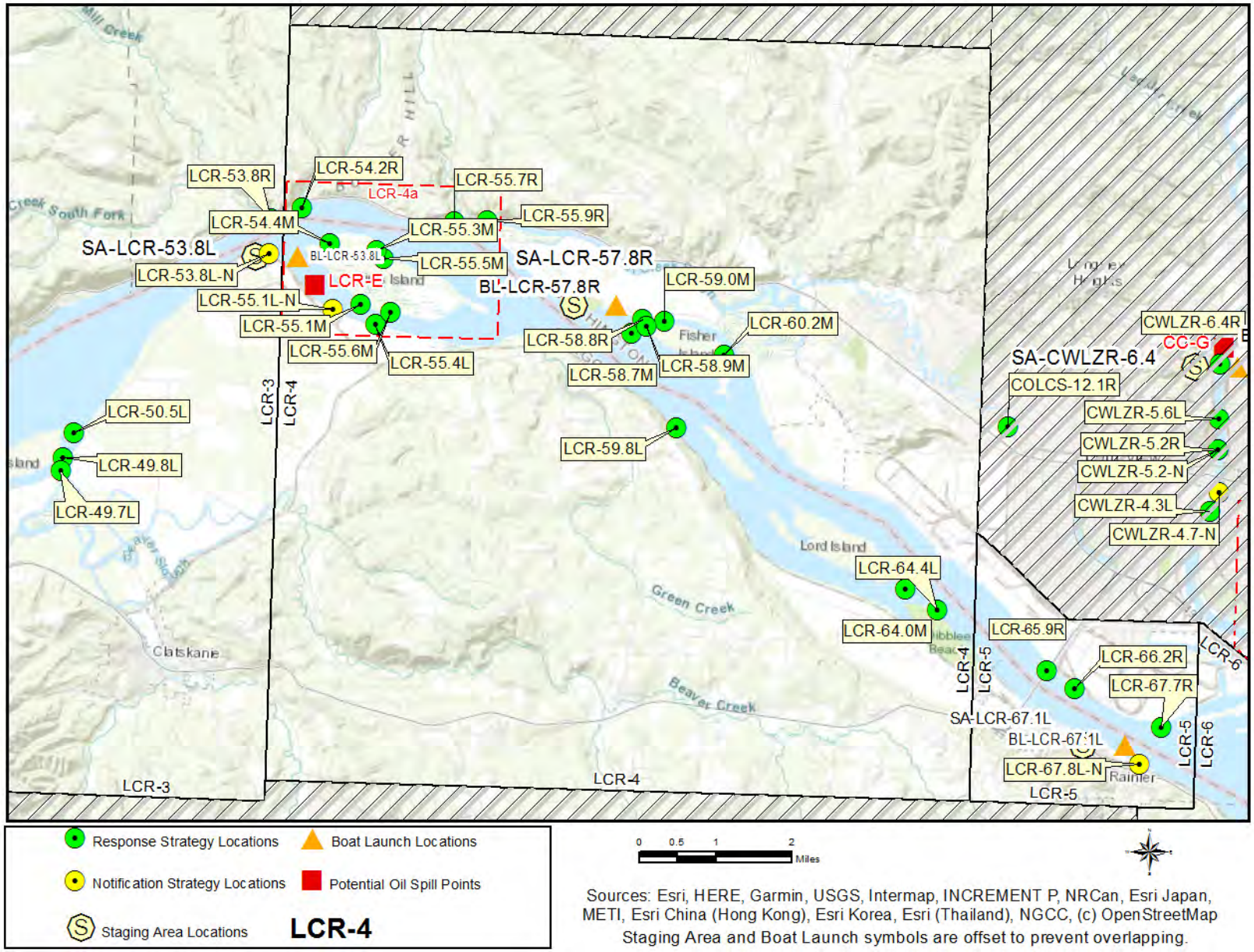
DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

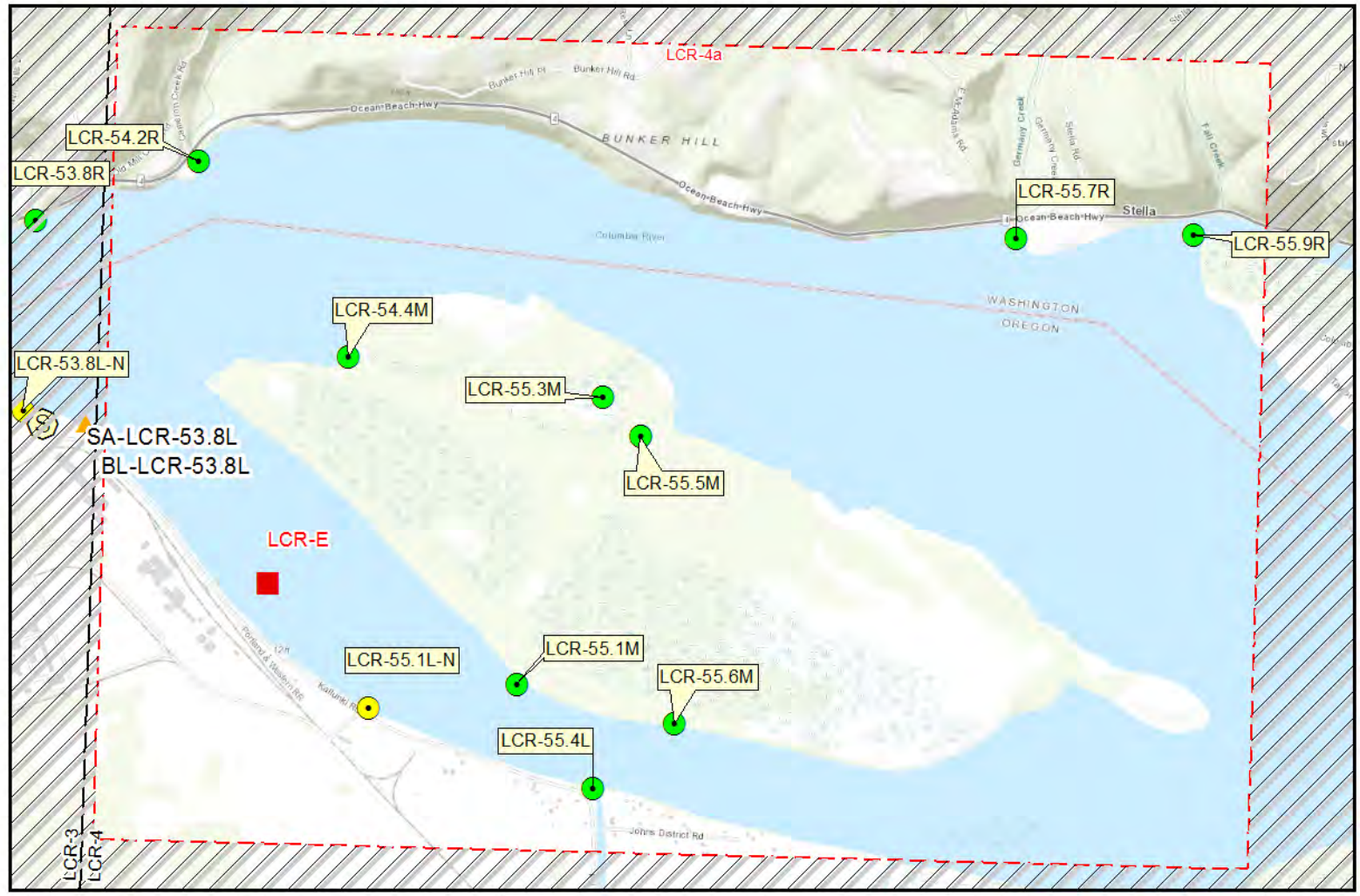
Staging Area and Boat Launch symbols are offset to prevent overlapping.


LCR-2a
LCR-40.5M
LCR-C
LCR-3a
Cross Dike Rd
W Little Island Rd
E Little Island Rd
Cathlamet Channel
Abe Creek Rd
Grove Slough
Garden Slough
Birnie Slough
E Birnie Slough Rd
N Welcome Slough Rd
Columbia River
W Sunny Sands Rd
E Sunny Sands Rd
LCR-41.3M
LCR-44.0M
LCR-44.1M
LCR-D
LCR-41.6L
LCR-45.0M
LCR-45.2M
LCR-42.4L-N
LCR-44.3M
LCR-42.5L
LCR-43.2L
Lower Columbia River Hwy
Old US-30
Gull Slough
Mt Farm Rd
SA-LCR-43.8L
BL-LCR-43.8L
LCR-2
LCR-3
Response Strategy Locations
Notification Strategy Locations
Staging Area Locations
Boat Launch Locations
Potential Oil Spill Locations
LCR-3a
0
0.5
1
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri
DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



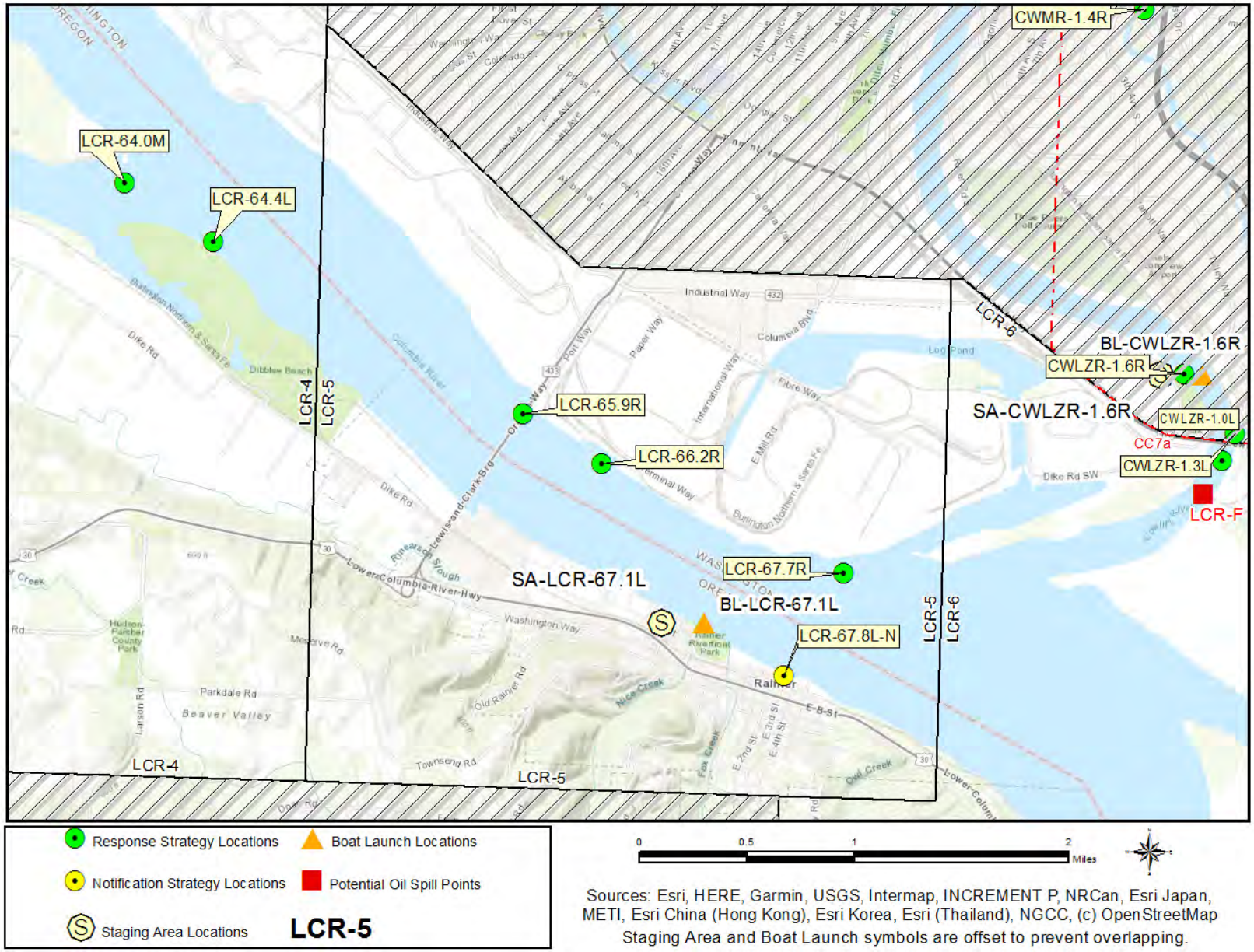
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



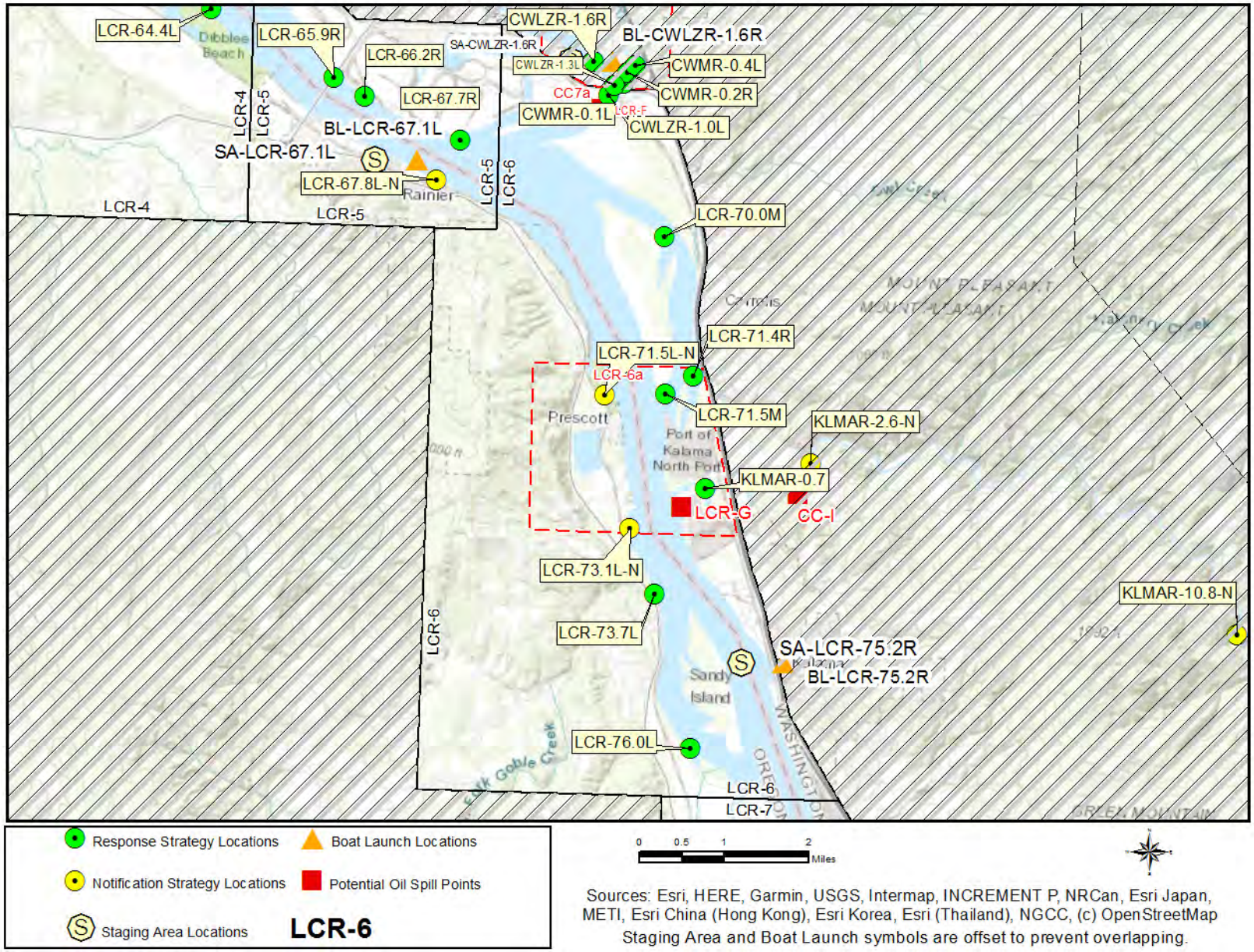
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



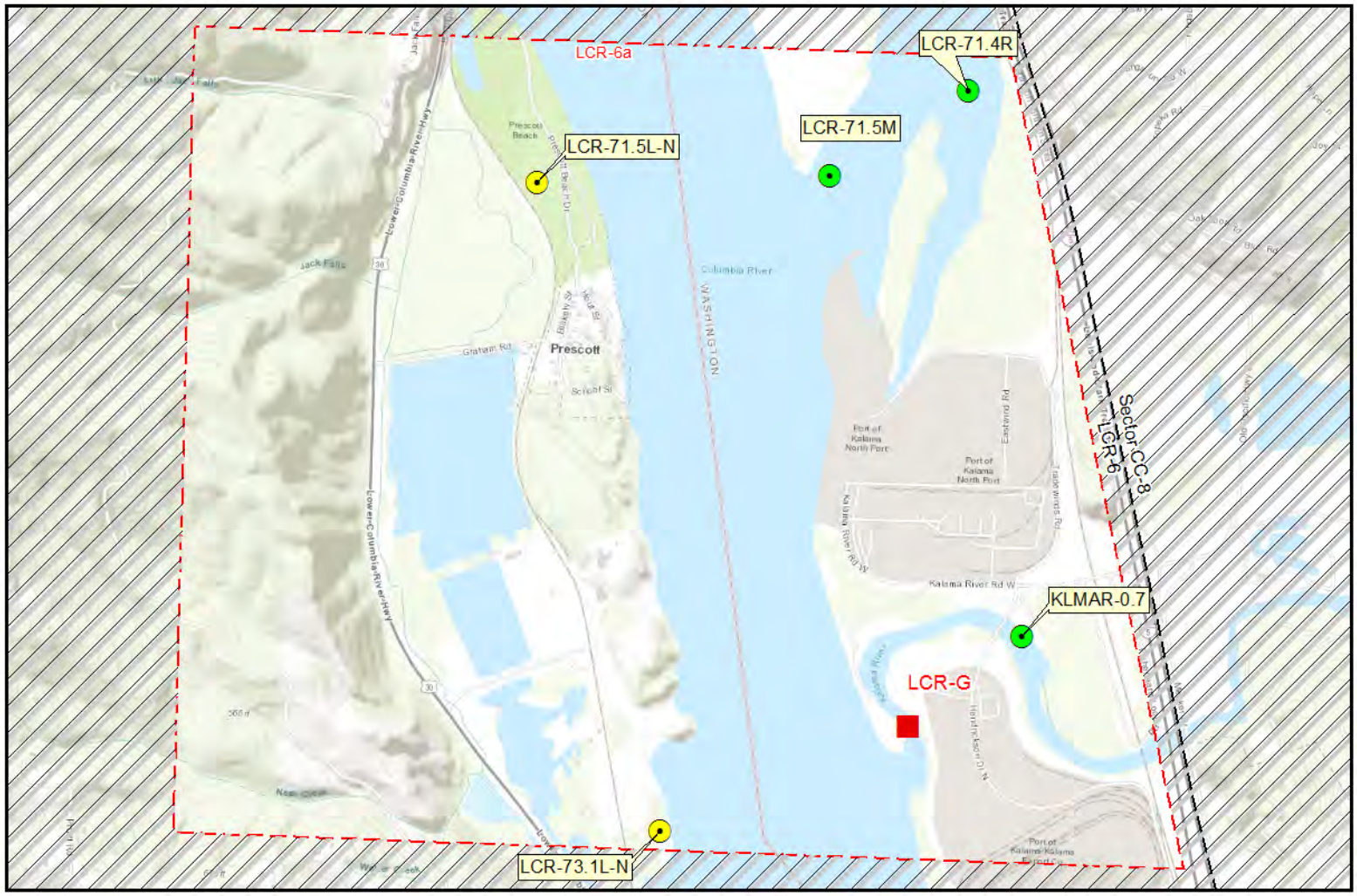
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

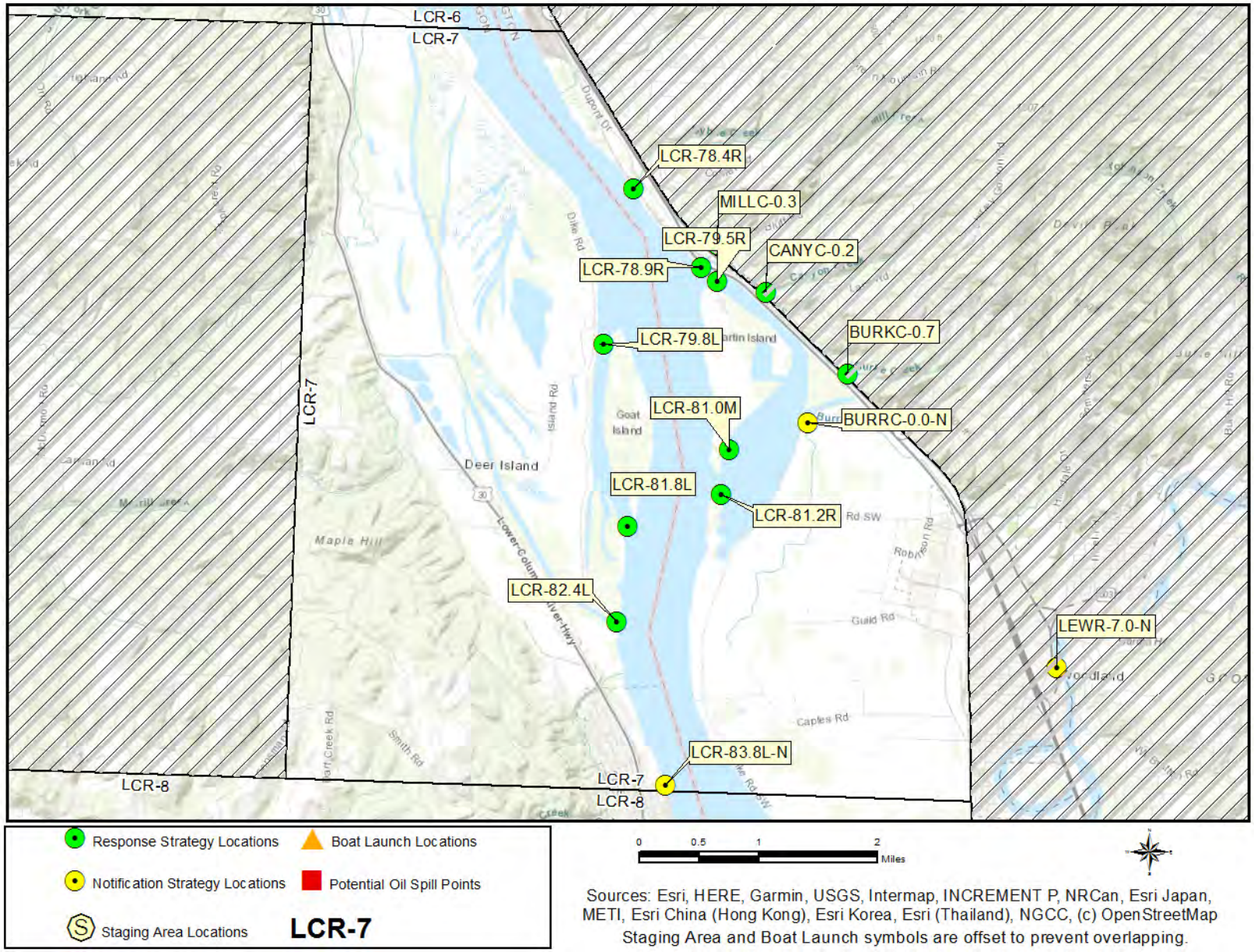
Staging Area and Boat Launch symbols are offset to prevent overlapping.



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

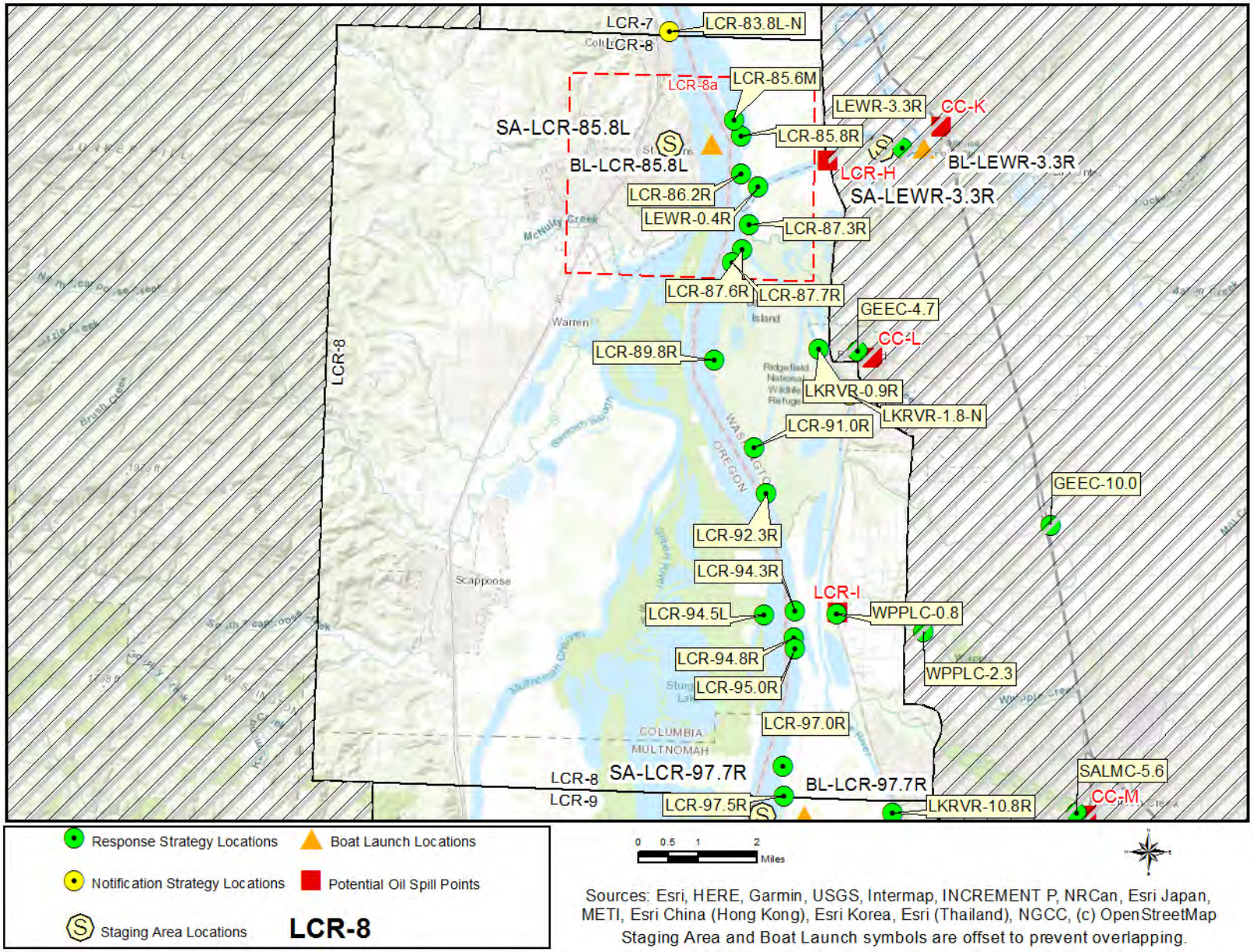
Staging Area and Boat Launch symbols are offset to prevent overlapping.


LCR-6a
LCR-71.4R
LCR-71.5M
LCR-71.5L-N
LCR-73.1L-N
KLMAR-0.7
LCR-G
Sector CC-8
LCR-6
Prescott
Columbia River
WASHINGTON
Jack Falls
Graham Rd
Kalama River Rd W
Lower Columbia River Hwy
Response Strategy Locations
Notification Strategy Locations
Staging Area Locations
Boat Launch Locations
Potential Oil Spill Locations
LCR-6a
0
0.5
1
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri
DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



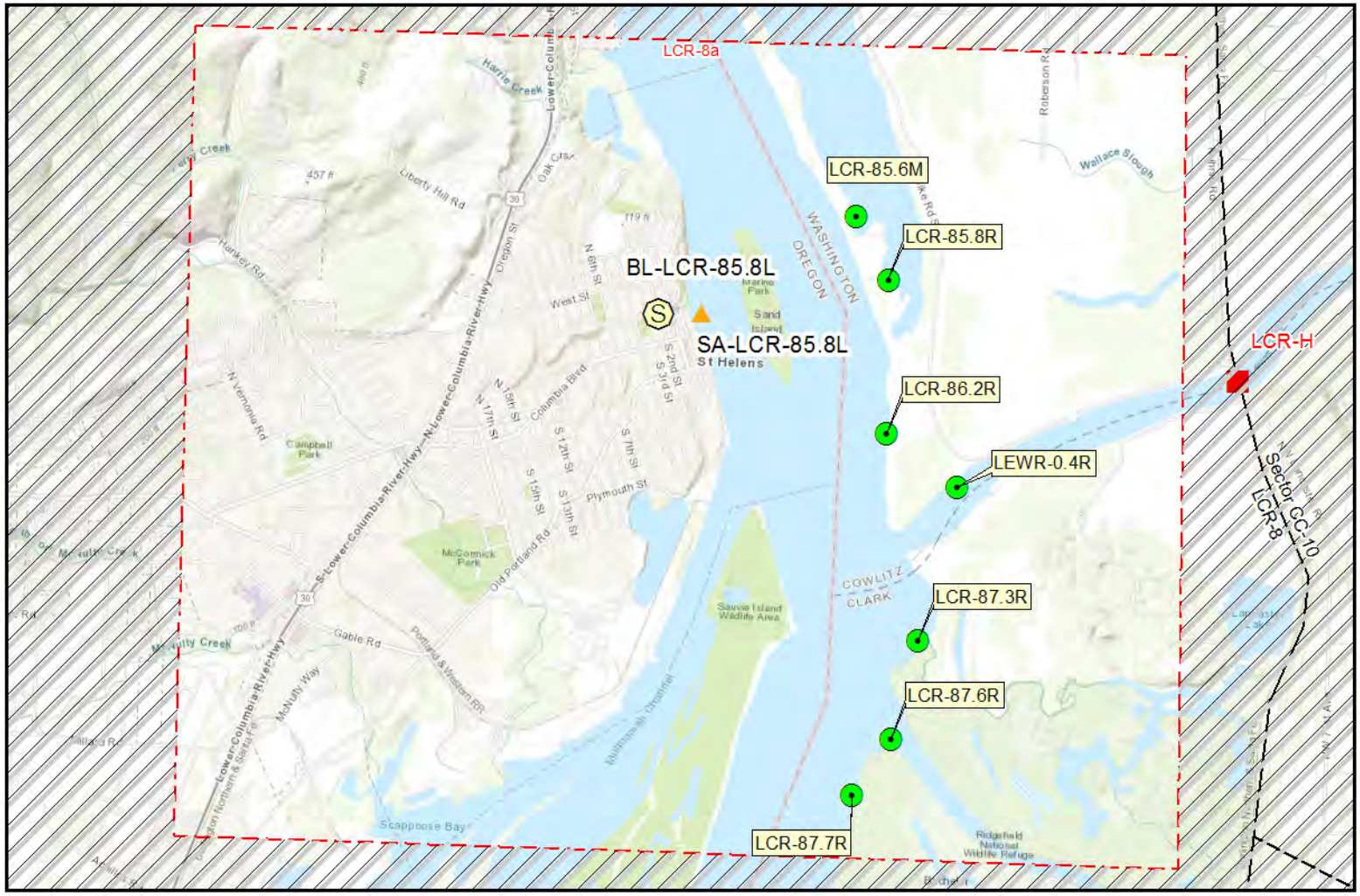
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



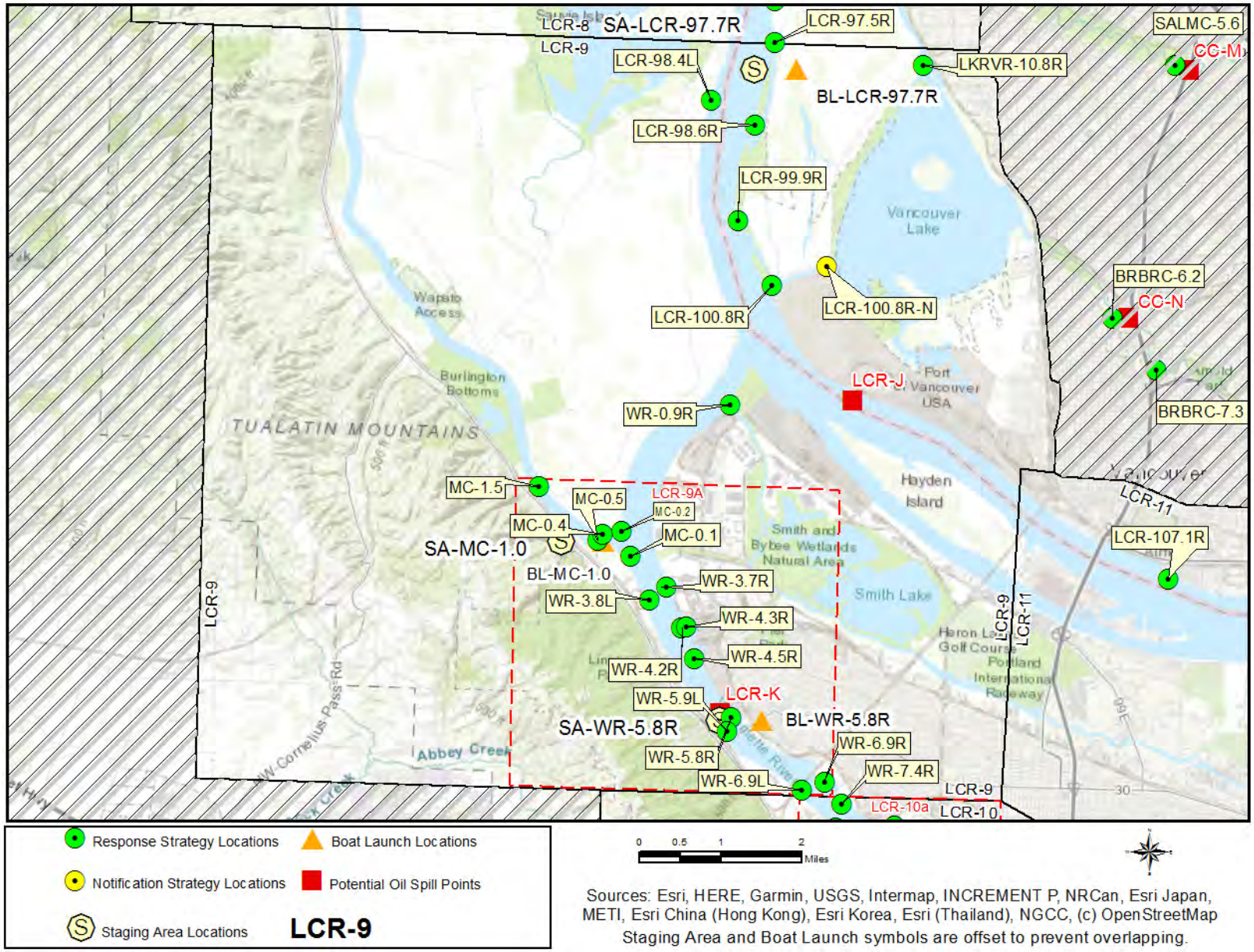
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



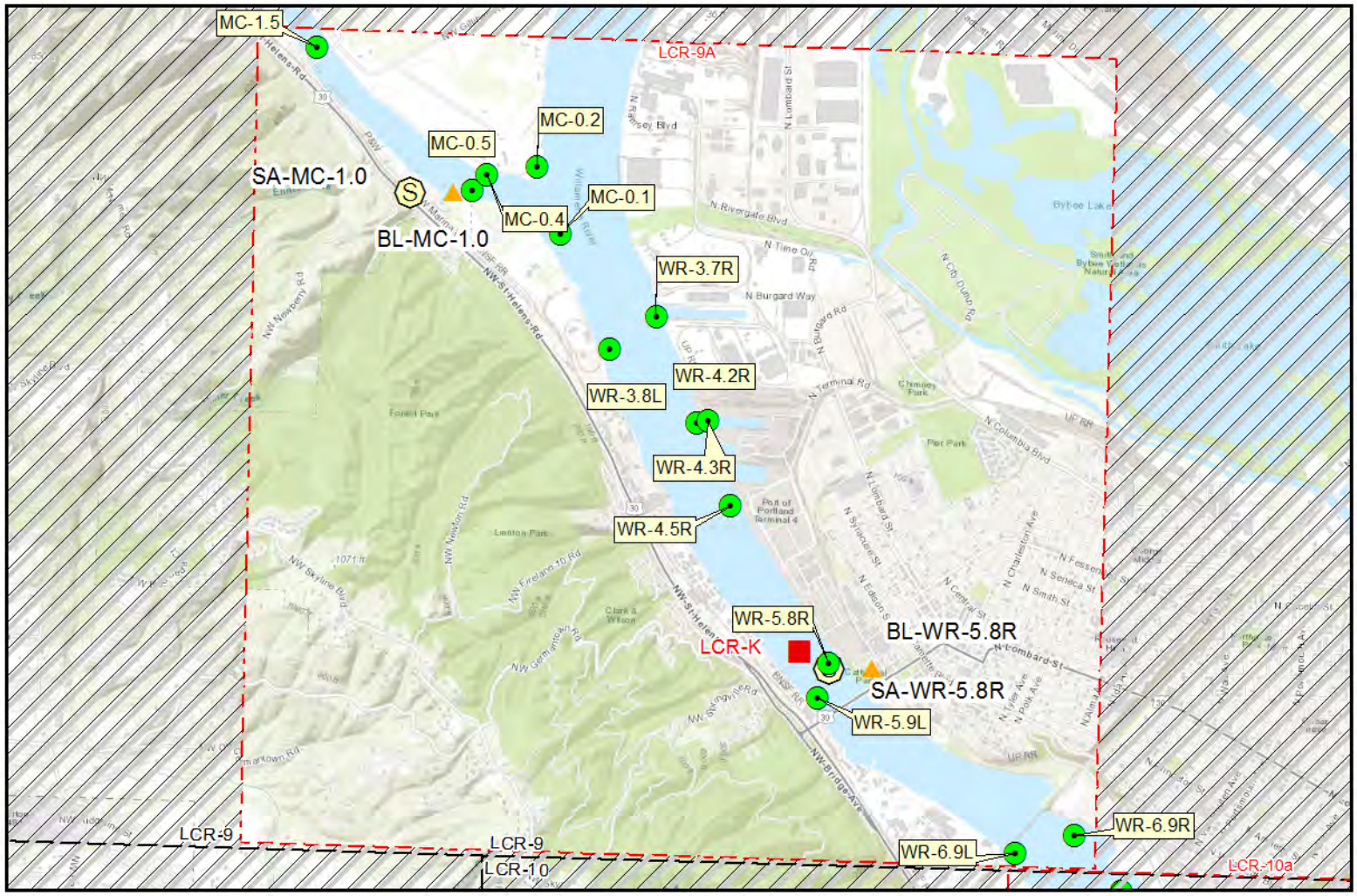
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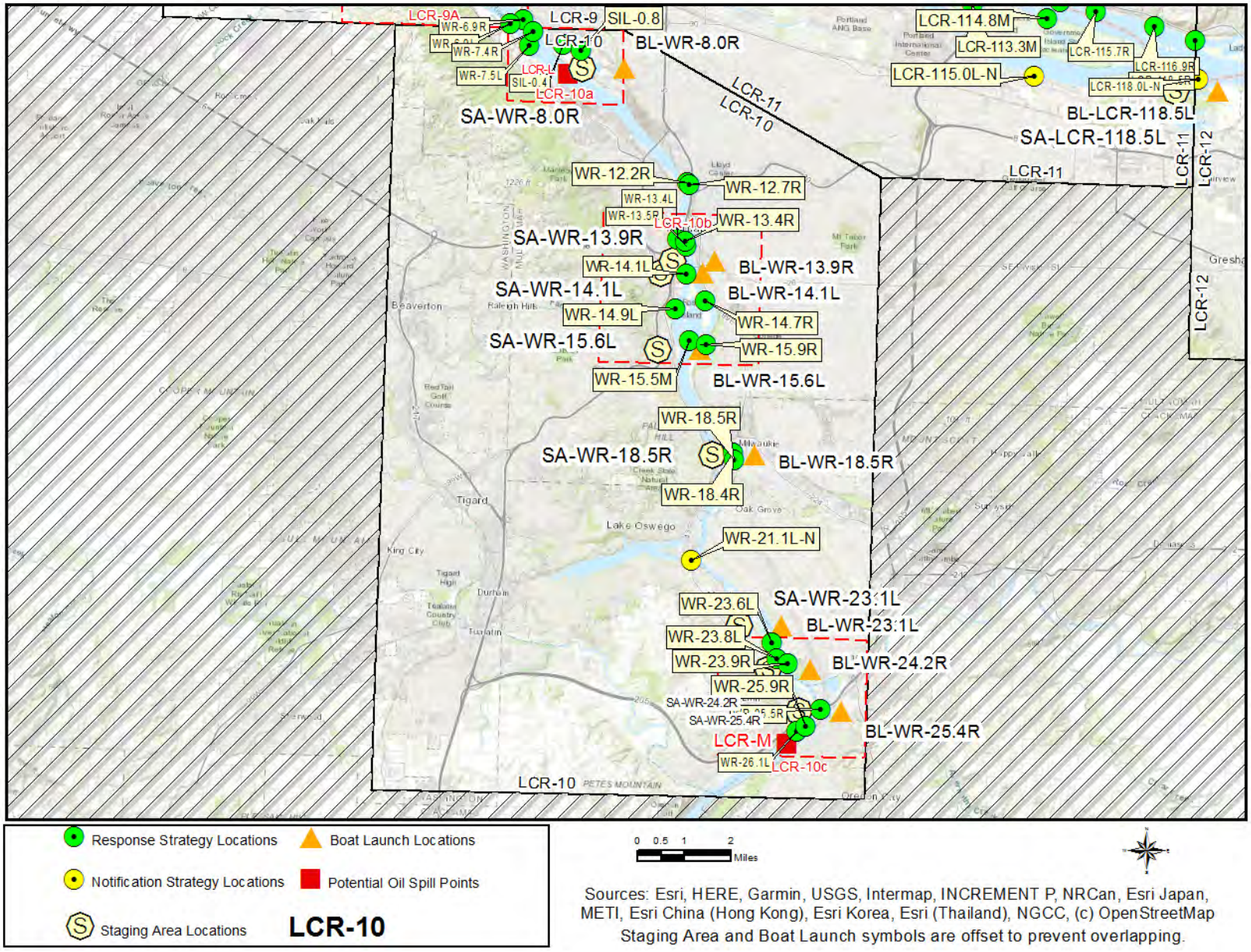
DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

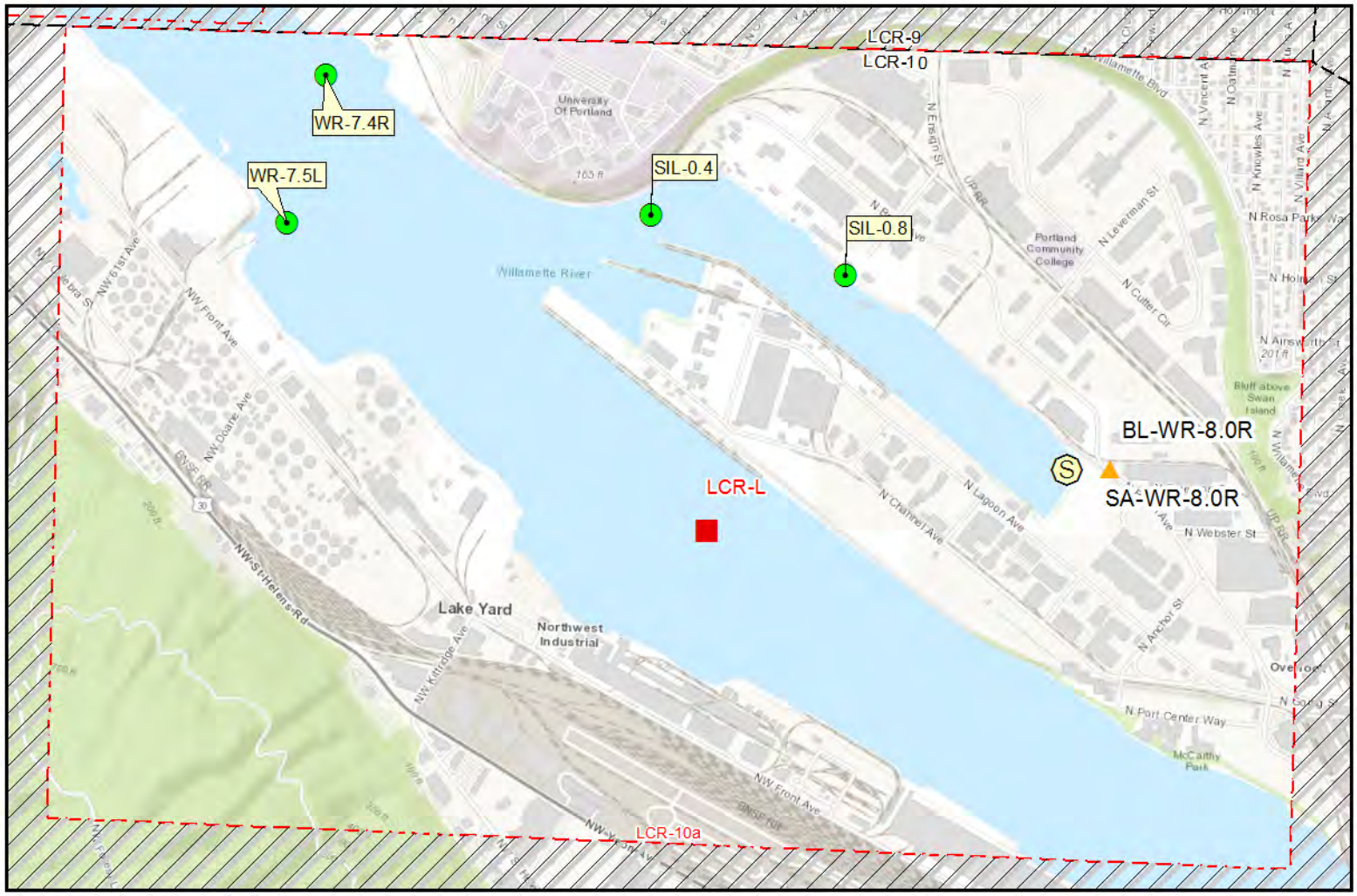
Staging Area and Boat Launch symbols are offset to prevent overlapping.


MC-1.5
LCR-9A
MC-0.2
MC-0.5
SA-MC-1.0
MC-0.1
MC-0.4
BL-MC-1.0
WR-3.7R
WR-4.2R
WR-3.8L
WR-4.3R
WR-4.5R
WR-5.8R
BL-WR-5.8R
LCR-K
SA-WR-5.8R
WR-5.9L
WR-6.9R
WR-6.9L
LCR-9
LCR-9
LCR-10
LCR-10a
Response Strategy Locations
Boat Launch Locations
Notification Strategy Locations
Potential Oil Spill Locations
Staging Area Locations
LCR-9A
0
0.5
1
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri
DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



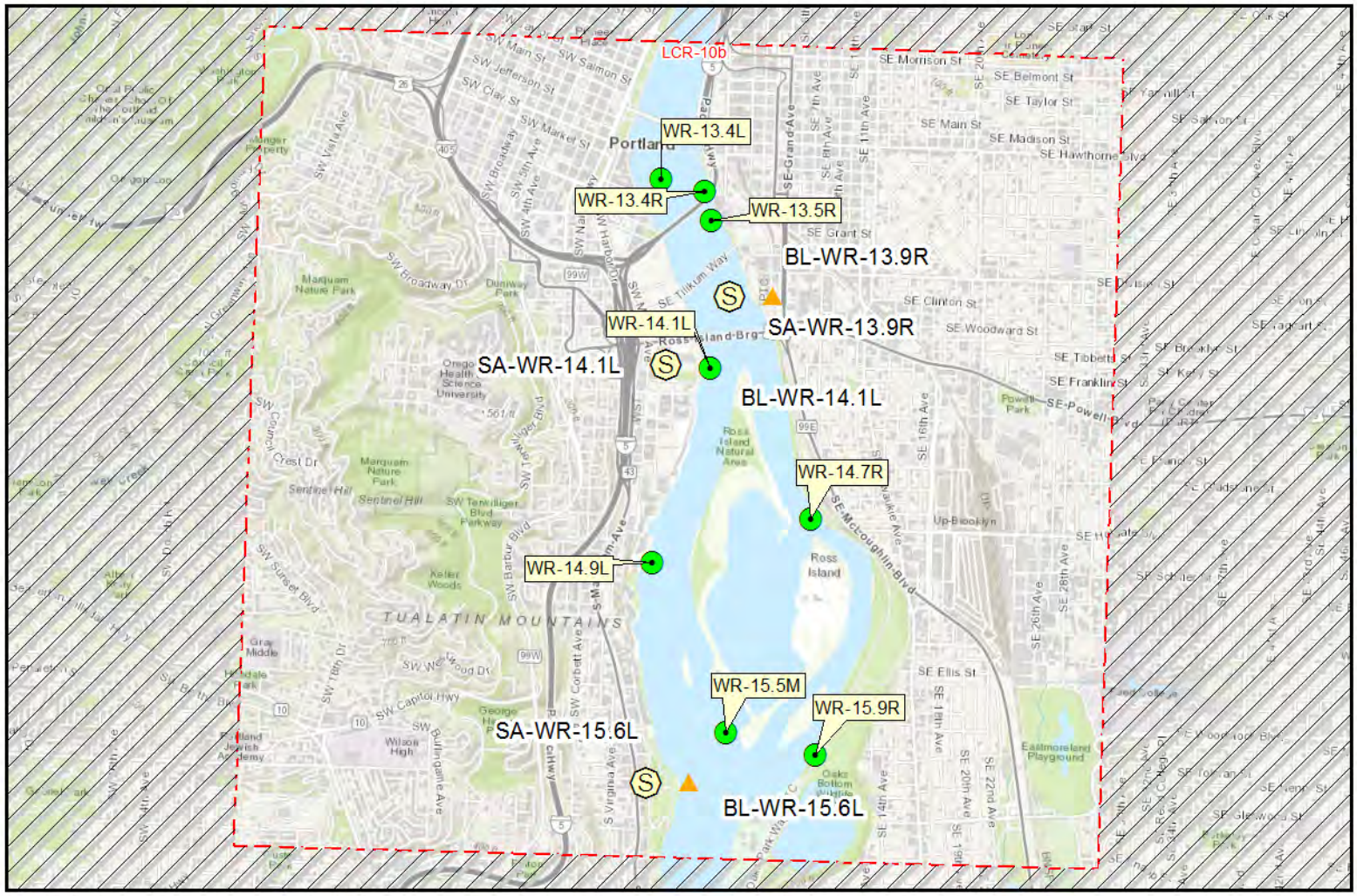
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



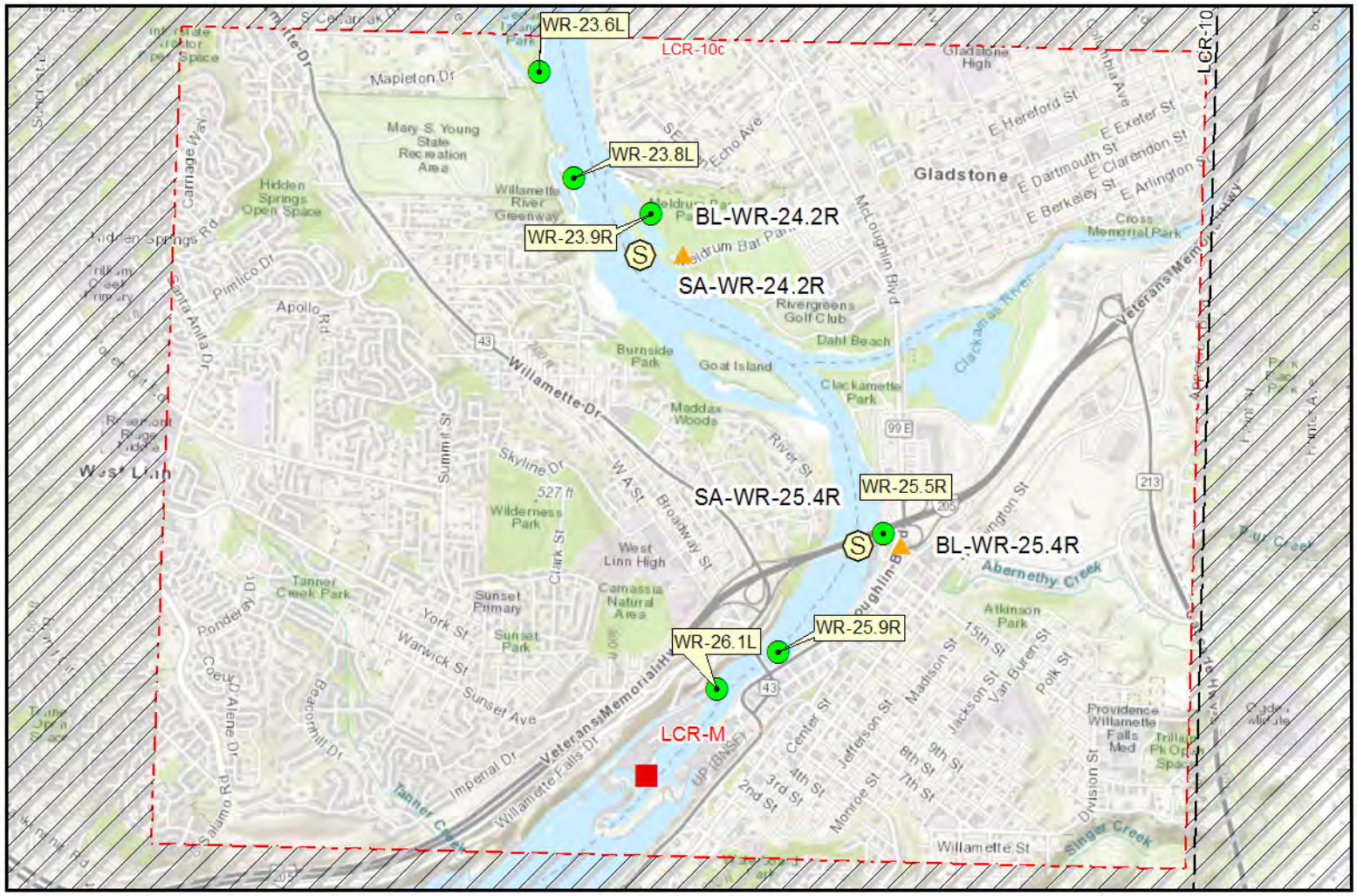
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



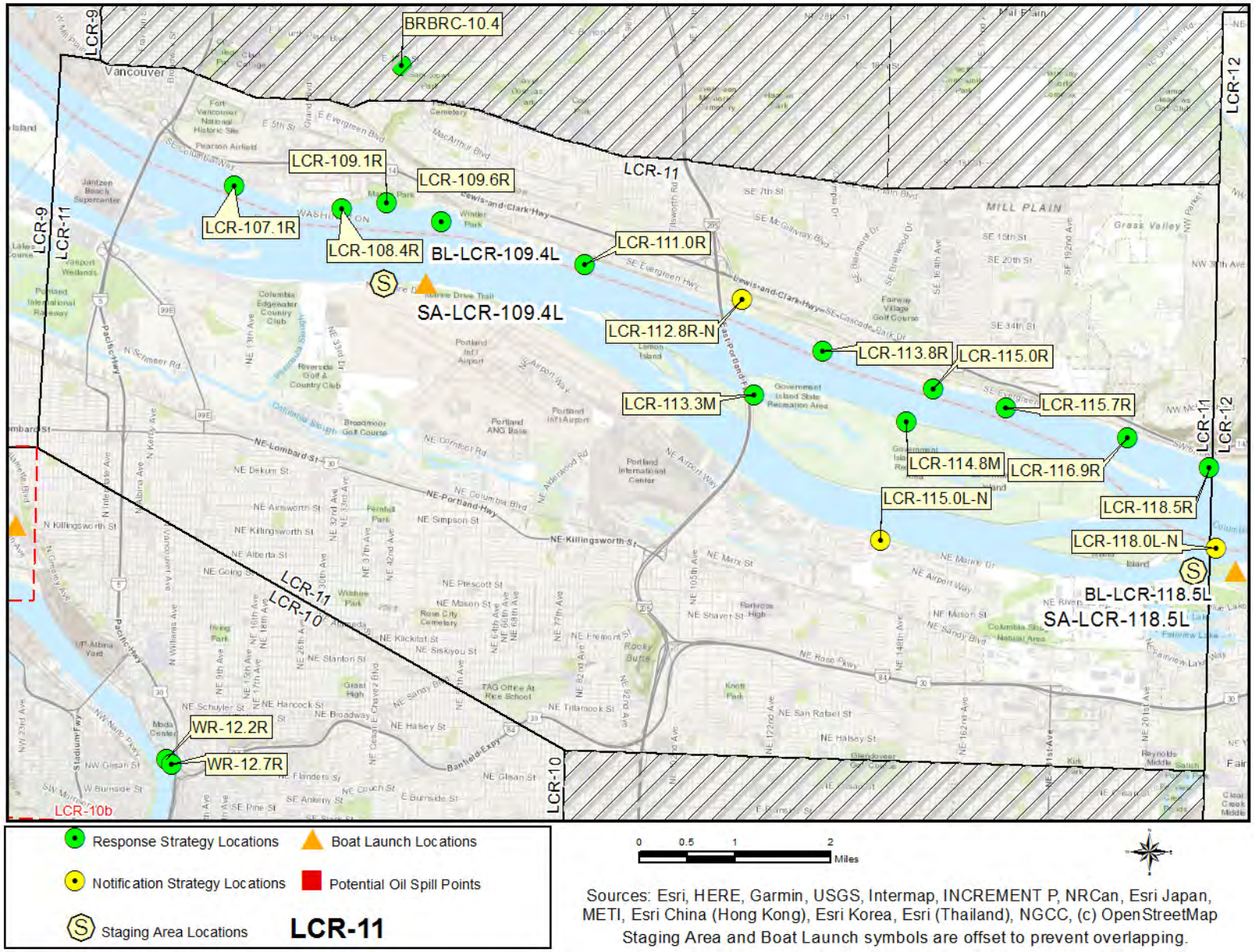
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



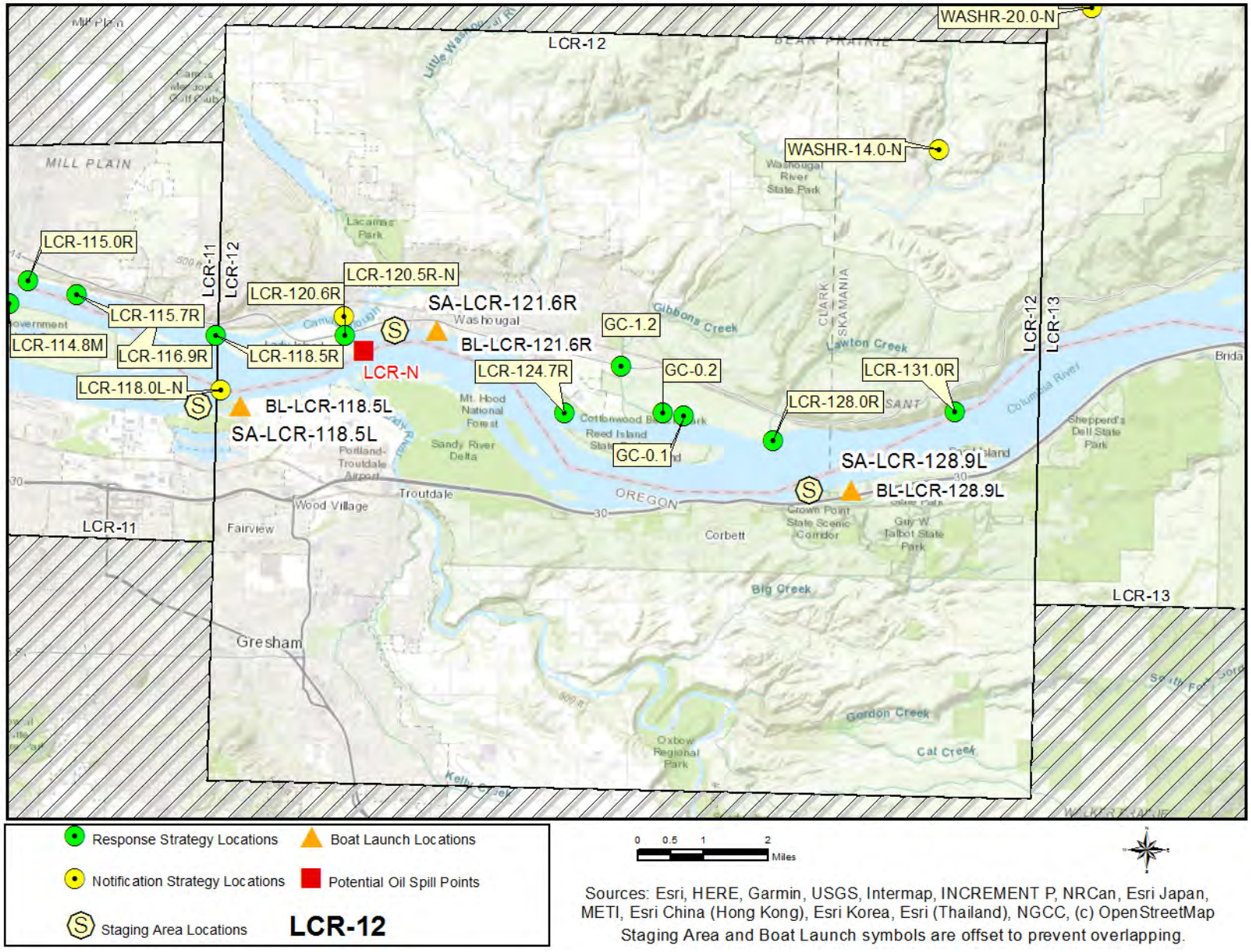
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

DRAFT. Staging Area and Boat Launch symbols are offset to prevent overlapping.



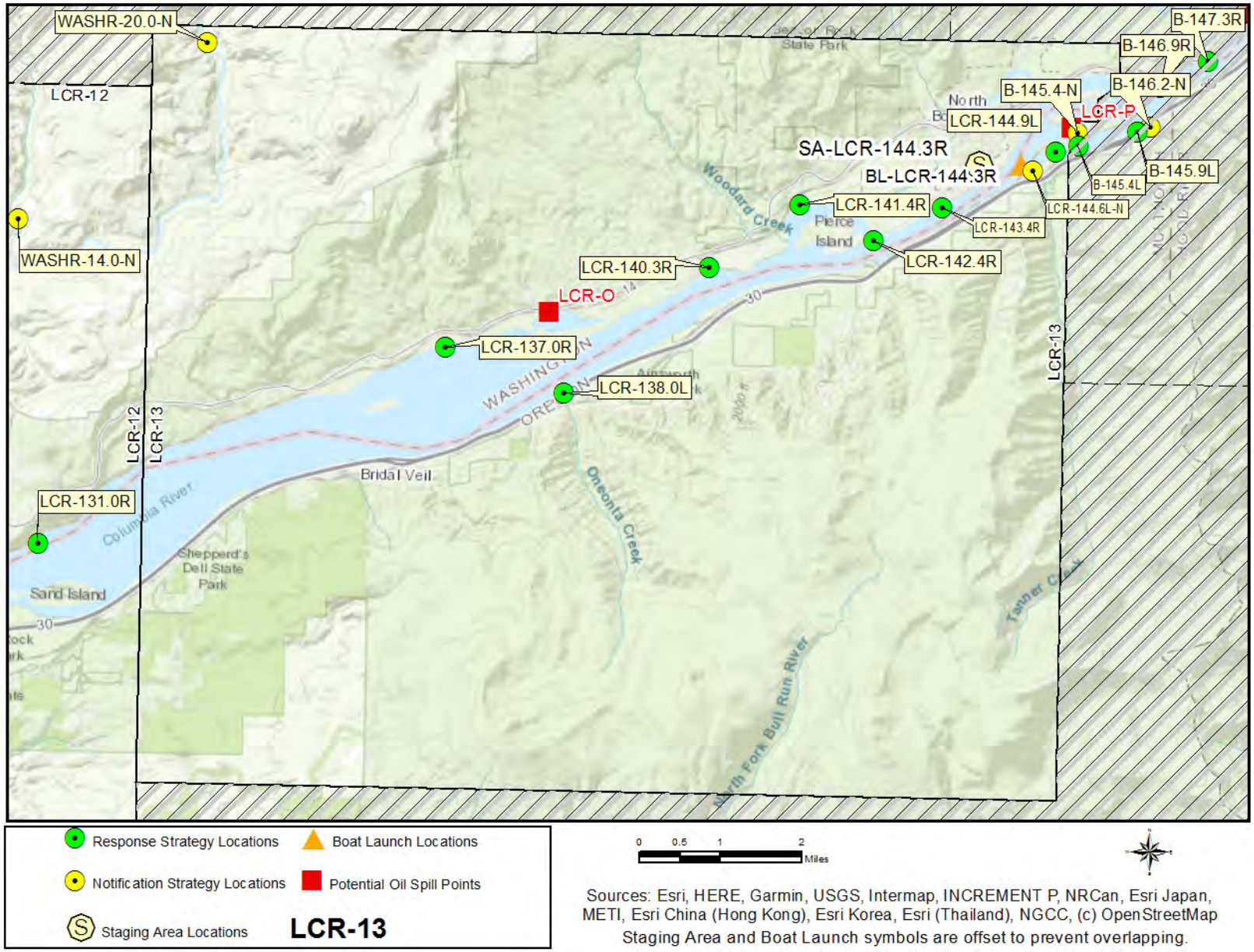
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

Staging Area and Boat Launch symbols are offset to prevent overlapping.



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

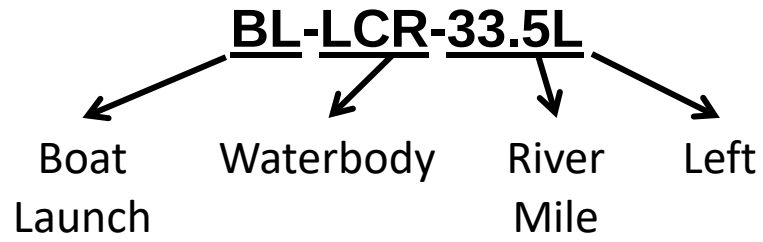
Staging Area and Boat Launch symbols are offset to prevent overlapping.


WASHR-20.0-N
LCR-12
WASHR-14.0-N
LCR-131.0R
LCR-12
LCR-13
Columbia River
Sand Island
Shepperd's Dell State Park
Bridal Veil
LCR-138.0L
LCR-137.0R
LCR-O
LCR-140.3R
WASHINGTON
OREGON
Woodard Creek
Pierce Island
LCR-141.4R
LCR-142.4R
LCR-143.4R
LCR-144.6L-N
SA-LCR-144.3R
BL-LCR-144.3R
LCR-144.9L
B-145.4-N
LCR-P
B-145.4L
B-145.9L
B-146.2-N
B-146.9R
B-147.3R
LCR-13
Oneonta Creek
North Fork Bull Run River
Response Strategy Locations
Notification Strategy Locations
Staging Area Locations
Boat Launch Locations
Potential Oil Spill Points
LCR-13
0 0.5 1 2
Miles
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap
Staging Area and Boat Launch symbols are offset to prevent overlapping.

MATRICES

Naming Conventions (Short Names)

Each strategy, staging area, and boat launch location in this document has been given a unique "Short Name" which includes one to six letters denoting the associated waterbody. Following the letters are numbers that specify the location. On rivers or other linear waterbodies, the location is named by river mile: the distance from the mouth of the river or creek upstream to the site location. Some short names indicate whether the site is located on river right, river left, or mid-river by an "R", "L" or "M" after the river mile. Notification strategies are indicated by an "-N" at the end of the name. Staging Areas and Boat Launches are indicated by the prefix "SA" or "BL".



Associated river body short name designations used within the plan include:

CHINR = Chinook River
CRKDC = Crooked Creek
CWLZR = Cowlitz River
DEEPC = Deep Creek
ELOCR = Elochoman River
GC = Gibbons Creek
GRAYR = Grays River
KLMAR = Kalama River
MC = Multnomah Channel
SIL = Swan Island Lagoon
N = Notification Strategy
WPPLC = Whipple Creek
WR = Willamette River
YOR = Youngs River
SA = Staging Area
BL = Boat Launch
R = River Right
L = River Left
M = River Middle

Lower Columbia River Tributaries Figure



Response Strategy Matrices

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map	Strategy Details (Page#)
CHINR-0.3	Chinook River (WA) 46.30393 -123.96711	Exclusion	Boom 100ft	No	Onsite Stage on shoulder of US-101 on river right.	Backwater Habitat, Marine Birds, Mud Flat(s), Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	Lane closure possible- use WDOT guidelines. Old tide gate is in rough condition, do not walk out on it	LCR-1	119
CRKDC-0.3	Crooked Creek (WA) 46.29588 -123.68090	Exclusion	Boom 200ft	Yes	Onsite Stage on shoulder of Altoona-Pillar Rock Rd. Lane closure possible – use WSDOT guidelines.	Marsh, Resident Fish, Salmonids, Wetlands	Grays Bay is too shallow for access from Columbia River. Hand launch on Altoona - Pillar Rock Rd where it crosses Crooked Creek.	LCR-2	121
CWLZR-1.0	Cowlitz River (South of Tennant Way Bridge) 46.10566 -122.89146	Collection	Boom 900ft	Yes	Remote Stage equipment at SA-CWLZR-1.6R Gerhart Gardens Park (40 Tennant Way, Longview, WA 98632).	Resident Fish, Salmonids	The vac truck can reach the location via Talley Way. The riverbank is owned by BNSF. Call the railroad before deployment.	LCR-6	123
DEEPR-0.9	Deep River (WA) 46.31337 -123.71327	Collection	Boom 900ft	Yes	Onsite BL-SA-DEEPR-0.9 Stage at WDFW boat launch on Oneida Rd	Resident Fish, Salmonids, Waterfowl, Wetlands	Site is a WDFW-managed boat launch and parking area with restroom and docks. River widens and slows in this location. Discover Pass Required.	LCR-2	125

GC-0.1	Gibbons Creek - Bridge 2 45.56056 -122.29555	Exclusion	Boom 100ft	No	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	This location is part of Steigerwald Lake National Wildlife Refuge. Notify USFWS before deployment (360-887-4106). Depending upon the time of year, there may be water flowing in another outlet a mile to the east from this location. Work with refuge staff to keep oil out of this place if need be.	LCR-12	127
GC-0.2	Gibbons Creek - Bridge 1 45.56119 -122.30242	Exclusion	Boom 100ft	No	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	This location is part of Steigerwald Lake National Wildlife Refuge. Notify USFWS before deployment (360-887-4106) so that you can obtain the gate code to the trail that leads to the bridge. Depending upon the time of year, there may be water flowing in another outlet 500ft to the south of this location. Work with refuge staff to keep oil out of this place if need be.	LCR-12	129

GC-1.2	Gibbons Creek at WA-14 Bridge 45.57119 -122.31585	Collection	Boom 100ft	No	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	Steigerwald Lake NWR is located south of the highway. Call USFWS before deployment.	LCR-12	131
GRAYR-1.9L	Grays River (WA) 46.30760 -123.67132	Collection	Boom 500ft	Yes	Onsite Stage onsite on Altoona-Pillar Rock Rd.	Resident Fish, Salmonids, Waterfowl, Wetlands	Site is at sharp bend in Grays River at intersection of Altoona-Pillar Rock Rd. and Mattson Rd. Lane closure possible-use WSDOT guidelines.	LCR-2	133
KLMAR-0.7	WDFW Boat Launch on Kalama River (WA) 46.03830 -122.86457	Collection, Deflection	Boom 700ft	Yes	Onsite Stage at SA-KLMAR-0.7, WDFW boat launch parking area.	Resident Fish, Salmonids, State Lands, Wetlands	Site is a WDFW boat launch used frequently by boaters and fishermen. River bends, widens, and slows in this location.	LCR-6	135
L&C-1.2	Lewis and Clark River (OR) 46.15129 -123.86083	Collection	Boom 1000ft	Yes	Remote Stage and launch at East Mooring Basin	Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl	Access by boat from East Mooring Basin.	LCR-1	137
L&C-1.7	Jeffers Slough (OR) 46.14435 -123.86386	Exclusion	Boom 500ft	Yes	Remote Stage and launch at East Mooring Basin BL-LCR-15.8L	Marine Birds, National Park, Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl	Access by boat from launch at Yacht Club near bridge or at Tides Point across from Daggett Point. Access also possible through property of Astoria Marine Construction. Low-flow only.	LCR-1	139

L&C-2.3	Barrett Slough (OR) 46.13700 -123.86838	Exclusion	Boom 300ft	Yes	Remote Stage and launch at East Mooring Basin	Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl	Access by boat from launch at East Mooring Basin. Low flow only.	LCR-1	141
L&C-2.6	Green Slough (OR) 46.13408 -123.87378	Exclusion	Boom 300ft	Yes	Remote Stage and launch at East Mooring Basin BL-LCR-15.8L	Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl	Access by boat at high tide from launch at East Mooring Basin. Low flow only.	LCR-1	143
LCR-10.1L	Tansy Point (OR) 46.19183 -123.92506	Collection, Deflection	Boom 400ft	Yes	Remote Stage at Hammond Marina SA-LCR-8.7L; launch same BL-LCR-8.7L	Economic Resources, Resident Fish, Salmonids	Boat access and by land at wood chipping company (need permission of company). Will work with a NW wind and a flood tide.	LCR-1	157
LCR-10.8L	Inner Skipanon Waterway (OR) 46.17972 -123.90928	Exclusion	Boom 800ft	Yes	Remote Stage + launch at Warrenton Marina SA-SKPR-1.4, approximately 1 mile upriver	Backwater Habitat, Crabs, Herons, Marine Birds, Mud Flat(s), National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands	Access via sandy spit collection points. Low flow only.	LCR-1	159

LCR-10.9L	Outer Skipanon Waterway (OR) 46.18168 -123.90788	Collection, Deflection	Boom 600ft	Yes	Remote Stage + launch at Warrenton Marina BL-SKPR-1.4, approximately 1 mile upriver	Resident Fish, Salmonids	Boat can only reach site during high tide.	LCR-1	161
LCR-19.0L	Clatsop Community College Dock (OR) 46.18984 -123.74557	Exclusion	Boom 1000ft	Yes	Remote Stage at SA-LCR-17.7L, Tongue Point Boat Launch	Economic Resources, Fish Pens, Salmonids	Access by boat or vehicle from the USCG Station.	LCR-2	163
LCR-19.2L	John Day River (OR) 46.18155 -123.74197	Exclusion	Boom 800ft	Yes	Remote Stage at SA-JDAYR-0.5 John Day Boat Launch	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide).	LCR-2	165
LCR-19.3L	Twilight Marsh (Eskeline Creek) (OR) 46.17040 -123.69934	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Do not allow people/equipment within 25' of any railroad track. Access via boat at high tide.	LCR-2	167

LCR-19.9L	Marys Creek (OR) 46.17319 -123.66833	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide)	LCR-2	169
LCR-2.2R	Cape Disappointment State Park 46.28642 -124.05092	Collection	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).	Backwater Habitat, Eelgrass, Marine Birds, Marsh, Mud Flat(s), Raptors, Resident Fish, Salmonids, State Park, Waterfowl	This strategy is located within Baker Bay. Some onsite staging can occur at this location. Call the park before deployment.	LCR-1	145
LCR-2.4R	USCG Station Cape Disappointment 46.28072 -124.04422	Collection	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).	Backwater Habitat, Eelgrass, Marine Birds, Marsh, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl	This strategy is located within Baker Bay. It can only be deployed during high tide. Some onsite staging can occur at this location. Call the Coast Guard before deployment.	LCR-1	147

LCR-20.0L	Bear Creek (OR) 46.17191 -123.66568	Exclusion	Boom 200ft	Yes	Remote Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Access via boat at high tide.	LCR-2	171
LCR-20.3L	Ferris Creek (OR) 46.17143 -123.65522	Exclusion	Boom 300ft	Yes	Remote Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide)	LCR-2	173
LCR-26.4M	NW Karlson Island (OR) 46.20837 -123.61157	Exclusion	Boom 400ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L	Backwater Habitat, Marine Mammals, Marsh, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Access from water only	LCR-2	175

LCR-27.2L	Big Creek (OR) 46.18462 -123.59612	Exclusion	Boom 200ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Do not allow people/equipment within 25' of railroad tracks. Boat access only. River banks are sturdy and provide good anchor points.	LCR-2	177
LCR-27.5L	Warren Slough (OR) 46.18885 -123.58786	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Site is at wide slough opening to the north and a smaller slough opening to the south. Strategy is exclusion for both openings.	LCR-2	179
LCR-27.9L	Grizzly Slough (OR) 46.20330 -123.56667	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands	Boat access only through Blind Slough, just downstream of swing bridge.	LCR-2	181

LCR-29.0L	Blind Slough Net Pens (OR) 46.20277 -123.54434	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.	Fish Pens, Salmonids	Site is fish net pens on Blind Slough, just west of bridge. Land access from dock at 43201 Penttila Ln, Astoria, OR, 97103	LCR-2	183
LCR-29.2L	Gnat Creek (OR) 46.19904 -123.53310	Exclusion	Boom 300ft	Yes	Remote Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands	Site is boat access only, but may be accessible by land through private property. There is an unverified boat ramp on Ziak-Gnat Creek Rd.	LCR-2	185
LCR-33.2M	Welch Island sloughs (OR) 46.25610 -123.48577	Exclusion	Boom 400ft	Yes	Remote Stage at Skamokawa Vista Park, SA-LCR-33.5R	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only from Skamokawa Vista Park	LCR-2	187
LCR-33.3M	Welch Island sloughs (OR) 46.25307 -123.48468	Exclusion	Boom 400ft	Yes	Remote Stage at Skamokawa Vista Park, SA-LCR-33.5R	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only from Skamokawa Vista Park.	LCR-2	189

LCR-33.6aR	Skamokawa Creek and Brooks Slough 46.26718 -123.45857	Exclusion	Boom 900ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	There is a small boat launch in the town of Skamokawa that may be of use to responders during deployment.	LCR-2	191
LCR-33.6bR	Price Island and Steamboat Slough 46.26567 -123.45648	Exclusion	Boom 900ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	There is a small boat launch in the town of Skamokawa that may be of use to responders during deployment.	LCR-2	193
LCR-34.4M	NW entrance to Red Slough (OR) 46.24094 -123.47880	Exclusion	Boom 800ft	Yes	Remote Stage at SA-LCR-33.5R, Skamokawa Vista Park	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Between Welch and Tenasillahe Islands. Boat access only.	LCR-2	195
LCR-34.6M	Welch Island sloughs (OR) - east side of island 46.24827 -123.45883	Exclusion	Boom 500ft	Yes	Remote Stage at Skamokawa Vista Park, SA-LCR-33.5R	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only to sloughs on east side of Welch Island.	LCR-2	197

LCR-34.7M	Red Slough - NW Tenasillahe Island (OR) 46.23524 -123.47741	Exclusion	Boom 600ft	Yes	Remote Stage at SA-LCR-33.5R, Skamokawa Vista Park	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only between Welch and Tenasillahe Islands (OR).	LCR-2	199
LCR-35.0M	Red Slough- E side of Tenasillahe Island (OR) 46.24289 -123.45164	Exclusion	Boom 800ft	Yes	Remote Stage at SA-LCR-33.5R, Skamokawa Vista Park	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only, between Welch and Tenasillahe Islands.	LCR-2	201
LCR-35.0R	Julia Butler Hansen NWR - Levee Breach #1 46.25062 -123.43466	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Resident Fish, Salmonids, Shorebirds, Wildlife Refuge	This refuge is part of the Willapa National Wildlife Refuge Complex. Call USFWS before deployment.	LCR-2	203
LCR-35.3R	JBH Refuge Levee Breach #2 (WA) 46.24613 -123.43121	Exclusion	Boom 800ft	Yes	Onsite Stage on Steamboat Slough Road, hand launch boat from parking lot	Resident Fish, Salmonids, Shorebirds, Wildlife Refuge	Old levee breeched to allow flow into wetland area. This levee breach is ~170 yds across at full bank levels and only has water over it at high tides.	LCR-3	205
LCR-35.7R	Steamboat Slough Road (WA) 46.24415 -123.43014	Collection	Boom 800ft	Yes	Onsite Stage onsite in parking/staging area off of Steamboat Slough Rd.	Resident Fish, Salmonids, Shorebirds, Wetlands, Wildlife Refuge	Collection location at sand beach off of Steamboat Slough Rd. Contact JBH Refuge for access.	LCR-3	207

LCR-36.0R	Elochoman Slough - N Entrance (WA) 46.23922 -123.42152	Collection, Exclusion	Boom 800ft	Yes	Remote Elochoman Slough Marina (BL-LCR 38.6R)	Backwater Habitat, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	Travel by Columbia River from Elochoman Slough Marina toward North entrance of Elochoman Slough. Elochoman Slough runs at about 1-1.5kts. Heavy vegetation and debris on banks. Using a vac-truck is possible, but would be difficult.	LCR-3	209
LCR-37.2R	Elochoman Slough - Central Entrance 46.22156 -123.41411	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge	This refuge is part of the Willapa National Wildlife Refuge Complex. Call USFWS before deployment.	LCR-3	211
LCR-37.7M	Tenasillahe Island (OR) 46.21257 -123.45023	Collection, Deflection	Boom 500ft	Yes	Remote Stage at SA-LCR-38.6R, Elochoman Slough Marina	Backwater Habitat, Resident Fish, Salmonids, Wetlands, Wildlife Refuge	Boat access only from Elochoman Slough Marina, Cathlamet. Current is 2-4 knots, strong winds. Log rafts may be present in this area.	LCR-2	213
LCR-38.2L	Clifton Channel (OR) 46.20789 -123.45253	Collection, Deflection	Boom 500ft	Yes	Remote Stage at SA-LCR-38.6R, Elochoman Slough Marina	Backwater Habitat, Resident Fish, Salmonids, Wetlands, Wildlife Refuge	Vehicle access from Clifton Road and railroad access along bank.	LCR-2	215

LCR-38.5M	Clifton Channel Mouth North (OR) 46.20337 -123.43487	Deflection	Boom 800ft	Yes	Remote Stage at Elochoman Slough Marina, SA-LCR-38.6R	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only. Current is 2-4 knots, and strong winds. Log rafts may be present in this area.	LCR-2	217
LCR-38.6R	Elochoman Slough - S Entrance (WA) 46.20556 -123.39013	Collection, Exclusion	Boom 800ft	Yes	Onsite Stage at Elochoman Slough Marina, SA-LCR-38.6R	Backwater Habitat, Marsh, Resident Fish, Salmonids, Shorebirds, Wildlife Refuge	Slough runs through large wetland area and Julia Butler Hansen Refuge for the Whitetail Deer.	LCR-3	219
LCR-38.8L	Clifton Channel Mouth South (OR) 46.19778 -123.43586	Deflection	Boom 500ft	Yes	Remote Stage at SA-LCR-38.6R, Elochoman Slough Marina	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Current is 2-4 knots, strong winds. Log rafts may be present in this area.	LCR-2	221

LCR-40.5M	Bernie Slough - West Entrance 46.19569 -123.40176	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	The slough divides the larger Puget Island from Little Island. Call Wahkiakum County before deployment.	LCR-3	223
LCR-41.3M	Welcome Slough 46.17103 -123.40543	Exclusion	Boom 1ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	This slough is on the south side of Puget Island. Call Wahkiakum County before deployment.	LCR-3	225
LCR-41.6L	Wauna (OR) 46.15999 -123.40512	Collection	Boom 1000ft	Yes	Onsite Stage onsite at Wauna Mill.	Backwater Habitat, Resident Fish, Salmonids, Wildlife Refuge	Site access is through Wauna mill.	LCR-3	227
LCR-42.5L	Driscoll Slough (OR) (Hanson Slough) 46.15158 -123.39661	Exclusion	Boom 400ft	Yes	Remote Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Site is accessed through Wauna Mill. Contact site managers before deploying strategy.	LCR-3	229

LCR-43.2L	Westport Slough (OR) 46.14368 -123.38265	Collection, Exclusion	Boom 800ft	Yes	Remote Stage at Westport Boat Ramp, SA-LCR-43.8L	Backwater Habitat, Resident Fish, Salmonids, Wildlife Refuge	Site is at mouth of Westport Slough along active ferry route for Cathlamet-Westport ferry.	LCR-3	231
LCR-44.0M	Bernie Slough - East Entrance 46.17477 -123.35653	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Resident Fish, Salmonids, Wetlands	The slough divides the larger Puget Island from Little Island. Call Wahkiakum County before deployment.	LCR-3	233
LCR-44.1M	Jackson Inlet 46.17336 -123.35454	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Resident Fish, Salmonids, Wetlands	The boom runs from Jackson Island to Browns Island. Call Wahkiakum County before deployment.	LCR-3	235
LCR-44.3M	Net Rack Slough 46.15003 -123.35691	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Shorebirds, State Lands, Waterfowl, Wetlands	The slough divides Puget and Whites Island (the latter is a WDFW property). Call Wahkiakum County before deployment.	LCR-3	237

LCR-45.0M	Jackson Island - East End 46.16442 -123.34168	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands	The boom runs from Jackson Island to another island. Call Wahkiakum County before deployment.	LCR-3	239
LCR-45.2M	Puget and Whites Islands 46.16170 -123.33825	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands	The boom runs from Whites Island to another island. Call Wahkiakum County before deployment.	LCR-3	241
LCR-48.1M	Wallace Island Slough - NW end (OR) 46.14060 -123.27616	Exclusion	Boom 600ft	Yes	Remote Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.	Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge	Boat access only. Water depth is likely to be very shallow. When the river is low, booming will likely not be necessary or feasible.	LCR-3	243

LCR-48.6M	Wallace Island Slough - SW end (OR) 46.13737 -123.26463	Exclusion	Boom 500ft	Yes	Remote Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.	Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge	Boat access only. Water is very shallow in this area and at low water booming may not be feasible or necessary.	LCR-3	245
LCR-48.8M	Wallace Island Slough - S center (OR) 46.13720 -123.25140	Exclusion	Boom 500ft	Yes	Remote Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.	Backwater Habitat, Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge	Boat access only. Water is very shallow in this area. At low water, booming may not be feasible or necessary.	LCR-3	247
LCR-49.1M	Wallace Island Slough - North center (OR) 46.14255 -123.25016	Exclusion	Boom 400ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Backwater Habitat, Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge	Boat access only. Water is very shallow. At low water, access to strategy may not be possible.	LCR-3	249

LCR-49.7L	Clatskanie River - E side (OR) 46.13935 -123.23099	Exclusion	Boom 600ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge	Site is at the mouth of the Clatskanie River at the Columbia River. May also be referred to as Beaver Slough. Strategy works together with collection at LCR-49.6L.	LCR-3	251
LCR-49.8L	Clatskanie River - W side (OR) 46.14176 -123.23053	Collection	Boom 600ft	Yes	Remote Stage at Port Westward boat launch, BL-LCR-53.8L. Launch from same BL-LCR-53.8L.	Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge	Contact property owner before deploying. Site is at the confluence of Clatskanie River with Lower Columbia River and is surrounded by private agricultural property. May also be referred to as Beaver Slough. Strategy works together with exclusion at LCR-49.7L.	LCR-3	253
LCR-50.5L	Upriver Wallace Island (OR) 46.14675 -123.22939	Exclusion	Boom 1800ft	Yes	Remote Stage at Port Westward, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge	Side channel of Columbia River with forested islands	LCR-3	255
LCR-53.8R	Mill Creek (WA) 46.18824 -123.17629	Collection, Exclusion	Boom 1000ft	Yes	Onsite Stage onsite at large gravel parking area on W side of creek	Resident Fish, Salmonids	Strong currents, particularly during outgoing tides, may make collection difficult. Parking area on west side of creek, north side of highway. Access site from west side of creek.	LCR-3	257

LCR-54.2R	Abernathy Creek (WA) 46.19092 -123.16740	Exclusion	Boom 300ft	Yes	Remote SA-LCR-53.8L & BL-LCR-53.8L	Herons, Resident Fish, Salmonids, Sensitive Resources, Shorebirds, State Lands	DO NOT USE STAKES OR ANCHOR POINTS IN THIS AREA. Lane closure possible- use WSDOT guidelines.	LCR-4	259
LCR-54.4M	Gull/ Crims Islands - W opening (OR) 46.18419 -123.15950	Exclusion	Boom 500ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Water in this area is very shallow. At low water, strategy may not be feasible or necessary.	LCR-4	261
LCR-55.1M	Crims Island-South Side (OR) 46.17280 -123.15037	Exclusion	Boom 700ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Backwater Habitat, Habitat Restoration Site, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	Water is very shallow in this area. During low water, strategy may not be feasible or necessary.	LCR-4	263

LCR-55.3M	Gull Island-North Side (OR) 46.18309 -123.14644	Exclusion	Boom 800ft	Yes	Remote Stage from Willow Grove County Park, SA-LCR-57.8R	Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only. This strategy is only needed during high flow conditions.	LCR-4	265
LCR-55.4L	John Slough (OR) 46.16923 -123.14627	Exclusion	Boom 200ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Best access to this strategy is by boat, but there is limited vehicle access from Kallunki Rd. Water is very shallow in this area. Strategy may not be feasible at low water.	LCR-4	267
LCR-55.5M	Gull/Crims Islands - East opening (OR) 46.18175 -123.14447	Exclusion	Boom 400ft	Yes	Remote Stage at Willow Grove County Park, SA-LCR-57.8R	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge	Boat access only. Water is very shallow in this area and access will not be possible during low water. Strategy is only necessary during high water.	LCR-4	269
LCR-55.6M	Crims Island Channel (OR) 46.17158 -123.14226	Exclusion	Boom 300ft	Yes	Remote Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.	Backwater Habitat, Habitat Restoration Site, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	Boat access only. This strategy is needed for all water levels.	LCR-4	271

LCR-55.7R	Germany Creek (WA) 46.18982 -123.12534	Exclusion	Boom 100ft	Yes	Onsite Stage at SA-LCR-57.8R, Willow Grove County Park	Raptors, Resident Fish, Salmonids, Sensitive Resources	There is limited landside access from WA-4. Lane closure possible- use WSDOT guidelines. Do not use anchor posts in this area, particularly on east side of creek.	LCR-4	273
LCR-55.9R	Coal Creek Slough (WA) 46.18961 -123.11635	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-57.8R, Willow Grove County Park	Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Boat access only. Site is at the mouth of Coal Creek Slough. Hwy 4 narrow and busy at site.	LCR-4	275
LCR-58.7M	Fisher Island and Hump Island 46.16914 -123.07612	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	Fisher Island is a WDFW property. Call Cowlitz County before deployment.	LCR-4	277
LCR-58.8R	Fisher Island Slough - Willow Grove Road 46.17228 -123.07367	Collection	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Vac truck can park on road shoulder. Fisher Island is a WDFW property. Call Cowlitz County before deployment.	LCR-4	279

LCR-58.9M	Fisher Island - West End (WA) 46.17043 -123.07205	Exclusion	Boom 600ft	Yes	Remote Stage at Willow Grove County Park, SA-LCR-57.8R	Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	Boom length required will vary depending on water level in the marsh.	LCR-4	281
LCR-59.0M	Fisher Island (East) 46.17159 -123.06724	Deflection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).	Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	Call Cowlitz County before deployment.	LCR-4	283
LCR-59.8L	Walker Island (OR) 46.15139 -123.06286	Collection	Boom 600ft	Yes	Remote Stage at SA-LCR-57.8R, Willow Grove County Park	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Boat access only. At 30 feet from shore water is about 25 feet deep. Do not allow people/equipment within 25' of railroad tracks.	LCR-4	285
LCR-6.8L	Jetty Lagoon West (OR) 46.21496 -123.97881	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.	Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands	Boat access only. Flow through the opening can be high during tidal exchanges, add boom as necessary to prevent entrainment.	LCR-1	149

LCR-60.2M	Fisher Island - East End 46.16542 -123.05047	Exclusion	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).	Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	Fisher Island is a WDFW property. Call Cowlitz County before deployment.	LCR-4	287
LCR-64.0M	Lord Island - E end (OR) 46.12208 -122.99881	Collection, Exclusion	Boom 1600ft	Yes	Remote Stage at SA-LCR-57.8R, Willow Grove County Park	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	This strategy may only be feasible during low water and low flow conditions.	LCR-4	289
LCR-64.4L	Slaughters Dike (OR) 46.11834 -122.99002	Collection	Boom 600ft	Yes	Remote Stage at SA-LCR-67.1L, Rainier City Marina. Launch at same BL-LCR-67.1L or from beach onsite.	Resident Fish, Salmonids	Good vehicle access with sandy beach for recovery.	LCR-4	291
LCR-65.9R	Port of Longview (Below Lewis & Clark Bridge) 46.10737 -122.95940	Collection	Boom 700ft	Yes	Remote Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).	Economic Resources, Resident Fish, Salmonids	The vac truck can drive to riverbank. Call port before deployment.	LCR-5	293
LCR-66.2R	Port of Longview (Berth 4) 46.10415 -122.95161	Collection	Boom 900ft	Yes	Remote Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).	Resident Fish, Salmonids	The vac truck can drive to riverbank. Call port before deployment.	LCR-5	295

LCR-67.7R	Port of Longview (Log Pond Entrance) 46.09725 -122.92783	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).	Economic Resources, Marine Mammals, Resident Fish, Salmonids	There is an industrial water intake within the channel. Call the associated notification strategy in the plan.	LCR-5	297
LCR-7.1L	Jetty Lagoon East (OR) 46.21438 -123.97771	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.	Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands	Boat access only. Flow through the opening can be high during tidal exchanges, add boom as necessary to prevent entrainment.	LCR-1	151
LCR-7.5L	Swash Lake (OR) 46.21114 -123.97447	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.	Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands	Creek connects Jetty Lagoon to Swash Lake to the south. Mouth of creek is very shallow at low water and may not be accessible except for high water. Pilings and jetty to NE of strategy.	LCR-1	153
LCR-70.0M	Cottonwood Island (Carrolls Channel) 46.08179 -122.87680	Exclusion	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	The north end of the channel is quite shallow so approach the location from the south. Call Cowlitz County before deployment.	LCR-6	299

LCR-71.4R	Carrolls Channel (South End) 46.05804 -122.86852	Exclusion	Boom 1000ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	USACE may store their dredging equipment in the vicinity. Call Cowlitz County before deployment.	LCR-6	301
LCR-71.5M	Cottonwood Island (South End) 46.05489 -122.87542	Deflection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Call Cowlitz County before deployment.	LCR-6	303
LCR-73.7L	Goble Creek (OR) 46.02052 -122.87656	Exclusion	Boom 100ft	Yes	Remote Stage at SA-LCR-74.5L, Goble Marina. Launch at same BL-LCR-74.5L.	Resident Fish, Salmonids	Railroad tracks and US-30 cross Goble Creek at this site. Salmon habitat. Peak times are Sept - Oct, Apr - May.	LCR-6	305
LCR-76.0L	Tide Creek (OR) 45.99420 -122.86666	Exclusion	Boom 1000ft	Yes	Remote Stage at Port of Kalama Marina, SA-LCR-75.2R	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Boat access only. Log rafts in area may complicate deployment. Numerous pilings in water.	LCR-6	307

LCR-78.4R	Bybee Creek 45.96701 -122.81628	Exclusion	Boom 200ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Resident Fish, Salmonids	Bybee Creek enters the Columbia River through this culvert. Call Cowlitz County before deployment.	LCR-7	309
LCR-78.9R	Mill Creek 45.95762 -122.80414	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Resident Fish, Salmonids, Waterfowl	Mill Creek enters the Columbia River through this culvert. Call Cowlitz County before deployment.	LCR-7	311
LCR-79.5R	Martin Slough (Downriver) 45.95605 -122.80120	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl	Call Cowlitz County before deployment.	LCR-7	313
LCR-79.8L	Goat Island - N end (OR) 45.94802 -122.82068	Exclusion	Boom 700ft	Yes	Remote Stage at Woodland Bottoms, SA-LCR-82.1R. Launch at same BL-LCR-82.1R.	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl	Boat access only. This strategy is mainly needed if oil is moving upriver due to wind or tidal current.	LCR-7	315
LCR-8.4R	Chinook Point 46.25145 -123.92383	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).	Resident Fish, Salmonids, Sensitive Resources, State Park	This location is part of Fort Columbia State Park. Call State Parks before deployment.	LCR-1	155
LCR-81.0M	Martin Slough (Upriver) 45.93557 -122.79829	Exclusion	Boom 900ft	Yes	Remote Stage equipment at SA-LCR-85.8L Saint Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl	Call Cowlitz County before deployment.	LCR-7	317

LCR-81.2R	Burke Island 45.93013 -122.79940	Exclusion	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-85.8L Saint Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl	Call Cowlitz County before deployment.	LCR-7	319
LCR-81.8L	Goat Island - S end (OR) 45.92590 -122.81556	Exclusion	Boom 900ft	Yes	Remote Stage at Woodland Bottoms, SA-LCR-82.1R	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl	Boat access only. Water is shallow with moving sand bars. Amount of boom needed will vary greatly depending on flow conditions.	LCR-7	321
LCR-82.4L	Deer Island Slough (OR) 45.91417 -122.81704	Exclusion	Boom 400ft	Yes	Remote Stage at Woodland Bottoms, SA-LCR-82.1R. Launch at same BL-LCR-82.1R.	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Shellfish, Waterfowl, Wetlands	Boat access only. Shallow water and pilings in area. Slough opening will vary greatly in width depending on water flow.	LCR-7	323
LCR-85.6M	Goerig Slough (Downriver) 45.87346 -122.78430	Exclusion	Boom 700ft	Yes	Remote Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Resident Fish, Salmonids, Waterfowl	Call Cowlitz County before deployment.	LCR-8	325
LCR-85.8R	Goerig Slough (Upriver) 45.86967 -122.78142	Exclusion	Boom 1000ft	Yes	Remote Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Resident Fish, Salmonids, Waterfowl	Call Cowlitz County before deployment.	LCR-8	327

LCR-86.2R	Austin Point 45.86048 -122.78115	Collection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).	Resident Fish, Salmonids, Waterfowl	The vac truck can drive to the riverbank. Call Port of Woodland before deployment.	LCR-8	329
LCR-87.3R	Lancaster Lake 45.84804 -122.77794	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Habitat Restoration Site, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	Gee Creek flows through the lake before entering the Columbia. This area makes up the northern extent of Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	331
LCR-87.6R	Bachelor Island and Lake River 45.84207 -122.78005	Exclusion	Boom 900ft	Yes	Remote Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).	Backwater Habitat, Cranes, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	333
LCR-87.7R	Canvasback Lake 45.83861 -122.78330	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).	Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge	The lake is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	335

LCR-89.8R	Turtle Lake 45.81478 -122.78875	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).	Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge	The lake is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment. Also, this location is silted at low tides and above water when St Helens gauge is below 4ft.	LCR-8	337
LCR-91.0R	Bachelor Island Slough 45.79368 -122.77383	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).	Backwater Habitat, Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge	The slough connects with the Lake River after approximately three miles. This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	339
LCR-92.3R	Campbell Lake 45.78263 -122.76912	Exclusion	Boom 300ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	341

LCR-94.3R	Post Office Lake 45.75423 -122.75792	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	343
LCR-94.5L	Willow Bar Island (OR) 45.75293 -122.76870	Collection, Exclusion	Boom 600ft	Yes	Remote Stage at Langsdorf Landing, SA-LCR-97.7R	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands	If necessary, site can be accessed land-side from Brown Road on Sauvie Island.	LCR-8	345
LCR-94.8R	Ridgefield Levee Breach #1 45.74766 -122.75809	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wildlife Refuge	This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	347
LCR-95.0R	Ridgefield Levee Breach Area #2 45.74496 -122.75779	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wildlife Refuge	Aid to navigation #19 is close to this spot. The area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.	LCR-8	349

LCR-97.0R	New Columbia Gardens 45.71624 -122.76053	Collection	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Sensitive Resources	The vac truck can drive to the riverbank. Call farm before deployment.	LCR-8	351
LCR-97.5R	Caterpillar Island (Downriver) 45.70887 -122.76007	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands	The Shillapoo South Wildlife Area (WDFW) is located within the slough. Call Clark County before deployment.	LCR-8	353
LCR-98.4L	Dairy Creek (OR) 45.69829 -122.77601	Exclusion	Boom 300ft	Yes	Remote Stage at SA-LCR-97.7R	Habitat Restoration Site, Resident Fish, Salmonids, Wetlands	Dairy Creek feeds into Sturgeon Lake, which is an important wildlife area. Log jams and debris are present upstream from mouth. At low water, this strategy may not be feasible or necessary.	LCR-9	355

LCR-98.6R	Caterpillar Island - S end (WA) 45.69395 -122.76462	Exclusion	Boom 600ft	Yes	Remote Stage at Langsdorf Landing, SA-LCR-97.7R	Backwater Habitat, County Park, Economic Resources, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge	Boat access only. Sensitive resources in the vicinity- do not disturb shorelines.	LCR-9	357
LCR-99.9R	Frenchman's Bar Regional Park 45.67693 -122.76815	Collection	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	County Park, Resident Fish, Salmonids, Sensitive Resources, Waterfowl	The vac truck can drive to the riverbank. Call Clark County before deployment.	LCR-9	359
LCR-100.8R	Vancouver Lake Flushing Channel 45.66556 -122.75902	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).	Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands	You can drive to the north side of the channel (Blurock Landing). Collection is a possibility from this location. Activate the associated notification strategy (LCR-100.8R-N).	LCR-9	361

LCR-107.1R	Waterfront Park on SE Columbia Way (WA) 45.61489 -122.65644	Deflection	Boom 1000ft	Yes	Remote Stage at SA-LCR-108.4R, Marine Park in Vancouver	City Park, Economic Resources, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Site is upstream from a public park & anchor point along popular walking trail. Vehicle access possible on trail-contact Vancouver Parks.	LCR-11	363
LCR-108.4R	Marine Park Boat Ramp - upstream of Ryan Point (WA 45.61164 -122.63282	Collection	Boom 800ft	Yes	Onsite Marine Park Boat Ramp, Vancouver, SA-LCR-108.4R	City Park, Economic Resources, Marine Birds, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands		LCR-11	365
LCR-109.1R	Marine Park wetland (WA) 45.61274 -122.62290	Exclusion	Boom 800ft	Yes	Remote Stage at Marine Park, SA-LCR-108.4	City Park, Economic Resources, Raptors, Resident Fish, Salmonids, Wetlands	Site is directly to the east of Marine Park in Vancouver and to the south of the Water Resources Education Center. There is a paved trail up river from this site with a rocky trail down to beach, <.25 miles to site. May want to send ground team to assess water level/channel to wetland ahead of boat teams.	LCR-11	367

LCR-109.6R	Tidewater Cove Marina 45.61028 -122.61143	Collection	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).	Marina, Raptors, Resident Fish, Salmonids	The vac truck can drive to the riverbank. Call marina before deployment.	LCR-11	369
LCR-111.0R	Russell Landing 45.60445 -122.58022	Collection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).	Raptors, Resident Fish, Salmonids, Waterfowl	Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard	LCR-11	371
LCR-113.3M	Government Island Slough (OR) 45.58530 -122.54298	Exclusion	Boom 500ft	Yes	Remote Stage at SA-LCR-109.4L, M. James Gleason Memorial Boat Ramp. Launch from same BL-LCR-109.4L.	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands	Length of boom needed will vary depending on water level.	LCR-11	373
LCR-113.8R	McCuddy's Steamboat Landing Marina 45.59221 -122.52829	Deflection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).	Marina, Resident Fish, Salmonids, Sensitive Resources	Call Clark County before deployment.	LCR-11	375

LCR-114.8M	Jewit Lake Intake (OR) 45.58182 -122.50993	Exclusion	Boom 100ft	Yes	Remote Stage at SA-LCR-109.4L, M. James Gleason Memorial Boat Ramp. Launch from same BL-LCR-109.4L.	Backwater Habitat, Resident Fish, Salmonids, Waterfowl	Site is just downriver from Port of Portland Government Island dock. Boat access only from Vancouver or Portland. Water enters Jewit Lake through weir only during high river flow.	LCR-11	377
LCR-115.0R	Fisher's Landing 45.58699 -122.50427	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).	Resident Fish, Salmonids, Sensitive Resources	Call Clark County before deployment.	LCR-11	379
LCR-115.7R	Fisher Quarry Channel 45.58433 -122.48860	Deflection	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).	Resident Fish, Salmonids, Sensitive Resources	Call Clark County before deployment.	LCR-11	381
LCR-116.9R	Ackerman Island 45.58023 -122.46206	Collection	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).	Resident Fish, Salmonids	The vac truck can drive to the riverbank. Call Clark County for assistance with access to the location.	LCR-11	383

LCR-118.5R	Lady Island and Camas Slough 45.57602 -122.44427	Exclusion	Boom 1000ft	Yes	Remote Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).	Resident Fish, Salmonids, Waterfowl	Call Clark County before deployment.	LCR-11	385
LCR-120.6R	WA-14 Bridge over Camas Slough 45.57667 -122.40355	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-121.6R Port of Camas-Washougal Marina (24 S A St, Washougal, WA 98671).	Resident Fish, Salmonids, Waterfowl	If the water level is too low, deployment by land is possible. The Washougal River joins the Columbia River within the slough. Call Clark County before deployment.	LCR-12	387
LCR-124.7R	Captain William Clark Park 45.56051 -122.33357	Deflection	Boom 800ft	Yes	Remote Stage equipment at SA-LCR-121.6R Port of Camas-Washougal Marina (24 S A St, Washougal, WA 98671).	County Park, Resident Fish, Salmonids, Wildlife Refuge	Steigerwald Lake NWR is just to the east of this location. Call Clark County before deployment.	LCR-12	389
LCR-128.0R	Lawton Creek 45.55539 -122.26713	Exclusion	Boom 600ft	Yes	Remote Stage equipment at SA-LCR-128.9L Rooster Rock State Park (I-84, Corbett, OR 97019).	Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	Call Clark County before deployment.	LCR-12	391
LCR-131.0R	Near Cape Horn N of Sand Island (FBS MP-34.0) (OR) 45.56285 -122.20990	Collection	Boom 800ft	Yes	Remote Stage at Rooster Rock State Park, SA-LCR-128.9L. Launch from same BL-LCR-128.9L.	Resident Fish, Salmonids, Sensitive Resources	Site is at outcropping adjacent to BNSF railroad where it runs along the banks of the Columbia River.	LCR-12	393

LCR-137.0R	Franz Lake 45.59950 -122.10677	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).	Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	Franz Lake NWR is just to the east of this location. Call USFWS before deployment.	LCR-13	395
LCR-138.0L	Horsetail / Oneonta Creeks (OR) 45.59176 -122.07642	Exclusion	Boom 100ft	Yes	Remote Stage at Dalton Point (Rooster Rock State Park), SA-LCR-133.7L. Launch from same BL-LCR-133.7L.	Raptors, Resident Fish, Salmonids	Site is culvert opening to Oneonta and Horsetail Creeks which runs under I-84.	LCR-13	397
LCR-140.3R	Lake Shahala 45.61475 -122.03973	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).	Resident Fish, Salmonids	Skamania Landing Rd deployment by land is an alternative to deployment by boat. Call Skamania County before deployment.	LCR-13	399
LCR-141.4R	Hardy Slough 45.62628 -122.01712	Exclusion	Boom 400ft	Yes	Remote Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge	This location is part of Pierce NWR. Beacon Rock State Park is just to the west. Call Skamania County before deployment.	LCR-13	401

LCR-142.4R	Ives and Pierce Islands 45.62027 -121.99810	Deflection	Boom 700ft	Yes	Remote Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).	Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands	Beacon Rock State Park is to the west of this location. Call Skamania County before deployment.	LCR-13	403
LCR-143.4R	Hamilton Island 45.62638 -121.98064	Deflection	Boom 500ft	Yes	Remote Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).	Resident Fish, Salmonids, Sensitive Resources	Pierce NWR is just to the west of this location. Call USACE Bonneville Dam before deployment.	LCR-13	405
LCR-144.9L	Bonneville Dam Navigation Locks (OR) 45.63664 -121.95187	Collection	Boom 600ft	Yes	Remote Stage at SA-LCR-144.3R	Resident Fish, Salmonids, State Park	Site is below Bonneville Dam locks. There is minimal current in the channel.	LCR-13	407
LEWR-0.4R	Lewis River Mouth 45.85736 -122.77500	Collection	Boom 700ft	Yes	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Waterfowl, Wetlands	Collection of oil from a spill on the Lewis River is also possible at this location (see CCSWL-GRP). Call landowner before deployment.	LCR-8	409
LKRVR-0.9R	Lake River at City of Ridgefield 45.81818 -122.75228	Collection	Boom 500ft	Yes	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge	Location is owned by the Port of Ridgefield. Call port before deployment.	LCR-8	411

LKRVR-10.8R	Lake River at Vancouver Lake 45.70547 -122.72214	Collection	Boom 600ft	Yes	Onsite Stage equipment onsite.	Resident Fish, Salmonids, Sensitive Resources, Waterfowl	Vancouver Lake drains northward via Lake River to Columbia River. Call landowner before deployment.	LCR-9	413
MC-0.1	Multnomah Channel entrance (OR) 45.61638 -122.79307	Collection	Boom 2000ft	Yes	Remote Stage at Fred's Marina, SA-MC-1.0	Cranes, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl	Site is at south entrance to Multnomah Channel. New restoration site on north side of channel. Houseboats and marina with private vessels to the west.	LCR-9	415
MC-0.2	Willamette River Entrance to Sauvie Island (OR) 45.62077 -122.79556	Exclusion	Boom 700ft	Yes	Remote Stage at Fred's Marina, SA-MC-1.0. Launch from same, BL-MC-1.0.	Cranes, Habitat Restoration Site, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl	Site is at north entrance to Multnomah Channel. New restoration site on N end of channel (tip of Sauvie Island) and marina with private vessels to the west.	LCR-9	417
MC-0.4	Multnomah Channel - Sauvie Is Restoration (OR) 45.62018 -122.80033	Exclusion	Boom 500ft	Yes	Remote Stage and launch across channel at Fred's Marina, SA/BL-MC-1.0	Habitat Restoration Site, Resident Fish, Salmonids, Waterfowl	Multnomah Channel at entrance to new restoration site on Sauvie Island. Across river from marina with private vessels and houseboats along south shore of channel.	LCR-9	419
MC-0.5	Multnomah Channel Moorages (OR) 45.61907 -122.80168	Deflection	Boom 1000ft	Yes	Remote Stage at Fred's Marina, SA-MC-1.0. Launch from same, BL-MC-1.0.	Economic Resources, Marina, Resident Fish, Salmonids, Wildlife Refuge	Site is at south entrance to Multnomah Channel. Restoration site to the north and marina with houseboats and private vessels to the west.	LCR-9	421

MC-1.5	Multnomah Channel - Sauvie Isl. Bridge (OR) 45.62842 -122.81695	Collection	Boom 1000ft	Yes	Remote Stage and Launch at Fred's Marina, SA/BL-MC-1.0	Cranes, Economic Resources, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl	Gate access to levee on channel right just off bus station parking lot at NW Sauvie Island Rd and NW Gillihan.	LCR-9	423
SIL-0.4	Swan Island Lagoon (OR) 45.56993 -122.72417	Exclusion	Boom 800ft	Yes	Remote Stage at Swan Island Boat Ramp, SA-WR-8.0R	Resident Fish, Salmonids	Do not allow people/equipment within 25' of track. Military and commercial activity. Site is at mouth of channel at north side of Port of Portland at Swan Island.	LCR-10	425
SIL-0.8	Swan Lagoon - Mocks Bottom Outfall (OR) 45.56794 -122.71606	Containment	Boom 100ft	Yes	Remote Stage at Swan Island Boat Ramp, BL-WR-8.0R	Resident Fish, Salmonids	Site is at Port of Portland Dredge Base Property and NRC Office Property.	LCR-10	427
WALOR-1.0	Wallooskee River at bridge (OR) 46.14899 -123.79864	Collection, Exclusion	Boom 500ft	Yes	Remote Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.	Crabs, Herons, Resident Fish, Salmonids, Waterfowl	Site is best accessed by boat, although there is landside access via Highway 202. Highway has no shoulders for safe access.	LCR-1	429
WALR-0.7	Wallacut River 46.32009 -124.00936	Collection	Boom 200ft	Yes	Onsite Stage equipment onsite.	Resident Fish, Salmonids	Deployment by boat at river mouth may be possible during an extreme high tide. Call Pacific County before deployment.	LCR-1	431

WPPLC-0.8	Whipple Creek at NW Krieger Rd (WA) 45.75368 -122.74359	Sorbent	Boom 100ft	No	Onsite From the right bank of the creek, looking south. Photo was taken in July.	Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wetlands	Work with Clark County to control vehicle traffic on road. Call county before deployment.	LCR-8	433
WR-0.9R	Columbia Slough (Smith & Bybee Lakes) (OR) 45.64388 -122.76888	Exclusion	Boom 700ft	Yes	Remote Stage at SA-MC-1.0, Fred's Marina. Launch at same BL-MC-1.0.	Habitat Restoration Site, Resident Fish, Salmonids	Boat access only. Boom length required will vary with water levels; min 400' for lower water flow, maximum 1000ft.	LCR-9	435
WR-3.7R	International Terminals Slip (OR) 45.61101 -122.78374	Collection	Boom 800ft	Yes	Remote Stage at SA-MC-1.0 Fred's Marina; launch from same BL-MC-1.0.	Resident Fish, Salmonids	Strategy is collection in dredged channel on east bank of the Willamette River near Port of Portland.	LCR-9	437
WR-3.8L	Owens Corning Dock (OR) 45.60868 -122.78805	Collection	Boom 800ft	Yes	Remote Stage at SA-MC-1.0 Fred's Marina; launch from same BL-MC-1.0.	Resident Fish, Salmonids	Active industrial sites on both banks of the river in this location. Significant commercial and industrial activity.	LCR-9	439
WR-4.2R	Port of Portland Terminal 4 - Slip 3 North (OR) 45.60388 -122.77956	Collection	Boom 800ft	Yes	Remote Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.	Resident Fish, Salmonids	Strategy is collection at dredged channel at Port of Portland.	LCR-9	441
WR-4.3R	Port of Portland Terminal 4 - Slip 3 South (OR) 45.60407 -122.77847	Exclusion	Boom 600ft	Yes	Remote Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.	Resident Fish, Salmonids	Port of Portland	LCR-9	443

WR-4.5R	Port of Portland Terminal 4 - Berth 412 (OR) 45.59844 -122.77605	Collection	Boom 800ft	Yes	Remote Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.	Resident Fish, Salmonids	Strategy is collection at southern tip of	LCR-9	445
WR-5.8R	St. John's Bridge East (OR) 45.58805 -122.76628	Collection	Boom 800ft	Yes	Onsite Stage at Cathedral Park, SA-WR-5.8R	Resident Fish, Salmonids	Strategy site is just downstream of Cathedral Park, on the Willamette River.	LCR-9	447
WR-5.9L	Riverside Industrial Park (OR) 45.58566 -122.76724	Collection	Boom 800ft	Yes	Remote Stage at Cathedral Park, SA-WR-5.8R	Resident Fish, Salmonids	Strategy is collection at active industrial facility. Large vessels and barges may be present.	LCR-9	449
WR-6.9L	BNRR Bridge - West End (OR) 45.57558 -122.74792	Collection	Boom 800ft	Yes	Remote Stage at Cathedral Park (OR) SA-WR-5.8R	Resident Fish, Salmonids	Best access is by boat; shoreside access is limited by private property.	LCR-9	451
WR-6.9R	McCormick & Baxter Restoration Site (OR) 45.57695 -122.74220	Exclusion	Boom 2000ft	Yes	Remote Stage at Cathedral Park, SA-WR-5.8R	Habitat Restoration Site, Resident Fish, Salmonids	Boat access only. Shoreside access limited by private property.	LCR-9	453
WR-7.4R	Triangle Park Slip (OR) 45.57325 -122.73762	Collection	Boom 800ft	Yes	Remote Stage at Swan Island Boat Ramp, SA-WR-8.0R	Resident Fish, Salmonids	Strategy is SE of shoreline restoration site and is a natural collection point.	LCR-10	455
WR-7.5L	Elf Atochem Dock (OR) 45.56900 -122.73904	Collection	Boom 800ft	Yes	Remote Stage at Swan Island Boat Ramp, SA-WR-8.0R	Resident Fish, Salmonids	Strategy could be extended to enclose the Portland Tanker Basin as containment.	LCR-10	457

WR-12.2R	Steel Bridge (OR) 45.52776 -122.66748	Exclusion	Boom 300ft	Yes	Remote Stage at Swan Island Boat Ramp, SA-WR-8.0R	Resident Fish, Salmonids	Do not allow people/equipment within 25ft. of track. Site is at intersection of railroad and highway. Shoreside access is possible, but best access is by boat.	LCR-10	459
WR-12.7R	Eastbank Esplanade Outfalls (OR 45.52705 -122.66631	Collection	Boom 400ft	Yes	Remote Stage at Swan Island Boat Ramp, SA-WR-8.0R	Resident Fish, Salmonids	Do not allow people/equipment within 25ft. of railroad track. I-5 underdeck slopes to river at this location; Walkways and floating decks are present at Eastbank Esplanade.	LCR-10	461
WR-13.4L	River Place Marina (OR) 45.51007 -122.67113	Deflection	Boom 800ft	Yes	Remote Stage at SA-WR-13.9R Ross Island Sand & Gravel; launch from same BL-WR-13.9R.	Marina, Resident Fish, Salmonids	Site is at heavily used marina with significant recreational traffic.	LCR-10	463
WR-13.4R	OMSI - Marquam Bridge (OR) 45.50943 -122.66755	Collection	Boom 500ft	Yes	Remote Stage at SA-WR-13.9R Ross Island Sand & Gravel; launch from same BL-WR-13.9R.	Resident Fish, Salmonids	Site is at Marquam Bridge, across the river from the River Place Marina.	LCR-10	465
WR-13.5R	OMSI Docks (OR) 45.50780 -122.66694	Exclusion	Boom 600ft	Yes	Remote Stage at Ross Island Sand & Gravel, SA-WR-13.9R	Economic Resources, Resident Fish, Salmonids	Site is intended to protect historic submarine at OMSI and accompanying docks. There will likely be pedestrian traffic in the area.	LCR-10	467

WR-14.1L	Zidell Yard (OR) 45.49937 -122.66672	Collection	Boom 500ft	Yes	Onsite Stage onsite at Zidell Marine Shipyard (SA/BL-WR-14.1L)	Resident Fish, Salmonids	Site is at Zidell shipbuilding yard.	LCR-10	469
WR-14.7R	Ross Island E Channel (OR) 45.49090 -122.65819	Collection	Boom 900ft	Yes	Remote Stage at Ross Island Sand & Gravel, SA-WR-13.9R; launch from same BL-WR-13.9R.	Raptors, Resident Fish, Salmonids	Ross Island Sand & Gravel has boat ramp/ house on property at 4315 S.E. McLoughlin Blvd. (503) 239-5504.	LCR-10	471
WR-14.9L	Ross Island W Channel (OR) 45.48820 -122.67102	Collection	Boom 500ft	Yes	Remote Stage at SA-WR-14.1L Zidell Shipyard; launch from same BL-WR-14.1L.	Resident Fish, Salmonids	Strategy may be accessed shoreside via paved riverwalk. There may be pedestrian traffic present.	LCR-10	473
WR-15.5M	Ross Island W Channel (OR) 45.47861 -122.66459	Deflection	Boom 1000ft	Yes	Remote Stage at Willamette Park, SA-WR-15.6L	Backwater Habitat, Resident Fish, Salmonids	Boat access only. Strategy is at southernmost tip of Ross Island.	LCR-10	475
WR-15.9R	Ross Island E Channel (OR) 45.47750 -122.65728	Exclusion	Boom 100ft	Yes	Remote Stage at Willamette Park, SA-WR-15.6L	City Park, Recreational Use Area, Resident Fish, Salmonids, Waterfowl, Wetlands	Site is at Oaks Bottom Wildlife Refuge and Springwater Trail Levee	LCR-10	477
WR-18.4R	Johnson Creek (OR) 45.44405 -122.64391	Exclusion	Boom 600ft	Yes	Remote Stage from Milwaukie Riverfront Park SA-WR-18.5R; launch from same BL-WR-18.5R.	Resident Fish, Salmonids, Sensitive Resources	Launch from BL-WR-18.5R	LCR-10	479

WR-18.5R	Kellogg Creek (OR) 45.44174 -122.64332	Exclusion	Boom 300ft	Yes	Onsite Stage onsite at parking area near creek mouth or Milwaukie Park.	Fish Ladder(s), Resident Fish, Salmonids, Sensitive Resources	Site is operated by Clackamas Water Environment Services - Kellog Creek Sewage Treatment Plant	LCR-10	481
WR-23.6L	Cedar Island (OR) 45.38509 -122.62468	Exclusion	Boom 500ft	Yes	Remote Stage at SA-WR-23.1L, Cedaroak Boat Ramp, launch at same BL-WR-23.1L.	Backwater Habitat, Raptors, Reptiles and Amphibians, Resident Fish, Salmonids		LCR-10	483
WR-23.8L	Unnamed Slough near Bolton (OR) 45.38038 -122.62232	Exclusion	Boom 1300ft	Yes	Remote Stage at SA-WR-24.2R Meldrum Bar Park, launch from same BL-WR-24.2R.	Backwater Habitat, Resident Fish, Salmonids	Boat access only. Beware of floating dock adjacent to strategy location.	LCR-10	485
WR-23.9R	Meldrum Slough (OR) 45.37891 -122.61734	Exclusion	Boom 100ft	Yes	Remote Stage at SA-WR-24.2R Meldrum Bar Park, launch from same BL-WR-24.2R.	Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands	Boat access only. Strategy is at the southern opening to Meldrum Slough.	LCR-10	487
WR-25.5R	Abernethy Creek Outfall (OR) 45.36488 -122.60211	Collection, Exclusion	Boom 100ft	No	Onsite Stage onsite at Sportcraft Marina.	Resident Fish, Salmonids, Sensitive Resources	Strategy is at Sportcraft Marina, which has a boat ramp, parking area, and a marina with covered slips. Outfall is a culvert.	LCR-10	489
WR-25.9R	Hwy 43 Bridge (OR) 45.35949 -122.60855	Collection	Boom 1000ft	Yes	Remote Stage at SA-WR-25.4R, Sportcraft Marina. Launch at same BL-WR-25.4R.	Resident Fish, Salmonids	Collection point is under Highway 99 viaduct.	LCR-10	491

WR-26.1L	Falls Locks (OR) 45.35775 -122.61240	Containment	Boom 200ft	Yes	Remote Stage at SA-WR-25.4R, Sportcraft Marina. Launch at same BL-WR-25.4R.	Resident Fish, Salmonids	Approximately 100 feet of boom is present at the dam facility (as of 10/3/2013) to keep floating debris from backing into locks. There is an eddy and slack water in this area when the locks are closed.	LCR-10	493
YOR-3.3R	Youngs River Fish Pens #1 (OR) 46.17000 -123.83773	Exclusion	Boom 1600ft	Yes	Remote Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.	Fish Pens, Salmonids	Strategy is intended to protect fish pens. Water is shallow and shoaled here.	LCR-1	495
YOR-3.6L	Cook Slough (OR) 46.16188 -123.83116	Exclusion	Boom 100ft	Yes	Onsite Stage onsite from Wireless Road.	Backwater Habitat, Resident Fish, Salmonids, Wetlands	Site is accessed through private property. Make contact with land owner before deploying strategy.	LCR-1	497
YOR-4.0R	Youngs River Fish Pens #2 (OR) 46.17106 -123.82487	Exclusion	Boom 800ft	Yes	Remote Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.	Fish Pens, Salmonids	Entrance to Youngs River can be shallow at low water.	LCR-1	499
YOR-4.1R	Youngs River Fish Pens #3 (OR) 46.17052 -123.82273	Exclusion	Boom 800ft	Yes	Remote Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.	Fish Pens, Salmonids	Mouth of Youngs River can be shallow at low water.	LCR-1	501

Notification Strategy Matrices

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map	Strategy Details (Page#)
BURRC-0.0-N	Burris Creek Lift Station (WA) 45.93911 -122.78471	Notification	Economic Resources, Resident Fish, Salmonids	Call Consolidated Diking Improvement District No. 2 of Cowlitz County (CDID #2) at 360-225-8935 or 360-772-3246 and notify them of spills in the area that might impact Burris Creek and the lift stations.	Notify Consolidated Diking Improvement District #2 (CDID #2) of spills that could impact the lift stations on Burris Creek.	LCR-7	505
CHINR-0.3-N	Chinook River Tide Gates (WA) 46.30397 -123.96693	Notification	Habitat Restoration Site, Wetlands	Call WDFW Project Manager at 360-280-5493 and notify of a spill potentially impacting the Chinook River. They will initiate internal notifications, close tide gates if deemed necessary, and take actions to protect resources under their control.	Call WDFW to request that they close the tide gates at the Chinook River Bridge.	LCR-1	507
ELOCR-5.9-N	WDFW Beaver Creek Hatchery 46.22543 -123.32899	Notification	Fish Hatchery	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Elochoman River, so they can take action to protect the resources under their control.	Notify WDFW so they can take action to protect the resources under their control.	LCR-3	509

GRAYR-4.0-N	Sea Resources Hatchery 46.26939 -123.93151	Notification	Fish Hatchery	Call the non-profit at (360) 777-8229 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Chinook River, so they can take action to protect the resources under their control.	Notify the non-profit so they can take action to protect the resources under their control.	LCR-1	511
GRAYR-13.0-N	WDFW Grays River Hatchery 46.32989 -123.64567	Notification	Fish Hatchery	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Grays River, so they can take action to protect the resources under their control.	Notify WDFW so they can take action to protect the resources under their control.	LCR-2	513
LCR-19.0L-N	Clatsop Community College Dock Fish Pen 46.18991 -123.74803	Notification	Fish Pens, Salmonids	Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.	Notify Clatsop County Fisheries Management/ODFW of spills that could impact Tongue Point Fish Pens	LCR-2	515
LCR-29.0L-N	Blind Slough Net Pens 46.20335 -123.54442	Notification	Fish Pens, Salmonids	Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.	Notify Clatsop County Fisheries Management/ODFW of spills that could impact Blind Slough Fish Pens	LCR-2	517
LCR-42.4L-N	Georgia Pacific Wauna Mill 46.15229 -123.39783	Notification	Water Intakes	Call Georgia Pacific at 503-266-1933 and inform them that a spill has occurred.	Notify Georgia Pacific of spills that could impact their water intake at the facility.	LCR-3	519
LCR-53.8L-N	Port of St. Helens - Point Westward 46.18190 -123.17602	Notification	Water Intakes	Call Port of St. Helens at 971-203-9733 and inform them that a spill has occurred.	Notify Port of St. Helens of spills that could impact their industrial well and water intake at Point Westward.	LCR-3	521

LCR-55.1L-N	PGE Beaver Generating Facility 46.17181 -123.15790	Notification	Water Intakes	Call Portland General Electric (PGE) at 503-728-7211 and inform them that a spill has occurred.	Notify PGE of spills that could impact their industrial water intake at the Beaver Generating Facility near Port Westward.	LCR-4	523
LCR-67.8L-N	City of Rainier Water Intake 46.09021 -122.93332	Notification	Water Intakes	Call City of Rainier at 503-410-2180 and inform them that a spill has occurred.	Notify City of Rainier of spills that could impact their municipal water intake on the Columbia River.	LCR-5	525
LCR-71.5L-N	City of Prescott 46.05432 -122.89026	Notification	Water Intakes	Call City of Prescott at 503-397-1744 and inform them that a spill has occurred.	Notify City of Prescott of spills that could impact their municipal well near the Columbia River/rail line.	LCR-6	527
LCR-73.1L-N	PGE Trojan Park 46.03154 -122.88307	Notification	Water Intakes	Call PGE at 503-556-7089 and inform them that a spill has occurred.	Notify PGE of spills that could impact their drinking water and industrial intake at Trojan Park on the Columbia River.	LCR-6	529
LCR-83.8L-N	City of St. Helens Drinking Wells 45.89453 -122.80776	Notification	Water Intakes	Call City of St. Helens at 503-397-3532 and inform them that a spill has occurred.	Notify City of St. Helens of spills that could impact their drinking water well (groundwater) near the Columbia River.	LCR-7	531
LCR-100.8R-N	Flushing Channel Pumping Station 45.66919 -122.74533	Notification	Resident Fish, Salmonids	Call Port of Vancouver 24 hr Security at 360-992-1120 to notify them of a spill on the Columbia River that could impact the Flushing Channel pumping station. They will shut down the pumps to prevent transfer of oil between the Columbia River and Vancouver Lake.	Contact Port of Vancouver to shut down pumping station between Columbia River and Vancouver Lake.	LCR-9	533

LCR-112.8R-N	WDFW Vancouver Hatchery 45.59980 -122.54599	Notification	Fish Hatchery	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Columbia River, so they can take action to protect the resources under their control.	Notify WDFW so they can take action to protect the resources under their control.	LCR-11	535
LCR-115.0L-N	City of Portland - East Wellfield 45.56381 -122.51480	Notification	Water Intakes	Call the Portland Water Bureau and inform them that a spill has occurred.	Notify Portland Water Bureau of a spill that could impact their wellfield on the left bank of the river near Troutdale.	LCR-11	537
LCR-118.0L-N	Oregon Watermaster 45.56389 -122.44252	Notification	Water Intakes	Notify the following entities that may divert municipal water from the Columbia River below Bonneville Dam. City of Rainier 503-397-1521, City of St. Helens 503-397-1521, Port of St. Helens 503-369-0856, Port of Portland 503-460-4747	Notify municipalities to close water intakes potentially impacted by a spill on the Columbia River.	LCR-12	539
LCR-120.5R-N	Georgia Pacific Paper Mill 45.58091 -122.40404	Notification	Economic Resources, Water Intakes	Call 24-hour main phone at mill 360-834-3201 to notify of spill potentially impacting their water intakes. Mill personnel will take actions to protect the resources under their control and will initiate the decision process to shut down water intakes if necessary.	Notify Georgia Pacific Paper Mill of spills in the Columbia River potentially impacting paper mill water intakes.	LCR-12	541
LCR-144.6L-N	Bonneville Hatchery 45.63321 -121.95770	Notification	Fish Hatchery, Salmonids, Water Intakes	Call ODFW Bonneville Hatchery at 541-374-8393 and inform them that a spill has occurred.	Notify Bonneville Hatchery of spills that could impact their water intakes below the Bonneville Dam.	LCR-13	543

LKRVR-1.8-N	USFWS Ridgefield National Wildlife Refuge 45.80730 -122.74116	Notification	Sensitive Resources, Water Intakes, Wildlife Refuge	Call USFWS at (360) 887-4106 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.	Notify the US Fish & Wildlife Service so they can take action to protect the resources under their control.	LCR-8	545
WASHR-14.0-N	WDFW Skamania Hatchery 45.62100 -122.21660	Notification	Fish Hatchery	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Columbia River, so they can take action to protect the resources under their control.	Notify WDFW so they can take action to protect the resources under their control.	LCR-12	547
WASHR-20.0-N	WDFW Washougal Hatchery 45.65324 -122.16926	Notification	Fish Hatchery	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Washougal River, so they can take action to protect the resources under their control.	Notify WDFW so they can take action to protect the resources under their control.	LCR-13	549
WR-21.1L-N	Willamette River - Oswego Creek (OR) 45.41024 -122.66090	Notification	Resident Fish, Salmonids	Call Lake Oswego Corporation at 503-636-1422 to notify them of a spill potentially impacting Lake Oswego.	Notify Lake Oswego Corporation to close locks and prevent transfer of oil from Lake Oswego to Willamette River.	LCR-10	551
YOR-3.3-N	Youngs Bay Fish Pens 46.17088 -123.83733	Notification	Fish Pens, Salmonids	Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.	Notify Clatsop County Fisheries Management/ODFW of spills that could impact Youngs Bay Fish Pens	LCR-1	553

Staging Area Matrices

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-JDAYR-0.5	John Day Park Boat Ramp	46.17805 -123.75107	E Columbia River Hwy Astoria, OR 97103	Clatsop County OR 503-325-9306	LCR-20.3L, LCR-20.0L, LCR-19.3L, LCR-19.2L, LCR-19.9L	Large paved parking area 66,400 sq ft	LCR-2	557
SA-LCR-109.4L	Broughton Beach Park	45.60085 -122.61879	4325 NE Marine Drive Portland, OR 97211	Oregon Metro Portland, OR 503-797-1700	LCR-114.8M, LCR-113.3M, LCR-109.6R, LCR-113.8R, LCR-111.0R	Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.	LCR-11	583
SA-LCR-118.5L	Chinook Landing Marine Park	45.56038 -122.44261	5201 NE 223rd Ave Fairview, OR 97024	Oregon Metro Portland, OR 503-797-1700	LCR-115.7R, LCR-115.0R, LCR-118.5R, LCR-116.9R	Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.	LCR-12	585
SA-LCR-121.6R	Port of Camas-Washougal Marina	45.57827 -122.38106	24 S A St Washougal, WA 98671	Port of Camas-Washougal Washougal, WA 98671 360-835-2196	LCR-124.7R, LCR-120.6R	Public staging area and boat launch on the right bank of the Columbia River. Notify port before staging equipment.	LCR-12	587

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-LCR-128.9L	Rooster Rock State Park	45.54463 -122.24874	I-84 Corbett, OR 97019	OR State Parks Rooster Rock State Park Corbett, OR 97019 503-695-2261	LCR-131.0R, LCR-128.0R	Public staging area and boat launch on the left bank of the Columbia River. Notify state park before staging equipment.	LCR-12	589
SA-LCR-144.3R	Hamilton Island	45.63418 -121.96576	Boat Ramp Rd North Bonneville, WA 98639	USACE Bonneville Dam Control Room Cascade Locks, OR 97014 541-374-8338	LCR-142.4R, LCR-140.3R, LCR-137.0R, LCR-141.4R, LCR-143.4R, LCR-144.9L	Public staging area and boat launch on the right bank of the Columbia River. Notify USACE before staging equipment.	LCR-13	591
SA-LCR-15.8L	East Mooring Basin	46.19465 -123.80234	37th Street Astoria, OR 97103	Port of Astoria Executive Director 10 Pier One, Suite 308 Astoria, OR 97103	L&C-2.6, WALOR-1.0, L&C-1.2, L&C-1.7, YOR-3.3R, L&C-2.3, YOR-4.1R, YOR-4.0R	Large asphalt parking area with 54 trailer spaces and restrooms.	LCR-1	563
SA-LCR-17.7L	Tongue Point - Cathlamet Channel	46.19880 -123.76236	Railroad Avenue Astoria, OR 97103	Port of Astoria Executive Director 10 Pier One, Suite 308 Astoria, OR 97103	LCR-27.2L, LCR-19.0L, LCR-27.9L, LCR-26.4M, LCR-27.5L, LCR-29.0L, LCR-29.2L	Massive paved parking area in an industrial complex.	LCR-2	565

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-LCR-3.1R	Port of Ilwaco Marina	46.30252 -124.03654	Outer Harbor Way SE Ilwaco, WA 98624	Port of Ilwaco Port Manager Ilwaco, WA 98624 360-642-3143	LCR-2.2R, LCR-2.4R, LCR-8.4R	Public staging area and boat launch on the right bank of the Columbia River (Baker Bay). Notify the port before staging equipment (360-642-3143).	LCR-1	559
SA-LCR-38.6R	Elochoman Slough Marina	46.20484 -123.38818	200 3rd Street Cathlamet, WA 98612	Elochoman Slough Marina WA 360-795-3501	LCR-38.5M, LCR-38.6R, LCR-45.2M, LCR-33.6aR, LCR-44.3M, LCR-44.0M, LCR-37.2R, LCR-44.1M, LCR-38.2L, LCR-35.0R, LCR-45.0M, LCR-33.6bR, LCR-41.3M, LCR-37.7M, LCR-40.5M, LCR-38.8L	Elochoman Slough Marina Parking and Staging	LCR-3	567
SA-LCR-43.8L	Westport Boat Ramp	46.13665 -123.37297	Old Mill Town Rd Westport, OR 97016	Clatsop County OR 503-325-9306	LCR-48.8M, LCR-48.1M, LCR-43.2L, LCR-42.5L, LCR-48.6M	Large paved area with restrooms.	LCR-3	569

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-LCR-53.8L	Port Westward (Columbia Pacific)	46.18149 -123.17373	81566 Kallunki Rd Clatskanie, OR 97016	Columbia Pacific Bio-Refinery Port Westward Clatskanie, OR 503-728-7000	LCR-49.7L, LCR-49.1M, LCR-55.4L, LCR-55.1M, LCR-55.6M, LCR-54.4M, LCR-49.8L, LCR-54.2R, LCR-50.5L	Empty gravel parking area 90'x160'=14,400 sq ft, no facilities	LCR-3	571
SA-LCR-57.8R	Willow Grove Beach	46.17410 -123.08620	7141 Willow Grove Rd Longview, WA 98632	Cowlitz County Emergency Management Kelso, WA 98626 360-577-3130	LCR-60.2M, LCR-59.0M , LCR-58.7M, LCR-64.0M, LCR-55.9R, LCR-59.8L, LCR-55.5M, LCR-58.8R, LCR-55.3M, LCR-58.9M, LCR-55.7R	Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.	LCR-4	573
SA-LCR-67.1L	Rainier City Park	46.09353 -122.94321	48 W 7th St Rainier, OR 97048	City of Rainier Rainier, OR 97048 503-556-7301	LCR-65.9R, LCR-67.7R, LCR-66.2R, LCR-64.4L	Public staging area and boat launch on the left bank of the Columbia River. Notify the city before staging equipment.	LCR-5	575

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-LCR-75.2R	Port of Kalama Marina	46.00923 -122.84936	950 W Marine Dr Kalama, WA 98625	Port of Kalama Kalama, WA 98625 360-673-2325	LCR-78.4R, LCR-73.7L, LCR-78.9R, LCR-79.5R, LCR-71.4R, LCR-71.5M, LCR-76.0L, LCR-70.0M	Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.	LCR-6	577
SA-LCR-8.7L	Hammond Marina	46.20237 -123.95274	1085 Iredale Street Warrenton, OR 97121	Warrenton Harbor Master Marinas (Warrenton/Hammond) 225 S. Main Avenue PO Box 250 Warrenton, OR 97146 503-861-3197	LCR-7.1L, LCR-7.5L, LCR-10.1L, LCR-6.8L	Adjoining Seafarer's Park and Fort Stevens State Park	LCR-1	561
SA-LCR-85.8L	St. Helens Marina	45.86730 -122.79902	134 N River St St. Helens, OR 97051	St. Helens Marina 134 N River St St. Helens, OR 97051 503-397-4162	LCR-91.0R, LCR-81.2R, LCR-85.8R, LCR-81.0M, LCR-86.2R, LCR-87.7R, LCR-87.6R, LCR-85.6M, LCR-87.3R, LCR-89.8R	Staging area and boat launch on the left bank of the Columbia River. Notify the marina before staging equipment.	LCR-8	579
SA-LCR-97.7R	Langsdorf Landing	45.70410 -122.75967	10612 NW Lower River Rd	Clark Regional Emergency Services (CRESA) 360-992-6285	LCR-100.8R, LCR-94.8R,	Public staging area and boat launch on the right bank of the	LCR-9	581

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
			Vancouver, WA 98660	WDFW Region 5 (Southwest) 360-696-6211	LCR-99.9R, LCR-98.6R, LCR-95.0R, LCR-97.5R, LCR-94.3R, LCR-92.3R, LCR-94.5L, LCR-98.4L, LCR-97.0R	Columbia River. Notify the county before staging equipment.		
SA-MC-1.0	Fred's Marina	45.61885 -122.80533	12800 NW Marina Way Portland, OR 97231	Fred's Marina 12800 NW Marina Way Portland, OR 503-286-5537	MC-0.4, MC-1.5, WR-3.8L, MC-0.2, MC-0.1, WR-0.9R, WR-3.7R, MC-0.5	Paved parking area 37,950 sq ft	LCR-9	593
SA-SKPR-1.4	Warrenton Marina	46.16430 -123.92087	553 Ensign Drive Warrenton, OR 97146	Warrenton Harbor Master Marinas (Warrenton/Hammond) 225 S. Main Avenue PO Box 250 Warrenton, OR 97146 503-861-3197	LCR-10.8L, LCR-10.9L	Huge paved parking area 50,000 sq ft.	LCR-1	595
SA-WR-13.9R	Ross Island Sand and Gravel	45.50348 -122.66334	2611 SE 4th Avenue Portland, OR 97202	Ross Island Sand & Gravel Company 4315 SE McLoughlin Blvd Portland, OR 97202	WR-14.7R, WR-13.4L, WR-13.4R, WR-13.5R	Commercial business, 23,400 sq ft grass/gravel parking area	LCR-10	601
SA-WR-14.1L	Zidell Marine (Shipyard)	45.49950 -122.66834	3121 SW Moody Avenue Portland, OR 97239	Zidell Corporation Zidell Marine 31231 SW Moody Ave Portland, OR 97239 503-228-8691	WR-14.9L	Commercial shipyard - may have facilities available upon request	LCR-10	603

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-WR-15.6L	Willamette Park (OR)	45.47563 -122.66907	6336 SW Beaver Ave Portland, OR 97239	City of Portland Parks and Recreation 1120 SW Fifth Ave., Suite 1302 Portland, OR 97204 503-823-7529	WR-15.5M, WR-15.9R	Willamette Park Parking and Staging	LCR-10	605
SA-WR-18.5R	Milwaukie Riverfront Park	45.44322 -122.64338	10993 SE McLoughlin Blvd Milwaukie, OR 97222	City of Milwaukie Jefferson Street Boat Ramp 10722 SE Main Street Milwaukie, OR 97222 503-786-7508	WR-18.4R	Paved parking area 42,000 sq ft	LCR-10	607
SA-WR-23.1L	Cedaroak Boat Ramp	45.39052 -122.62937	4600 Elmran Drive West Linn, OR 97068	West Linn Parks & Recreation Cedaroak Boat Ramp 4600 Elmran Drive West Linn, OR 97068 503-557-4700	WR-23.6L	Large paved parking area 60,000 sq ft	LCR-10	609
SA-WR-24.2R	Meldrum Bar Park	45.37704 -122.61644	Meldrum Bar Park Road Gladstone, OR 97027	Gladstone Parks & Recreation Meldrum Bar Park Gladstone, OR 503-557-2769	WR-23.9R, WR-23.8L	Paved parking area 30,000 sq ft.	LCR-10	611
SA-WR-25.4R	Sportcraft Marina	45.36434 -122.60214	1701 Clackamette Drive Oregon City, OR 97045	Sportcraft Landing Sportcraft Marina 1701 Clackamette Dr Oregon City, OR 503-655-0981	WR-26.1L, WR-25.5R, WR-25.9R	Very large paved parking area 40,000 sq ft	LCR-10	613
SA-WR-5.8R	Cathedral Park (OR)	45.58771 -122.76388	6635 N Baltimore Ave Portland, OR 97203	City of Portland Parks and Recreation 1120 SW Fifth Ave., Suite 1302 Portland, OR 97204 503-823-7529	WR-5.8R, WR-5.9L, WR-6.9L, WR-4.2R , WR-4.5R, WR-6.9R, WR-4.3R	Cathedral Park Parking and Staging	LCR-9	597

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
SA-WR-8.0R	Swan Island Boat Ramp (OR)	45.56252 -122.70578	5561 N. Basin Ave. Portland, OR 97217	No Information	WR-12.7R, SIL-0.4, WR-12.2R, WR-7.5L, WR-7.4R, SIL-0.8	Swan Island Boat Ramp Parking and Staging	LCR-10	599

Boat Launch Matrices

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-JDAYR-0.5	John Day Park Boat Ramp	46.17805 -123.75107	E Columbia River Hwy Astoria, OR 97103	Clatsop County OR 503-325-9306	LCR-20.3L, LCR-20.0L, LCR-19.3L, LCR-19.2L, LCR-19.9L	Double concrete ramp with one floating dock	LCR-2	617
BL-LCR-109.4L	Broughton Beach Park	45.60085 -122.61879	4325 NE Marine Drive Portland, OR 97211	Oregon Metro Portland, OR 503-797-1700	LCR-114.8M, LCR-113.3M, LCR-109.6R, LCR-113.8R, LCR-111.0R	Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.	LCR-11	643
BL-LCR-118.5L	Chinook Landing Marine Park	45.56038 -122.44261	5201 NE 223rd Ave Fairview, OR 97024	Oregon Metro Portland, OR 503-797-1700	LCR-115.7R, LCR-115.0R, LCR-118.5R, LCR-116.9R	Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.	LCR-12	645
BL-LCR-121.6R	Port of Camas-Washougal Marina	45.57827 -122.38106	24 S A St Washougal, WA 98671	Port of Camas-Washougal Washougal, WA 98671 360-835-2196	LCR-124.7R, LCR-120.6R	Public staging area and boat launch on the right bank of the Columbia River. Notify port before staging equipment.	LCR-12	647

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-LCR-128.9L	Rooster Rock State Park	45.54463 -122.24874	I-84 Corbett, OR 97019	OR State Parks Rooster Rock State Park Corbett, OR 97019 503-695-2261	LCR-131.0R, LCR-128.0R	Public staging area and boat launch on the left bank of the Columbia River. Notify state park before staging equipment.	LCR-12	649
BL-LCR-144.3R	Hamilton Island	45.63418 -121.96576	Boat Ramp Rd North Bonneville, WA 98639	USACE Bonneville Dam Control Room Cascade Locks, OR 97014 541-374-8338	LCR-142.4R, LCR-140.3R, LCR-137.0R, LCR-141.4R, LCR-143.4R, LCR-144.9L	Public staging area and boat launch on the right bank of the Columbia River. Notify USACE before staging equipment.	LCR-13	651
BL-LCR-15.8L	East Mooring Basin	46.19465 -123.80234	37th Street Astoria, OR 97103	Port of Astoria Executive Director 10 Pier One, Suite 308 Astoria, OR 97103	L&C-2.6, WALOR-1.0, L&C-1.2, L&C-1.7, YOR-3.3R, L&C-2.3, YOR-4.1R, YOR-4.0R	Double boat ramps and short dock next to larger marina.	LCR-1	623
BL-LCR-17.7L	Tongue Point - Cathlamet Channel	46.19880 -123.76236	Railroad Avenue Astoria, OR 97103	Port of Astoria Executive Director 10 Pier One, Suite 308 Astoria, OR 97103	LCR-27.2L, LCR-19.0L, LCR-27.9L, LCR-26.4M, LCR-27.5L, LCR-29.0L, LCR-29.2L	Wide concrete boat launch next to massive paved area. Docks nearby.	LCR-2	625

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-LCR-3.1R	Port of Ilwaco Marina	46.30252 -124.03654	Outer Harbor Way SE Ilwaco, WA 98624	Port of Ilwaco Port Manager Ilwaco, WA 98624 360-642-3143	LCR-2.2R, LCR-2.4R, LCR-8.4R	Port of Ilwaco Marina	LCR-1	619
BL-LCR-38.6R	Elochoman Slough Marina	46.20484 -123.38818	200 3rd Street Cathlamet, WA 98612	Elochoman Slough Marina WA 360-795-3501	LCR-38.5M, LCR-38.6R, LCR-45.2M, LCR-33.6aR, LCR-36.0R, LCR-44.3M, LCR-44.0M, LCR-37.2R, LCR-44.1M, LCR-38.2L, LCR-35.0R, LCR-45.0M, LCR-33.6bR, LCR-41.3M, LCR-37.7M, LCR-40.5M, LCR-38.8L	Elochoman Slough Marina Boat Launch	LCR-3	627
BL-LCR-43.8L	Westport Boat Ramp	46.13665 -123.37297	Old Mill Town Rd Westport, OR 97016	Clatsop County OR 503-325-9306	LCR-48.8M, LCR-48.1M, LCR-43.2L, LCR-42.5L, LCR-48.6M	Limited depth. Wide concrete ramp with docks on either side.	LCR-3	629

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-LCR-53.8L	Port Westward (Columbia Pacific)	46.18149 -123.17373	81566 Kallunki Rd Clatskanie, OR 97016	Columbia Pacific Bio-Refinery Port Westward Clatskanie, OR 503-728-7000	LCR-49.7L, LCR-49.1M, LCR-55.4L, LCR-55.1M, LCR-55.6M, LCR-54.4M, LCR-49.8L, LCR-54.2R, LCR-53.8R, LCR-50.5L	Small concrete boat launch with floating dock	LCR-3	631
BL-LCR-57.8R	Willow Grove Beach	46.17410 -123.08620	7141 Willow Grove Rd Longview, WA 98632	Cowlitz County Emergency Management Kelso, WA 98626 360-577-3130	LCR-60.2M, LCR-59.0M, LCR-58.7M, LCR-64.0M, LCR-55.9R, LCR-59.8L, LCR-55.5M, LCR-58.8R, LCR-55.3M, LCR-58.9M, LCR-55.7R	Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.	LCR-4	633
BL-LCR-67.1L	Rainier City Park	46.09353 -122.94321	48 W 7th St Rainier, OR 97048	City of Rainier Rainier, OR 97048 503-556-7301	LCR-65.9R, LCR-67.7R, LCR-66.2R, LCR-64.4L	Public staging area and boat launch on the left bank of the Columbia River. Notify the city before staging equipment.	LCR-5	635

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-LCR-75.2R	Port of Kalama Marina	46.00923 -122.84936	950 W Marine Dr Kalama, WA 98625	Port of Kalama Kalama, WA 98625 360-673-2325	LCR-78.4R, LCR-73.7L, LCR-78.9R, LCR-79.5R, LCR-71.4R, LCR-71.5M, LCR-76.0L, LCR-70.0M	Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.	LCR-6	637
BL-LCR-8.7L	Hammond Marina	46.20237 -123.95274	1085 Iredale Street Warrenton, OR 97121	Warrenton Harbor Master Marinas (Warrenton/Hammond) 225 S. Main Avenue PO Box 250 Warrenton, OR 97146 503-861-3197	LCR-7.1L, LCR-7.5L, LCR-10.1L, LCR-6.8L	Concrete Ramp with 4 Lanes	LCR-1	621
BL-LCR-85.8L	St. Helens Marina	45.86730 -122.79902	134 N River St St. Helens, OR 97051	St. Helens Marina 134 N River St St. Helens, OR 97051 503-397-4162	LCR-91.0R, LCR-81.2R, LCR-85.8R, LCR-81.0M, LCR-86.2R, LCR-87.7R, LCR-87.6R, LCR-85.6M, LCR-87.3R, LCR-89.8R	Staging area and boat launch on the left bank of the Columbia River. Notify the marina before staging equipment.	LCR-8	639
BL-LCR-97.7R	Langsdorf Landing	45.70410 -122.75967	10612 NW Lower River Rd Vancouver, WA 98660	Clark Regional Emergency Services (CRESA) 360-992-6285	LCR-100.8R, LCR-94.8R, LCR-99.9R, LCR-98.6R,	Public staging area and boat launch on the right bank of the Columbia River.	LCR-9	641

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
				WDFW Region 5 (Southwest) 360-696-6211	LCR-95.0R, LCR-97.5R, LCR-94.3R, LCR-92.3R, LCR-94.5L, LCR-98.4L, LCR-97.0R	Notify the county before staging equipment.		
BL-MC-1.0	Fred's Marina	45.61885 -122.80533	12800 NW Marina Way Portland, OR 97231	Fred's Marina 12800 NW Marina Way Portland, OR 503-286-5537	MC-0.4, MC-1.5, WR-3.8L, MC-0.2, MC-0.1, WR-0.9R, WR-3.7R, MC-0.5	Double concrete ramps with two floating docks and slips available at marina	LCR-9	653
BL-SKPR-1.4	Warrenton Marina	46.16430 -123.92087	553 Ensign Drive Warrenton, OR 97146	Warrenton Harbor Master Marinas (Warrenton/Hammond) 225 S. Main Avenue PO Box 250 Warrenton, OR 97146 503-861-3197	LCR-10.8L, LCR-10.9L	Double concrete ramp with two floating docks and ~400 slips at marina	LCR-1	655
BL-WR-13.9R	Ross Island Sand and Gravel	45.50348 -122.66334	2611 SE 4th Avenue Portland, OR 97202	Ross Island Sand & Gravel Company 4315 SE McLoughlin Blvd Portland, OR 97202	WR-14.7R, WR-13.4L, WR-13.4R, WR-13.5R	Single concrete ramp	LCR-10	661
BL-WR-14.1L	Zidell Marine (Shipyard)	45.49950 -122.66834	3121 SW Moody Avenue Portland, OR 97239	Zidell Corporation Zidell Marine 31231 SW Moody Ave Portland, OR 97239 503-228-8691	WR-14.1L, WR-14.9L	Three commercial size concrete ramps	LCR-10	663

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-WR-15.6L	Willamette Park (OR)	45.47563 -122.66907	6336 SW Beaver Ave Portland, OR 97239	City of Portland Parks and Recreation 1120 SW Fifth Ave., Suite 1302 Portland, OR 97204 503-823-7529	WR-15.5M, WR-15.9R	Willamette Park Boat Launch	LCR-10	665
BL-WR-18.5R	Milwaukie Riverfront Park	45.44322 -122.64338	10993 SE McLoughlin Blvd Milwaukie, OR 97222	City of Milwaukie Jefferson Street Boat Ramp 10722 SE Main Street Milwaukie, OR 97222 503-786-7508	WR-18.4R, WR-18.5R	Single concrete ramp, no floating dock but can pull up to the shoreline	LCR-10	667
BL-WR-23.1L	Cedaroak Boat Ramp	45.39052 -122.62937	4600 Elmran Drive West Linn, OR 97068	West Linn Parks & Recreation Cedaroak Boat Ramp 4600 Elmran Drive West Linn, OR 97068 503-557-4700	WR-23.6L	Double concrete boat launch with two floating docks	LCR-10	669
BL-WR-24.2R	Meldrum Bar Park	45.37704 -122.61644	Meldrum Bar Park Road Gladstone, OR 97027	Gladstone Parks & Recreation Meldrum Bar Park Gladstone, OR 503-557-2769	WR-23.9R, WR-23.8L	Double concrete ramps with floating dock, as well as dirt ramp Less than 100' to the west.	LCR-10	671
BL-WR-25.4R	Sportcraft Marina	45.36434 -122.60214	1701 Clackamette Drive Oregon City, OR 97045	Sportcraft Landing Sportcraft Marina 1701 Clackamette Dr Oregon City, OR 503-655-0981	WR-26.1L, WR-25.5R, WR-25.9R	Double concrete ramp with floating dock. Large marina.	LCR-10	673

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map	Strategy Details (Page#)
BL-WR-5.8R	Cathedral Park (OR)	45.58771 -122.76388	6635 N Baltimore Ave Portland, OR 97203	City of Portland Parks and Recreation 1120 SW Fifth Ave., Suite 1302 Portland, OR 97204 503-823-7529	WR-5.8R, WR-5.9L, WR-6.9L, WR-4.2R , WR-4.5R, WR-6.9R, WR-4.3R	Cathedral Park Boat Launch	LCR-9	657
BL-WR-8.0R	Swan Island Boat Ramp (OR)	45.56252 -122.70578	5561 N. Basin Ave. Portland, OR 97217	No Information	WR-12.7R, SIL-0.4, WR-12.2R, WR-7.5L, WR-7.4R, SIL-0.8	Swan Island Boat Ramp	LCR-10	659

APPENDIX A

Response Strategy 2-Pagers

Chinook River — CHINR-0.3

Position - Location:	46° 18.231', -123° 58.044'	46° 18' 13.9", -123° 58' 2.6"	46.30385, -123.96740	Chinook

Strategy Objective: Exclusion : Keep oil out of river above Highway 101 bridge.

Implementation: Using workboat, deploy 200ft boom at anchor point A. Then extend boom to the southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to creek bank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Road Traffic; Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: WDFW Johns River Wildlife Area is just to the east of the highway. Call Pacific County before deployment.

Watercourse: River - With Tidal Influence - Chinook River

Resources at Risk: Backwater Habitat, Marine Birds, Mud Flat(s), Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Chinook River CHINR-0.3



CHINR-0.3 Photo: From the Hwy 101 Bridge, looking downriver/west towards Baker Bay. Photo was taken in August.



Site Contact

Pacific County Emergency Management
Municipality (County/City) : PCRMA Director
360-875-9338

Washington Department of Fish and Wildlife
Land/Property Contact : Project Manager
360-280-5493

Nearest Address

1032 U.S. 101
Chinook, WA 98614

Driving Directions

1. Head west on State Road 4 (Lewis and Clark Trail Hwy)
2. Turn left on State Route 401 (Lewis and Clark Trail Hwy)
3. At the traffic light, continue forward on Highway 101 (Lewis and Clark Trail Hwy)
4. Location is on the left

Crooked Creek CRKDC-0.3R

Position - Location:	46° 17.779', -123° 40.621'	46° 17' 46.7", -123° 40' 37.2"	46.29631, -123.67701	Rosburg

Strategy Objective: Collection : Collect oil moving upstream from Grays Bay and Columbia River.

Implementation: Using workboat, extend 300ft boom east from anchor point A. Then add 100ft to protect the right creek bank near anchor point C. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to bank.

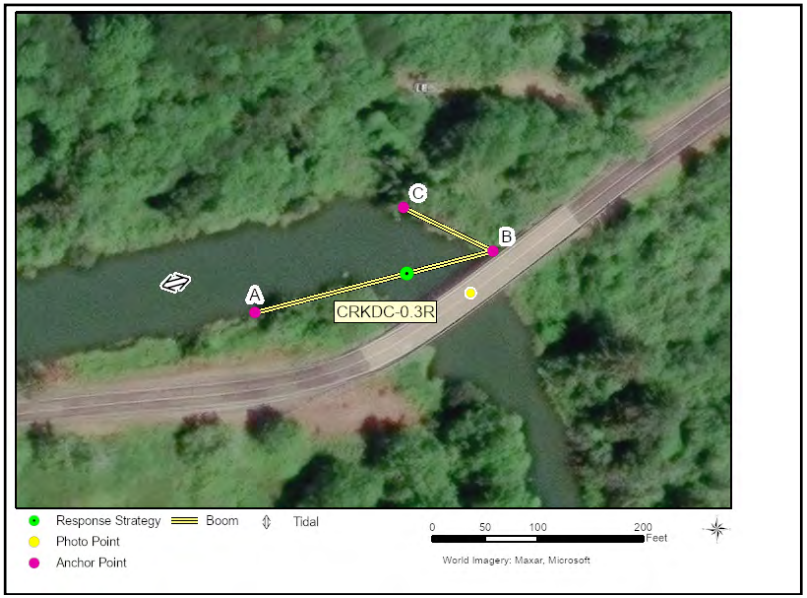
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Water Hazard

Field Notes: Call Wahkiakum County before deployment. Lane closure possible– use WSDOT guidelines.

Watercourse: Creek - Crooked Creek

Resources at Risk: Marsh, Resident Fish, Salmonids, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Crooked Creek CRKDC-0.3R



CRKDC-0.3R Photo: From bridge over Crooked Creek on Altoona-Pillar Rock Rd looking downstream toward the Columbia River.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 Altoona-Pillar Rock Rd
Rosburg, WA 98643

Driving Directions

1. Go west on WA-4 (W Ocean Beach Hwy)
2. Turn left on WA-403 (Altoona-Pillar Rock Rd)
3. Turn left at intersection with Larson Rd to stay on WA-403 (Altoona-Pillar Rock Rd)
4. Location is on the right

Cowlitz River (South of Tennant Way Bridge) CWLZR-1.0L

Position - Location:	46° 6.364', -122° 53.473'	46° 6' 21.8", -122° 53' 28.4"	46.10606, -122.89121	Longview

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using two workboats, deploy 600ft boom on left riverbank. Then extend boom northwest to large bridge pier and secure end with custom bridle (use 50ft line). Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

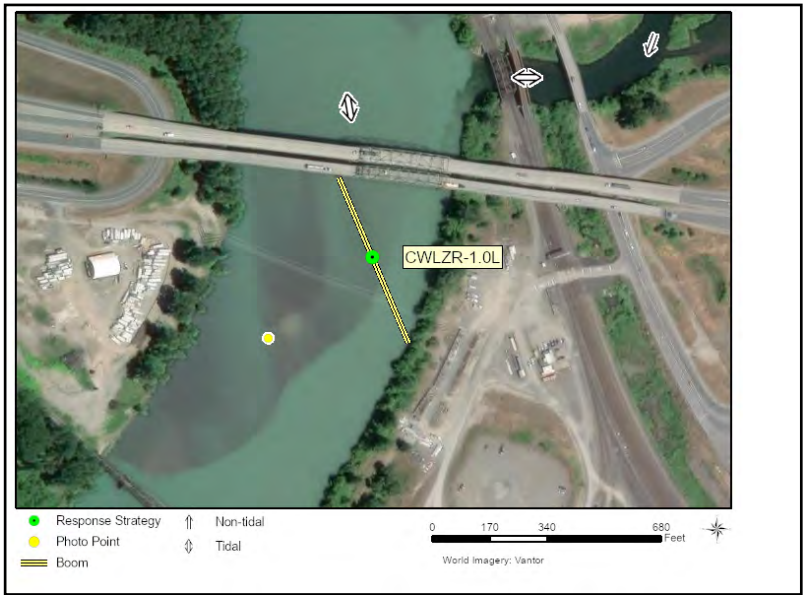
Staging Area: Remote: Stage equipment at SA-CWLZR-1.6R Gerhart Gardens Park (40 Tennant Way, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vehicle Traffic; Water Hazard

Field Notes: The vac truck can reach the location via Talley Way. The riverbank is owned by BNSF. Call the railroad (and then Cowlitz County) before deployment.

Watercourse: River - With Tidal Influence - Cowlitz River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
50	Feet	Line - 1/2" poly line
1	Each	Pump(s)
1	Each	Vac Truck or Skimmer and Storage
2	Each	Workboat(s) - of adequate size for type and amount of boom

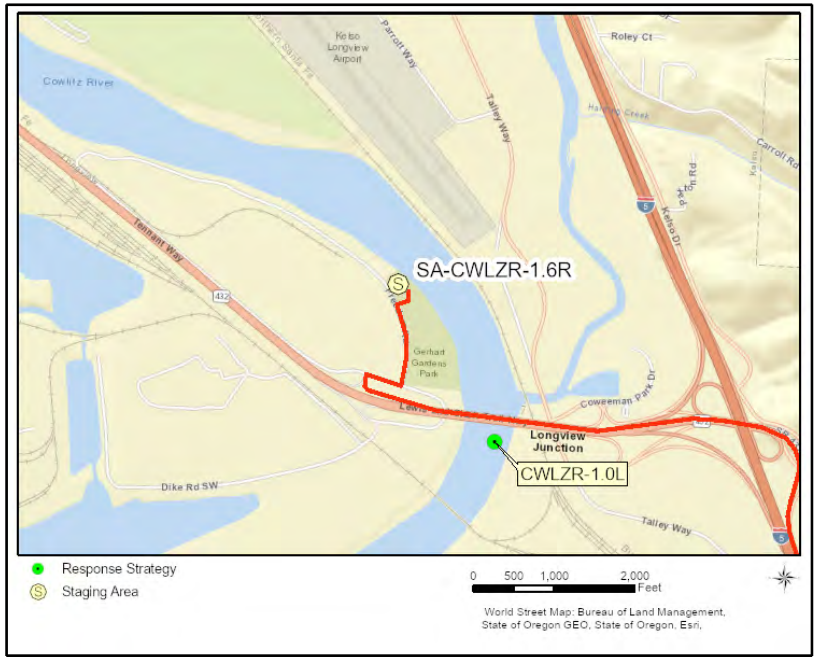
Recommended Personnel

2	Boat Operator
5	Laborer
1	Supervisor

Cowlitz River (South of Tennant Way Bridge) CWLZR-1.0L



CWLZR-1.0L Photo: From river, looking northeast towards



Site Contact

BNSF Railway
Land/Property Owner : Service Interruption Desk
817-352-2832

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

Nearest Address

40 Tennant Way
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Gerhart Gardens Park (SABL-CWLZR-1.6R):

1. Head north on I
2. Take the ramp on the right at exit 3
3. Continue onto WA-432
4. Take the exit toward Frontage R
5. Drive to Freedom R
6. Turn right onto Frontage R
7. Turn left onto Freedom Rd. Boat launch is on the righ

WDFW Deep River Boat Launch — DEEPR-0.9R

Position - Location:	46° 18.828', -123° 42.800'	46° 18' 49.7", -123° 42' 48.0"	46.31380, -123.71333	Deep River

Strategy Objective: Collection : Collect oil moving upriver from the Columbia.

Implementation: Using workboat, extend 500ft boom north from anchor point A. Then add 100ft to protect the right river bank near anchor point C. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

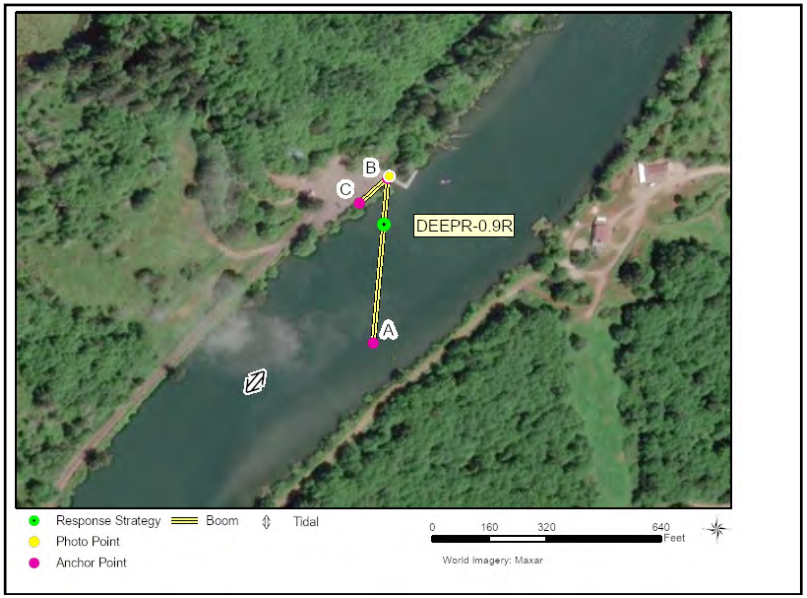
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Deep River

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

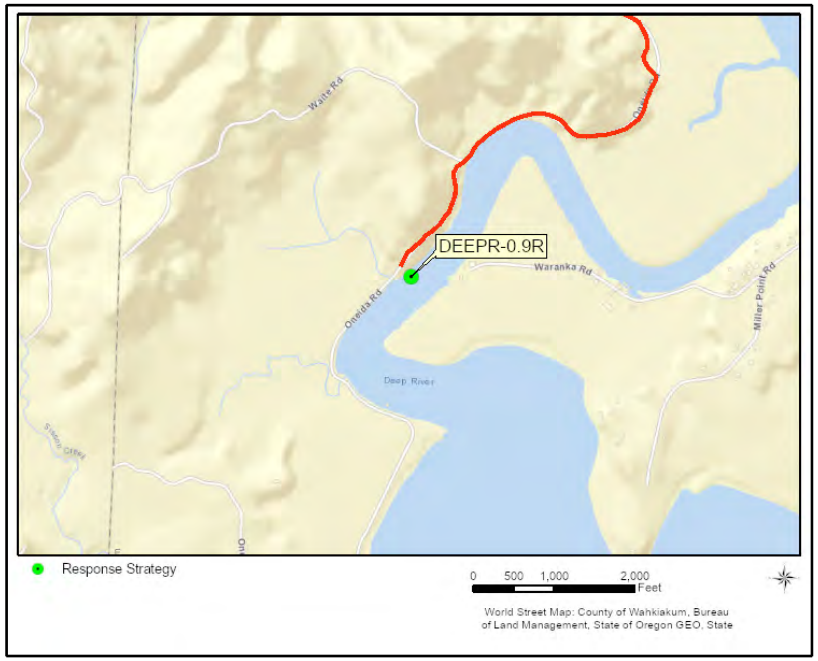
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

WDFW Deep River Boat Launch DEEPR-0.9R



DEEPR-0.9R Photo: From dock at Deep River looking toward Anchor C across the river.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

600 Oneida Rd
Deep River, WA 98643

Driving Directions

1. Go west on WA-4 (W Ocean Beach Hwy) toward WA-403/Rosburg School Rd
2. Turn left on Oneida Rd
3. Location is on the left.

NOTE: There is a dead end sign BEFORE you arrive at the boat launch - continue past the dead end sign to reach the location.

Gibbons Creek - Bridge 2 GC-0.1

Position - Location:	45° 33.634', -122° 17.733'	45° 33' 38.0", -122° 17' 44.0"	45.56056, -122.29555	Washougal

Strategy Objective: Exclusion : Keep oil out of creek and Steigerwald Lake.

Implementation: Deploy 100ft boom at anchor point A. Then extend boom to the southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to creek bank.

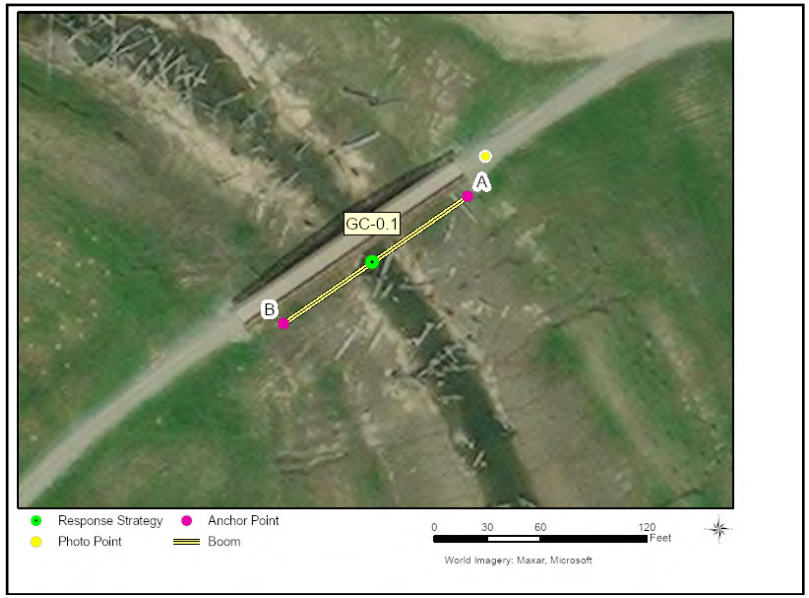
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: This location is part of Steigerwald Lake National Wildlife Refuge. Notify USFWS before deployment so that you can obtain the gate code to the trail that leads to the bridge. Depending upon the time of year, there may be water flowing in another outlet 500ft to the south o

Watercourse: Creek - Gibbons Creek

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (18" to 42")
100	Feet	Line - 1/2" poly line

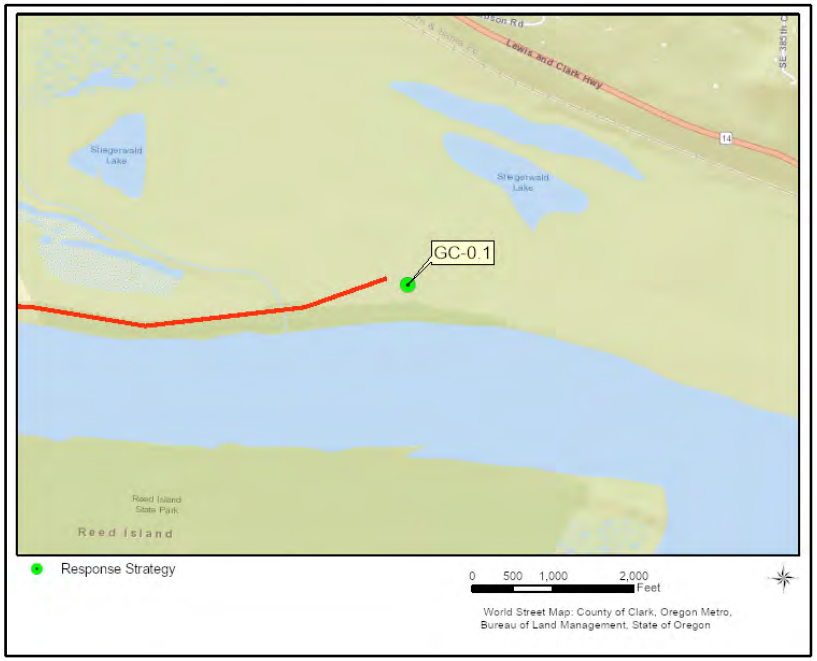
Recommended Personnel

2	Laborer
1	Supervisor

Gibbons Creek - Bridge 2 GC-0.1



GC-0.1 Photo: From west end of bridge, looking south towards the Columbia River and Reed Island. Photo was taken in September.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

3333 Index St
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. At the roundabout, take the third exit to WA-14 E toward Kennewick
3. At the roundabout, take the first exit toward Port
At the stop sign, make a sharp left on S Index St
4. Pass through gate and drive east on Refuge River Trail until you reach the second bridge.

Gibbons Creek - Bridge 1 GC-0.2

Position - Location:	45° 33.671', -122° 18.145'	45° 33' 40.3", -122° 18' 8.7"	45.56119, -122.30242	Washougal

Strategy Objective: Exclusion : Keep oil out of creek and Steigerwald Lake.

Implementation: Deploy 100ft boom at anchor point A. Then extend boom to the southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to creek bank.

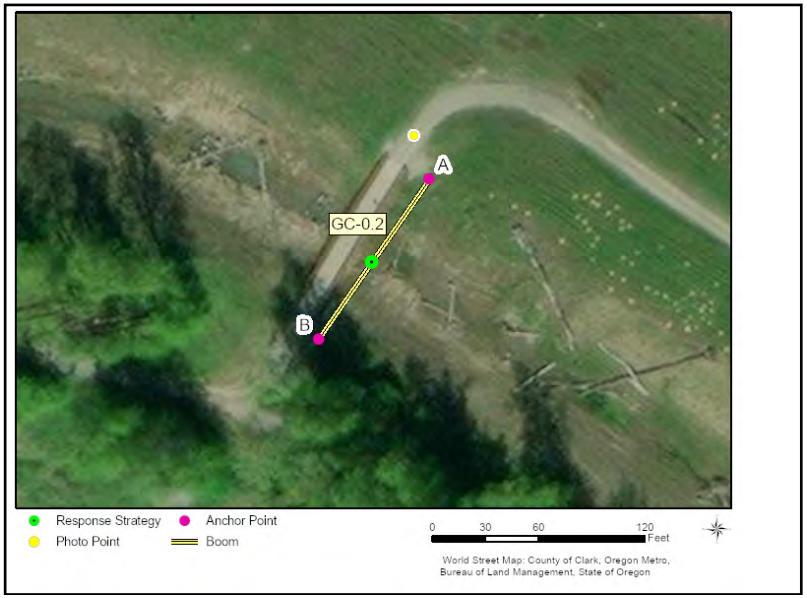
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: Deploy 100ft boom at anchor point A. Then extend boom to the southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures,

Watercourse: Creek - Gibbons Creek

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (18" to 42")
100	Feet	Line - 1/2" poly line

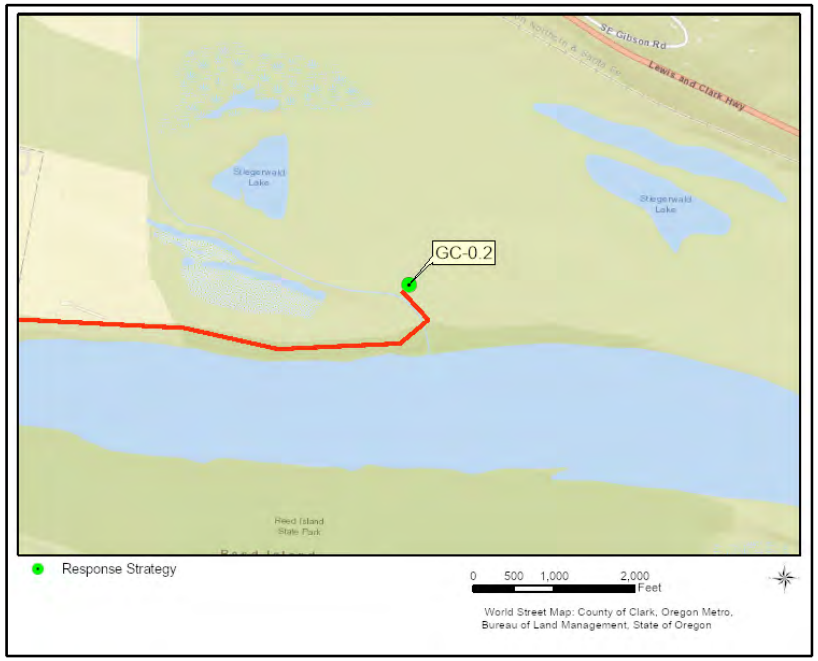
Recommended Personnel

2	Laborer
1	Supervisor

Gibbons Creek - Bridge 1 GC-0.2



GC-0.2 Photo: From west end of bridge, looking southeast towards the Columbia River and Reed Island. Photo was taken in September.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

3333 Index St
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. At the roundabout, take the third exit to WA-14 E toward Kennewick
3. At the roundabout, take the first exit toward Port
At the stop sign, make a sharp left on S Index St
4. Pass through gate and drive east on Refuge River Trail until you reach the second bridge.

Gibbons Creek at WA-14 Bridge GC-1.2

Position - Location:	45° 34.271', -122° 18.951'	45° 34' 16.3", -122° 18' 57.1"	45.57119, -122.31585	Washougal

Strategy Objective: Collection : Collect oil moving downstream before it reaches the refuge.

Implementation: Deploy 100ft boom at anchor point A. Then extend boom to the southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vehicle Traffic; Water Hazard

Field Notes: Steigerwald Lake NWR is located south of the highway. Call USFWS before deployment.

Watercourse: Creek - Gibbons Creek (and Columbia River)

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (18" to 42")
100	Feet	Line - 1/2" poly line
1	Each	Vac Truck or Skimmer and Storage

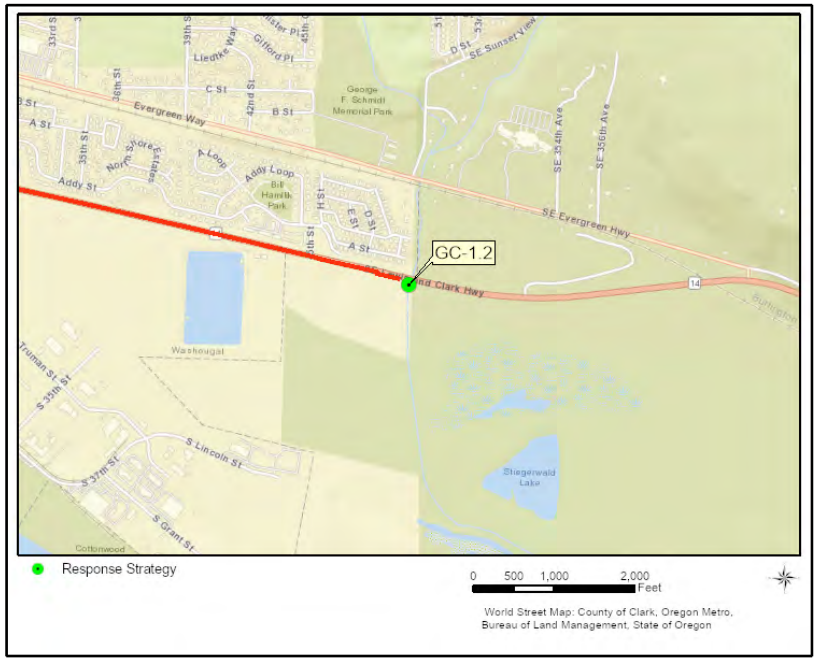
Recommended Personnel

2	Laborer
1	Supervisor

Gibbons Creek at WA-14 Bridge GC-1.2



GC-1.2 Photo: From right bank of creek, looking northeast towards the WA-14 bridge. Photo was taken in January.



Site Contact

USFWS Steigerwald Lake NWR
Land/Property Contact :

Washougal, WA 98671
360-887-4106

Nearest Address

35001 Lewis & Clark Hwy
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. Location is on the right, just past the NWR parking lot

Grays River at Devils Elbow — GRAYR-1.9L

Position - Location:	46° 18.464', -123° 40.282'	46° 18' 27.8", -123° 40' 16.9"	46.30773, -123.67136	Rosburg

Strategy Objective: Collection : Collect oil moving upriver from Grays Bay and Columbia River.

Implementation: Using workboat, extend 400ft across river and secure end near anchor point B. Then add 100ft to protect the left river bank. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

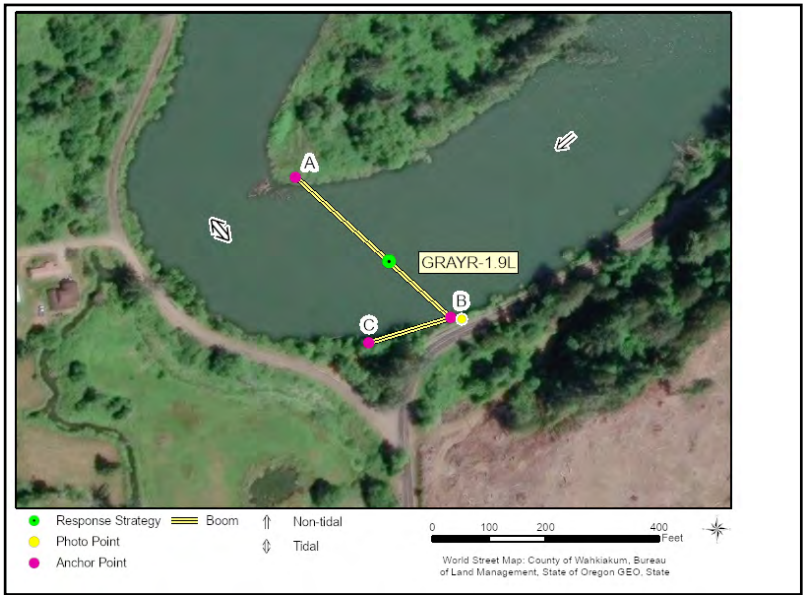
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Grays River

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

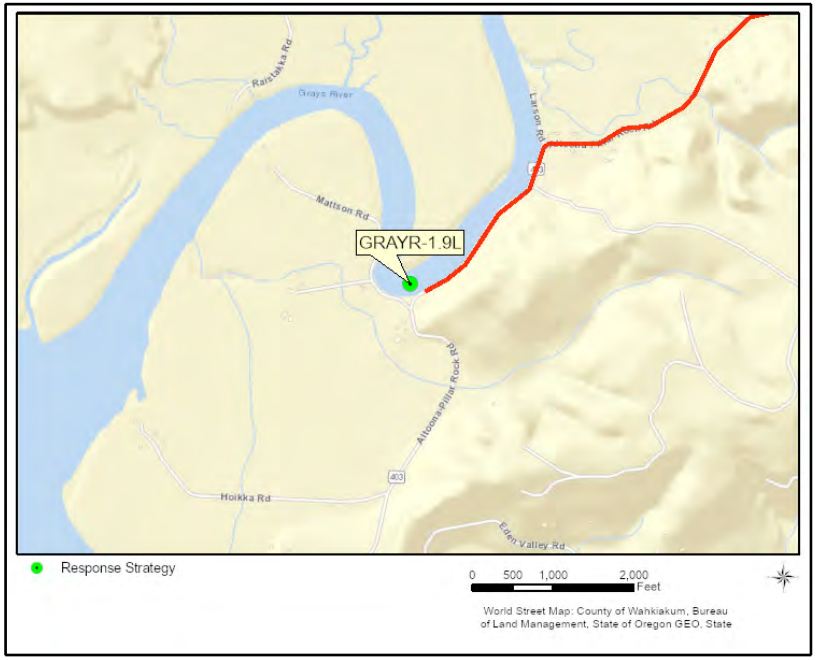
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Grays River at Devils Elbow GRAYR-1.9L



GRAYR-1.9L Photo: From road, looking downriver/northwest towards anchor point B. Photo was taken in August.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 Altoona-Pillar Rock Rd
Rosburg, WA 98643

Driving Directions

1. Head west on State Route 4 (Lewis and Clark Trail Hwy)
2. Turn left on Altoona Pillar Rock Rd (WA-403)
3. Location is on the right just before Mattson Rd

WDFW Fisherman's Loop Boat Launch on Kalama River — KLMAR-0.7

Position - Location:	46° 2.329', -122° 51.897'	46° 2' 19.7", -122° 51' 53.8"	46.03881, -122.86495	Kalama

Strategy Objective: Collection : Collect oil moving downriver before it reaches the Columbia River.

Implementation: Using workboat, deploy 300ft boom at anchor point A. Then extend boom downriver and secure end near anchor point B on left bank. Finally add 100ft to protect the right river bank at anchor point C. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: WDFW manages this boat launch. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Kalama River

Resources at Risk: Resident Fish, Salmonids, State Lands, Wetlands



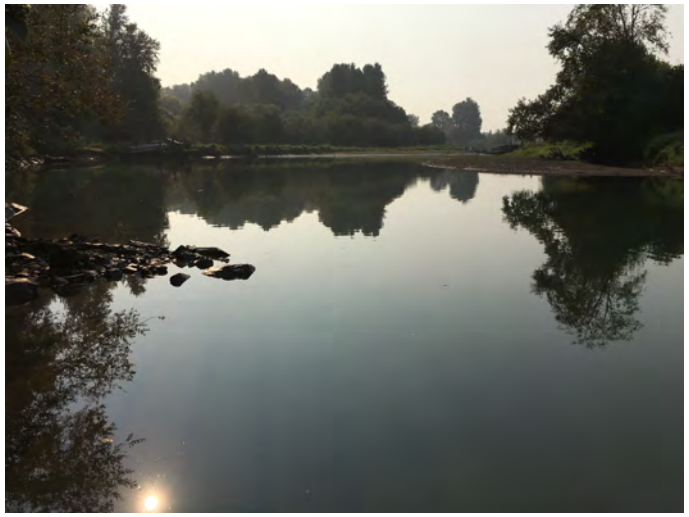
Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

WDFW Fisherman's Loop Boat Launch on Kalama River KLMAR-0.7



KLMAR-0.7 Photo: From boat launch, looking south/upriver. Photo was taken in September.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

N Hendrickson Dr
Kalama, WA 98625

Driving Directions

1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Keep left at the fork onto Oak St
5. Turn right on Hendrickson Dr
6. Keep left at the fork onto Hendrickson Dr
7. Turn left onto dirt road
8. Location is at the end of the road

Lewis and Clark River (OR) L&C-1.2

Position - Location:	46° 9.077', -123° 51.650'	46° 9' 4.6", -123° 51' 39.0"	46.15129, -123.86083	Astoria

Strategy Objective: Collection : Collect oil; keep oil out of river Lewis & Clark River.

Implementation: Deploy boom at angle from west end of the bridge to the south and east for collection on the east shoreline. This is a working channel so leave boom open until oil seen & put out notice to mariners. Adjust angle of boom (by moving east shoreside anchor point), quantity and placement of anchors, based on conditions of the day.

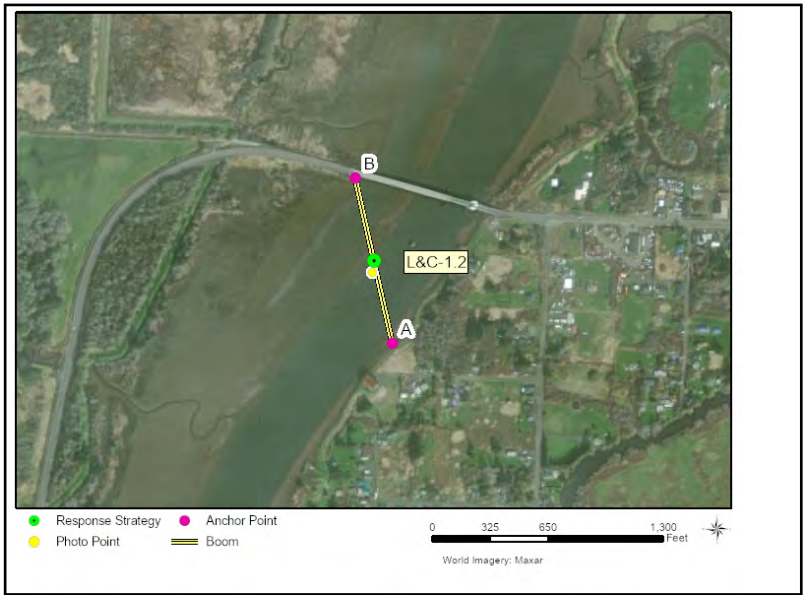
Staging Area: Remote: Stage and launch at East Mooring Basin

Site Safety: Slips, trips, and falls. Commercial vessel traffic in the area.

Field Notes: Access by boat from East Mooring Basin.

Watercourse: River - Without a Dam - Lewis & Clark River

Resources at Risk: Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl



Recommended Equipment

8	Each	Anchor - Danforth (or other appropriate type)
1000	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Lewis and Clark River (OR) L&C-1.2

No Photograph Available

L&C-1.2 Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

.

Land access from 35001 4th Ln., Astoria OR 97103

Jeffers Slough (OR) L&C-1.7

Position - Location:	46° 8.661', -123° 51.832'	46° 8' 39.7", -123° 51' 49.9"	46.14435, -123.86386	Astoria

Strategy Objective: Exclusion : Keep oil out of Lewis & Clark River.

Implementation: Deploy 500' of boom in a chevron formation across entrance to slough as a backup to L&C-1.2, the Lewis and Clark River strategy. Do not anchor to historic features (docks, pilings, etc.). Use shoreside anchor systems on either end and a Danforth type anchor at the apex of the chevron. Adjust angle of boom, quantity and placement of anchors, based on conditions of the day.

Staging Area: Remote: Stage and launch at East Mooring Basin BL-LCR-15.8L

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Access by boat from launch at Yacht Club near bridge or at Tides Point across from Daggett Point. Access also possible through property of Astoria Marine Construction. Low-flow only.

Watercourse: Slough - Lewis & Clark River

Resources at Risk: Marine Birds, National Park, Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl



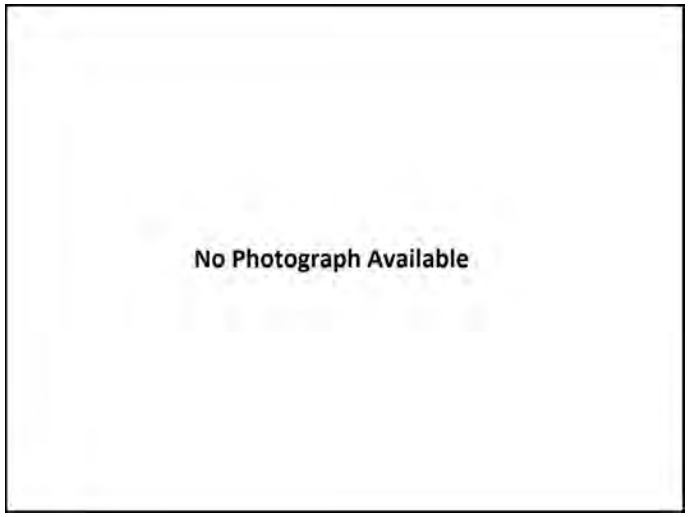
Recommended Equipment

3	Each	Anchor - Danforth (or other appropriate type)
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Jeffers Slough (OR) L&C-1.7



L&C-1.7 Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at Astoria, OR
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

Barrett Slough (OR) L&C-2.3

Position - Location:	46° 8.220', -123° 52.103'	46° 8' 13.2", -123° 52' 6.2"	46.13700, -123.86838	Astoria

Strategy Objective: Exclusion : Keep oil out of Lewis & Clark River.

Implementation: Deploy 300' of boom across entrance to slough as backup to L&C-1.2, Lewis and Clark River strategy. Adjust angle of boom, quantity and placement of anchors, based on conditions of the day.

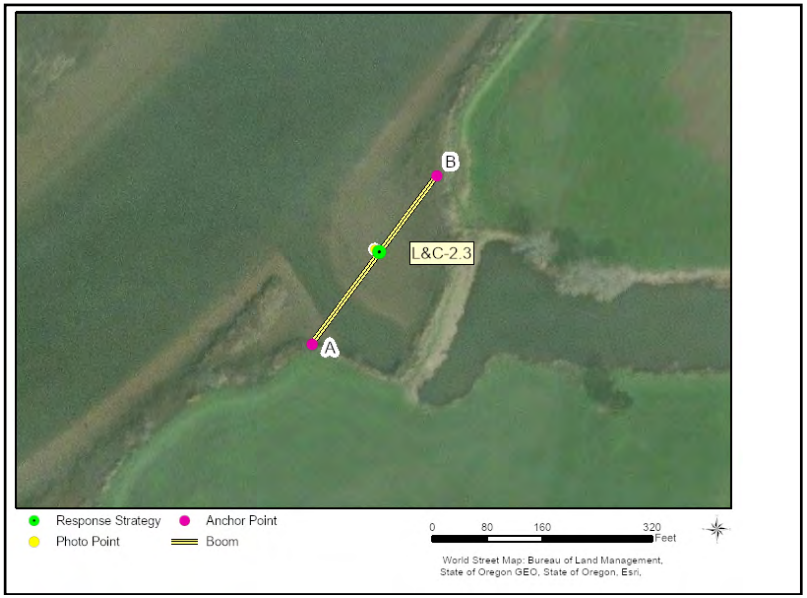
Staging Area: Remote: Stage and launch at East Mooring Basin

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Access by boat from launch at East Mooring Basin. Low flow only.

Watercourse: Slough - Lewis & Clark River

Resources at Risk: Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl



Recommended Equipment

2	Each	Anchor - Danforth (or other appropriate type)
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Barrett Slough (OR) L&C-2.3

No Photograph Available

L&C-2.3 Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

37th Street
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

Green Slough (OR) L&C-2.6

Position - Location:	46° 8.045', -123° 52.427'	46° 8' 2.7", -123° 52' 25.6"	46.13408, -123.87378	Astoria

Strategy Objective: Exclusion : Keep oil out of Lewis & Clark River.

Implementation: Deploy 300' of boom across the entrance to the slough as a backup to the Lewis and Clark River strategy, L&C-1.2. USe shoreside anchor systems on either end and Danforth type anchors every 100-150' depending on conditions of the day.

Staging Area: Remote: Stage and launch at East Mooring Basin BL-LCR-15.8L

Site Safety: Slips, trips, and falls.

Field Notes: Access by boat at high tide from launch at East Mooring Basin. Low flow only.

Watercourse: Slough - Lewis & Clark River

Resources at Risk: Marine Birds, National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl



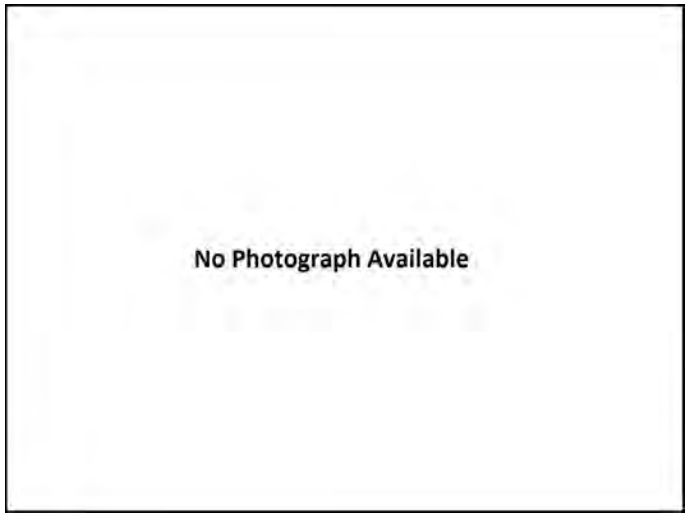
Recommended Equipment

2	Each	Anchor - Danforth (or other appropriate type)
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Green Slough (OR) L&C-2.6



L&C-2.6 Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

37th Street
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

Cape Disappointment State Park — LCR-2.2R

Position - Location:	46° 17.185', -124° 3.055'	46° 17' 11.1", -124° 3' 3.3"	46.28642, -124.05092	Ilwaco

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 600ft boom near dock at anchor point A. Then extend remainder northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Deployment by boat at river mouth may be possible during an extreme high tide. Call Pacific County before deployment. Lane closure possible – use WSDOT guidelines.

Watercourse: River - With Tidal Influence - Columbia River (Baker Bay)

Resources at Risk: Backwater Habitat, Eelgrass, Marine Birds, Marsh, Mud Flat(s), Raptors, Resident Fish, Salmonids, State Park, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Cape Disappointment State Park LCR-2.2R



LCR-2.2R Photo: From parking lot near anchor point A, looking northeast towards the aid to navigation.



Site Contact

Washington State Parks and Recreation Commission
Land/Property Contact : Cape Disappointment State Park
244 Robert Gray Dr
Ilwaco, WA 98624
360-642-3078

Nearest Address

Outer Harbor Way SE
Ilwaco, WA 98624

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Ilwaco Marina (SABL-LCR-3.1R):
1. Go northwest on WA-4 (Ocean Beach Hwy) toward Messinger Hill Dr
2. Keep left at the fork onto WA-4
3. Continue forward on US-101 toward Long Beach / Ilwaco
4. Turn left on US-101-ALT toward Astoria / Oregon
5. Turn right on US-101 toward Ilwaco
6. Turn left on Elizabeth St toward Port of Iiwaco / Grays Harbor College
7. Continue forward on Outer Harbor Way SE
8. Location is at the end of the road

USCG Station Cape Disappointment — LCR-2.4R

Position - Location:	46° 16.843', -124° 2.653'	46° 16' 50.6", -124° 2' 39.2"	46.28072, -124.04422	Ilwaco

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, during high tide, deploy 600ft boom near dock at anchor point A. Then extend remainder northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This strategy is located within Baker Bay. It can only be deployed during high tide. Some onsite staging can occur at this location. Call the Coast Guard before deployment.

Watercourse: River - With Tidal Influence - Columbia River (Baker Bay)

Resources at Risk: Backwater Habitat, Eelgrass, Marine Birds, Marsh, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

USCG Station Cape Disappointment LCR-2.4R



LCR-2.4R Photo: From above Baker Bay, looking southwest towards station. Photo was taken in August.



Site Contact

USCG Station Cape Disappointment
Primary Contact :
322 Coast Guard Rd
Ilwaco, WA 98624
360-642-2382

Nearest Address

Outer Harbor Way SE
Ilwaco, WA 98624

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Ilwaco Marina (SABL-LCR-3.1R):
1. Go northwest on WA-4 (Ocean Beach Hwy) toward Messinger Hill Dr
2. Keep left at the fork onto WA-4
3. Continue forward on US-101 toward Long Beach / Ilwaco
4. Turn left on US-101-ALT toward Astoria / Oregon
5. Turn right on US-101 toward Ilwaco
6. Turn left on Elizabeth St toward Port of Iiwaco / Grays Harbor College
7. Continue forward on Outer Harbor Way SE
8. Location is at the end of the road

The address for onsite collection is:
322 Coast Guard Rd, Ilwaco, WA 98624

Jetty Lagoon West (OR) LCR-6.8L

Position - Location:	46° 12.898', -123° 58.729'	46° 12' 53.9", -123° 58' 43.7"	46.21496, -123.97881	Warrenton

Strategy Objective: Exclusion : Prevent oil from entering Jetty Lagoon

Implementation: Launch workboat from Hammond Marina boat launch, BL-LCR-8.7L with 500ft. boom. Deploy boom in a chevron configuration on the river side of the west jetty opening. Anchor to Anchor A and Anchor C using natural anchors or shoreside anchor posts. Anchor to Anchor B using Danforth or other anchor and anchor along boom length every 100-150ft. or as necessary for conditions.

Staging Area: Remote: Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Flow through the opening can be high during tidal exchanges, add boom as necessary to prevent entrainment.

Watercourse: River - With Tidal Influence - Mouth of Columbia River

Resources at Risk: Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Jetty Lagoon West (OR) LCR-6.8L



LCR-6.8L Photo: Low-angle aerial photo looking west from river side of jetty.



Site Contact

No Information
Not Determined :

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Warrenton, Oregon
2. Go northwest on US-101-BR (E Harbor Dr) (0.03 miles)
3. Continue on OR-104 (N Main Ave) (2.8 miles)
4. Bear right on Haceta St (0.02 miles)
5. Bear left on Pacific Dr (6th St) (0.05 miles)
6. Turn right on Heceta Pl (0.05 miles)
7. Turn left on 5th Ave (0.22 miles)
8. Turn right on Jetty St (0.05 miles)
9. Turn left on 4th Ave (0.14 miles)
10. Turn right on Lake Dr (0.13 miles)
11. Turn right on Iredale St (0.01 miles)
12. Finish at 1085 Iredale Street, 97121, on the left

Jetty Lagoon East (OR) LCR-7.1L

Position - Location:	46° 12.863', -123° 58.663'	46° 12' 51.8", -123° 58' 39.8"	46.21438, -123.97771	Warrenton

Strategy Objective: Exclusion : Prevent oil from entering Jetty Lagoon

Implementation: Launch workboat from Hammond Marina boat launch, BL-LCR-8.7L with 500ft. boom. Deploy boom in a chevron configuration on the river side of the east jetty opening. Anchor to Anchor A and Anchor C using natural anchors or shoreside anchor posts. Anchor to Anchor B using Danforth or other anchor and anchor along boom length every 100-150ft. or as necessary for conditions.

Staging Area: Remote: Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Flow through the opening can be high during tidal exchanges, add boom as necessary to prevent entrainment.

Watercourse: River - With Tidal Influence - Mouth of Columbia River

Resources at Risk: Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Jetty Lagoon East (OR) LCR-7.1L



LCR-7.1L Photo: Low-angle aerial view looking west from river side of jetty.



Site Contact

No Information
Not Determined :

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Warrenton, Oregon
2. Go northwest on US-101-BR (E Harbor Dr) (0.03 miles)
3. Continue on OR-104 (N Main Ave) (2.8 miles)
4. Bear right on Haceta St (0.02 miles)
5. Bear left on Pacific Dr (6th St) (0.05 miles)
6. Turn right on Heceta Pl (0.05 miles)
7. Turn left on 5th Ave (0.22 miles)
8. Turn right on Jetty St (0.05 miles)
9. Turn left on 4th Ave (0.14 miles)
10. Turn right on Lake Dr (0.13 miles)
11. Turn right on Iredale St (0.01 miles)
12. Finish at 1085 Iredale Street, 97121, on the left

Swash Lake (OR) LCR-7.5L

Position - Location:	46° 12.668', -123° 58.468'	46° 12' 40.1", -123° 58' 28.1"	46.21114, -123.97447	Warrenton

Strategy Objective: Exclusion : Prevent oil from entering tidal creeks or Swash Lake.

Implementation: Deploy if tidal conditions allow; keep workboat outside of lagoon and use shallow-water skiff to deploy 500' of boom across mouth of creek and anchor at Anchor A and Anchor B using shoreside anchor posts, do not anchor to historic pilings. Anchor every 100-150ft. along boom length or as necessary for conditions.

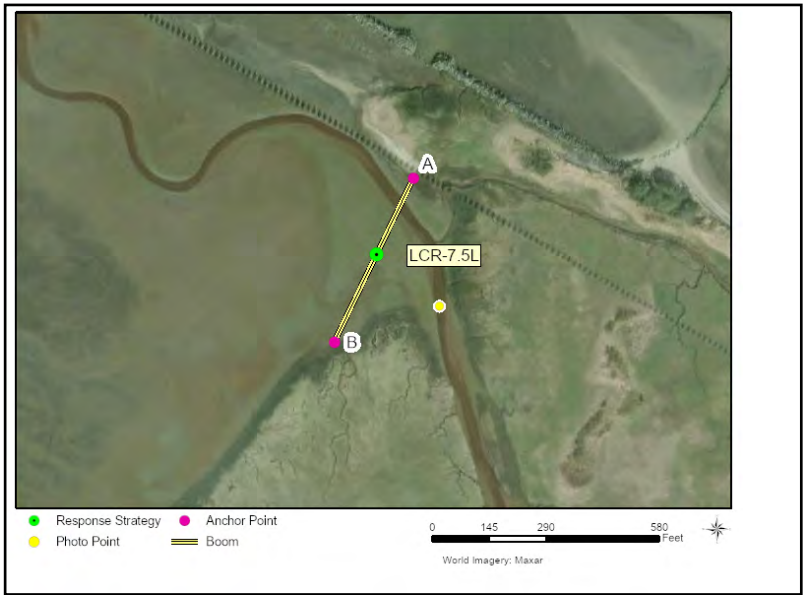
Staging Area: Remote: Stage at SA-LCR-8.7L Hammond Marina, launch at same BL-LCR-8.7L.

Site Safety: Shallow water with pilings. Slips, trips, and falls. Water hazards.

Field Notes: Creek connects Jetty Lagoon to Swash Lake to the south. Mouth of creek is very shallow at low water and may not be accessible except for high water. Pilings and jetty to NE of strategy.

Watercourse: Creek - Swash Lake

Resources at Risk: Marine Birds, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, State Park, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

Recommended Personnel

2	Boat Operator
3	Laborer
1	Supervisor

Swash Lake (OR) LCR-7.5L



LCR-7.5L Photo: Low-angle aerial photo looking SW from river side of jetty.



Site Contact

No Information
Not Determined :

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Warrenton, Oregon
2. Go northwest on US-101-BR (E Harbor Dr) (0.03 miles)
3. Continue on OR-104 (N Main Ave) (2.8 miles)
4. Bear right on Haceta St (0.02 miles)
5. Bear left on Pacific Dr (6th St) (0.05 miles)
6. Turn right on Heceta Pl (0.05 miles)
7. Turn left on 5th Ave (0.22 miles)
8. Turn right on Jetty St (0.05 miles)
9. Turn left on 4th Ave (0.14 miles)
10. Turn right on Lake Dr (0.13 miles)
11. Turn right on Iredale St (0.01 miles)
12. Finish at 1085 Iredale Street, 97121, on the left

Chinook Point — LCR-8.4R

Position - Location:	46° 15.087', -123° 55.430'	46° 15' 5.2", -123° 55' 25.8"	46.25145, -123.92383	Ilwaco

Strategy Objective: Exclusion : Keep oil out of two pocket beaches along Fort Columbia State Park shoreline.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom southeast and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southwest, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-3.1R Port of Ilwaco Marina (Outer Harbor Way SE, Ilwaco, WA 98624).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This location is part of Fort Columbia State Park. Call State Parks before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, State Park



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chinook Point LCR-8.4R



LCR-8.4R Photo: From near anchor point A, looking southeast along riverbank. Photo taken in October.



Site Contact

Washington State Parks and Recreation Commission
Land/Property Contact : Fort Columbia State Park

Chinook, WA 98614
360-777-8221

Nearest Address

Outer Harbor Way SE
Ilwaco, WA 98624

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Ilwaco Marina (SABL-LCR-3.1R):
1. Go northwest on WA-4 (Ocean Beach Hwy) toward Messinger Hill Dr
2. Keep left at the fork onto WA-4
3. Continue forward on US-101 toward Long Beach / Ilwaco
4. Turn left on US-101-ALT toward Astoria / Oregon
5. Turn right on US-101 toward Ilwaco
6. Turn left on Elizabeth St toward Port of Iiwaco / Grays Harbor College
7. Continue forward on Outer Harbor Way SE
8. Location is at the end of the road

Tansy Point (OR) LCR-10.1L

Position - Location:	46° 11.510', -123° 55.504'	46° 11' 30.6", -123° 55' 30.2"	46.19183, -123.92506	Warrenton

Strategy Objective: Collection, Deflection : Prevent oil from getting further into Youngs Bay.

Implementation: Anchor 400 ft of boom to the center of the retaining wall. Angle into current to deflect oil to collection point. Tend booms w/boat. Collect oil using vac truck or skimmer and portable storage.

Staging Area: Remote: Stage at Hammond Marina SA-LCR-8.7L; launch same BL-LCR-8.7L

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access and by land at wood chipping company (need permission of company). Will work with a NW wind and a flood tide.

Watercourse: Bay - Columbia River

Resources at Risk: Economic Resources, Resident Fish, Salmonids



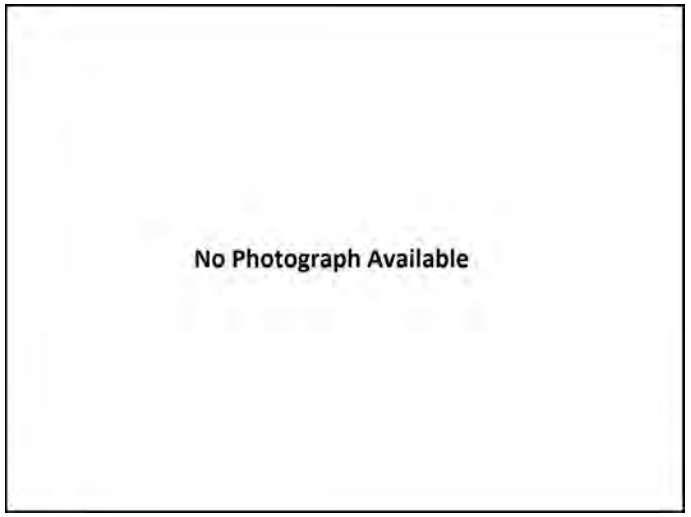
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
400	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Vac Truck or Skimmer and Storage (if collection)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Tansy Point (OR) LCR-10.1L



LCR-10.1L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Highway 101 S, Astoria, OR
2. Go southwest on US-101 (Oregon Coast Hwy) (3.15 miles)
3. Continue (0.04 miles)
4. Continue on US-101-ALT (Alternate Hwy 101) (0.86 miles)
5. Turn left at OR-104 to stay on US-101-ALT (S Main Ave) (0.23 miles)
6. Turn right on SW 18th St (Delaura Beach Ln) (0.76 miles)
7. Continue on SW Ridge Rd (3.32 miles)
8. Continue on Lake Dr (0.44 miles)
9. Turn right on Iredale St (0.01 miles)
10. Finish at 1085 Iredale Street, 97121, on the left

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Potential land access from 389 NW 13th St, Warrenton OR 97146

Inner Skipanon Waterway (OR) LCR-10.8L

Position - Location:	46° 10.783', -123° 54.557'	46° 10' 47.0", -123° 54' 33.4"	46.17972, -123.90928	Warrenton

Strategy Objective: Exclusion : Keep oil out of inner waterway.

Implementation: Launch boat at Warrenton Marina BL-SKPR-1.4. Deploy 800' of boom across waterway using shoreside connector systems on either side and Danforth type anchors every 100-150' depending on conditions of the day. Strategy will work well with a NW wind and a flood tide.

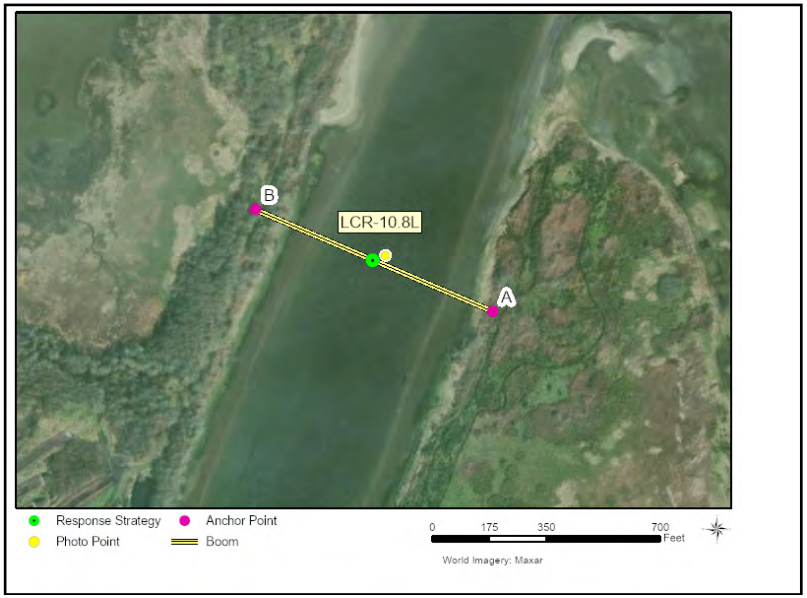
Staging Area: Remote: Stage + launch at Warrenton Marina SA-SKPR-1.4, approximately 1 mile upriver

Site Safety: Slips, trips, and falls.

Field Notes: Access via sandy spit collection points. Low flow only.

Watercourse: River - Without a Dam - Skipanon River

Resources at Risk: Backwater Habitat, Crabs, Herons, Marine Birds, Mud Flat(s), National Park, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands



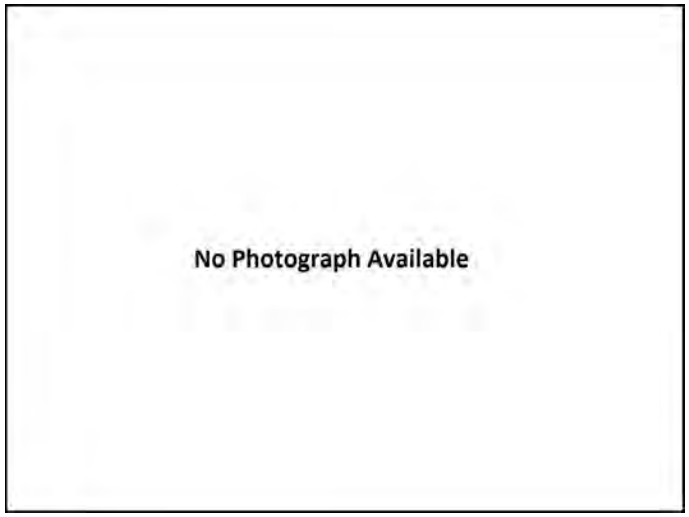
Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
800	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

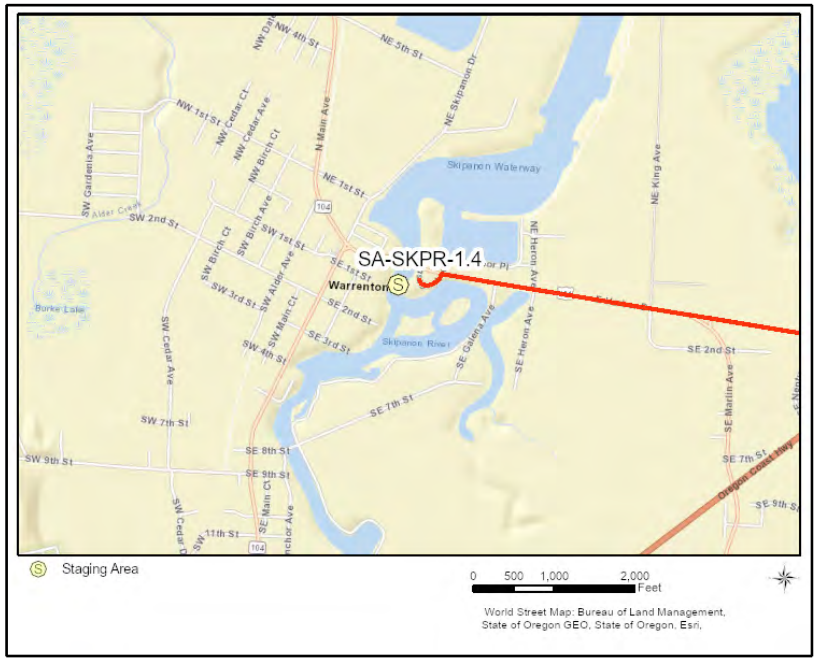
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Inner Skipanon Waterway (OR) LCR-10.8L



LCR-10.8L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

553 Ensign Drive
Warrenton, OR 97146

Driving Directions

1. Start at Youngs Bay Bridge, Astoria, Oregon
2. Go southwest on US-101 (Youngs Bay Brg) (1.83 miles)
3. Turn right on US-101-BR (E Harbor Dr) (1.11 miles)
4. Turn left on Ensign Ave (0.07 miles)
5. Finish at 553 Ensign Drive, 97146, on the left

Outer Skipanon Waterway (OR) LCR-10.9L

Position - Location:	46° 10.901', -123° 54.473'	46° 10' 54.0", -123° 54' 28.4"	46.18168, -123.90788	Warrenton

Strategy Objective: Collection, Deflection : Divert oil to shore for collection.Strategy will work well with a NW wind and a flood tide.

Implementation: Launch boat at Warrenton Marina BL-SKPR-1.4. Angle 600 ft of boom into current to deflect oil to collection point on south shoreline at sandy beach. Should be able to get a vac truck to the water, bring bolt cutters in case gate is locked.

Staging Area: Remote: Stage + launch at Warrenton Marina BL-SKPR-1.4, approximately 1 mile upriver

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat can only reach site during high tide.

Watercourse: River - Without a Dam - Skipanon River

Resources at Risk: Resident Fish, Salmonids



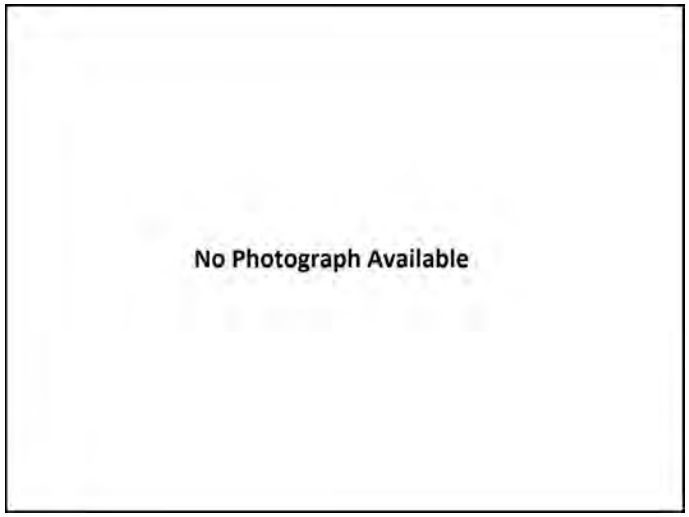
Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Vac Truck or Skimmer and Storage (if collection)
1	Each	Workboat(s) - of adequate size for type and amount of boom

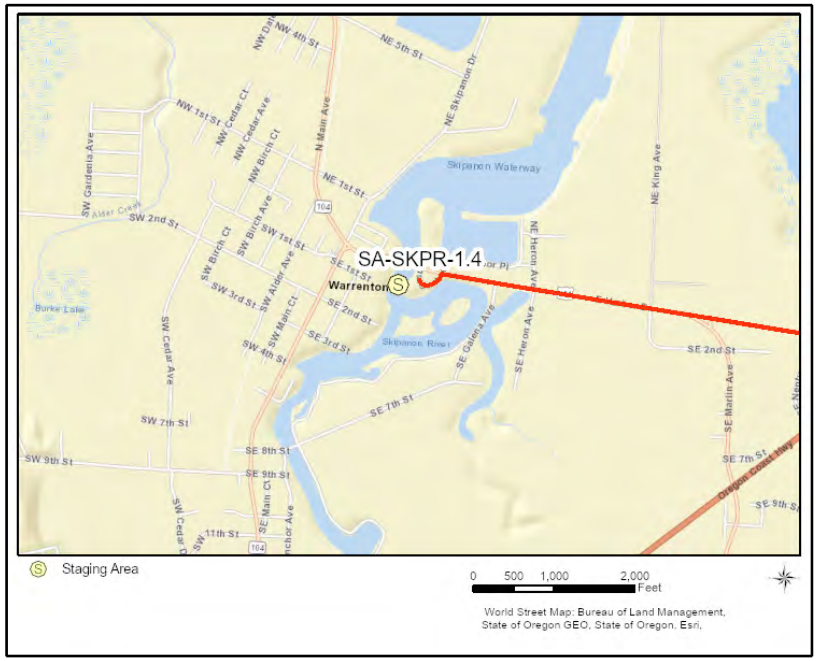
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Outer Skipanon Waterway (OR) LCR-10.9L



LCR-10.9L Photo: No Photograph available



Site Contact

No Information
Not Determined :

Nearest Address

553 Ensign Drive
Warrenton, OR 97146

Driving Directions

1. Start at Youngs Bay Bridge, Astoria, Oregon
2. Go southwest on US-101 (Youngs Bay Brg) (1.83 miles)
3. Turn right on US-101-BR (E Harbor Dr) (1.11 miles)
4. Turn left on Ensign Ave (0.07 miles)
5. Finish at 553 Ensign Dr, 97146, on the left

.

Potential land access from the north end of NE King Ave, Warrenton OR97146

Clatsop Community College Dock (OR) LCR-19.0L

Position - Location:	46° 11.390', -123° 44.734'	46° 11' 23.4", -123° 44' 44.1"	46.18984, -123.74557	Astoria

Strategy Objective: Exclusion : Keep oil out of ODFW salmon net pens.

Implementation: Deploy boom around net pens and pier at the north end of the USCG Station on Tongue Point. Anchor at A, B, C, and D and every 100-150ft. along boom length or as appropriate for conditions.

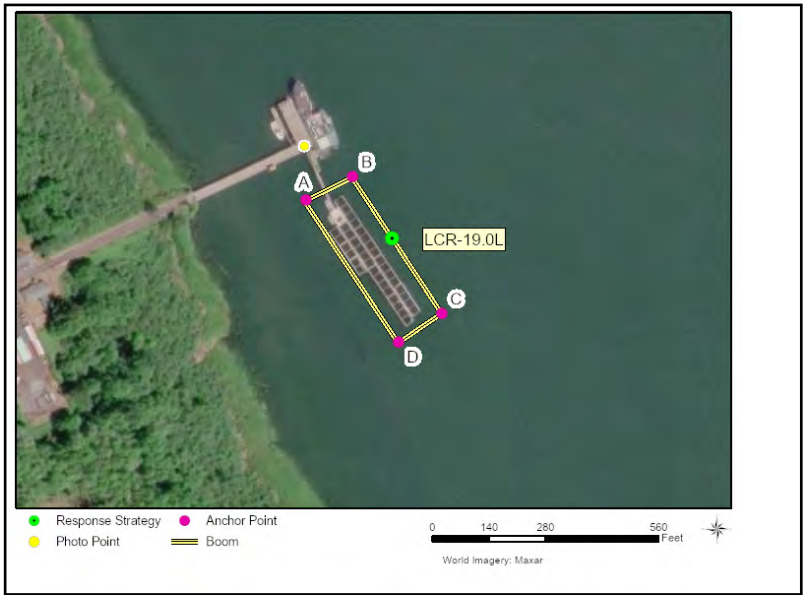
Staging Area: Remote: Stage at SA-LCR-17.7L, Tongue Point Boat Launch

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Access by boat or vehicle from the USCG Station.

Watercourse: River - Below a Dam - John Day Channel/Cathlamet Bay

Resources at Risk: Economic Resources, Fish Pens, Salmonids



Recommended Equipment

10	Each	Anchoring System(s) - (anchor, lines, floats)
1000	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

2	Boat Operator
3	Laborer
1	Supervisor

Clatsop Community College Dock (OR) LCR-19.0L



LCR-19.0L Photo: MERTS facility dock net pens



Site Contact

Marine and Environmental Research and Training Station (MERTS)
Land/Property Contact :

OR
503-741-0999

Nearest Address

Railroad Ave
Astoria, OR 97103

Driving Directions

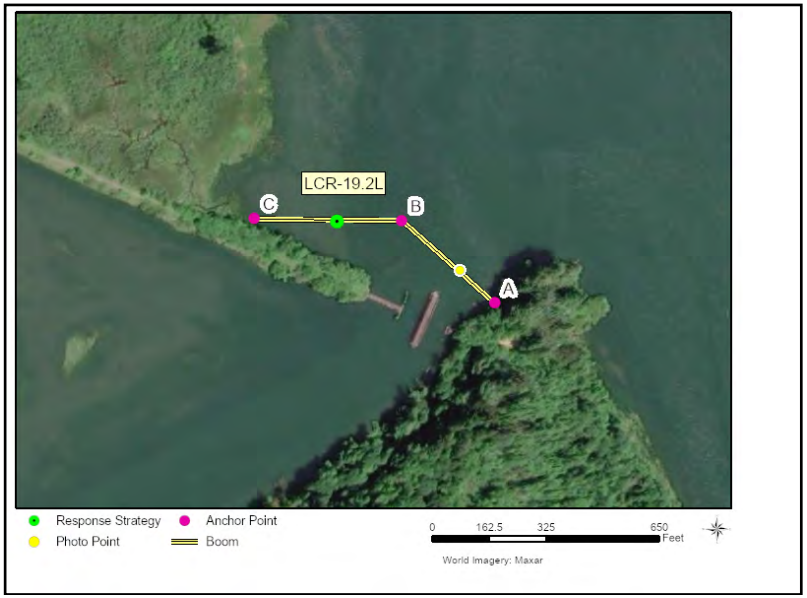
1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

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Land access from 6562 Liberty Ln, Astoria OR 97103

John Day River (OR) LCR-19.2L

Position - Location:	46° 10.893', -123° 44.518'	46° 10' 53.6", -123° 44' 31.1"	46.18155, -123.74197	Astoria

Strategy Objective:	Exclusion : Keep oil out of John Day River
Implementation:	Deploy boom in a chevron configuration around the RR trestle so as not to interfere with swinging bridge. Railroad track is operational.
Staging Area:	Remote: Stage at SA-JDAYR-0.5 John Day Boat Launch
Site Safety:	Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.
Field Notes:	Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide).
Watercourse:	River - Without a Dam - John Day River (Astoria)
Resources at Risk:	Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



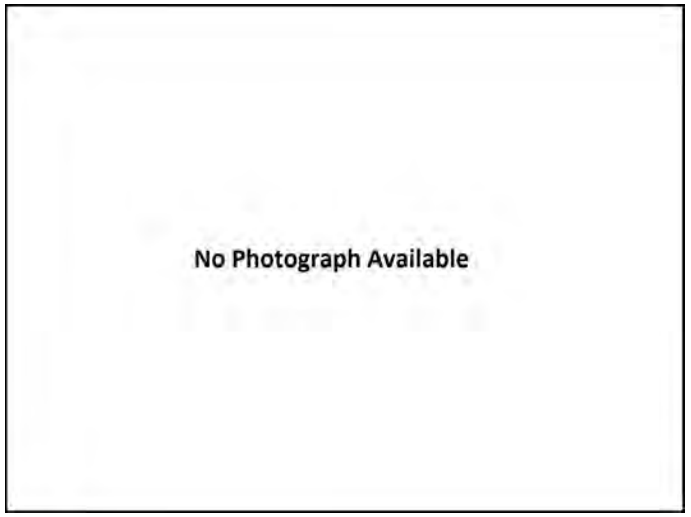
Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

John Day River (OR) LCR-19.2L



LCR-19.2L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.9 miles)
8. Finish at 38265 U.S. 30, 97103, on the left

Twilight Marsh (Eskeline Creek) (OR) LCR-19.3L

Position - Location:	46° 10.224', -123° 41.960'	46° 10' 13.4", -123° 41' 57.6"	46.17040, -123.69934	Astoria

Strategy Objective: Exclusion : Keep oil out of marsh and creek

Implementation: Deploy boom on the N side of the railroad trestle located about 2.3 miles east of the John Day River. Lay sorbents between boom and railroad trestle.

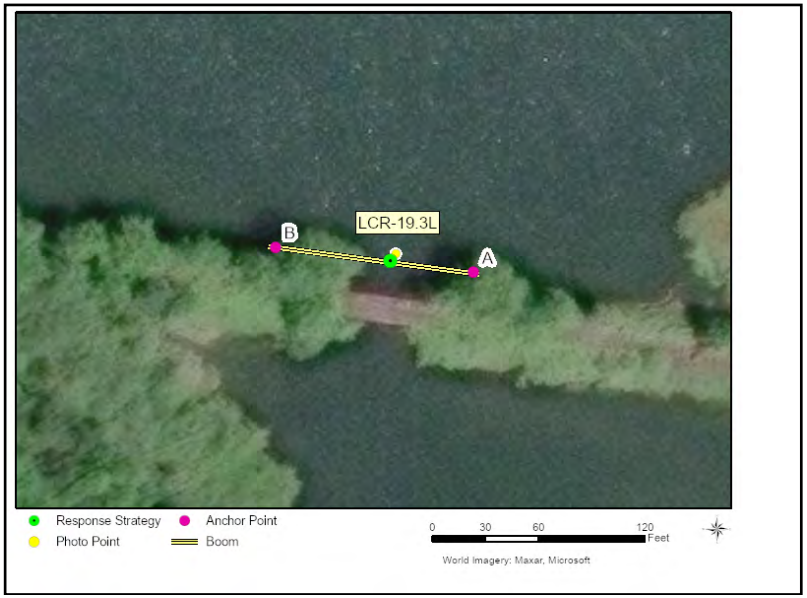
Staging Area: Remote: Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Do not allow people/equipment within 25' of any railroad track. Access via boat at high tide.

Watercourse: Creek - Columbia River

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



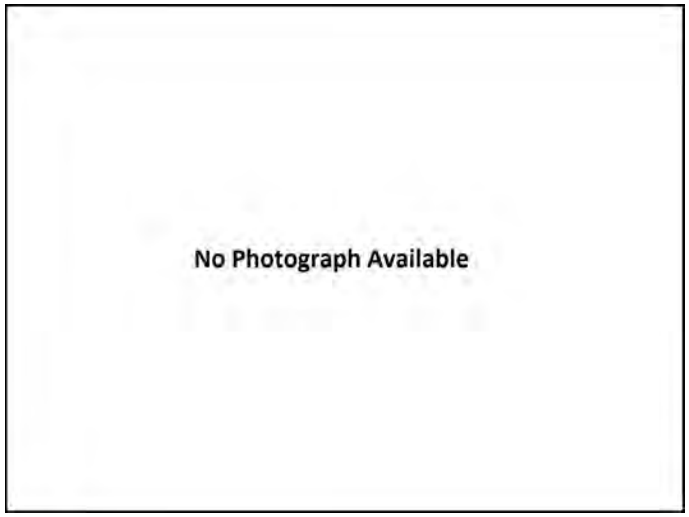
Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Twilight Marsh (Eskeline Creek) (OR) LCR-19.3L



LCR-19.3L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.87 miles)
8. Finish at 38273 US-30, 97103, on the left

Marys Creek (OR) LCR-19.9L

Position - Location:	46° 10.391', -123° 40.100'	46° 10' 23.5", -123° 40' 6.0"	46.17319, -123.66833	Astoria

Strategy Objective: Exclusion : Keep oil out of Marys Creek

Implementation: Deploy 100' of boom on the NE side of the railroad trestle, at the mouth of the creek. Line with sorbent between boom and railroad trestle.

Staging Area: Remote: Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide)

Watercourse: Creek - Marys Creek

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



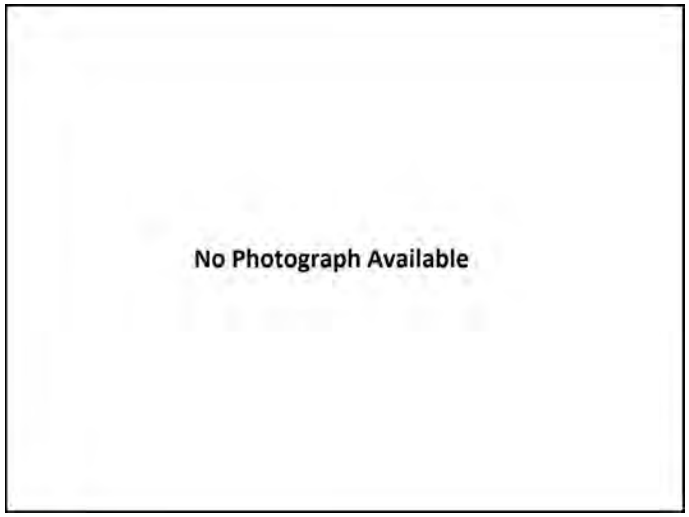
Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Marys Creek (OR) LCR-19.9L



LCR-19.9L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.87 miles)
8. Finish at 38273 US-30, 97103, on the left

Bear Creek (OR) LCR-20.0L

Position - Location:	46° 10.315', -123° 39.941'	46° 10' 18.9", -123° 39' 56.4"	46.17191, -123.66568	Astoria

Strategy Objective: Exclusion : Keep oil out of Bear Creek

Implementation: Deploy 200' of boom on the N side of the railroad trestle, at the mouth of the creek. Adjust angle of boom, quantity and placement of anchors, based on conditions of the day.

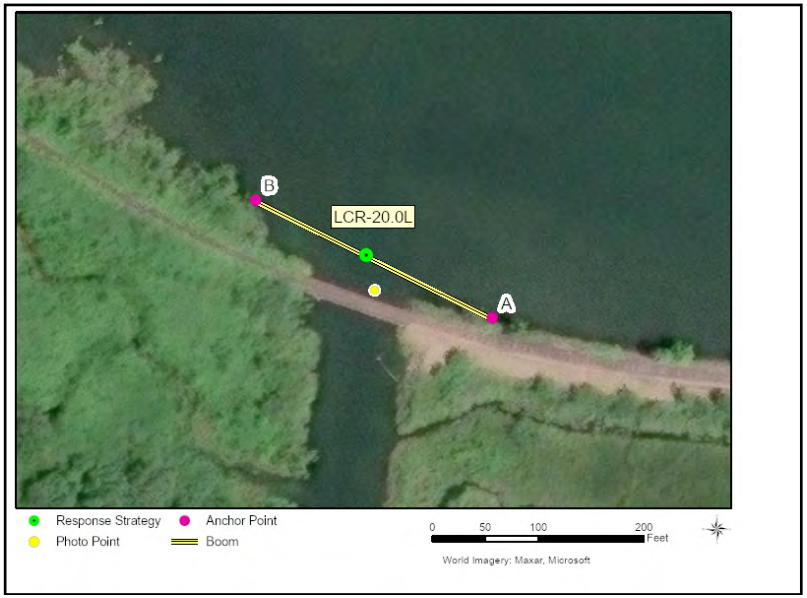
Staging Area: Remote: Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Access via boat at high tide.

Watercourse: Creek - Bear Creek

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



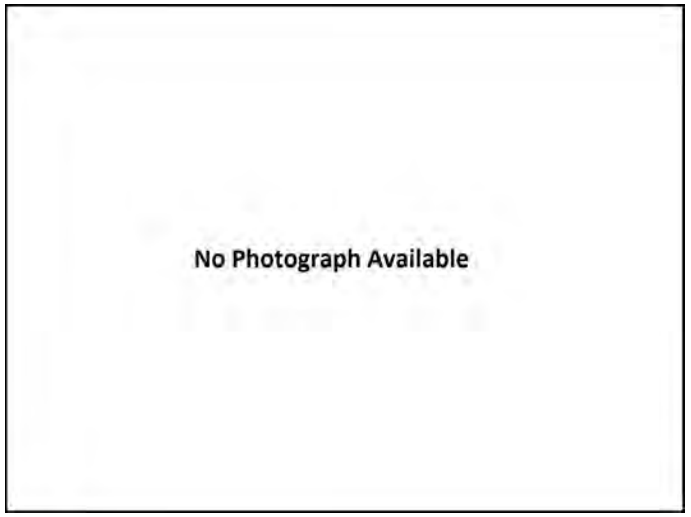
Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Bear Creek (OR) LCR-20.0L



LCR-20.0L Photo: No photograph available



Site Contact

No Information
Other :

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.87 miles)
8. Finish at 38273 US-30, 97103, on the left

Ferris Creek (OR) LCR-20.3L

Position - Location:	46° 10.286', -123° 39.313'	46° 10' 17.1", -123° 39' 18.8"	46.17143, -123.65522	Astoria

Strategy Objective: Exclusion : Keep oil out of Ferris Creek

Implementation: Deploy boom in a shallow chevron formation on the N side of the railroad trestle located at the mouth of Ferris creek. Use shoreside connection systems on each end of the boom and a Danforth (or other appropriate type) anchor in the middle. Add additional anchors in line as necessary. Adjust angle of boom, quantity and placement of anchors, depending on conditions of the day.

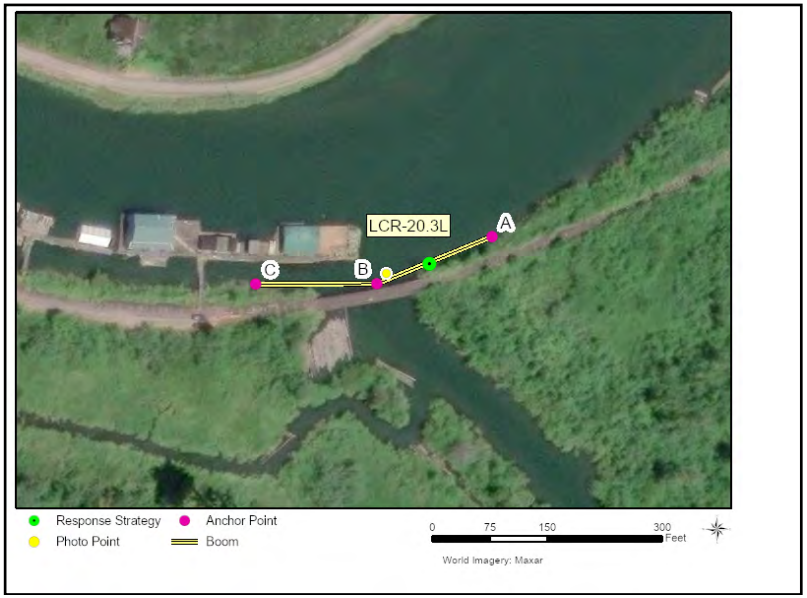
Staging Area: Remote: Stage at SA-JDAYR-0.5 John Day boat ramp, launch at same BL-JDAYR-0.5.

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Do not allow people/equipment within 25' of any railroad track. Access via boat (at high tide)

Watercourse: Creek - Ferris Creek

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



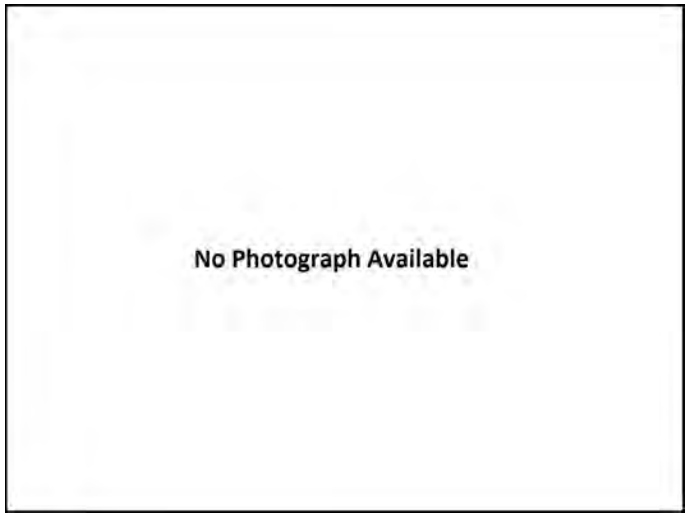
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Ferris Creek (OR) LCR-20.3L



LCR-20.3L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.87 miles)
8. Finish at 38273 US-30, 97103, on the left

NW Karlson Island (OR) LCR-26.4M

Position - Location:	46° 12.502', -123° 36.694'	46° 12' 30.1", -123° 36' 41.7"	46.20837, -123.61157	Astoria

Strategy Objective: Exclusion : Prevent oiling of wetlands behind dike, south of Karlson Island.

Implementation: From BL-LCR-17.7L, launch workboat with 400ft. boom. Deploy boom across mouth of creek and anchor at Anchor A and Anchor B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

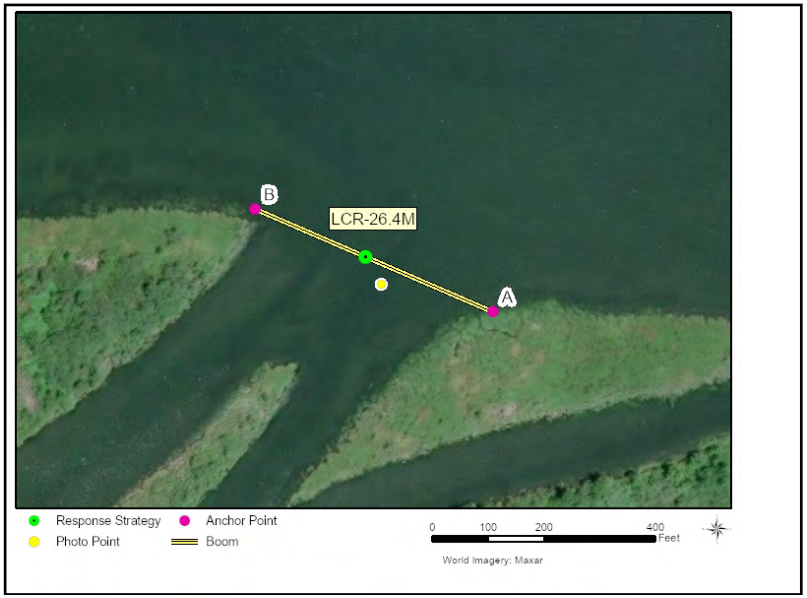
Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Access from water only

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Backwater Habitat, Marine Mammals, Marsh, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



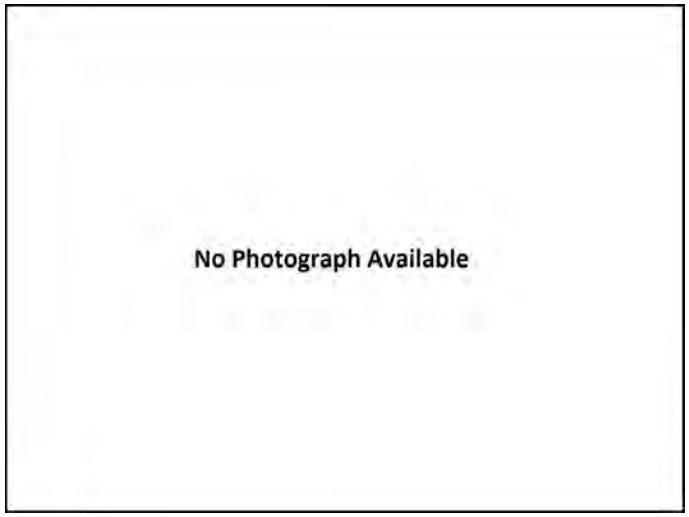
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

NW Karlson Island (OR) LCR-26.4M



LCR-26.4M Photo: No photo available.



Site Contact

No Information
Other :

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

Big Creek (OR) LCR-27.2L

Position - Location:	46° 11.077', -123° 35.767'	46° 11' 4.6", -123° 35' 46.0"	46.18462, -123.59612	Astoria

Strategy Objective: Exclusion : Prevent oil from entering Big Creek.

Implementation: From BL-LCR-17.7L, launch workboat with 200ft. boom. Deploy boom across mouth of creek and anchor at Anchor A and Anchor B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

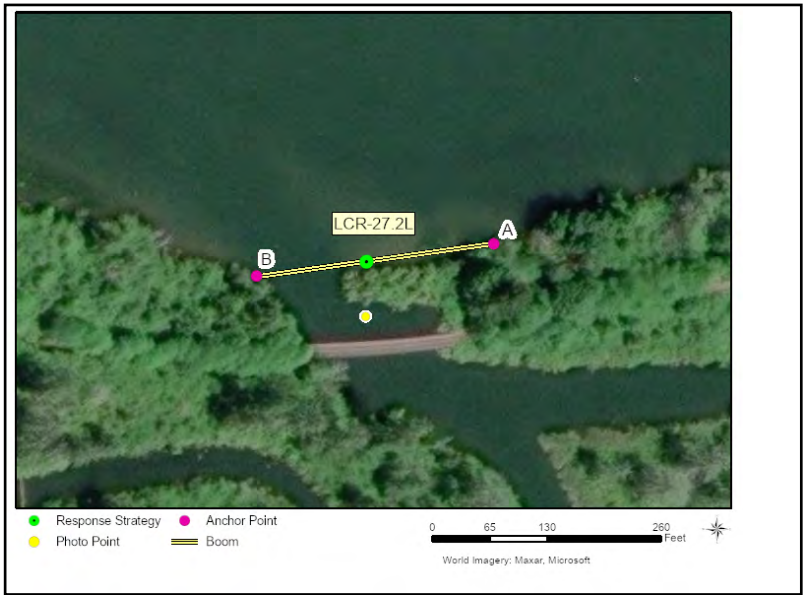
Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Do not allow people/equipment within 25' of railroad tracks. Boat access only. River banks are sturdy and provide good anchor points.

Watercourse: Creek - Big Creek

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



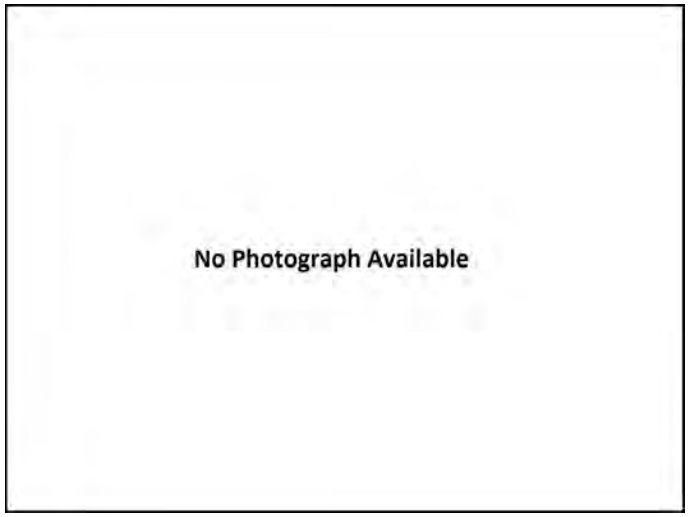
Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Big Creek (OR) LCR-27.2L



LCR-27.2L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

Warren Slough (OR) LCR-27.5L

Position - Location:	46° 11.331', -123° 35.272'	46° 11' 19.9", -123° 35' 16.3"	46.18885, -123.58786	Astoria

Strategy Objective: Exclusion : Prevent oil from entering Warren Slough.

Implementation: From BL-LCR-17.7L, launch shallow-water skiff and workboat with 500ft. boom to the mouth of Warren Slough. Using skiff to pull boom from workboat, deploy boom across the mouth of the slough and anchor at Anchor A and Anchor B using shoreside anchor posts. Anchor C to dock, NOT on shore. Adjust angle of boom, quantity and placement of anchors as necessary for conditions. Notify Environmental Unit if this strategy is to be deployed.

Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is at wide slough opening to the north and a smaller slough opening to the south. Strategy is exclusion for both openings.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



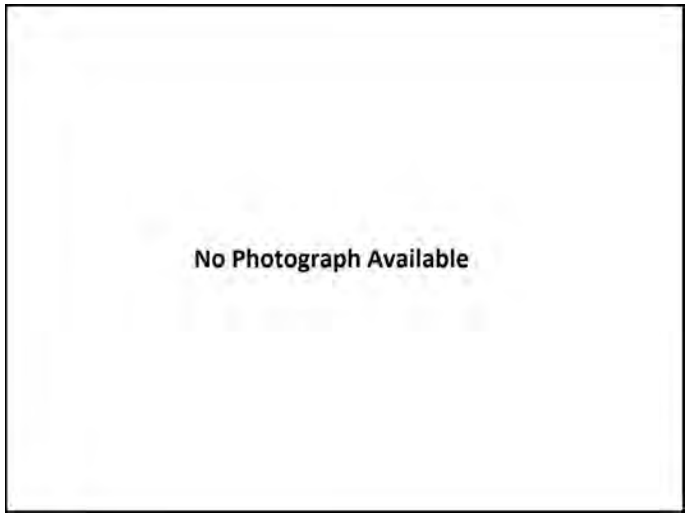
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

Recommended Personnel

2	Boat Operator
3	Laborer
1	Supervisor

Warren Slough (OR) LCR-27.5L



LCR-27.5L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

Grizzly Slough (OR) LCR-27.9L

Position - Location:	46° 12.198', -123° 34.000'	46° 12' 11.9", -123° 34' .0"	46.20330, -123.56667	Astoria

Strategy Objective: Exclusion : Prevent oil from entering Grizzly Slough.

Implementation: From BL-LCR-17.7L, launch shallow-water skiff and workboat with 500ft. boom to the mouth of Grizzly Slough (on interior of Blind Slough). Using skiff to pull boom from workboat, deploy boom across the mouth of the slough and anchor at A, B using natural anchor points or shoreside anchor posts. Anchor along boom length as necessary for conditions.

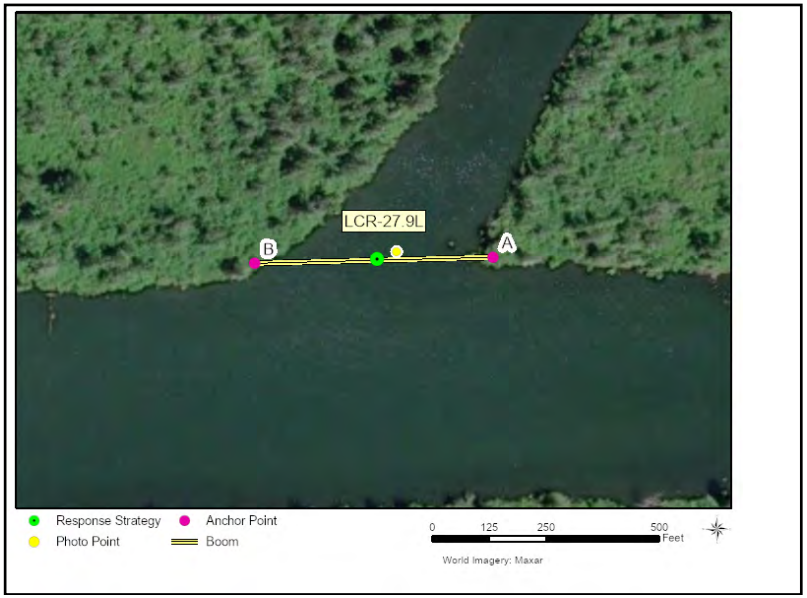
Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only through Blind Slough, just downstream of swing bridge.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands



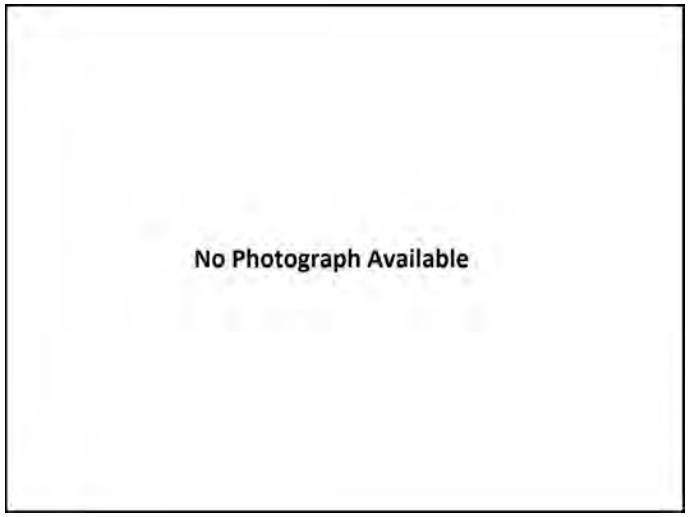
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Grizzly Slough (OR) LCR-27.9L



LCR-27.9L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

Blind Slough Net Pens (OR) LCR-29.0L

Position - Location:	46° 12.166', -123° 32.660'	46° 12' 10.0", -123° 32' 39.6"	46.20277, -123.54434	Astoria

Strategy Objective: Exclusion : Prevent oiling of net pens.

Implementation: From BL-LCR-17.7L, Crew 2 launch workboat with 500ft. boom. Crew 1 drive to net pens on Penttila Rd. Crew 2 place boom around the net pens and pass line attached to boom to Crew 1. Crew 1 anchor both ends of boom to the shore at Anchor A and Anchor D to the north of the pens. Crew 2 anchor to Anchor B and Anchor C using Danforth or other appropriate anchors. Anchor along boom length as appropriate for conditions.

Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is fish net pens on Blind Slough, just west of bridge. Land access from dock at 43201 Penttila Ln, Astoria, OR, 97103

Watercourse: Slough - Columbia River

Resources at Risk: Fish Pens, Salmonids



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Blind Slough Net Pens (OR) LCR-29.0L



LCR-29.0L Photo: Standing on shore to the northeast



Site Contact

No Information
Not Determined :

Nearest Address

Railroad Ave
Astoria, OR 97103

Driving Directions

1. Start at Leif Erickson Drive, Astoria, Oregon
2. Go east on US-30 (Leif Erickson Dr) toward 46th St (0.99 miles)
3. Turn left on Maritime Rd (0.18 miles)
4. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
5. Make sharp left (0.15 miles)
6. Turn left on Railroad Ave (0.26 miles)
7. Finish at Railroad Ave, 97103, on the right

.

From Astoria, OR to net pens:

1. Depart US-30 E / 8th St (17.5 mi)
2. Turn left onto Ziak-Gnat Creek Ln (2.1 mi)
3. Turn right onto Barendse Rd (0.2 mi)
4. Turn left onto Penttila Ln (491 ft)
5. Net pens are on the left.

Gnat Creek (OR) LCR-29.2L

Position - Location:	46° 11.942', -123° 31.986'	46° 11' 56.5", -123° 31' 59.2"	46.19904, -123.53310	Astoria

Strategy Objective: Exclusion : Prevent oil from entering Gnat Creek.

Implementation: From BL-LCR-17.7L, launch workboat with 300ft. boom to mouth of Gnat Creek. Anchor at Anchor A and Anchor B using shoreside anchor posts. Anchor along boom length as appropriate for conditions.

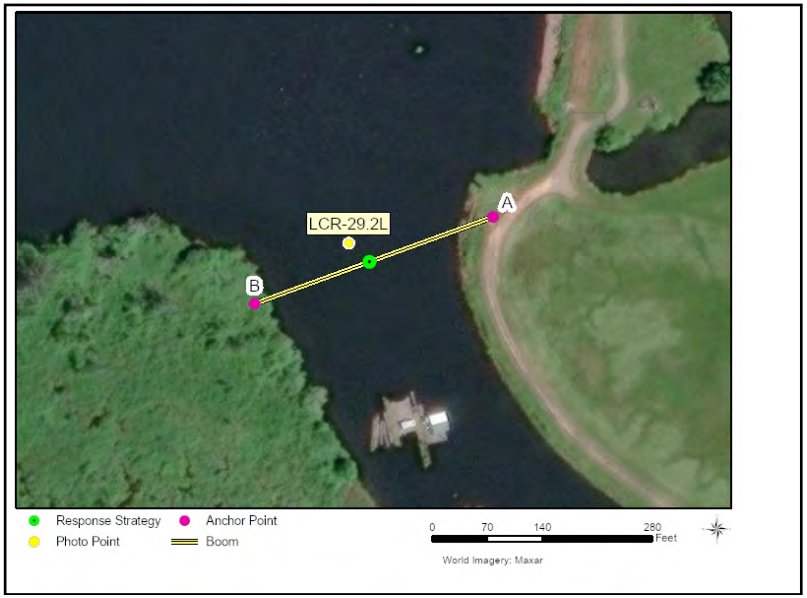
Staging Area: Remote: Stage at SA-LCR-17.7L Tongue Point, launch from same BL-LCR-17.7L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is boat access only, but may be accessible by land through private property. There is an unverified boat ramp on Ziak-Gnat Creek Rd

Watercourse: Creek - Any flow

Resources at Risk: Backwater Habitat, Marine Mammals, Mud Flat(s), Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands



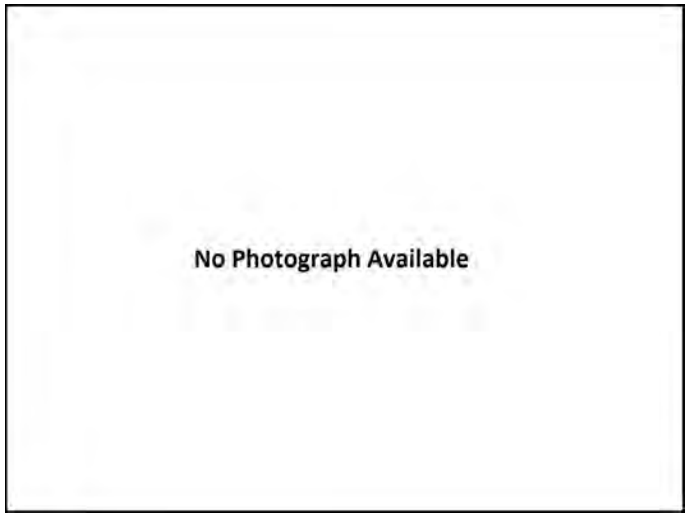
Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Gnat Creek (OR) LCR-29.2L



LCR-29.2L Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

Railroad Ave
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (2.42 miles)
8. Turn left on Maritime Rd (0.18 miles)
9. Make sharp right on Old Columbia River Hwy (Tongue Point Rd) (0.13 miles)
10. Make sharp left (0.15 miles)
11. Turn left on Railroad Ave (0.26 miles)
12. Finish at Railroad Ave, 97103, on the right

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Potential land access from 42013 Ziak-Gnat Creek Rd, Astoria OR 97103

Welch Island sloughs (OR) LCR-33.2M

Position - Location:	46° 15.366', -123° 29.146'	46° 15' 22.0", -123° 29' 8.8"	46.25610, -123.48577	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering Welch Island sloughs.

Implementation: Launch workboat from BL-LCR-33.5R, Skamokawa Vista Park, with 400ft. boom. Deploy boom across the entrance to the slough on the northwest corner of Welch Island. Anchor at A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Skamokawa Vista Park, SA-LCR-33.5R

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only from Skamokawa Vista Park

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



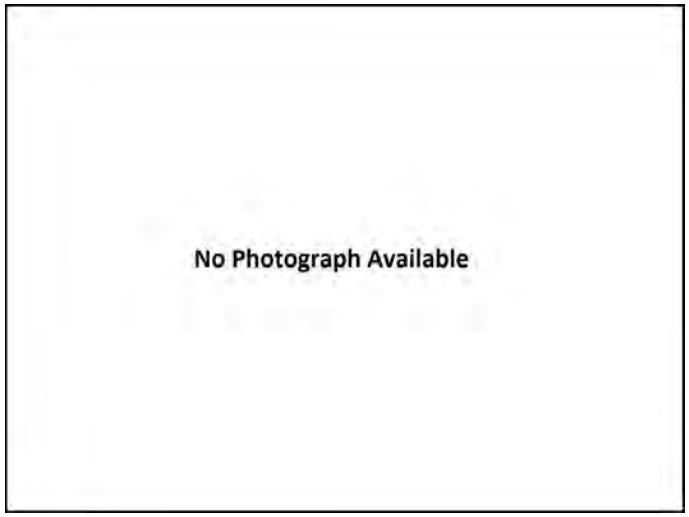
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

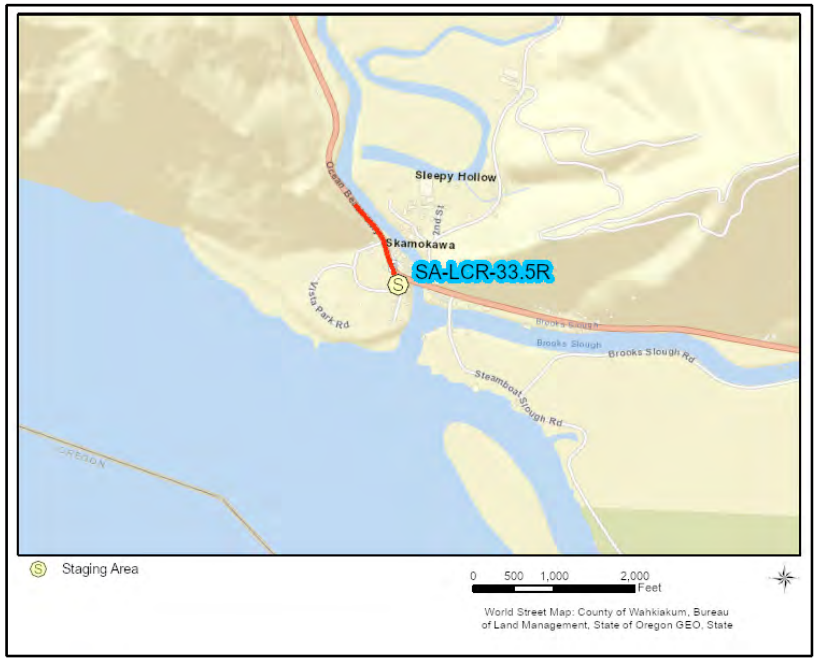
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Welch Island sloughs (OR) LCR-33.2M



LCR-33.2M Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Welch Island sloughs (OR) LCR-33.3M

Position - Location:	46° 15.184', -123° 29.081'	46° 15' 11.1", -123° 29' 4.8"	46.25307, -123.48468	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering Welch Island sloughs.

Implementation: Launch workboat from Skamokawa Vista Park, BL-LCR-33.5R with 400ft. boom. Deploy boom across the west entrance of the slough that runs through the middle of Welch Island. Anchor to A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Skamokawa Vista Park, SA-LCR-33.5R

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only from Skamokawa Vista Park.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



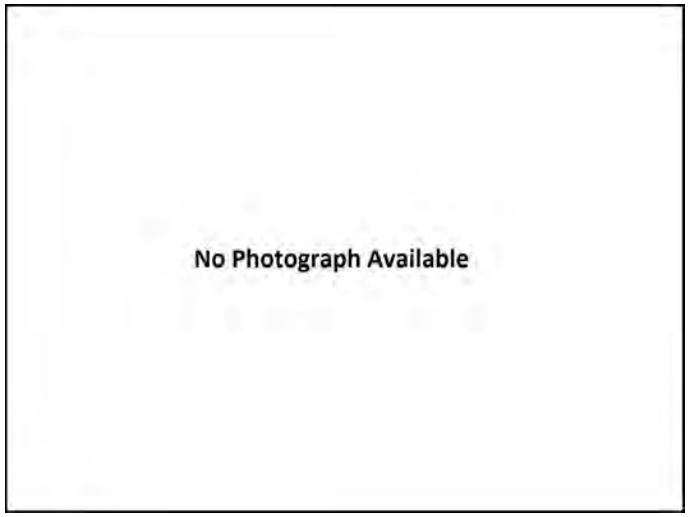
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

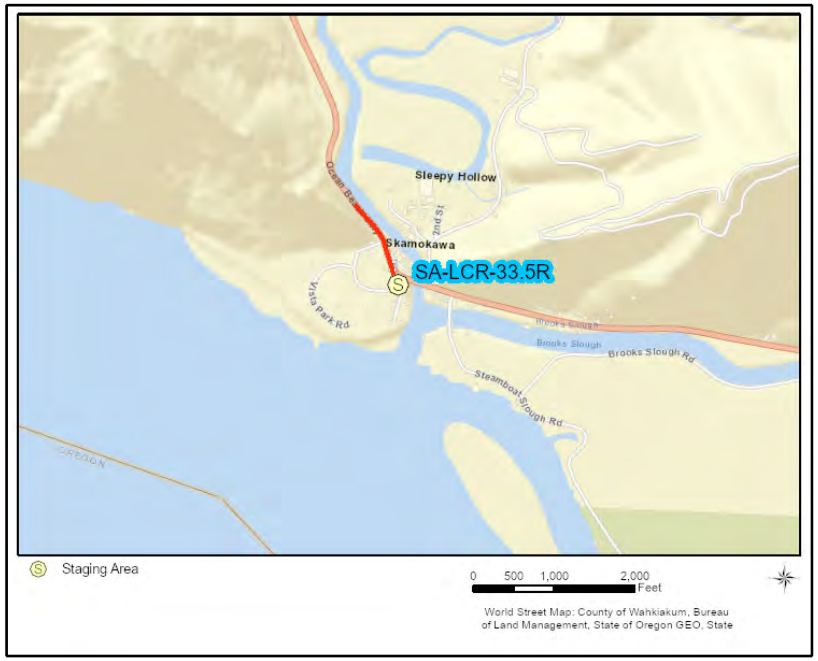
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Welch Island sloughs (OR) LCR-33.3M



LCR-33.3M Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Skamokawa Creek and Brooks Slough — LCR-33.6aR

Position - Location:	46° 16.031', -123° 27.514'	46° 16' 1.8", -123° 27' 30.9"	46.26718, -123.45857	Cathlamet

Strategy Objective: Exclusion : Keep oil out of the creek and slough.

Implementation: Using workboat, deploy 900ft boom at anchor point A. Then extend boom to the south and secure end at dolphin near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

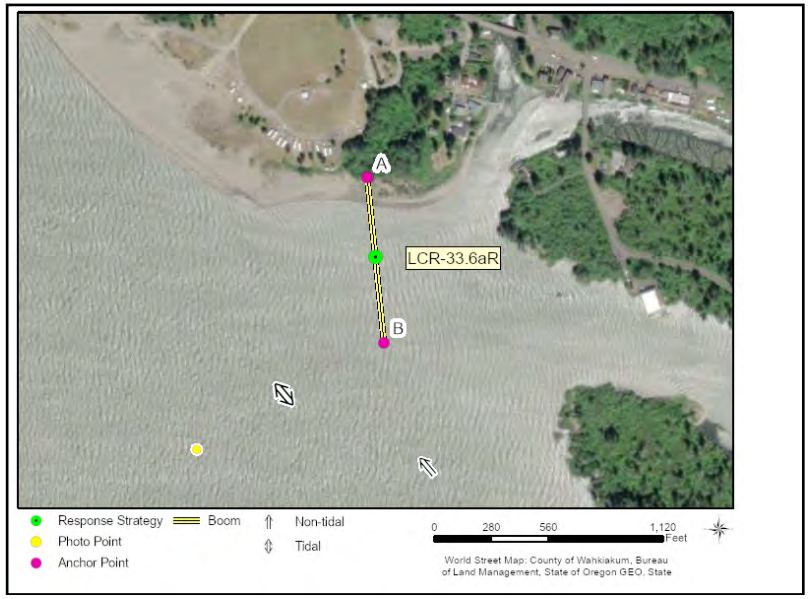
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: There is a small boat launch in the town of Skamokawa that may be of use to responders during deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
900	Each	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Piling (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Skamokawa Creek and Brooks Slough LCR-33.6aR



LCR-33.6aR Photo: From middle of Columbia River, looking northeast towards the creek and two sloughs. Note the dolphin in the lower left corner. Photo was taken in July 2016.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview (2.64 miles)
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Price Island and Steamboat Slough — LCR-33.6bR

Position - Location:	46° 15.940', -123° 27.389'	46° 15' 56.4", -123° 27' 23.3"	46.26567, -123.45648	Cathlamet

Strategy Objective: Exclusion : Keep oil out of Steamboat Slough behind Price Island.

Implementation: Using workboat, deploy 900ft boom at anchor point A. Then extend boom to the west and secure end at dolphin near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

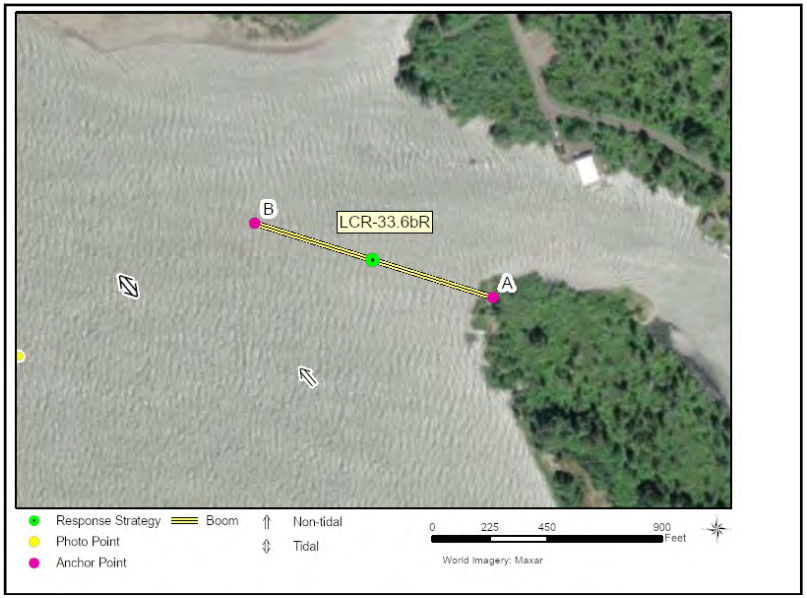
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: There is a small boat launch in the town of Skamokawa that may be of use to responders during deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
900	Each	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Piling (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Price Island and Steamboat Slough — LCR-33.6bR



LCR-33.6bR Photo: From middle of Columbia River, looking northeast towards the creek and two sloughs. Note the dolphin in the lower left corner. Photo was taken in July 2016.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR38.6R):

1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview (2.64 miles)
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

NW entrance to Red Slough (OR) LCR-34.4M

Position - Location:	46° 14.456', -123° 28.728'	46° 14' 27.4", -123° 28' 43.7"	46.24094, -123.47880	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering Red Slough.

Implementation: Launch workboat from BL-LCR-33.5R with 800ft. boom. Deploy boom across the NW entrance to Red Slough and anchor at A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions. Close tide gates by contacting USFWS through Wahkiakum County Sheriff.

Staging Area: Remote: Stage at SA-LCR-33.5R, Skamokawa Vista Park

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Between Welch and Tenasillahe Islands. Boat access only.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



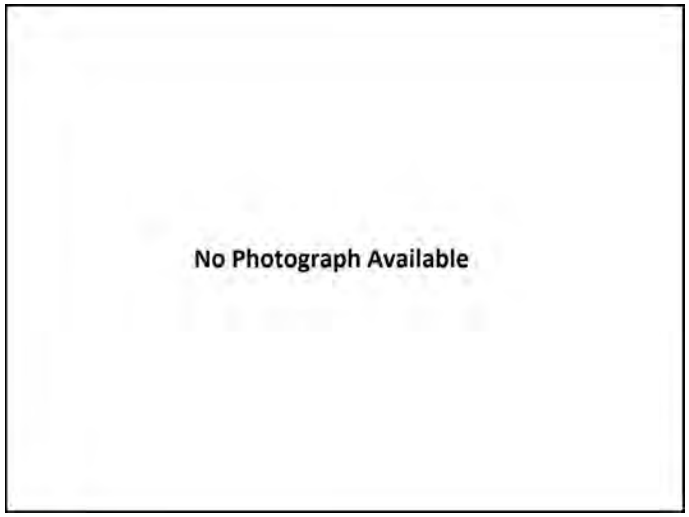
Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

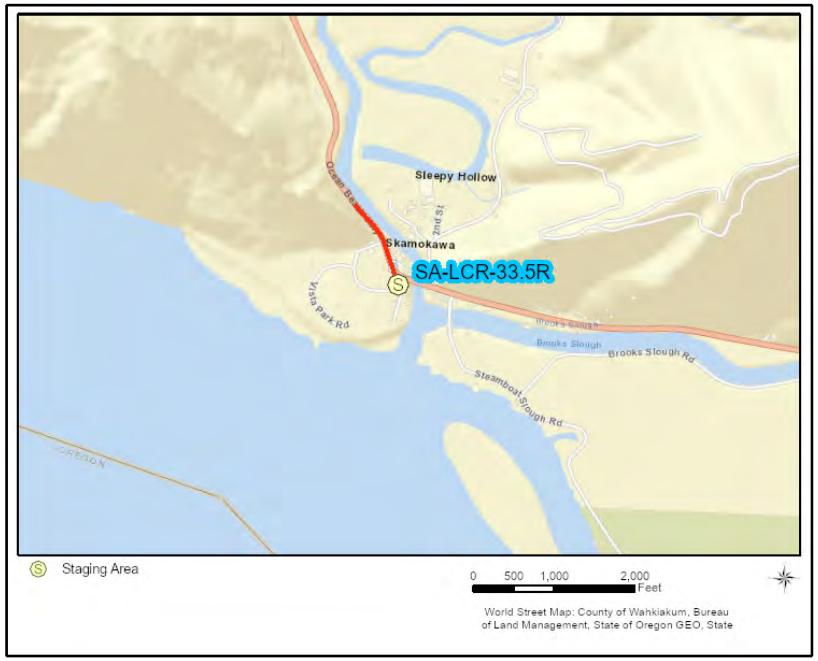
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

NW entrance to Red Slough (OR) LCR-34.4M



LCR-34.4M Photo: No photo available.



Site Contact

Wahkiakum County Sheriff
Emergency Contact : Emegregcy # for Wahkiahum County

OR
360-795-3911

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Welch Island sloughs (OR) - east side of island — LCR-34.6M

Position - Location:	46° 14.896', -123° 27.530'	46° 14' 53.8", -123° 27' 31.8"	46.24827, -123.45883	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering sloughs on Welch Island

Implementation: Launch workboat from Skamokawa Vista Park, BL-LCR-33.5R with 500ft. boom. Deploy boom across the east entrance of the slough that runs through the middle of Welch Island. Anchor at A and B using shoreside anchor posts and anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Skamokawa Vista Park, SA-LCR-33.5R

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only to sloughs on east side of Welch Island.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



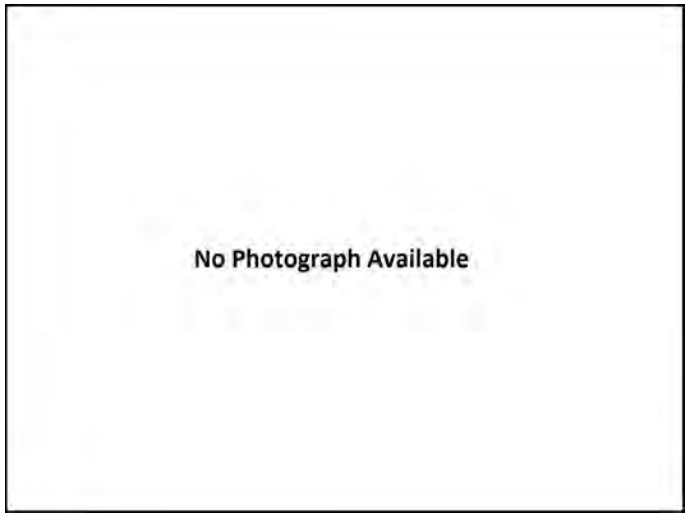
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

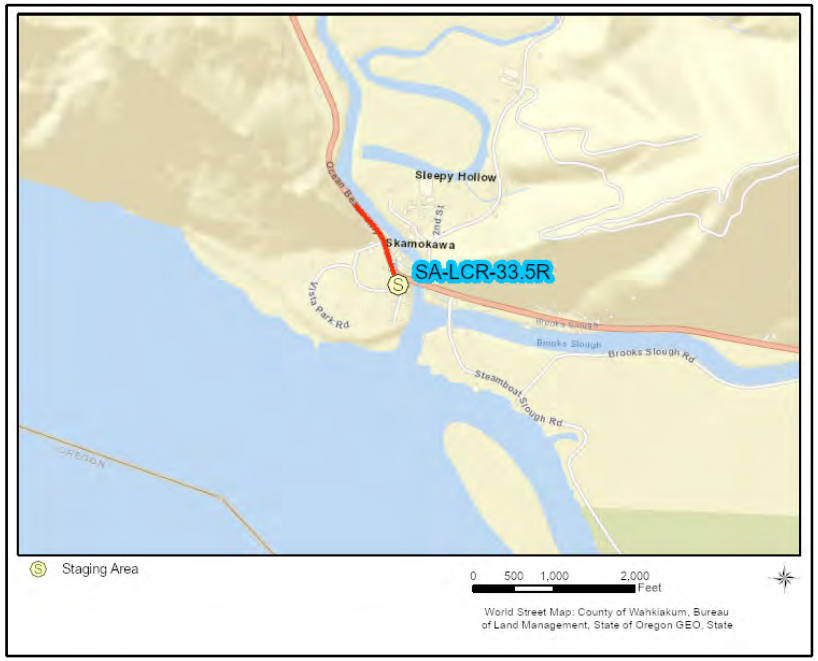
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Welch Island sloughs (OR) - east side of island LCR-34.6M



LCR-34.6M Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Red Slough - NW Tenasillahe Island (OR) LCR-34.7M

Position - Location:	46° 14.114', -123° 28.645'	46° 14' 6.9", -123° 28' 38.7"	46.23524, -123.47741	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering slough on west end of Tenasillahe Island.

Implementation: Launch workboat from BL-LCR-33.5R with 600ft. boom. Deploy boom across the SW entrance to Red Slough and anchor at A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions. Close tide gates by contacting USFWS through Wahkiakum County Sheriff (360) 795-3911.

Staging Area: Remote: Stage at SA-LCR-33.5R, Skamokawa Vista Park

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only between Welch and Tenasillahe Islands (OR).

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



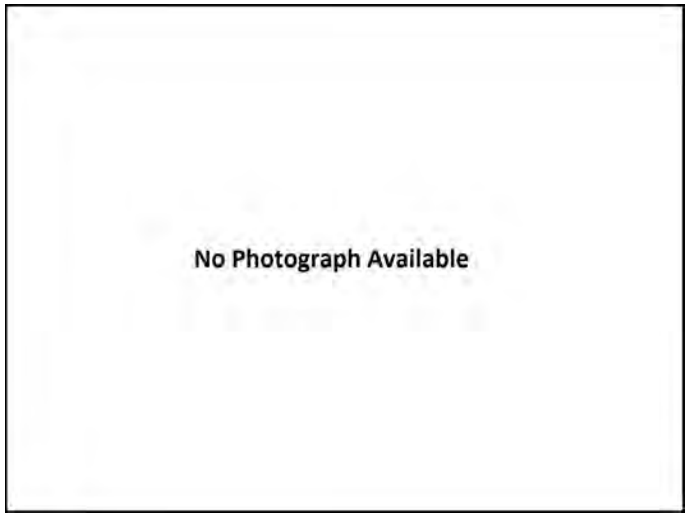
Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

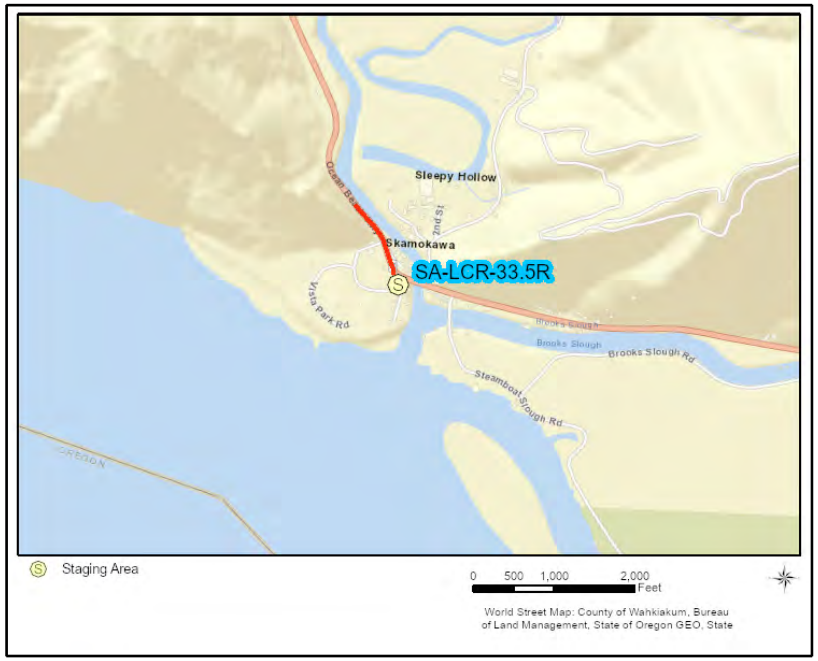
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Red Slough - NW Tenasillahe Island (OR) LCR-34.7M



LCR-34.7M Photo: No photo available.



Site Contact

No Information
Emergency Contact :

Wahkiakum County Sheriff
Emergency Contact : Emegregcy # for Wahkiahum County
360-795-3911

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Red Slough- E side of Tenasillahe Island (OR) LCR-35.0M

Position - Location:	46° 14.573', -123° 27.098'	46° 14' 34.4", -123° 27' 5.9"	46.24289, -123.45164	Skamokawa

Strategy Objective: Exclusion : Prevent oil from entering Red Slough.

Implementation: Launch workboat from BL-LCR-33.5R with 800ft. boom. Deploy boom across the E entrance to Red Slough and anchor at A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions. Close tide gates by contacting USFWS through Wahkiakum County Sheriff (360) 795-3911.

Staging Area: Remote: Stage at SA-LCR-33.5R, Skamokawa Vista Park

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only, between Welch and Tenasillahe Islands.

Watercourse: Slough - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



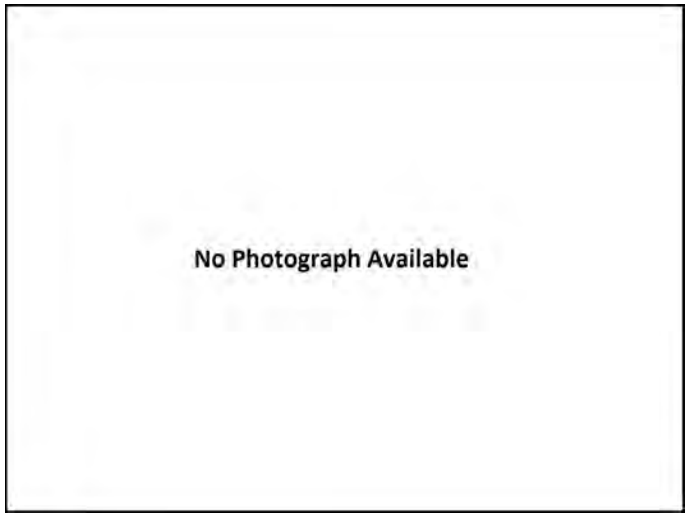
Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

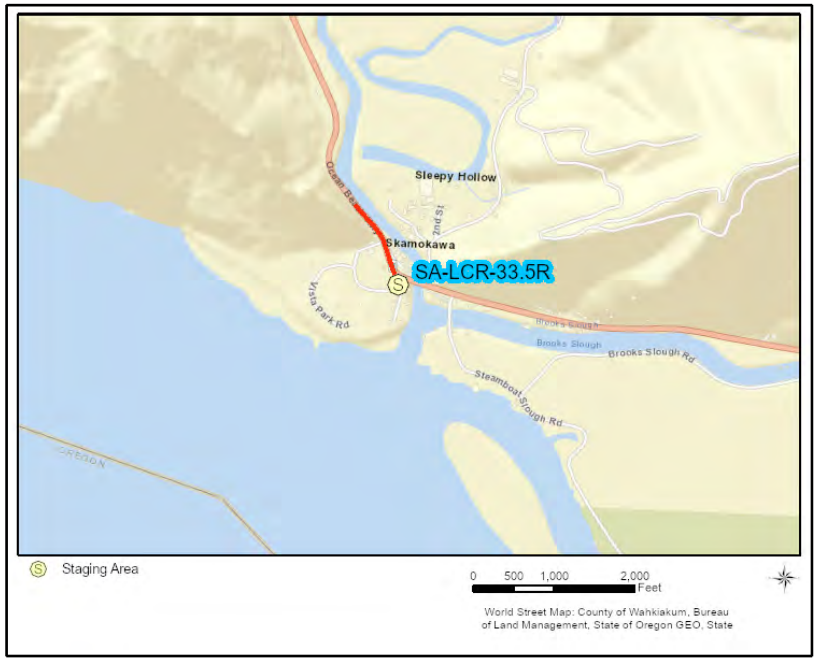
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Red Slough- E side of Tenasillahe Island (OR) LCR-35.0M



LCR-35.0M Photo: No photo available.



Site Contact

No Information
Other :

Nearest Address

33 Vista Park Road
Skamokawa, WA 98647

Driving Directions

Directions to SA-LCR-33.5R
From WA-4, Skamokawa, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Vista Park Rd (0.12 miles)
2. Turn right on Pleasant Point Rd. (0.1 miles)
3. Arrive at boat ramp and parking area on left

Julia Butler Hansen NWR - Levee Breach #1 LCR-35.0R

Position - Location:	46° 15.037', -123° 26.080'	46° 15' 2.2", -123° 26' 4.8"	46.25062, -123.43466	Cathlamet

Strategy Objective: Exclusion : Keep oil out of backwater area within the refuge.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom north and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

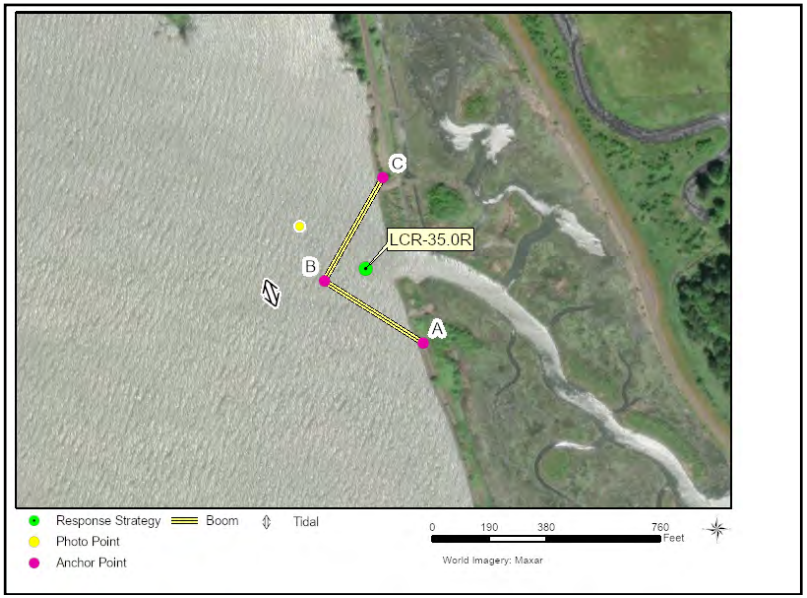
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This refuge is part of the Willapa National Wildlife Refuge Complex. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Shorebirds, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Julia Butler Hansen NWR - Levee Breach #1 LCR-35.0R



LCR-35.0R Photo: From the river, looking east towards levee breach. Photo taken in March.



Site Contact

Julia Butler Hansen Refuge
Primary Contact : Willapa Refuges Complex Project Lead
360-751-3370

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview (2.64 miles)
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Julia Butler Hansen NWR - Levee Breach #2 LCR-35.3R

Position - Location:	46° 14.782', -123° 25.880'	46° 14' 46.9", -123° 25' 52.8"	46.24636, -123.43133	Cathlamet

Strategy Objective: Exclusion : Keep oil out of backwater area within the refuge.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This refuge is part of the Willapa National Wildlife Refuge Complex. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Shorebirds, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Julia Butler Hansen NWR - Levee Breach #2 LCR-35.3R



LCR-35.3R Photo: From the river, looking east towards levee breach (see red arrow in center right). Photo taken in July.



Site Contact

Julia Butler Hansen Refuge
After Hours and Weekends Contact: Willapa Refuges Complex Project Lead
360-751-3370

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

End of Steamboat Slough Road — LCR-35.7R

Position - Location:	46° 14.635', -123° 25.813'	46° 14' 38.1", -123° 25' 48.8"	46.24391, -123.43021	Cathlamet

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend remainder to the south and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

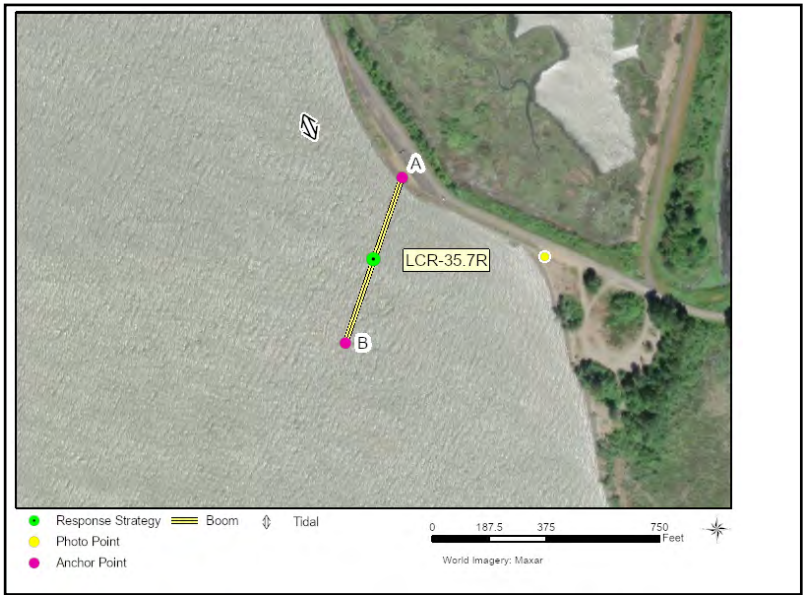
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: There is a river aid to navigation nearby. This location is part of Julia Butler Hansen NWR. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Shorebirds, Wetlands, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

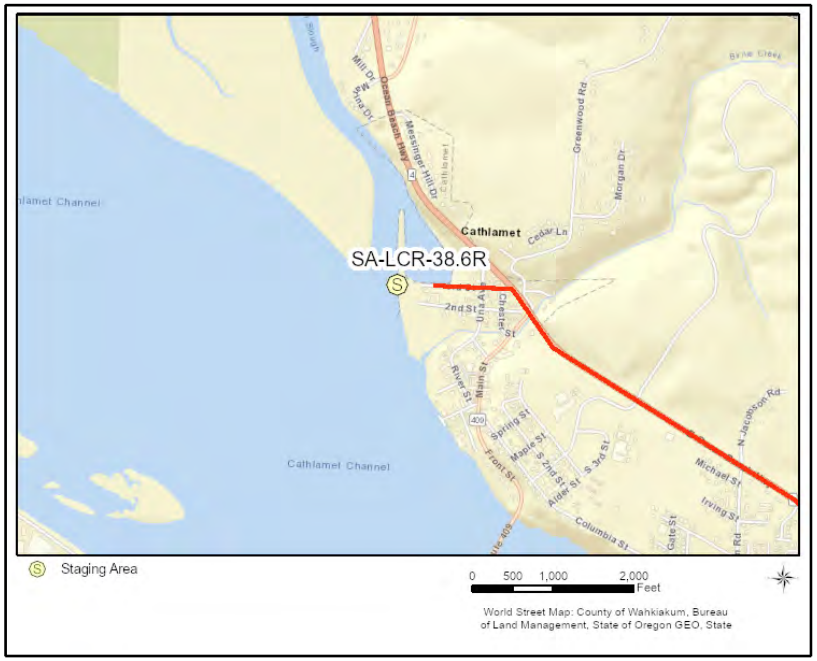
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

End of Steamboat Slough Road LCR-35.7R



LCR-35.7R Photo: From the road, looking west towards anchor point A. Photo was taken in September.



Site Contact

USFWS Julia Butler Hansen Refuge
Secondary Contact :
360-795-3915

Julia Butler Hansen Refuge
After Hours and Weekends Contact : Willapa Refuges Complex Project Lead
360-751-3370

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Address for oil collection:
Steamboat Slough Rd, Cathlamet, WA 98612

Elochoman Slough (Downriver) LCR-36.0R

Position - Location:	46° 14.357', -123° 25.476'	46° 14' 21.4", -123° 25' 28.6"	46.23928, -123.42460	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 1000ft boom at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

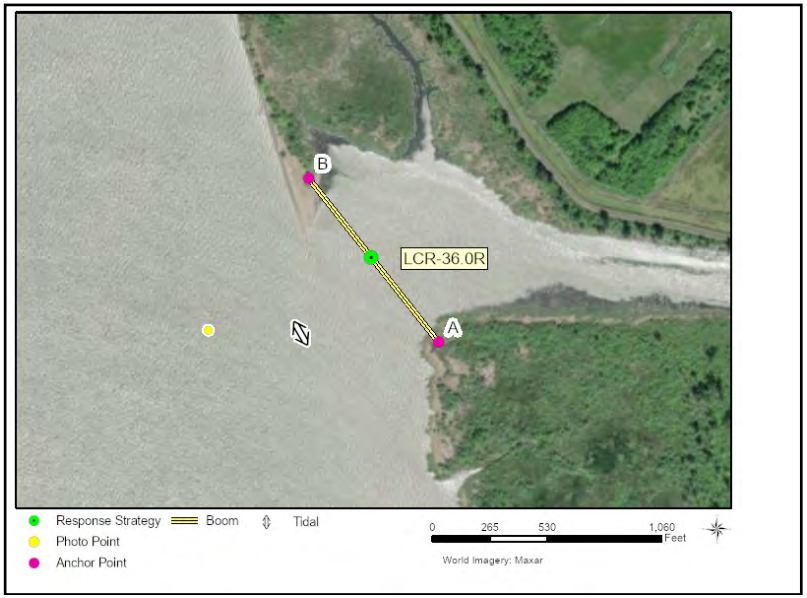
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This location is part of Julia Butler Hansen NWR. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Elochoman Slough (Downriver) LCR-36.0R



LCR-36.0R Photo: From above the river, looking east into the slough. Photo taken in July.



Site Contact

Julia Butler Hansen Refuge
Primary Contact : Willapa Refuges Complex Project Lead
360-751-3370

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Elochoman Slough - Central Entrance — LCR-37.2R

Position - Location:	46° 13.294', -123° 24.847'	46° 13' 17.6", -123° 24' 50.8"	46.22156, -123.41411	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough and Elochoman River.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom north and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

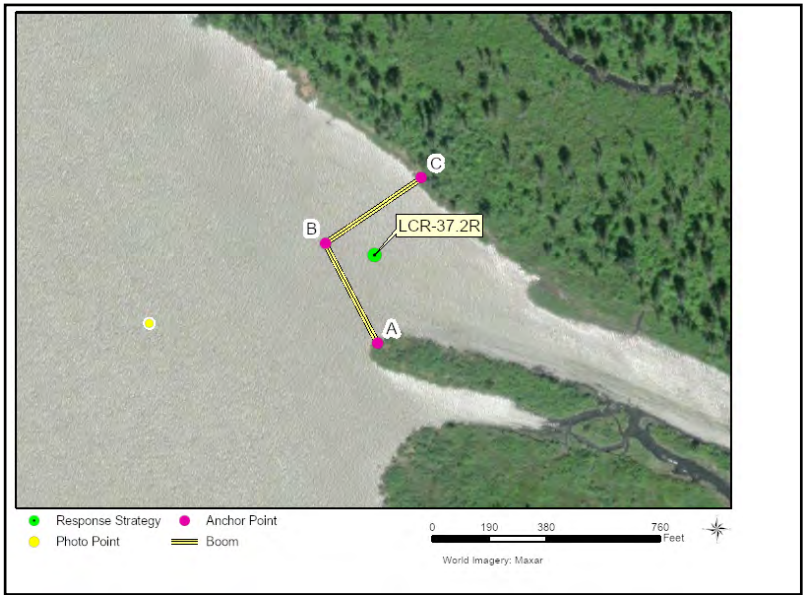
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This refuge is part of the Willapa National Wildlife Refuge Complex. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Elochoman River)

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Elochoman Slough - Central Entrance LCR-37.2R



LCR-37.2R Photo: From the river, looking east towards anchor point A. Photo taken in March.



Site Contact

Julia Butler Hansen Refuge
Land/Property Contact : Willapa Refuges Complex Project Lead
360-751-3370

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Tenasillahe Island (OR) LCR-37.7M

Position - Location:	46° 12.754', -123° 27.014'	46° 12' 45.3", -123° 27' .8"	46.21257, -123.45023	Cathlamet

Strategy Objective: Collection, Deflection : Collect oil/Prevent oil from continuing downstream.

Implementation: Launch workboat from Elochoman Slough Marina, BL-LCR-38.6R with 500ft. of boom. Deploy boom from the SW shore of Tenasillahe Island to collect oil entering channel and anchor at Anchor A using shoreside anchor posts and at Anchor B using Danforth or other anchor. Anchor along boom length as necessary for conditions. Collect oil on water using portable skimmer and storage. Tend boom throughout tidal cycle.

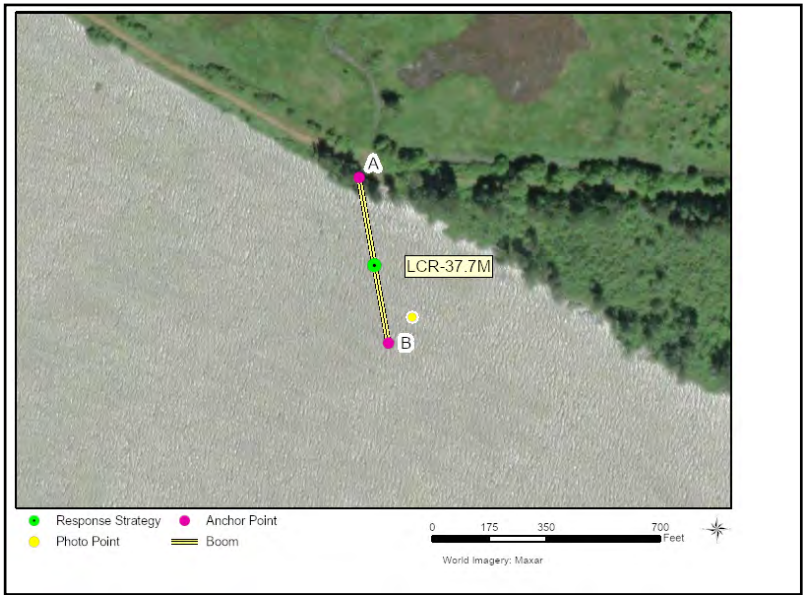
Staging Area: Remote: Stage at SA-LCR-38.6R, Elochoman Slough Marina

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only from Elochoman Slough Marina, Cathlamet. Current is 2-4 knots, strong winds. Log rafts may be present in this area.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wetlands, Wildlife Refuge



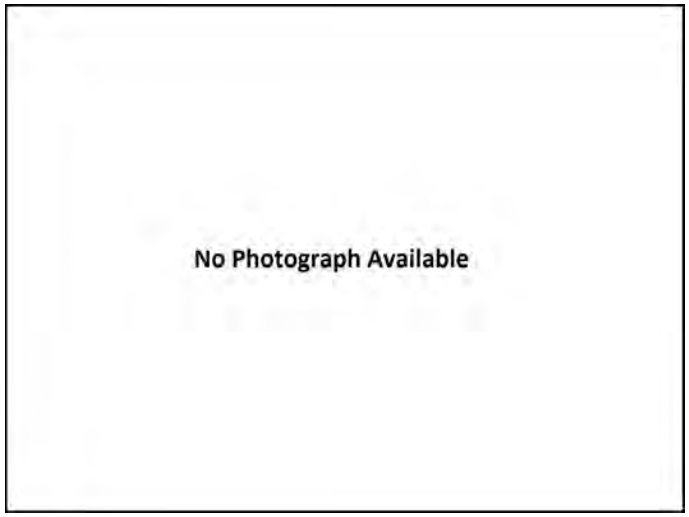
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Tenasillahe Island (OR) LCR-37.7M



LCR-37.7M Photo: Photo Not Available



Site Contact

No Information
Not Determined :

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

From WA-4, Cathlamet, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Una Ave (0.13 miles)
2. Turn right on Una Ave (0.06 miles)
3. Turn right on 3rd St (0.01 miles)
4. Finish at 200 3rd Street, 98612, on the right

Clifton Channel (OR) LCR-38.2L

Position - Location:	46° 12.473', -123° 27.152'	46° 12' 28.4", -123° 27' 9.1"	46.20789, -123.45253	Cathlamet

Strategy Objective: Collection, Deflection : Collect oil/Prevent oil from continuing downstream.

Implementation: Deploy 500 ft of boom from Clifton for collection of oil that enters the channel. Boom needs to be tended, current is 2-4 knots, strong winds are common. Collect using skimmer and portable storage.

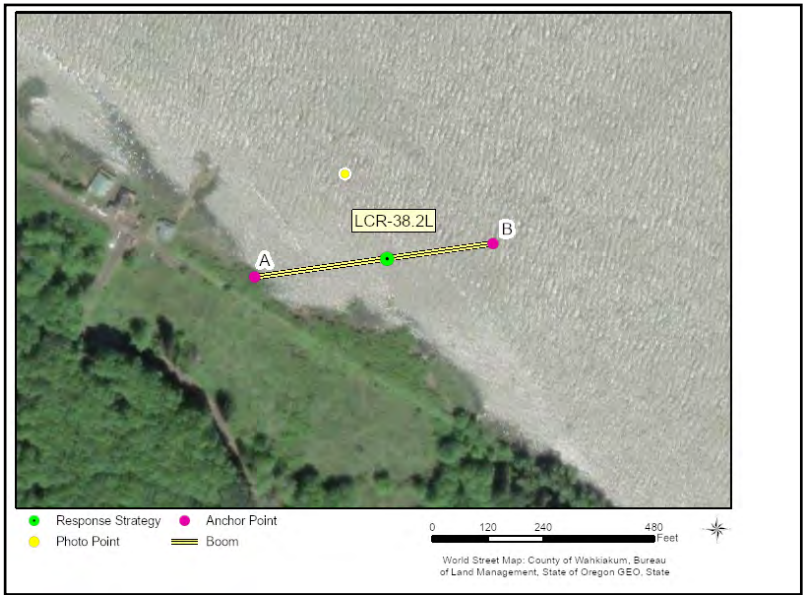
Staging Area: Remote: Stage at SA-LCR-38.6R, Elochoman Slough Marina

Site Safety: Slips, trips, and falls. Water hazards. Strong current through Channel. Log rafts may be present in this area

Field Notes: Vehicle access from Clifton Road and railroad access along bank.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wetlands, Wildlife Refuge



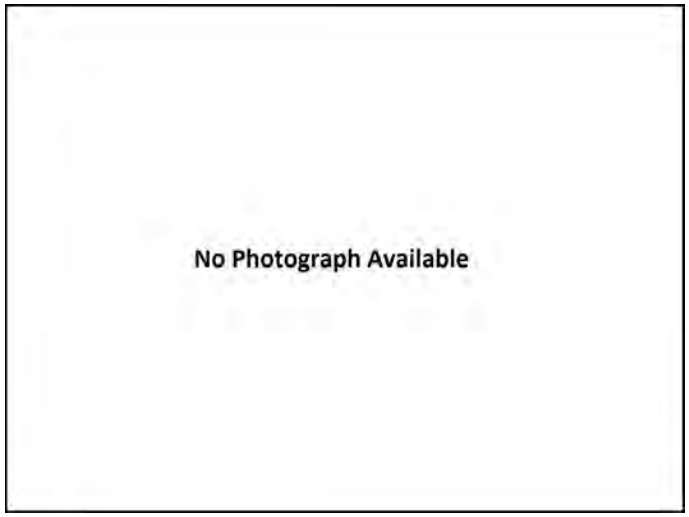
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Clifton Channel (OR) LCR-38.2L



LCR-38.2L Photo: Photo Not Available



Site Contact

No Information
Not Determined :

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

Directions to SA-LCR-38.6R
From WA-4, Cathlamet, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Una Ave (0.09 miles)
2. Turn right on Una Ave (0.06 miles)
3. Turn right on 3rd St (0.01 miles)
4. Finish at 200 3rd Street, 98612, on the right

Clifton Channel Mouth North (OR) LCR-38.5M

Position - Location:	46° 12.202', -123° 26.092'	46° 12' 12.1", -123° 26' 5.5"	46.20337, -123.43487	Cathlamet

Strategy Objective: Deflection : Deflect oil away from Clifton Channel and sensitive shoreline.

Implementation: Launch workboat from Elochoman Slough Marina, BL-LCR-38.6R with 800ft. boom. Deploy boom along the row of pilings at the south end of Tenasillahe Island. Anchor to Anchor A using shoreside anchor posts and to Anchor B using Danforth or other anchor. Depending on water level it may be possible to anchor to pilings. Anchor every 100-150ft. along boom length or as necessary for conditions. Deploy only during incoming tide or upstream wind.

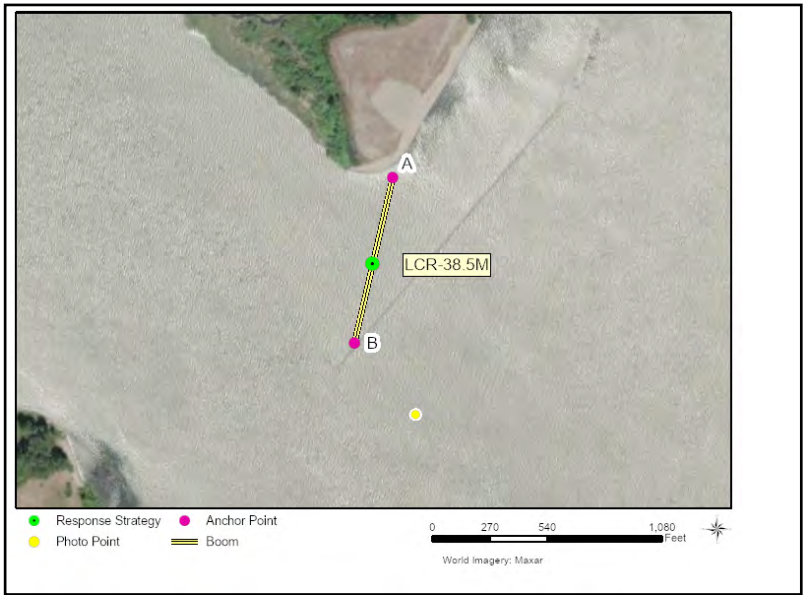
Staging Area: Remote: Stage at Elochoman Slough Marina, SA-LCR-38.6R

Site Safety: Slips, trips, and falls. Strong current. Use caution around pilings.

Field Notes: Boat access only. Current is 2-4 knots, and strong winds. Log rafts may be present in this area.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Clifton Channel Mouth North (OR) LCR-38.5M



LCR-38.5M Photo: On water looking N toward pilings at Clifton Channel



Site Contact

No Information
Not Determined :

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

Directions to SA-LCR-38.6R
From WA-4, Cathlamet, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Una Ave (0.13 miles)
2. Turn right on Una Ave (0.06 miles)
3. Turn right on 3rd St (0.01 miles)
4. Finish at 200 3rd Street, 98612, on the right

Elochoman Slough (Upriver) LCR-38.6R

Position - Location:	46° 12.337', -123° 23.384'	46° 12' 20.2", -123° 23' 23.0"	46.20561, -123.38973	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 700ft boom at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Julia Butler Hansen NWR is just to the northwest. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Marsh, Resident Fish, Salmonids, Shorebirds



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Elochoman Slough (Upriver) LCR-38.6R



LCR-38.6R Photo: From river, looking northeast into the slough. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Clifton Channel Mouth South (OR) LCR-38.8L

Position - Location:	46° 11.867', -123° 26.152'	46° 11' 52.0", -123° 26' 9.1"	46.19778, -123.43586	Cathlamet

Strategy Objective: Deflection : Deflect oil away from Clifton Channel and sensitive shoreline.

Implementation: From BL-LCR-38.6R, launch workboat to south side of Clifton Channel opening with 500ft boom. Deploy boom at a downstream angle to deflect oil into the main channel. Anchor at Anchor A using shoreside anchor posts, and at Anchor B using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions.

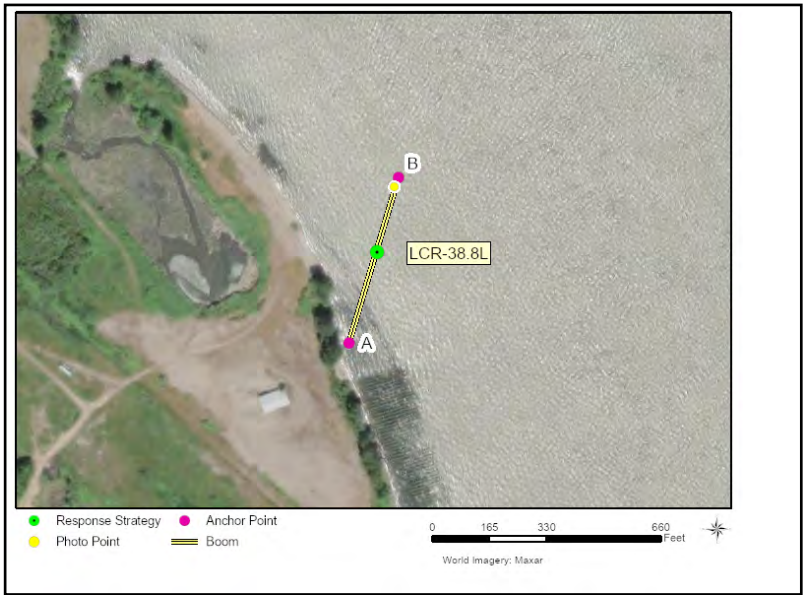
Staging Area: Remote: Stage at SA-LCR-38.6R, Elochoman Slough Marina

Site Safety: Slips, trips, and falls. Strong currents.

Field Notes: Current is 2-4 knots, strong winds. Log rafts may be present in this area.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



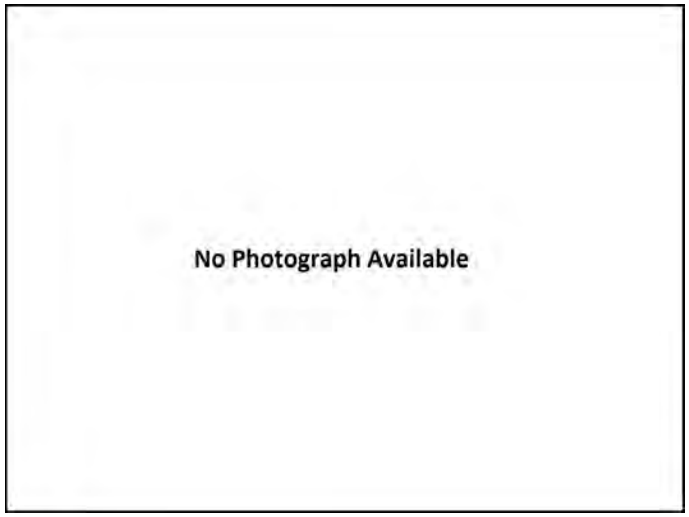
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Clifton Channel Mouth South (OR) LCR-38.8L



LCR-38.8L Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

Directions to SA-LCR-38.6R
From WA-4, Cathlamet, WA
1. Go southeast on WA-4 (W Ocean Beach Hwy) toward Una Ave (0.13 miles)
2. Turn right on Una Ave (0.06 miles)
3. Turn right on 3rd St (0.01 miles)
4. Finish at 200 3rd Street, 98612, on the right

Bernie Slough - West Entrance — LCR-40.5M

Position - Location:	46° 11.741', -123° 24.106'	46° 11' 44.5", -123° 24' 6.3"	46.19569, -123.40176	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom west and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The slough divides the larger Puget Island from Little Island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Cathlamet Channel)

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Bernie Slough - West Entrance LCR-40.5M



LCR-40.5M Photo: From Cathlamet Channel, looking southeast into the slough. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Welcome Slough — LCR-41.3M

Position - Location:	46° 10.301', -123° 24.343'	46° 10' 18.1", -123° 24' 20.6"	46.17169, -123.40571	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom west and secure end near anchor point C. Near boom midpoint, use workboat to pull boom south, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

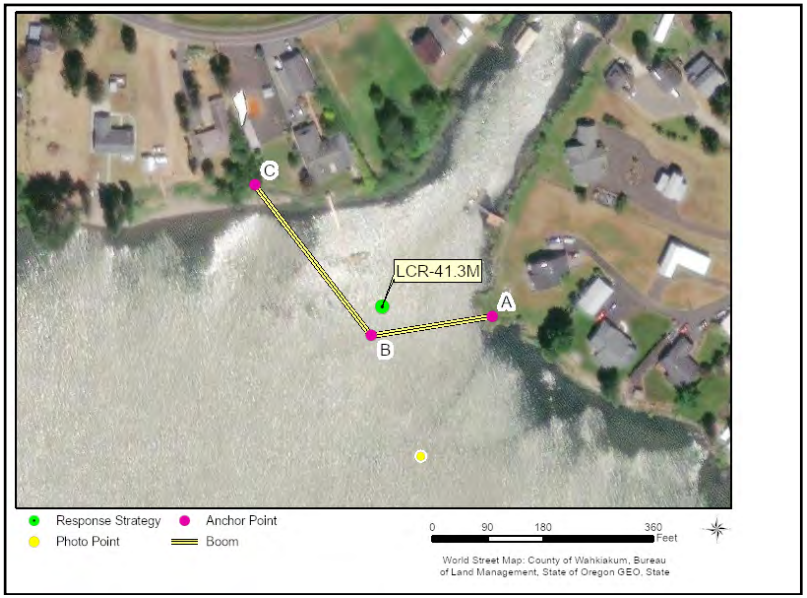
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This slough is on the south side of Puget Island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Welcome Slough LCR-41.3M



LCR-41.3M Photo: From the main channel, looking north into the slough. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Wauna (OR) LCR-41.6L

Position - Location:	46° 9.599', -123° 24.307'	46° 9' 36.0", -123° 24' 18.4"	46.15999, -123.40512	Clatskanie

Strategy Objective: Collection : Collect and recover oil on water at industrial dock.

Implementation: Crew 2 launch workboat from BL-LCR-41.8M. Crew 1 deploy two 500' lengths of boom in parallel, angled upstream and anchor to dock at A and B. Crew 2 anchor boom at C and D using Danforth or other anchor and anchor every 100-150ft. along boom length or as necessary for conditions. Collect with portable skimmers or vac truck staged at Wauna parking area.

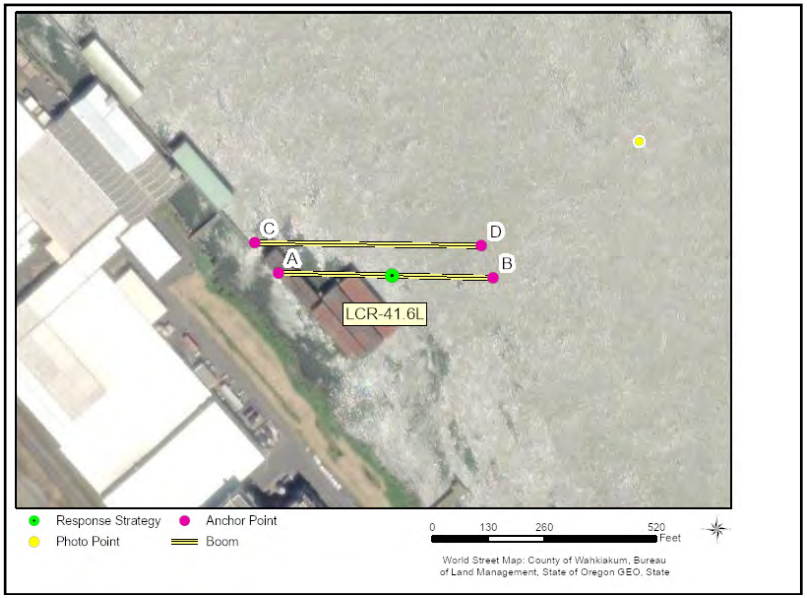
Staging Area: Onsite: Stage onsite at Wauna Mill.

Site Safety: Slips, trips, and falls. Water hazards. Active facility with vehicle and vessel traffic.

Field Notes: Site access is through Wauna mill.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wildlife Refuge



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1000	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Piling (appropriately sized for boom)
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage (if collection)
1	Each	Workboat(s) - of adequate size for type and amount of boom

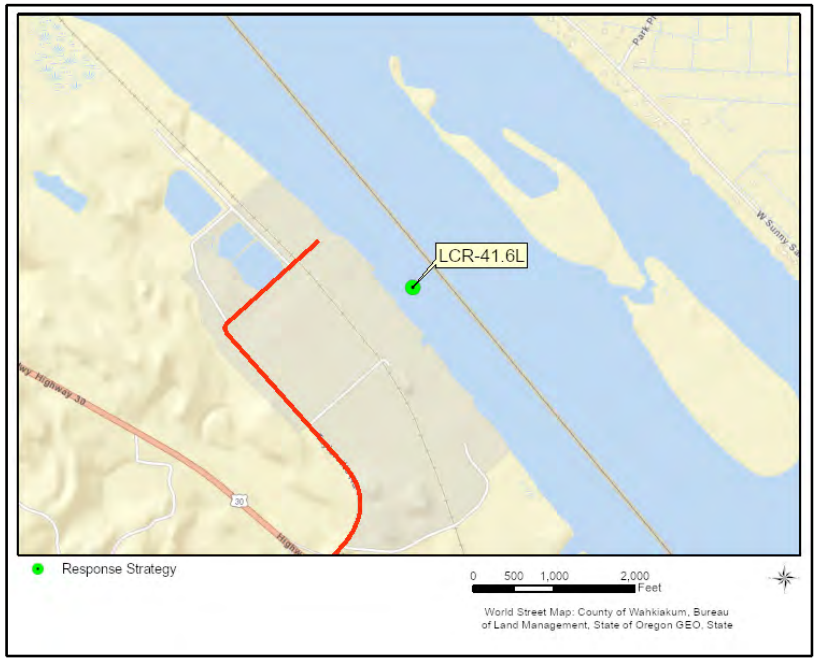
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Wauna (OR) LCR-41.6L



LCR-41.6L Photo: On-water looking SW at Wauna Mill



Site Contact

Georgia Pacific Wauna Mill
Primary Contact : Main Phone
92326 Taylorville Rd
Clatskanie, OR 97016
503-266-1933

Nearest Address

92328 Taylorville Road
Clatskanie, OR 97016

Driving Directions

From US-30, Clatskanie, OR
1. Go west on US-30 (Lower Columbia River Hwy) toward SE Conyers St/NE Conyers St (11.04 miles)
2. Take ramp toward Wauna (0.22 miles)
3. Turn right on Taylorville Rd (0.36 miles)
4. Finish at 92328 Taylorville Road, 97016, on the right

Driscoll Slough (OR) (Hanson Slough) LCR-42.5L

Position - Location:	46° 9.095', -123° 23.797'	46° 9' 5.7", -123° 23' 47.8"	46.15158, -123.39661	Westport

Strategy Objective: Exclusion : Prevent oil from entering Driscoll Slough (Hanson Slough).

Implementation: Launch workboat with 400ft. boom from Westport boat launch, BL-LCR-43.8L. Deploy boom across the slough entrance in chevron configuration and anchor at A and C using shoreside anchor posts. Anchor at B using Danforth or other anchor and anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.

Site Safety: Slips, trips, and falls. Water hazards. Active industrial area with vehicle and vessel traffic.

Field Notes: Site is accessed through Wauna Mill. Contact site managers before deploying strategy.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



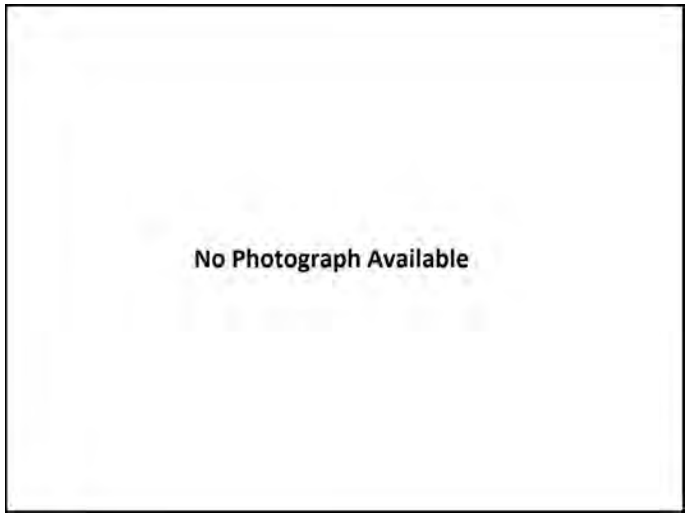
Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

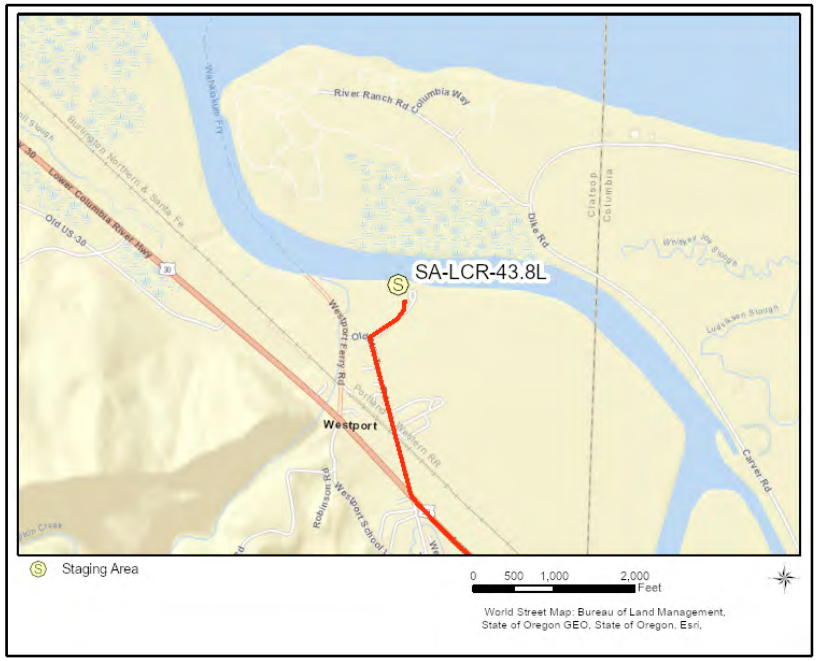
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Driscoll Slough (OR) (Hanson Slough) LCR-42.5L



LCR-42.5L Photo: No photo available.



Site Contact

Georgia Pacific Wauna Mill
Primary Contact : Main Phone
92326 Taylorville Rd
Clatskanie, OR 97016
503-266-1933

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at US-30, Clatskanie, OR
2. Go west on US-30 (Highway 30) toward Blitz Creek Rd (8 miles)
3. Bear right on Old Mill Town Rd (0.5 miles)
4. Take a right onto the gravel road to the boat launch.

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To Wauna Mill land access:

1. From Clatskanie, head west on US-30 / Lower Columbia River Hwy (11.0 mi)
2. Take ramp right toward Wauna (0.2 mi)
3. Turn right onto Taylorville Rd (225 ft)
4. Make the next right and follow the Wauna Mill road over the railroad tracks (0.3 mi)
5. Take a right towards the water intake area (250 ft).

Westport Slough (OR) LCR-43.2L

Position - Location:	46° 8.621', -123° 22.959'	46° 8' 37.2", -123° 22' 57.5"	46.14368, -123.38265	Clatskanie

Strategy Objective: Collection, Exclusion : Collect oil and prevent it from entering Westport Slough.

Implementation: Only deploy strategy if ferry route has been shut down. Launch boat from Wesport Boat Ramp, BL-LCR-43.8L, with 800ft. boom. Deploy boom just behind daymarker 58 over to pilings or trees on the west bank in a chevron configuration. Anchor to A and C using shoreside anchor posts, and to B using Danforth or other anchor. Anchor along boom length as necessary for conditions. If oil is travelling downstream (northward) on slough, angle boom upstream and anchor southeast of Anchor A and collect oil on eastern bank.

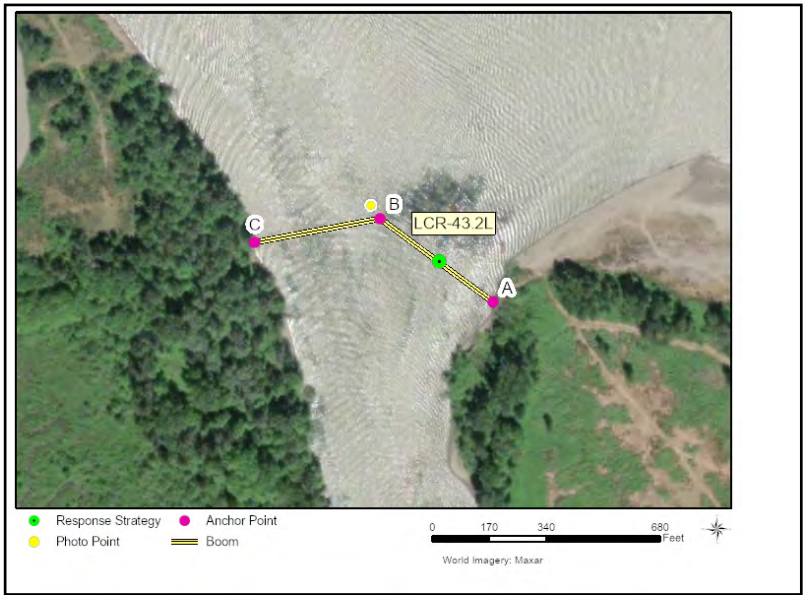
Staging Area: Remote: Stage at Westport Boat Ramp, SA-LCR-43.8L

Site Safety: Slips, trips, and falls. Water hazards. Active ferry route.

Field Notes: Site is at mouth of Westport Slough along active ferry route for Cathlamet-Westport ferry.

Watercourse: Slough - Westport Slough

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wildlife Refuge



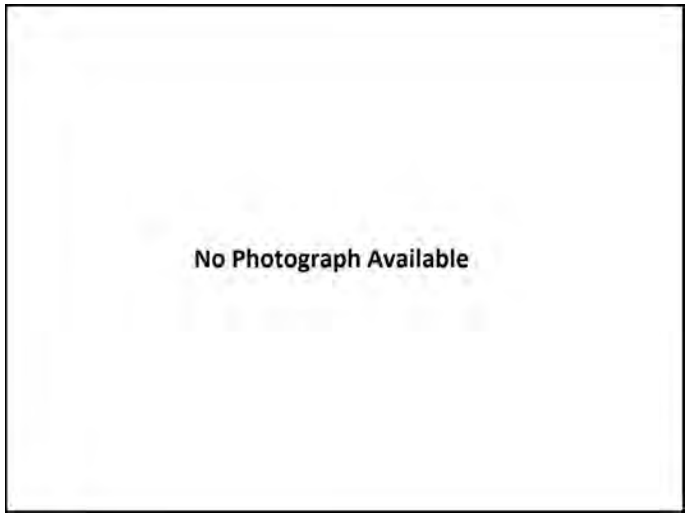
Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

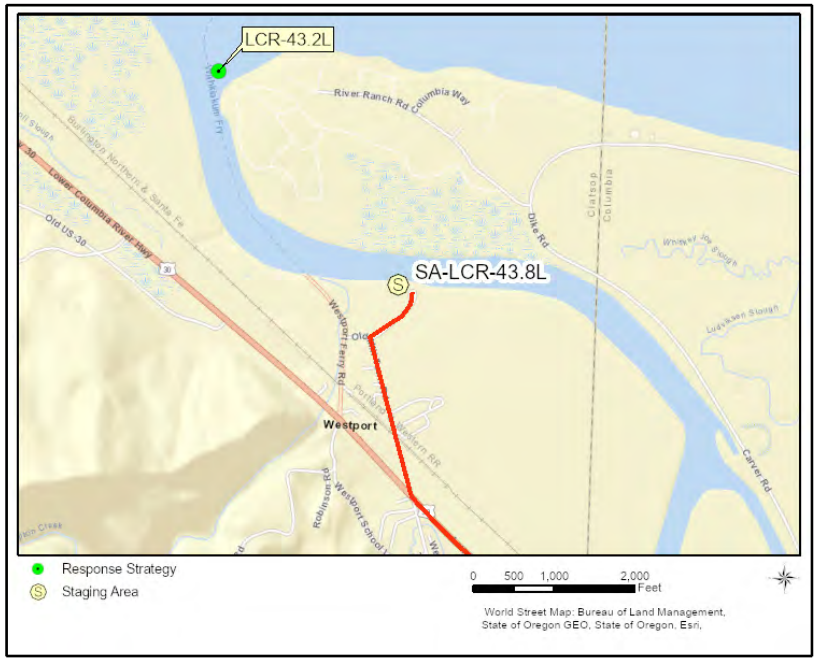
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Westport Slough (OR) LCR-43.2L



LCR-43.2L Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

Old Mill Town Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Make sharp left on US-30 (Lower Columbia River Hwy) (8.93 miles)
4. Bear right on Old Mill Town Rd (0.22 miles)
5. Finish at Old Mill Town Rd, 97016, on the right

.

For limited land access:
From US-30, Clatskanie, OR
1. Go west on US-30 (Lower Columbia River Hwy) toward SE Conyers St/NE Conyers St (6.54 miles)
2. Turn right on Woodson Rd (0.09 miles)
3. Turn left on Carver Rd (2.63 miles)
4. Continue on Dike Rd (0.24 miles)
5. Turn left on River Ranch Rd (0.59 miles)
6. Finish at 47006 River Ranch Ln, 97016. Continue along dirt roads to beach access.

Bernie Slough - East Entrance — LCR-44.0M

Position - Location:	46° 10.486', -123° 21.392'	46° 10' 29.2", -123° 21' 23.5"	46.17477, -123.35653	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The slough divides the larger Puget Island from Little Island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Cathlamet Channel)

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Bernie Slough - East Entrance LCR-44.0M



LCR-44.0M Photo: From Cathlamet Channel, looking southwest into the slough. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Jackson Inlet — LCR-44.1M

Position - Location:	46° 10.402', -123° 21.272'	46° 10' 24.1", -123° 21' 16.3"	46.17336, -123.35454	Cathlamet

Strategy Objective: Exclusion : Keep oil out of inlet behind Jackson Island.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

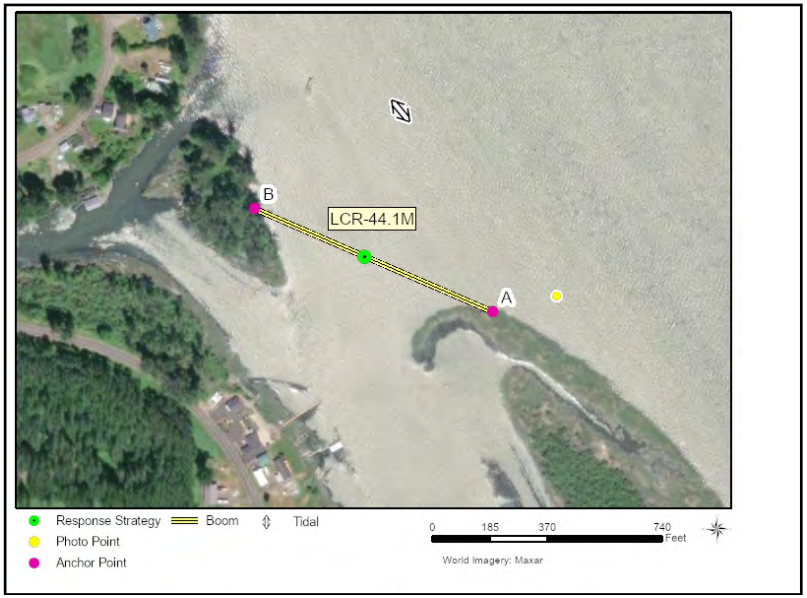
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The boom runs from Jackson Island to Browns Island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Cathlamet Channel)

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Jackson Inlet LCR-44.1M



LCR-44.1M Photo: From Jackson Island, looking west towards Browns Island. Inlet is to the left. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Net Rack Slough — LCR-44.3M

Position - Location:	46° 9.002', -123° 21.415'	46° 9' .1", -123° 21' 24.9"	46.15003, -123.35691	Cathlamet

Strategy Objective: Exclusion : Keep oil out of slough behind Whites Island.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The slough divides Puget and Whites Island (the latter is a WDFW property). Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Shorebirds, State Lands, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Net Rack Slough LCR-44.3M



LCR-44.3M Photo: From main channel, looking northeast towards the slough. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Jackson Island - East End — LCR-45.0M

Position - Location:	46° 9.865', -123° 20.501'	46° 9' 51.9", -123° 20' 30.0"	46.16442, -123.34168	Cathlamet

Strategy Objective: Exclusion : Keep oil out of inlet behind Jackson Island.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom northeast, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The boom runs from Jackson Island to another island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Cathlamet Channel)

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Jackson Island - East End LCR-45.0M



LCR-45.0M Photo: From the Cathlamet Channel, looking south towards the inlet. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Puget and Whites Islands — LCR-45.2M

Position - Location:	46° 9.702', -123° 20.295'	46° 9' 42.1", -123° 20' 17.7"	46.16170, -123.33825	Cathlamet

Strategy Objective: Exclusion : Keep oil out of sloughs between islands.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom northeast, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

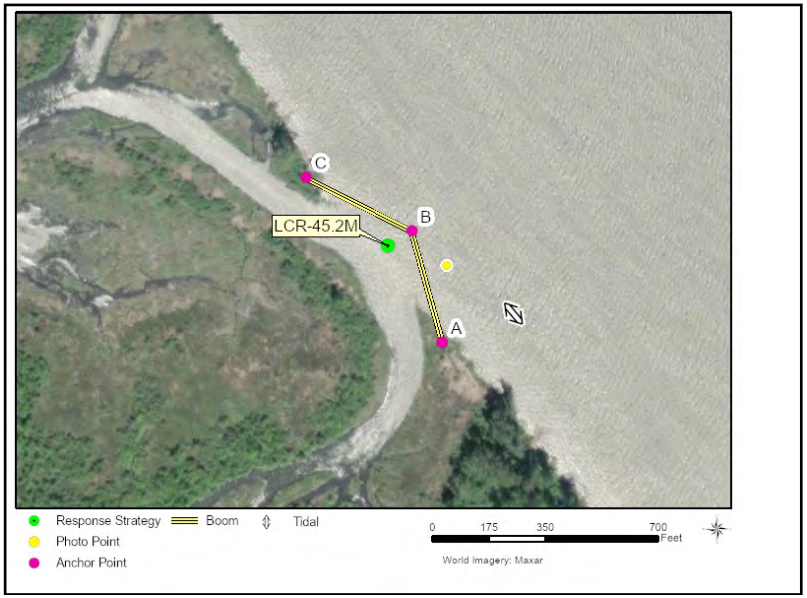
Staging Area: Remote: Stage equipment at SA-LCR-38.6R Elochoman Slough Marina (500 2nd St, Cathlamet, WA 98612).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The boom runs from Whites Island to another island. Call Wahkiakum County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Cathlamet Channel)

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Puget and Whites Islands LCR-45.2M



LCR-45.2M Photo: From the Cathlamet Channel, looking northwest into a slough behind an unnamed island. Photo taken in March.



Site Contact

Wahkiakum County Emergency Management
Municipality (County/City) : Director

Cathlamet, WA 98612
360-795-3242

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Elochoman Slough Marina (SABL-LCR-38.6R):
1. Head north on I-5
2. Take exit 36 on the right to WA-432 W toward Talley Way / Kelso Drive / Airport / Hospital
3. Keep left at exit 36B to merge onto WA-432 W toward Talley Way / Longview
4. Take the exit on the right to WA-432 W / 3rd Ave / WA-411
5. Head west on Ocean Beach Hwy (WA-4)
6. Turn left on Una Ave
7. Turn right on 3rd St
8. Location is at the end of the road

Wallace Island Slough - NW end (OR) LCR-48.1M

Position - Location:	46° 8.436', -123° 16.570'	46° 8' 26.2", -123° 16' 34.2"	46.14060, -123.27616	Westport

Strategy Objective: Exclusion : Keep oil out of sloughs during high flow conditions.

Implementation: Deploy only at high water. Launch workboat with 600ft. boom and shallow-water skiff from Westport boat launch, BL-LCR-43.8L. Deploy boom across the north entrance to the slough on the west end of Wallace Island. Using a shallow water skiff, anchor to A and B using shoreside anchors or natural anchor points. Anchor along boom length every 100-150ft. or as necessary for conditions.

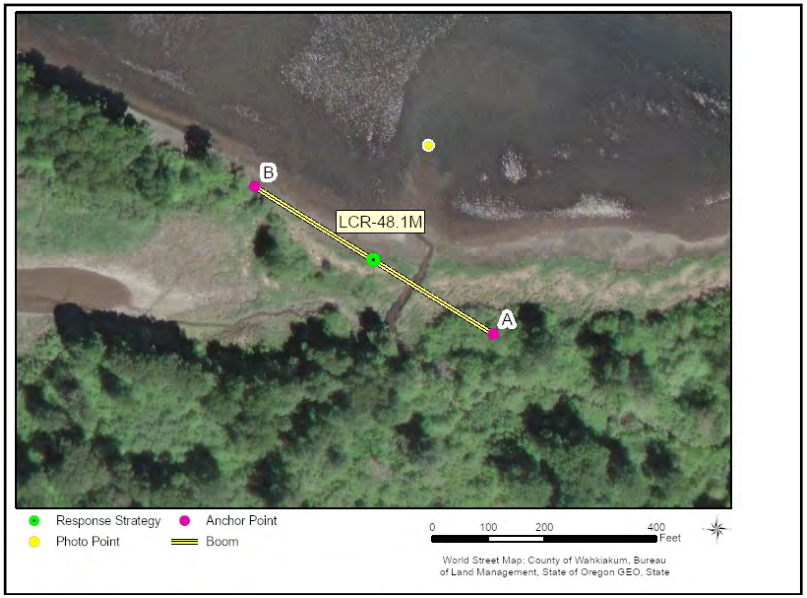
Staging Area: Remote: Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.

Site Safety: Very shallow water, slips, trips, falls, water hazard

Field Notes: Boat access only. Water depth is likely to be very shallow. When the river is low, booming will likely not be necessary or feasible.

Watercourse: Slough - Wallace Island Slough

Resources at Risk: Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

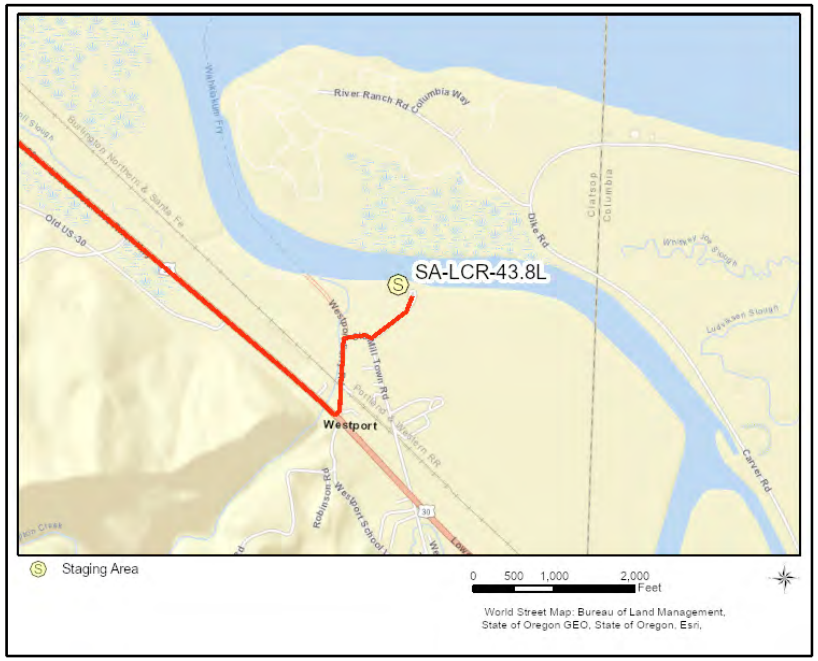
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Wallace Island Slough - NW end (OR) LCR-48.1M



LCR-48.1M Photo: View looking south at slough on west end of Wallace Island.



Site Contact

No Information
Not Determined :

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at Astoria, OR
2. Head east on US-30 (Marine Dr) to Westport (25 miles)
3. Turn left on Westport Ferry Rd (follow signs for Wahkiakum Ferry (0.5 mi)
4. Turn right on Old Mill Town Rd (0.1 mi)
5. Take the next left onto Westport Boat Ramp Lane (500 ft)

Wallace Island Slough - SW end (OR) LCR-48.6M

Position - Location:	46° 8.242', -123° 15.878'	46° 8' 14.5", -123° 15' 52.7"	46.13737, -123.26463	Westport

Strategy Objective: Exclusion : Prevent oil from entering slough on SW end of Wallace Island.

Implementation: Launch workboat with 500ft. boom and shallow-water skiff from Westport boat launch, BL-LCR-43.8L. Using shallow-water skiff, deploy boom across the entrance to the channel on the southwest end of Wallace Island. Anchor to A and B using shoreside anchor posts or natural anchors. Anchor along boom length as necessary for conditions.

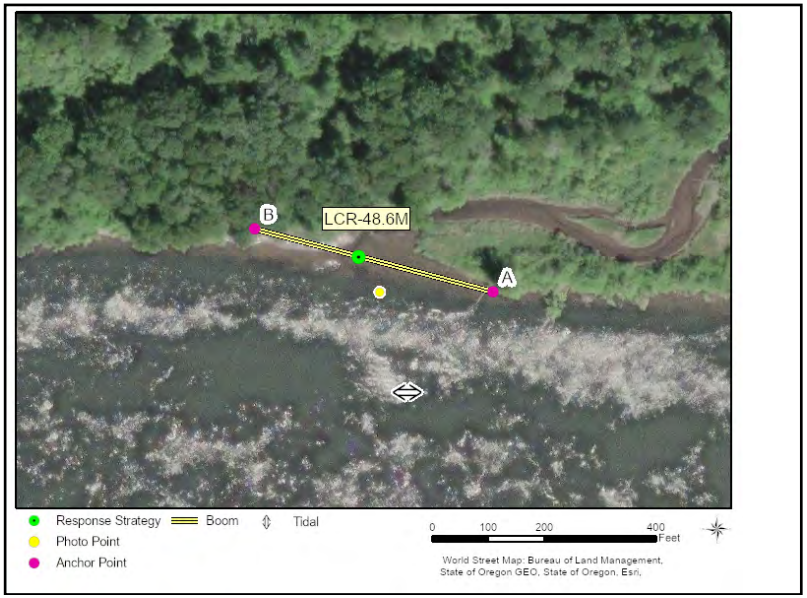
Staging Area: Remote: Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.

Site Safety: Shallow water, slips, trips, falls, water hazard.

Field Notes: Boat access only. Water is very shallow in this area and at low water booming may not be feasible or necessary.

Watercourse: Slough - Wallace Island Slough

Resources at Risk: Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

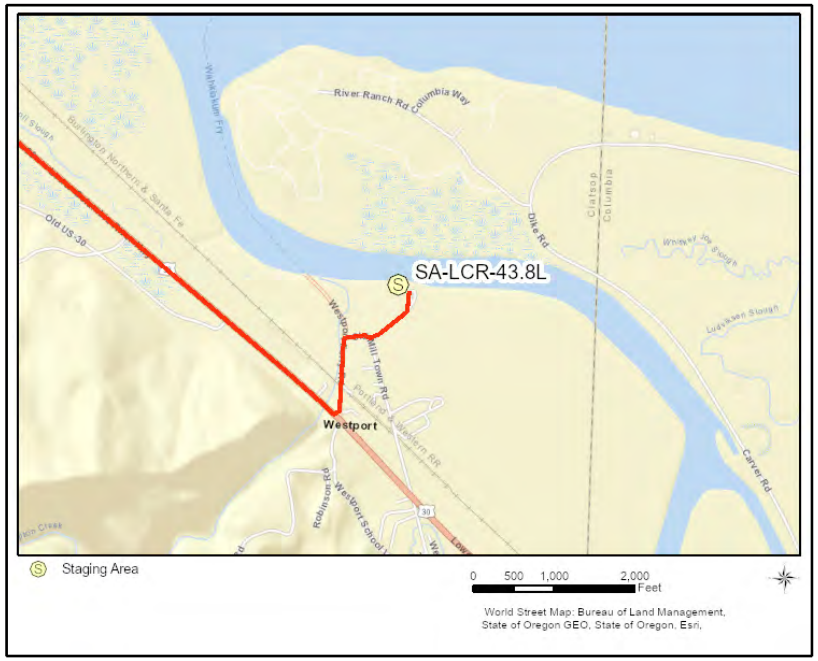
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Wallace Island Slough - SW end (OR) LCR-48.6M



LCR-48.6M Photo: looking east into slough on south



Site Contact

No Information
Not Determined :

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at Astoria, OR
2. Head east on US-30 (Marine Dr) to Westport (25 miles)
3. Turn left on Westport Ferry Rd (follow signs for Wahkiakum Ferry (0.5 mi)
4. Turn right on Old Mill Town Rd (0.1 mi)
5. Take the next left onto Westport Boat Ramp Lane (500 ft)

Wallace Island Slough - S center (OR) LCR-48.8M

Position - Location:	46° 8.232', -123° 15.084'	46° 8' 13.9", -123° 15' 5.0"	46.13720, -123.25140	Westport

Strategy Objective: Exclusion : Prevent oil from entering sloughs on S end of Wallace Island.

Implementation: Launch workboat with 500ft. boom and shallow-water skiff from Westport boat launch, BL-LCR-43.8L. Using shallow-water skiff, deploy boom across the entrance to the channel on the south end of Wallace Island. Anchor to A and B using shoreside anchor posts or natural anchors. Anchor along boom length as necessary for conditions.

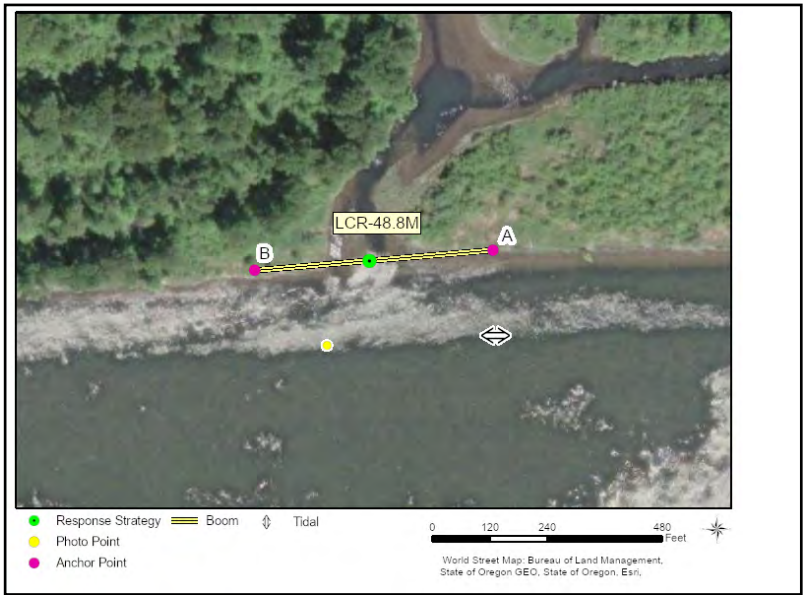
Staging Area: Remote: Stage at Westport boat ramp, SA-LCR-43.8L. Launch from same BL-LCR-43.8L.

Site Safety: Shallow, muddy area, water hazards, slips, trips, falls.

Field Notes: Boat access only. Water is very shallow in this area. At low water, booming may not be feasible or necessary.

Watercourse: Slough - Wallace Island Slough

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

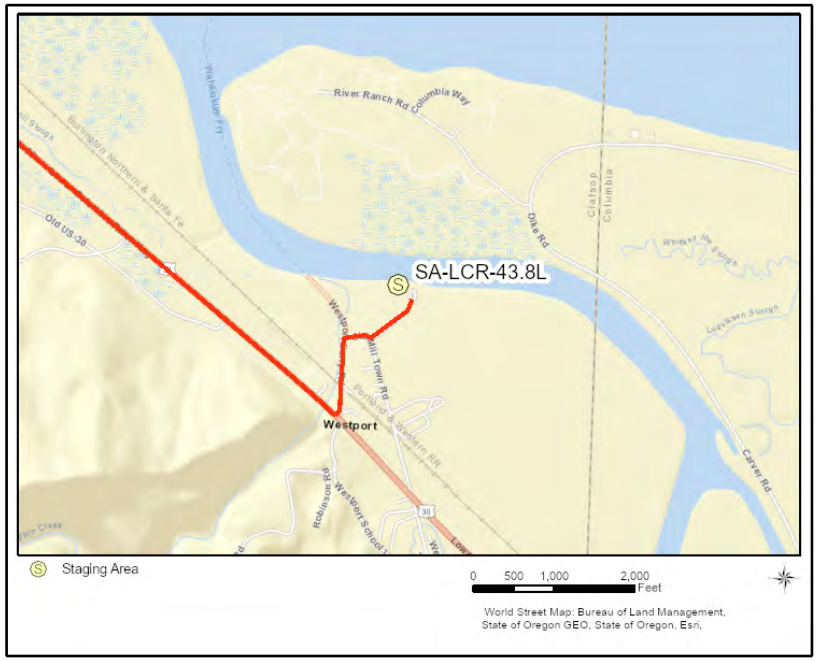
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Wallace Island Slough - S center (OR) LCR-48.8M



LCR-48.8M Photo: View looking north into slough at south central part of Wallace Island.



Site Contact

No Information
Not Determined :

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at Astoria, OR
2. Head east on US-30 (Marine Dr) to Westport (25 miles)
3. Turn left on Westport Ferry Rd (follow signs for Wahkiakum Ferry (0.5 mi)
4. Turn right on Old Mill Town Rd (0.1 mi)
5. Take the next left onto Westport Boat Ramp Lane (500 ft)

Wallace Island Slough - North center (OR) LCR-49.1M

Position - Location:	46° 8.553', -123° 15.010'	46° 8' 33.2", -123° 15' .6"	46.14255, -123.25016	Clatskanie

Strategy Objective: Exclusion : Prevent oil from entering sloughs on north side of Wallace Island

Implementation: Launch workboat with 400ft. boom and shallow-water skiff from Port Westward boat launch, BL-LCR-53.8L. Using shallow-water skiff, deploy boom across the entrance to the channel on the north side of Wallace Island. Anchor to A and B using shoreside anchor posts or natural anchors. Anchor along boom length as necessary for conditions.

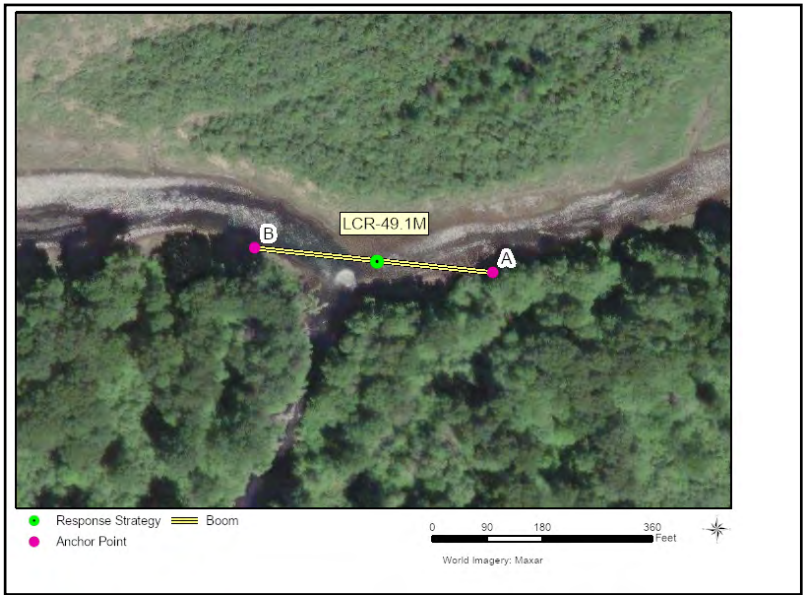
Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Very shallow and muddy, water hazard, slips, trips, falls.

Field Notes: Boat access only. Water is very shallow. At low water, access to strategy may not be possible.

Watercourse: Slough - Wallace Island Slough

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Riparian Habitat, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - (jon boat)

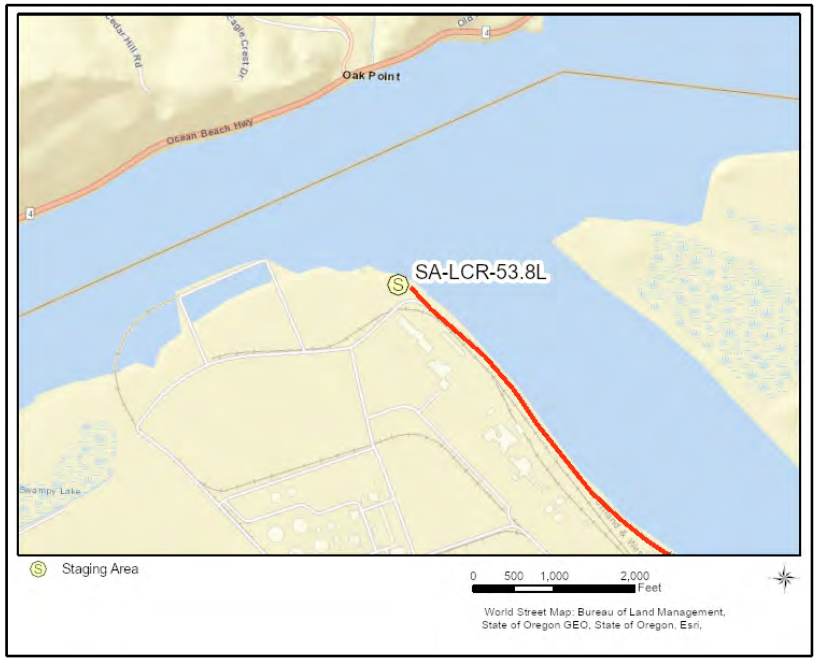
Recommended Personnel

2	Boat Operator
1	Laborer
1	Supervisor

Wallace Island Slough - North center (OR) LCR-49.1M



LCR-49.1M Photo: View looking south at center channel on Wallace Island.



Site Contact

No Information
Not Determined :

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2 miles)
11. Drive past industrial area, boat launch is straight on dirt road.

Clatskanie River - E side (OR) LCR-49.7L

Position - Location:	46° 8.361', -123° 13.859'	46° 8' 21.7", -123° 13' 51.6"	46.13935, -123.23099	Clatskanie

Strategy Objective: Exclusion : Prevent oil from entering the Clatskanie River.

Implementation: Launch workboat from Port Westward boat launch, BL-LCR-53.8L with 600ft. boom. Deploy boom across the mouth of the Clatskanie River. Anchor at A and B using shoreside anchor posts or natural anchors. Anchor every 100-150ft. along boom length or as necessary for conditions.

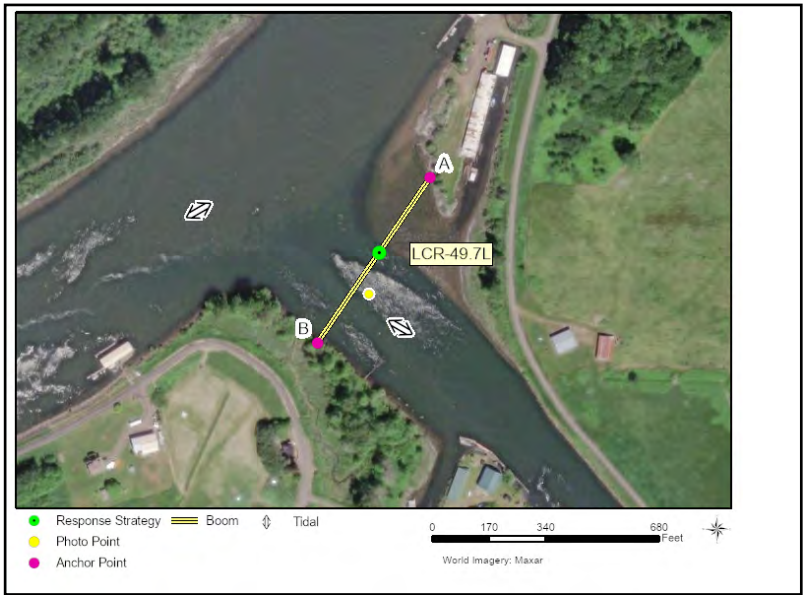
Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Water hazard, slips, trips, falls.

Field Notes: Site is at the mouth of the Clatskanie River at the Columbia River. May also be referred to as Beaver Slough. Strategy works together with collection at LCR-49.6L.

Watercourse: River - With Tidal Influence - Clatskanie River

Resources at Risk: Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

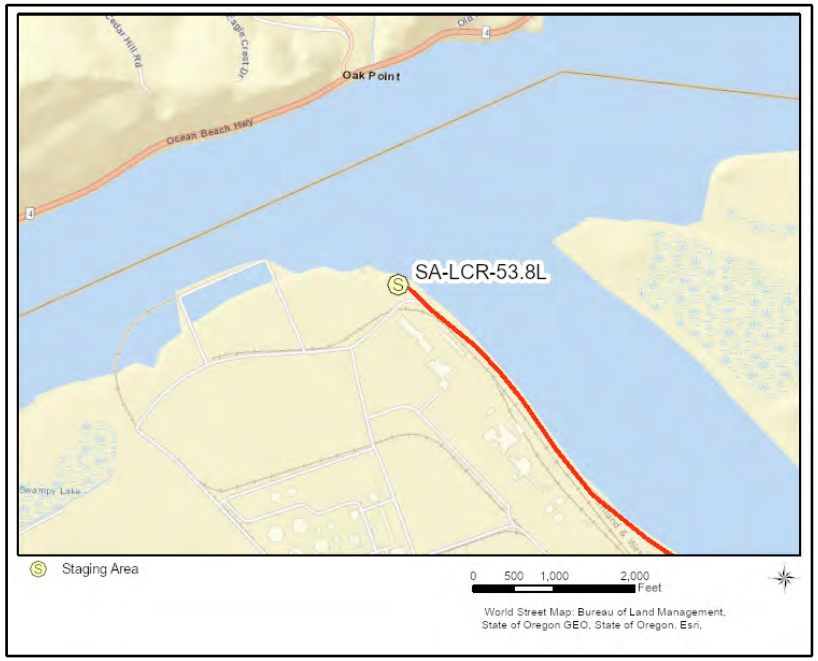
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Clatskanie River - E side (OR) LCR-49.7L



LCR-49.7L Photo: Looking north at the upriver anchor point for LCR-49.7.



Site Contact

No Information
Not Determined :

Nearest Address

Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2 miles)
11. Drive past industrial area, boat launch is straight on dirt road.

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Potential land access from 16239 River Front Road, Clatskanie OR 97016 (west bank) or 78947 Erickson Dike Rd, Clatskanie, OR 97016 (east bank)

Clatskanie River - W side (OR) LCR-49.8L

Position - Location:	46° 8.506', -123° 13.832'	46° 8' 30.3", -123° 13' 49.9"	46.14176, -123.23053	Clatskanie

Strategy Objective: Collection : Divert oil to shoreline for collection.

Implementation: Launch workboat from Port Westward boat launch, BL-LCR-53.8L with 600ft. boom. Anchor boom upstream of the Clatskanie River mouth at B, angled into main channel of the Columbia River at A to divert oil to shore for collection. Anchor at B to pilings or using shoreside anchor posts. Extend boom N to anchor at A using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil using vac truck at private property.

Staging Area: Remote: Stage at Port Westward boat launch, BL-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Water hazards, slips, trips, falls.

Field Notes: Contact property owner before deploying. Site is at the confluence of Clatskanie River with Lower Columbia River and is surrounded by private agricultural property. May also be referred to as Beaver Slough. Strategy works together with exclusion at LCR-49.7L.

Watercourse: River - With Tidal Influence - Clatskanie River

Resources at Risk: Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

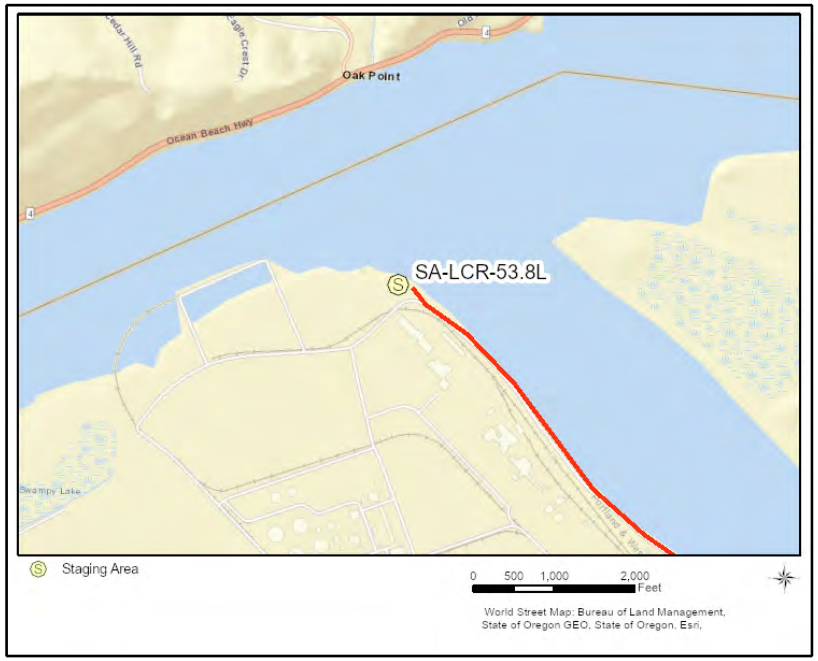
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Clatskanie River - W side (OR) LCR-49.8L



LCR-49.8L Photo: looking west at the shoreline anchor point for LCR-49.6.



Site Contact

No Information
Not Determined :

Nearest Address

Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at US-30 in Clatskanie, OR
2. Depart US-30 / Lower Columbia River Hwy toward SW Bryant St (0.1 mi)
3. Turn left onto Nehalem St (0.2 mi)
4. Road name changes to NW 5th St (2.9 mi)
5. Keep straight onto Quincy Mayger Rd (2.4 mi)
6. Turn left on Kallunki Rd (2 miles)
7. Drive past industrial area, boat launch is straight on dirt road.

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Potential land access at 78947 Erickson Dike Rd, Clatskanie, OR 97016

1. Start at NW 5th St & Stimson Mill Rd, Clatskanie, OR 97016
2. Take NW 5th St N toward Depot St (0.2 mi)
3. Turn left onto Depot St (0.1 mi)
4. Turn right onto Clatskanie District Rd (0.3 mi)
5. Turn left onto Erickson Dike Rd (3.1 mi)
6. Arrive at 78947 Erickson Dike Rd, Clatskanie, OR 97016

Upriver Wallace Island (OR) LCR-50.5L

Position - Location:	46° 8.792', -123° 13.661'	46° 8' 47.5", -123° 13' 39.6"	46.14654, -123.22768	Clatskanie

Strategy Objective: Exclusion : Prevent oil from entering side channel of Columbia towards Clatskanie River and Beaver Slough.

Implementation: Launch from Port Westward, BL-LCR-53.8L, with 1800 ft of boom. Anchor 800 ft section of boom at C, upstream of Poysky Slough. Extend SW to tip of small island and anchor at A using tree or posts. Anchor second 1000 ft section of boom to tree or post at N tip of small island at B and extend W to upstream tip of Wallace Island. Use shoreside posts or trees to secure to shore. Anchor every 100-150 ft along boom or as needed for conditions.

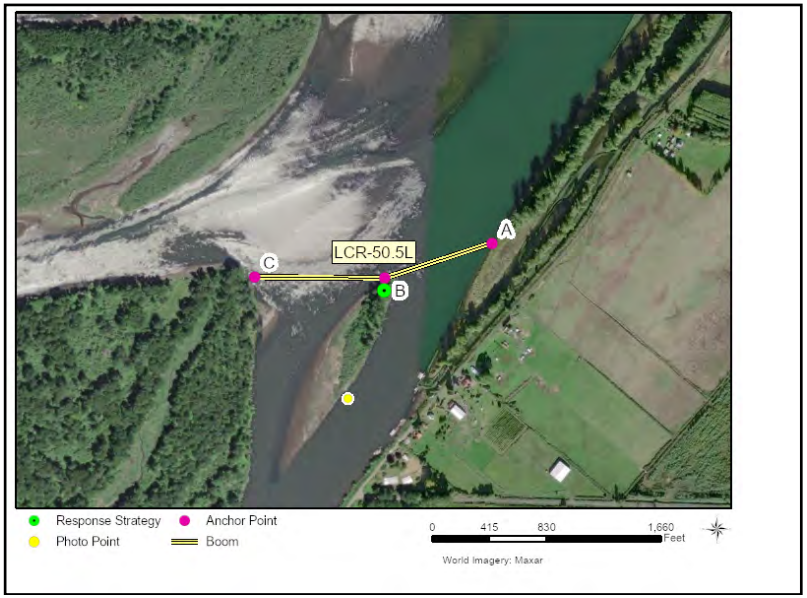
Staging Area: Remote: Stage at Port Westward, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Slips, trips, falls. Water hazard.

Field Notes: Side channel of Columbia River with forested islands

Watercourse: River - Side Channel - Tidal influence in area.

Resources at Risk: Raptors, Resident Fish, Salmonids, Wetlands, Wildlife Refuge



Recommended Equipment

16	Each	Anchoring System(s) - (anchor, lines, floats)
4	Each	Anchoring System(s)- Shoreside
1800	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

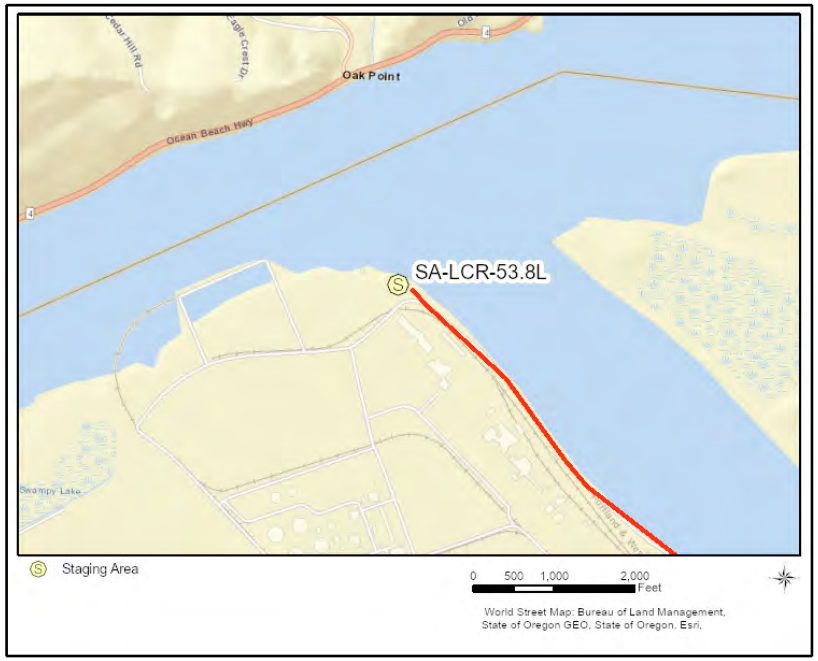
Recommended Personnel

2	Boat Operator
6	Laborer
1	Supervisor

Upriver Wallace Island (OR) LCR-50.5L



LCR-50.5L Photo: Looking north at deployed strategy via drone.
Photo taken during drill in September 2024.



Site Contact

No Information
Not Determined :

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2.03 miles)
11. The boat launch is straight ahead just past the industrial area.

Mill Creek — LCR-53.8R

Position - Location:	46° 11.319', -123° 10.543'	46° 11' 19.1", -123° 10' 32.6"	46.18865, -123.17571	Longview

Strategy Objective: Exclusion : Keep oil out of creek.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southwest, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

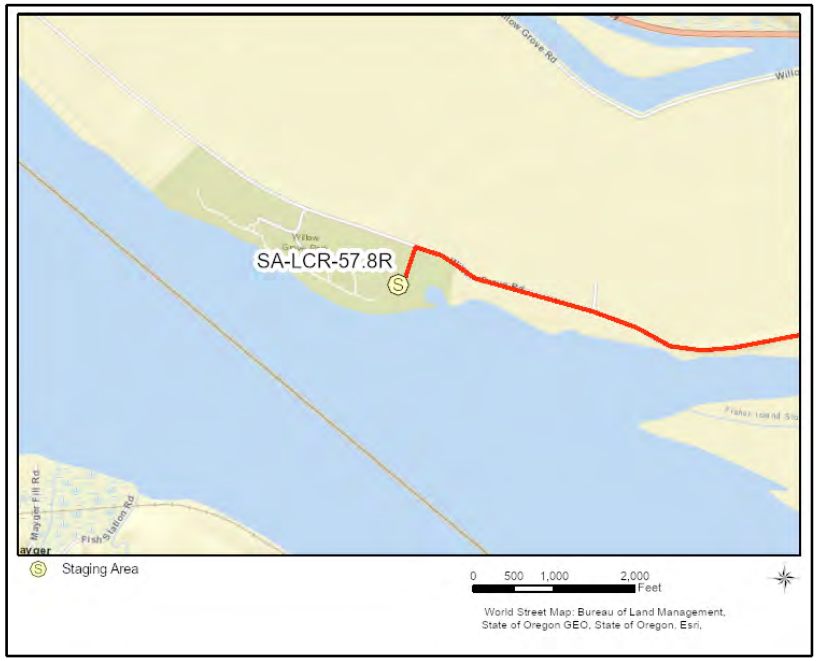
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Mill Creek LCR-53.8R



LCR-53.8R Photo: From right bank of creek, looking east towards anchor point A. Photo taken in September.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Abernathy Creek — LCR-54.2R

Position - Location:	46° 11.456', -123° 10.049'	46° 11' 27.4", -123° 10' 3.0"	46.19094, -123.16749	Longview

Strategy Objective: Exclusion : Keep oil out of creek.

Implementation: Using workboat, deploy 300ft boom at anchor point A. Then extend boom southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Location is part of a WDFW wildlife area. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, State Lands



Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

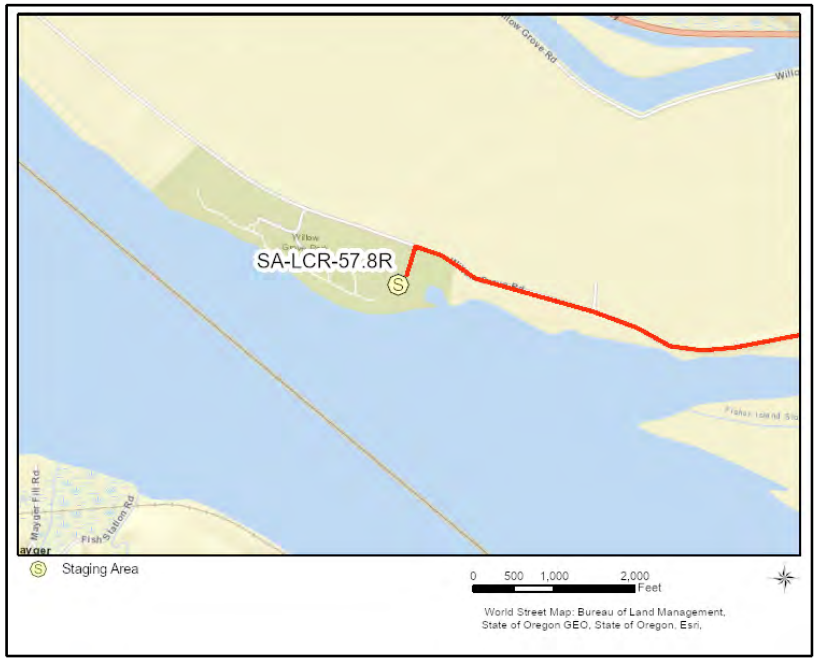
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Abernathy Creek LCR-54.2R



LCR-54.2R Photo: From right bank of creek, looking north towards anchor point A. Photo taken in September.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Gull/ Crims Islands - W opening (OR) LCR-54.4M

Position - Location:	46° 11.051', -123° 9.570'	46° 11' 3.1", -123° 9' 34.2"	46.18419, -123.15950	Clatskanie

Strategy Objective: Exclusion : Exclusion to protect backwaters behind Gull Island.

Implementation: Launch workboat with 500ft. boom and shallow-water skiff from Port Westward boat launch, BL-LCR-53.8L. Use shallow-water skiff to deploy boom across the west opening between Gull Island and Crims Island. Anchor to A and B using natural anchor points. Anchor every 100-150ft. along boom length or as necessary for conditions.

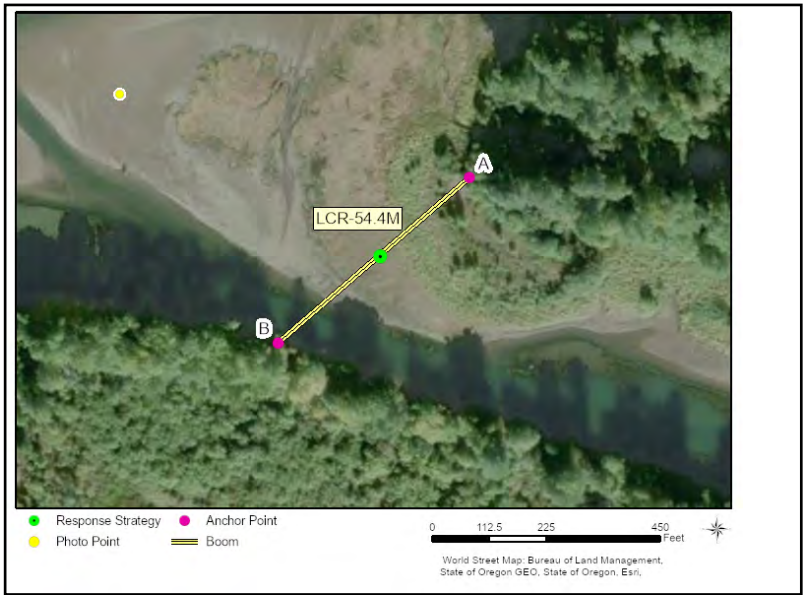
Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Shallow water, slips, trips, falls. Water hazards.

Field Notes: Water in this area is very shallow. At low water, strategy may not be feasible or necessary.

Watercourse: Slough - Water between islands is very shallow. Much of it may be dry during low water flow.

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

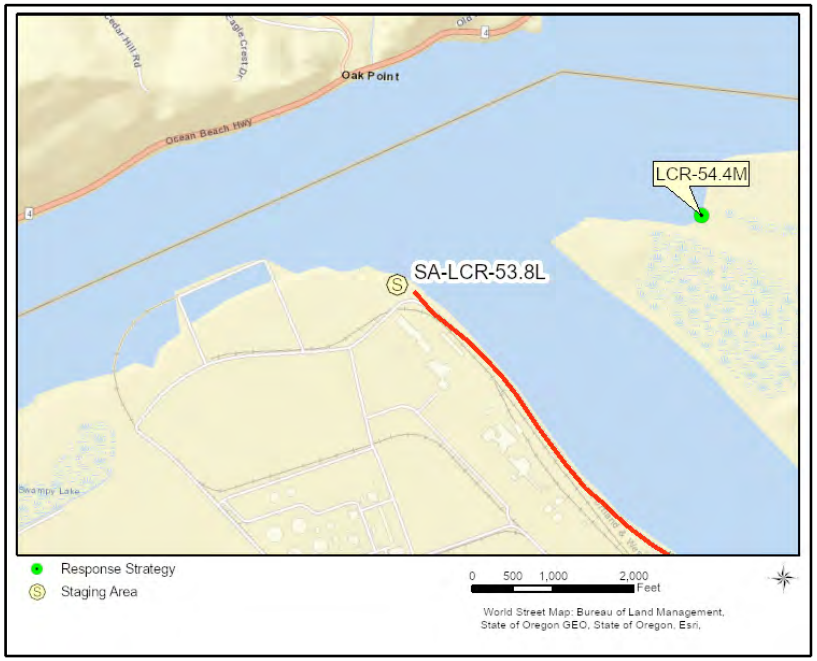
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Gull/ Crims Islands - W opening (OR) LCR-54.4M



LCR-54.4M Photo: View looking east into the channel between Gull and Crims Island.



Site Contact

No Information
Not Determined :

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2 miles)
11. Drive past industrial area, boat launch is straight on dirt road.

Crims Island- South Side (OR) LCR-55.1M

Position - Location:	46° 10.368', -123° 9.022'	46° 10' 22.1", -123° 9' 1.3"	46.17280, -123.15037	Clatskanie

Strategy Objective: Exclusion : Exclusion to prevent oil from entering Crims Island wetland area

Implementation: Launch workboat with 700ft. boom and shallow-water skiff from Port Westward boat launch, BL-LCR-53.8L. Use shallow-water skiff to deploy boom in a chevron across the south end slough on Crims Island. Anchor to A and C using shoreside anchor posts. Anchor to B using Danforth or other anchor and along boom length as necessary for conditions.

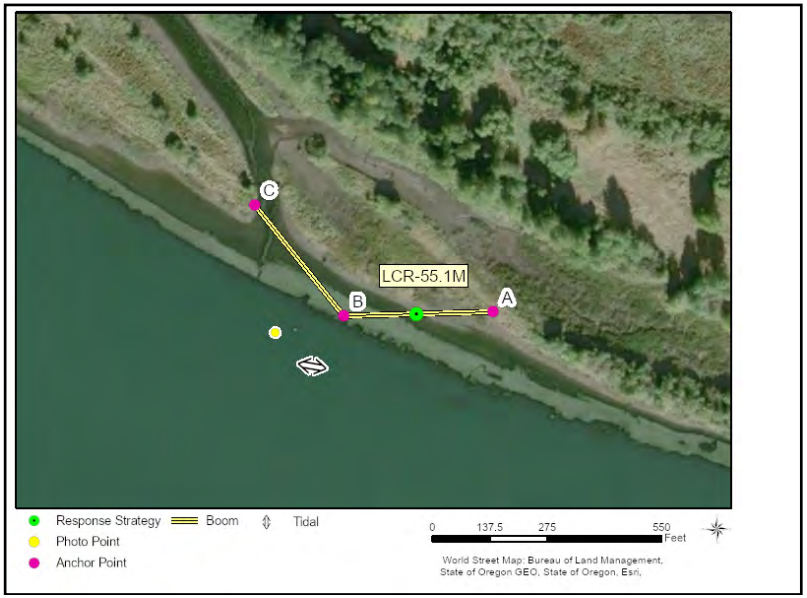
Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Slips, trips, and falls. Shallow water hazards.

Field Notes: Water is very shallow in this area. During low water, strategy may not be feasible or necessary.

Watercourse: Slough - Bradbury Slough

Resources at Risk: Backwater Habitat, Habitat Restoration Site, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



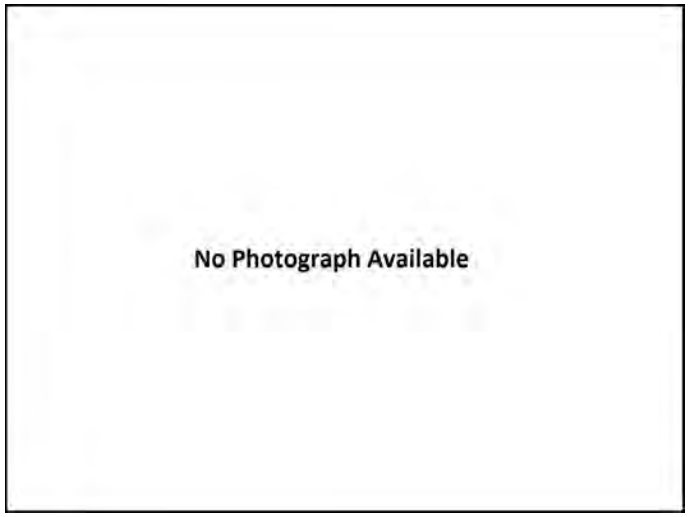
Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

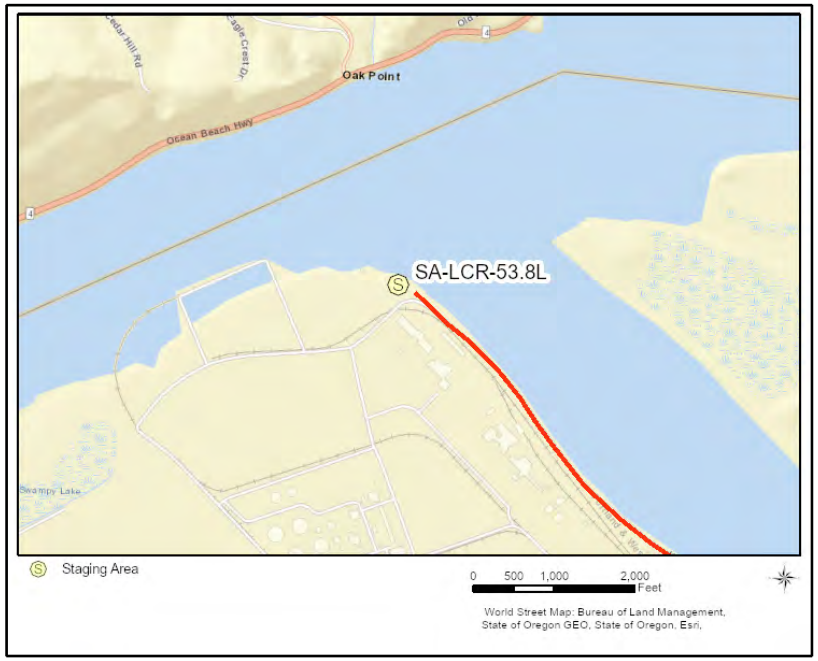
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Crims Island- South Side (OR) LCR-55.1M



LCR-55.1M Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2 miles)
11. Drive past industrial area, boat launch is straight on dirt road.

Gull Island- North Side (OR) LCR-55.3M

Position - Location:	46° 10.985', -123° 8.786'	46° 10' 59.1", -123° 8' 47.2"	46.18309, -123.14644	Cathlamet

Strategy Objective: Exclusion : Prevent oil from entering back waters behind Gull Island

Implementation: Launch workboat with 800ft. boom and shallow-water skiff from Willow Grove boat launch, BL-LCR-57.8R. Use shallow-water skiff to deploy boom across the north opening to the sloughs on Gull Island. Anchor to A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

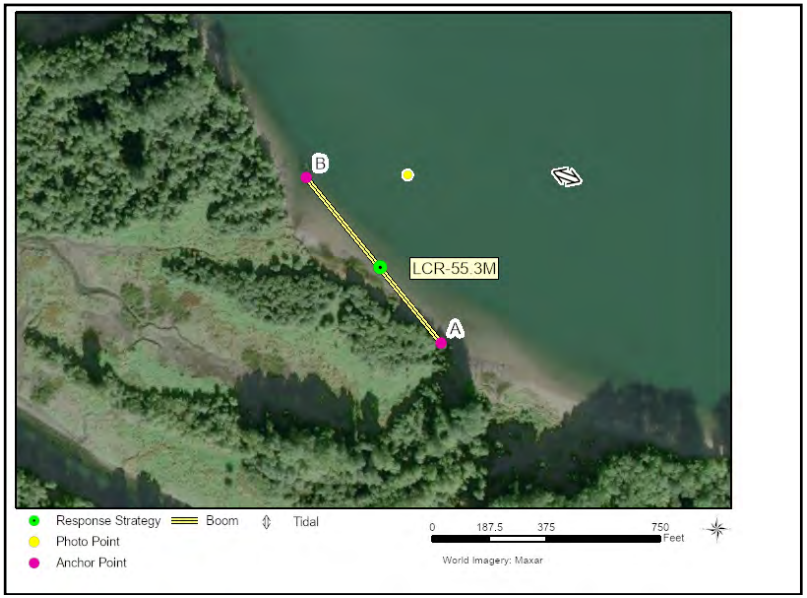
Staging Area: Remote: Stage from Willow Grove County Park, SA-LCR-57.8R

Site Safety: Shallow water hazard, slips, trips, falls.

Field Notes: Boat access only. This strategy is only needed during high flow conditions.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Mud Flat(s), Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

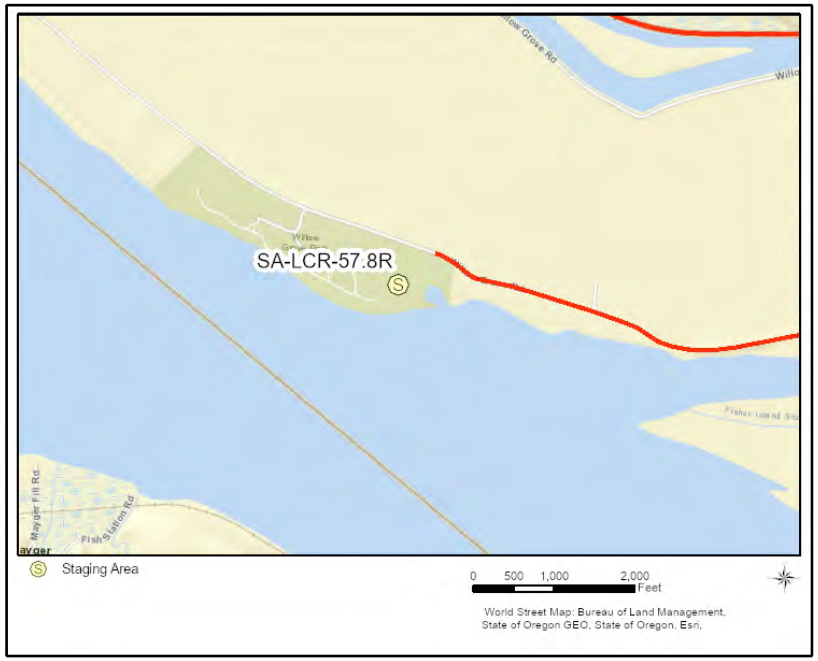
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Gull Island- North Side (OR) LCR-55.3M



LCR-55.3M Photo: View looking west at high water channels through Gull Island.



Site Contact

No Information
Not Determined :

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

Direections to SA-LCR-57.8R
From WA-4, Cathlamet, WA
1. Go east on WA-4 (W Ocean Beach Hwy) (20.51 miles)
2. Turn right on WA-432 (Willow Grove Connection Rd) (0.84 miles)
3. Turn right on Willow Grove Rd (2.98 miles)
4. Finish at 6950 Willow Grove Road, 98632, on the right

John Slough (OR) LCR-55.4L

Position - Location:	46° 10.154', -123° 8.776'	46° 10' 9.2", -123° 8' 46.6"	46.16923, -123.14627	Clatskanie

Strategy Objective: Exclusion : Prevent oil from entering John Slough.

Implementation: Launch workboat with 200ft. boom and shallow-water skiff from Port Westward boat launch, BL-LCR-53.8L. Use shallow-water skiff to deploy boom across Judson Slough. Anchor to A and B using shoreside anchor posts. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Water hazard, slips, trips, falls.

Field Notes: Best access to this strategy is by boat, but there is limited vehicle access from Kallunki Rd. Water is very shallow in this area. Strategy may not be feasible at low water.

Watercourse: Slough - John Slough

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

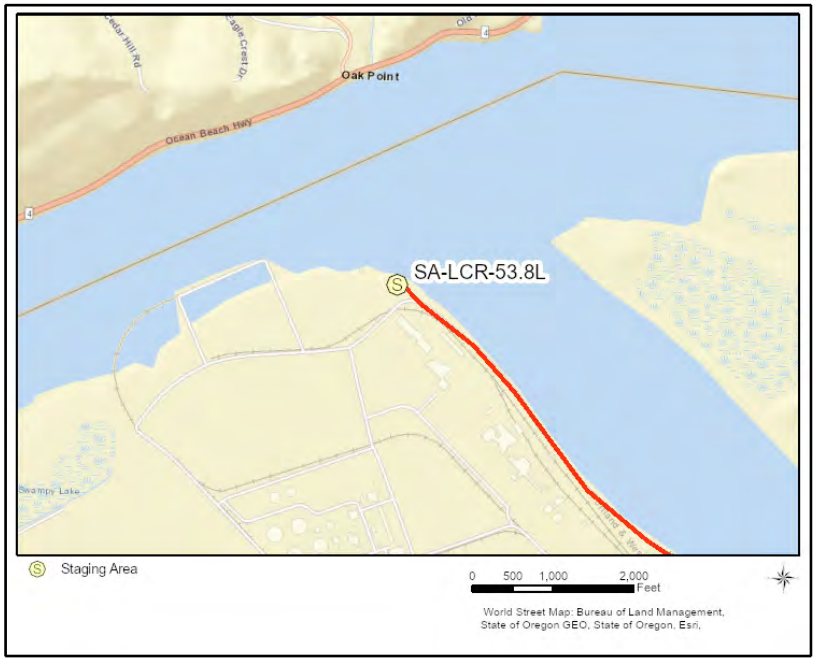
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

John Slough (OR) LCR-55.4L



LCR-55.4L Photo: View to the south looking into John Slough.



Site Contact

No Information
Not Determined :

Nearest Address

80661 Kallunki Road
Clatskanie, OR 97016

Driving Directions

To access site from land:
From US-30, Clatskanie, OR
1. Go northwest on US-30 (Lower Columbia River Hwy) toward SE Conyers St/NE Conyers St ()
2. Turn right on NE Conyers St (0.08 miles)
3. Turn right on Park St (0.19 miles)
4. Turn left on NE 5th St (0.1 miles)
5. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
6. Continue on Beaver Falls Rd (2.38 miles)
7. Continue on Quincy Mayger Rd (2.13 miles)
8. Turn left on Kallunki Rd (0.45 miles)
9. Finish at 80661 Kallunki Road, 97016, on the left

.
To continue to boat launch/staging area, keep straight on Kallunki Rd past Industrial Area, boat launch is on dirt road.

Gull/Crims Islands - East opening (OR) LCR-55.5M

Position - Location:	46° 10.905', -123° 8.668'	46° 10' 54.3", -123° 8' 40.1"	46.18175, -123.14447	Longview

Strategy Objective: Exclusion : Prevent oil from entering backwaters behind Gull Island.

Implementation: Launch workboat with 400ft. boom and shallow-water skiff from Willow Grove boat launch, BL-LCR-57.8R. Use shallow-water skiff to deploy boom across the north opening on Gull Island. Anchor to AP-1 and AP-2 using natural anchor points or shoreside anchoring systems. Anchor every 100-150ft. along boom length or as necessary for conditions

Staging Area: Remote: Stage at Willow Grove County Park, SA-LCR-57.8R

Site Safety: Shallow water hazard, slips, trips, falls.

Field Notes: Boat access only. Water is very shallow in this area and access will not be possible during low water. Strategy is only necessary during high water.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

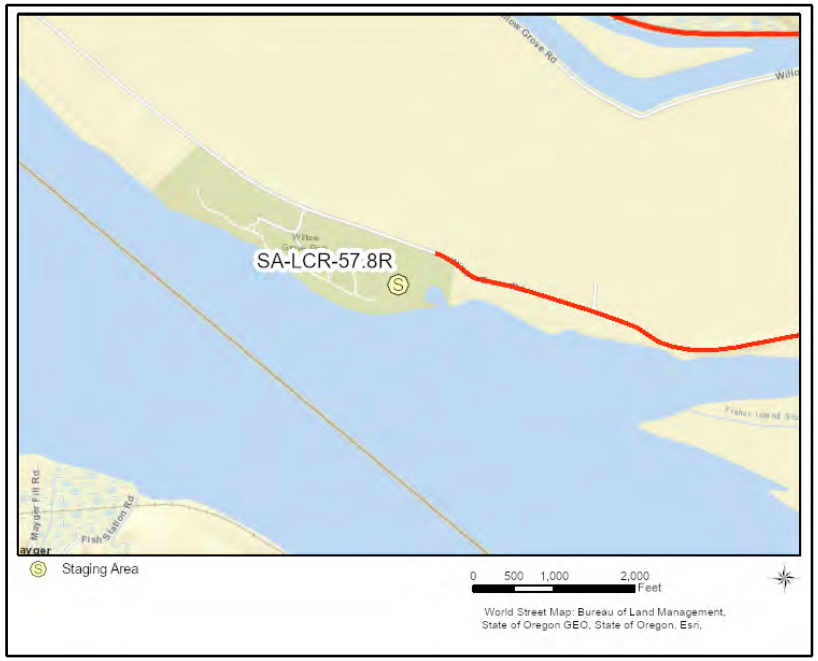
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Gull/Crims Islands - East opening (OR) LCR-55.5M



LCR-55.5M Photo: View to the southwest at the low area of Gull Island.



Site Contact

No Information
Not Determined :

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

Directions to SA-LCR-57.8R
From WA-4, Cathlamet, WA
1. Go east on WA-4 (W Ocean Beach Hwy) (20.51 miles)
2. Turn right on WA-432 (Willow Grove Connection Rd) (0.84 miles)
3. Turn right on Willow Grove Rd (2.98 miles)
4. Finish at 6950 Willow Grove Road, 98632, on the right

Crims Island Channel (OR) LCR-55.6M

Position - Location:	46° 10.295', -123° 8.536'	46° 10' 17.7", -123° 8' 32.1"	46.17158, -123.14226	Clatskanie

Strategy Objective: Exclusion : Prevent oil from entering wetland rehabilitation area.

Implementation: Launch workboat with 300ft. boom and shallow-water skiff from Port Westward boat launch, BL-LCR-53.8L. Use shallow-water skiff to deploy boom across south channel opening to wetland restoration site on Crims Island. Anchor to A and B using natural anchor points or shoreside anchoring systems. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Port Westward boat launch, SA-LCR-53.8L. Launch from same BL-LCR-53.8L.

Site Safety: Shallow water hazard, slips, trips, falls.

Field Notes: Boat access only. This strategy is needed for all water levels.

Watercourse: Freshwater Wetland - Crims Island Channel

Resources at Risk: Backwater Habitat, Habitat Restoration Site, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom
1	Each	Workboat(s) - shallow-water

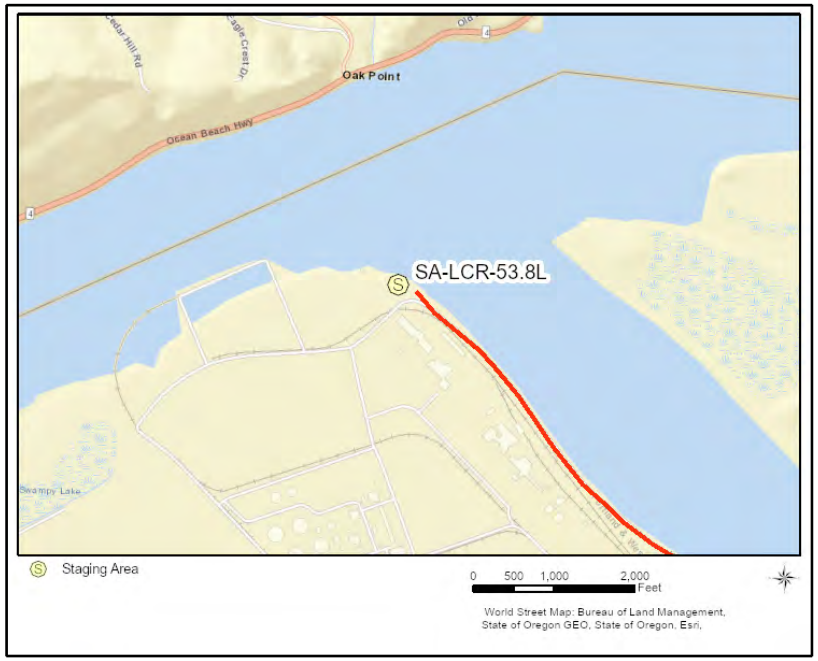
Recommended Personnel

2	Boat Operator
2	Laborer
1	Supervisor

Crims Island Channel (OR) LCR-55.6M



LCR-55.6M Photo: Looking north into access channel into Crims Island wetland area.



Site Contact

No Information
Not Determined :

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (2 miles)
11. Drive past industrial area, boat launch is straight on dirt road.

Germany Creek LCR-55.7R

Position - Location:	46° 11.350', -123° 7.539'	46° 11' 21.0", -123° 7' 32.3"	46.18916, -123.12565	Longview

Strategy Objective: Exclusion : Keep oil out of creek.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southwest, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Raptors, Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

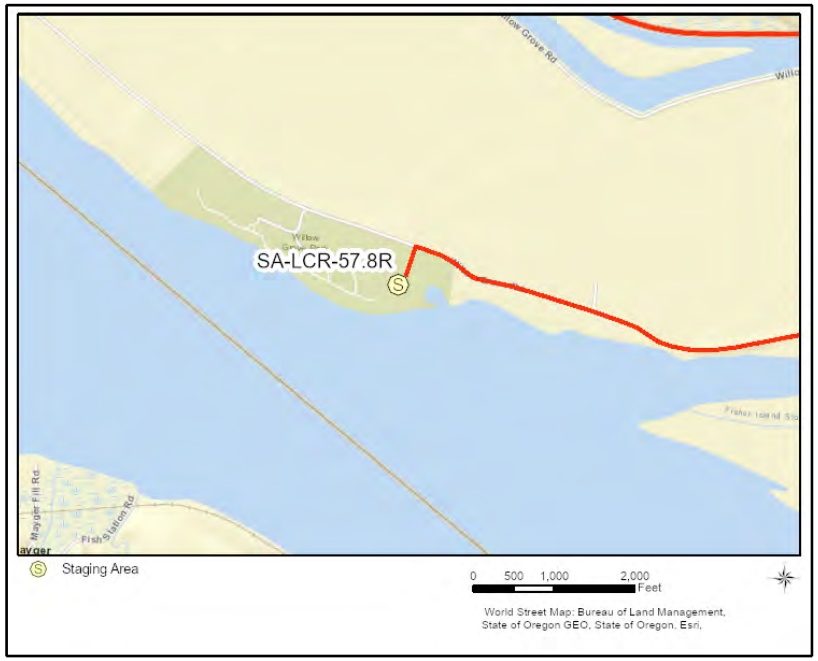
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Germany Creek LCR-55.7R



LCR-55.7R Photo: From Ocean Beach Highway, looking southeast towards river. Photo taken in September.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Coal Creek Slough — LCR-55.9R

Position - Location:	46° 11.371', -123° 6.995'	46° 11' 22.3", -123° 6' 59.7"	46.18952, -123.11659	Longview

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

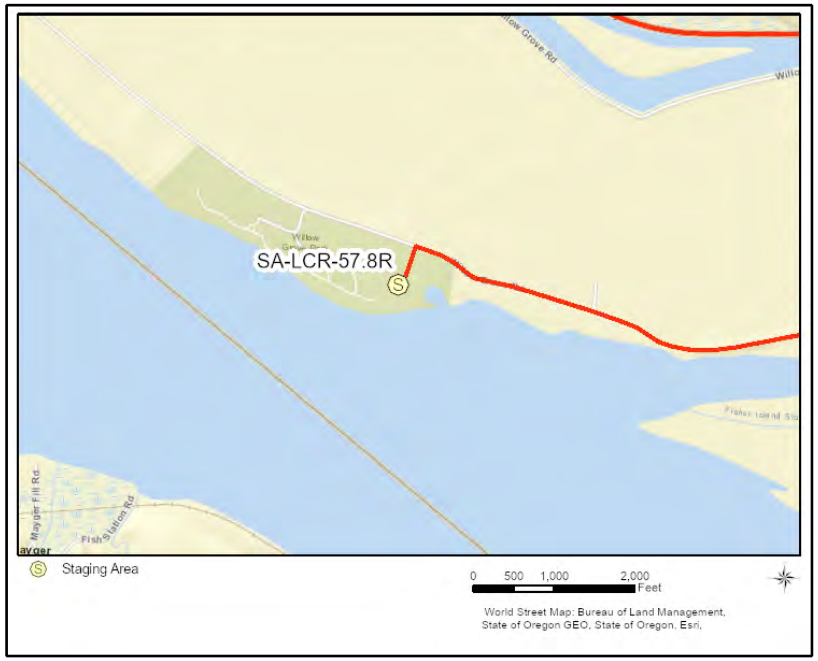
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Coal Creek Slough LCR-55.9R



LCR-55.9R Photo: From Ocean Beach Highway, looking southeast towards anchor point A. Photo taken in September.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Fisher Island and Hump Island — LCR-58.7M

Position - Location:	46° 10.148', -123° 4.567'	46° 10' 8.9", -123° 4' 34.0"	46.16914, -123.07612	Longview

Strategy Objective: Exclusion : Keep oil out of waterbody between the two islands.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom west and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

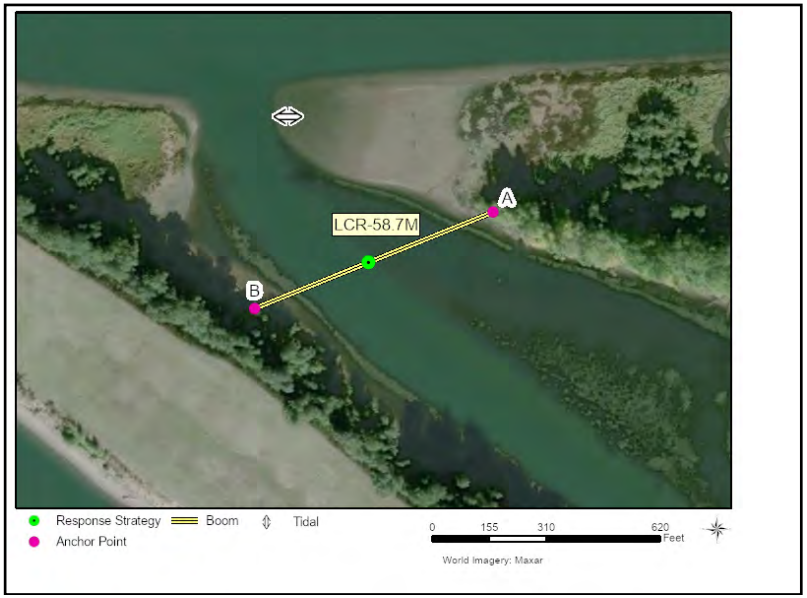
Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Fisher Island is a WDFW property. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Fisher Island Slough

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

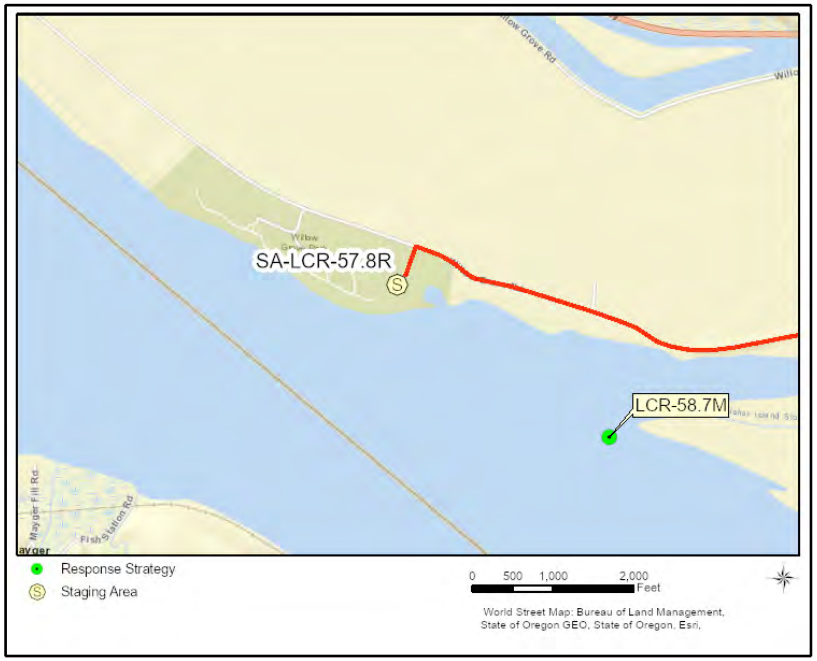
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Island and Hump Island — LCR-58.7M



LCR-58.7M Photo: From above the river, looking northeast towards the entrance to the waterbody between the two islands. Photo taken in June.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Fisher Island Slough - Willow Grove Road — LCR-58.8R

Position - Location:	46° 10.309', -123° 4.382'	46° 10' 18.5", -123° 4' 22.9"	46.17181, -123.07303	Longview

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend remainder southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Vac truck can park on road shoulder. Fisher Island is a WDFW property. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

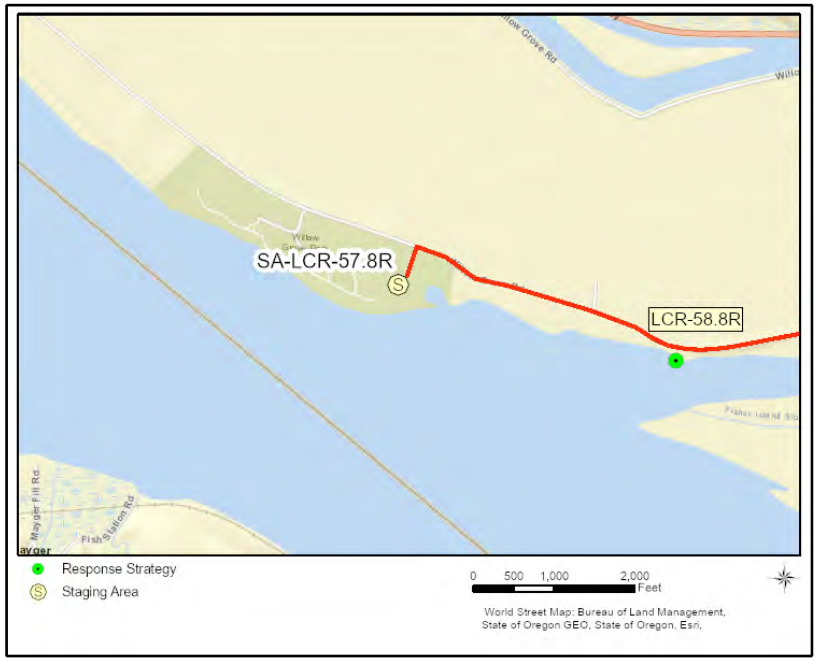
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Island Slough - Willow Grove Road LCR-58.8R



LCR-58.8R Photo: From Willow Grove Rd, looking southeast towards Fisher Island. Photo was taken in March.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Continue forward on Mt Solo Rd (WA-432)
3. Continue forward on Willow Grove Rd (WA-432)
4. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
5. Bear left
6. Location is on the left

Address for vac truck is:
6703 Willow Grove Rd, Longview, WA98632

Fisher Island (West) LCR-58.9M

Position - Location:	46° 10.226', -123° 4.322'	46° 10' 13.5", -123° 4' 19.3"	46.17043, -123.07203	Longview

Strategy Objective: Exclusion : Keep oil out of backwater area.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend boom west and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Fisher Island is a WDFW property. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River (and Fisher Slough)

Resources at Risk: Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Island (West) LCR-58.9M



LCR-58.9M Photo: From the road, looking southeast towards the island (backwater area is in the center right). Photo taken in March.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Fisher Island (East) LCR-59.0M

Position - Location:	46° 10.295', -123° 4.034'	46° 10' 17.7", -123° 4' 2.1"	46.17159, -123.06724	Longview

Strategy Objective: Deflection : Keep oil away from western end of island.

Implementation: Using workboat, deploy 700ft boom at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

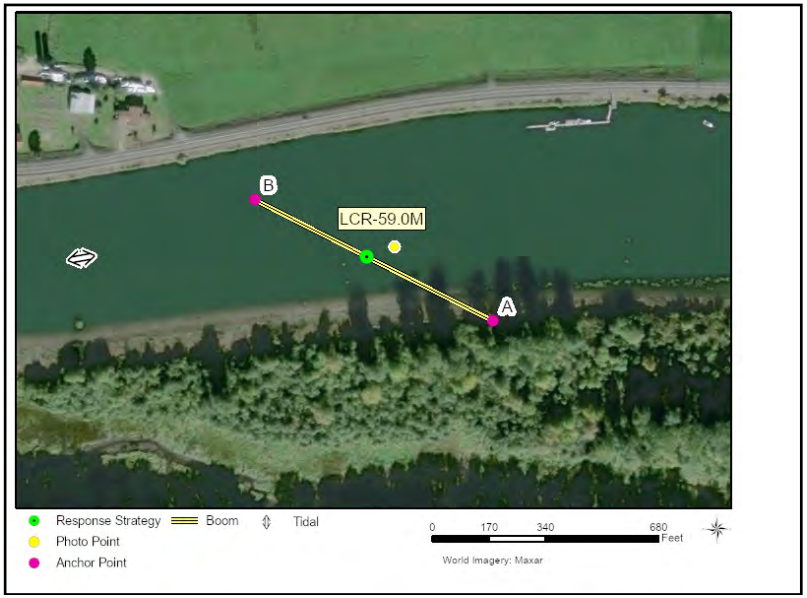
Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

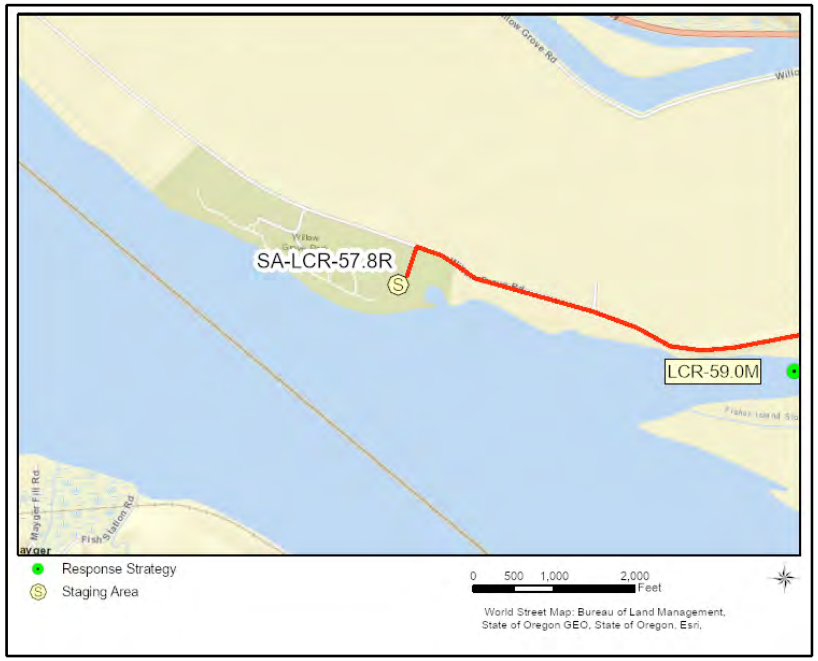
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Island (East) LCR-59.0M



LCR-59.0M Photo: From the middle of the channel, looking northwest towards anchor point B. Photo was taken in June.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Walker Island (OR) LCR-59.8L

Position - Location:	46° 9.083', -123° 3.772'	46° 9' 5.0", -123° 3' 46.3"	46.15139, -123.06286	Longview

Strategy Objective: Collection : Prevent oil from moving up channel behind island.

Implementation: Launch workboat from BL-LCR-57.8R, Willow Grove boat launch, with 600 ft. boom. Deploy boom at downstream angle to collect oil moving upstream with tide or wind. Anchor to AP-1 using natural anchors or shoreside anchor posts and to AP-2 using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage.

Staging Area: Remote: Stage at SA-LCR-57.8R, Willow Grove County Park

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction.

Field Notes: Boat access only. At 30 feet from shore water is about 25 feet deep. Do not allow people/equipment within25' of railroad tracks.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

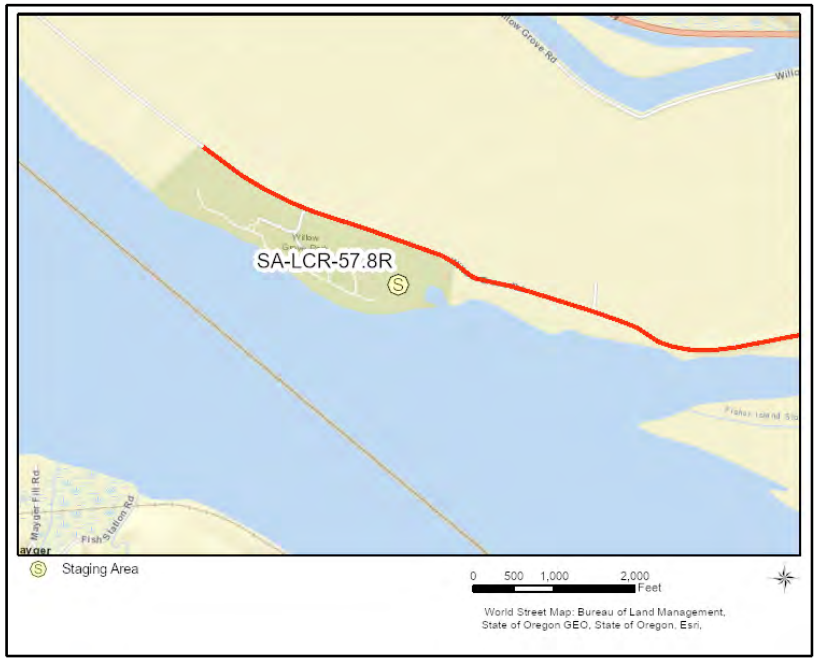
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Walker Island (OR) LCR-59.8L



LCR-59.8L Photo: Looking downriver along shoreline at LCR-59.8. Note railroad tracks along shoreline.



Site Contact

No Information
Not Determined :

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

Directions to SA-LCR-57.8R
From I-5 S, Kelso, WA
1. Go south on I-5 toward 40 (0.79 miles)
2. At exit 40 take ramp on the right toward WA-4/Kelso/Longview/Long Beach (0.24 miles)
3. Turn right on WA-431 (Kelso Ave N) (0.79 miles)
4. Turn right on WA-4 (Cowlitz Way) (3.67 miles)
5. Turn left on 38th Ave (1.09 miles)
6. Turn right on WA-432 (Industrial Way) (2.47 miles)
7. Turn left on Willow Grove Rd (3.58 miles)
8. Finish at Willow Grove Rd., 98632, on the left

Fisher Island - East End — LCR-60.2M

Position - Location:	46° 9.925', -123° 3.028'	46° 9' 55.5", -123° 3' 1.7"	46.16542, -123.05047	Longview

Strategy Objective: Exclusion : Keep oil out of backwater area within the island.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend boom north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-57.8R Willow Grove Beach (7141 Willow Grove Rd, Longview, WA 98632).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Fisher Island is a WDFW property. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marsh, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

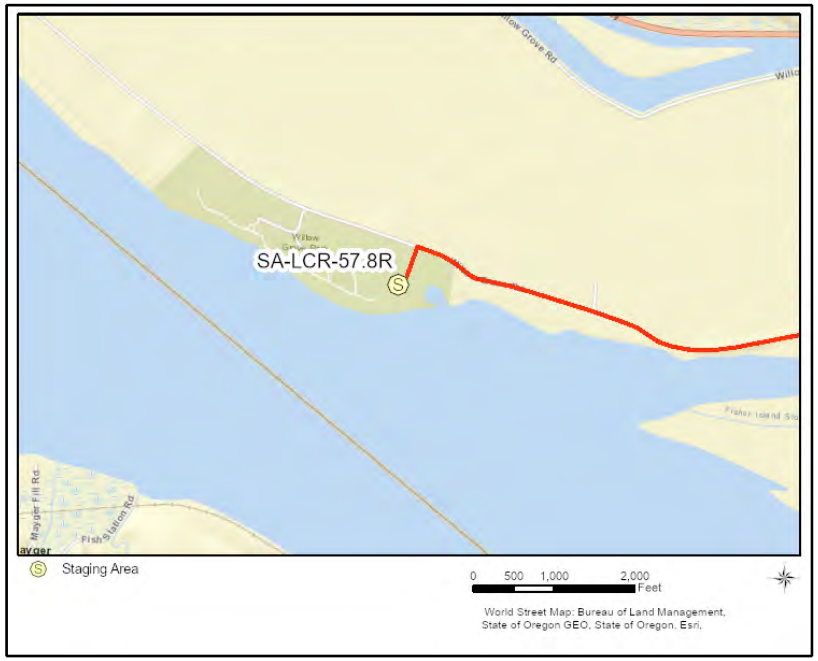
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Island - East End LCR-60.2M



LCR-60.2M Photo: From the slough, looking south into the backwater area. Photo taken in March.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Willow Grove Beach (SABL-LCR-57.8R):
1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Lord Island - E end (OR) LCR-64.0M

Position - Location:	46° 7.325', -122° 59.929'	46° 7' 19.5", -122° 59' 55.7"	46.12208, -122.99881	Longview

Strategy Objective: Collection, Exclusion : Prevent oil from moving through the channel between Lord Island and Slaughters Dike.

Implementation: Launch workboat from BL-LCR-57.8R, Willow Grove boat launch, with 1600 ft. boom. Deploy boom across the opening between Lord Island and Slaughters Dike. Use the existing wood piling (46.12148, -122.99786) as the anchor point for the apex of a chevron at B. Southern section of boom is 900 ft; northern section is 700 ft. Anchor at A and C using natural anchor points or shoreside anchor posts. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect on water using portable skimmer and storage.

Staging Area: Remote: Stage at SA-LCR-57.8R, Willow Grove County Park

Site Safety: Slips, trips, and falls. Shallow water near Lord Island. Wing wall pillings and vessel traffic pose hazards.

Field Notes: This strategy may only be feasible during low water and low flow conditions.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

14	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1600	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

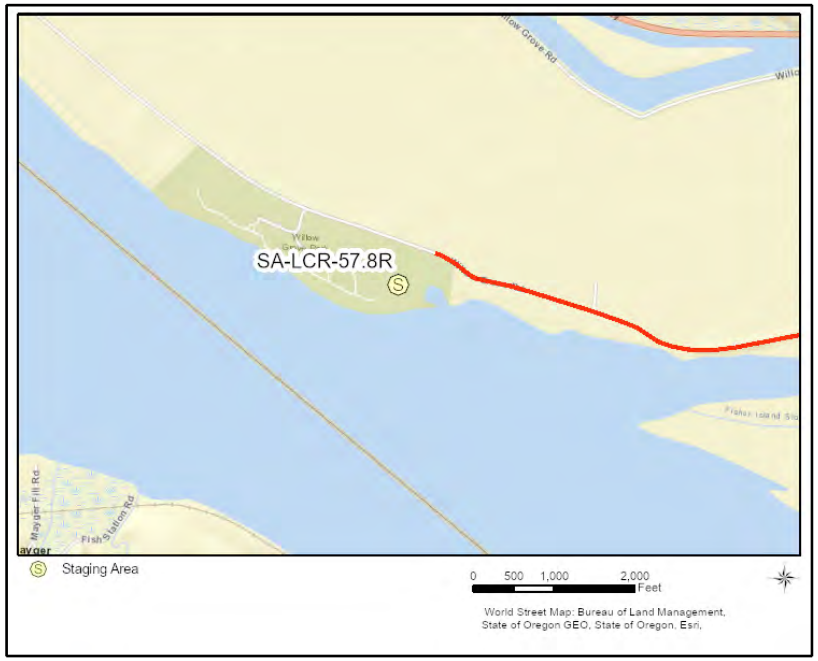
Recommended Personnel

1	Boat Operator
6	Laborer
1	Supervisor

Lord Island - E end (OR) LCR-64.0M



LCR-64.0M Photo: View to the north looking at the SE corner of Lord Island. Note the wingwall pillings in mid-channel.



Site Contact

No Information
Not Determined :

Nearest Address

6950 Willow Grove Road
Longview, WA 98632

Driving Directions

Directions to SA-LCR-57.8R
From I-5 S, Kelso, WA
1. Go south on I-5 toward 40 (0.79 miles)
2. At exit 40 take ramp on the right toward WA-4/Kelso/Longview/Long Beach (0.24 miles)
3. Turn right on WA-431 (Kelso Ave N) (0.79 miles)
4. Turn right on WA-4 (Cowlitz Way) (3.67 miles)
5. Turn left on 38th Ave (1.09 miles)
6. Turn right on WA-432 (Industrial Way) (2.47 miles)
7. Turn left on Willow Grove Rd (2.98 miles)
8. Finish at 6950 Willow Grove Road, 98632, on the right

Slaughters Dike (OR) LCR-64.4L

Position - Location:	46° 7.099', -122° 59.411'	46° 7' 5.9", -122° 59' 24.6"	46.11831, -122.99018	Rainier

Strategy Objective: Collection : Keep oil from moving downriver.

Implementation: Launch workboat from Rainier City Marina or beach onsite with 600 ft. boom. Deploy boom at an angle upriver to collect oil and anchor at A using shoreside anchor posts. Anchor at B using Danforth or other anchor and every 100-150ft. along boom length or as necessary for conditions. Recover with a vac truck staged on site at Slaughters Dike.

Staging Area: Remote: Stage at SA-LCR-67.1L, Rainier City Marina. Launch at same BL-LCR-67.1L or from beach onsite.

Site Safety: Slips, trips, and falls. Vessel traffic and pilings in river.

Field Notes: Good vehicle access with sandy beach for recovery. Maintain a lookout for large vessel traffic when deploying and maintaining this strategy. Large rollers (boat wakes) can approach shore after vessel passage.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

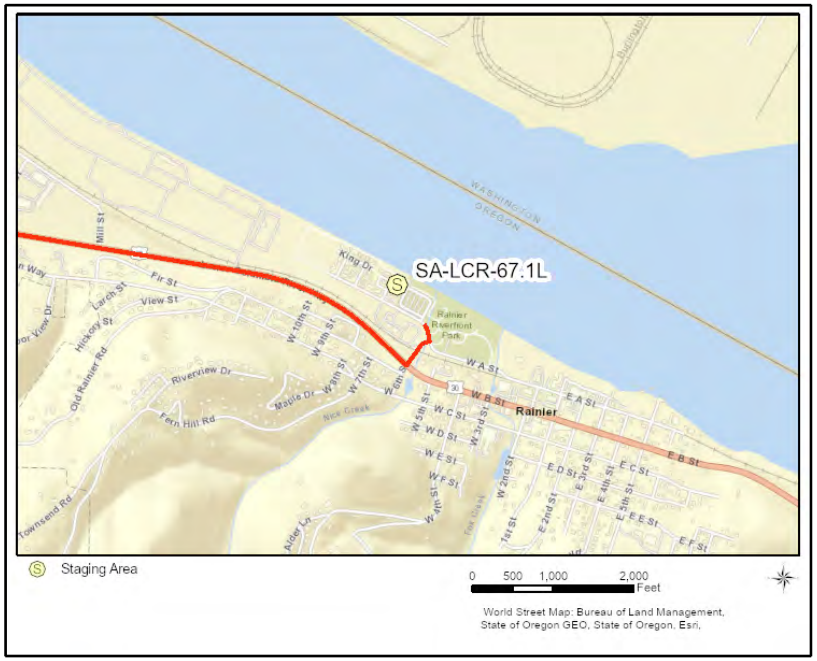
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Slaughters Dike (OR) LCR-64.4L



LCR-64.4L Photo: From beach, looking east/upriver towards anchor point B. Photo was taken at drill in September 2025.



Site Contact

No Information
Not Determined :

Nearest Address

415 W A Street
Rainier, OR 97048

Driving Directions

To boat launch from I-5 S in Kelso, WA:
1. At exit 40 take ramp on the right toward WA-4/Kelso/Longview/Long Beach (0.24 miles)
2. Turn right on WA-431 (Kelso Ave N) (0.79 miles)
3. Turn right on WA-4 (Cowlitz Way) (0.57 miles)
4. Turn left on 7th Ave SW (1.59 miles)
5. Turn right on WA-432 (Tennant Way) (0.53 miles)
6. Bear left on WA-433 (Oregon Way) (2.71 miles)
7. Just after Lewis & Clark Bridge make sharp left on US-30 E (Lower Columbia River Hwy)
8. Continue on US-30 for 1.56 miles
9. Turn left on W 6th St (Veterans Way) (0.08 miles)
10. Turn left on W A St, boat launch is just ahead on right.

**To access site at Dike Rd from boat launch:
1. Head west on US-30 E for 1.04 miles
2. Take the next right on Mill Rd, which turns into Dike Rd (1.19 miles)
3. After Ege Rd, turn right across railroad tracks to follow dirt roads to river access.

Port of Longview (Below Lewis & Clark Bridge) LCR-65.9R

Position - Location:	46° 6.442', -122° 57.564'	46° 6' 26.5", -122° 57' 33.8"	46.10737, -122.95940	Rainier

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 700ft boom at anchor point A. Then extend remainder south and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to riverbank. Call port before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Economic Resources, Resident Fish, Salmonids



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

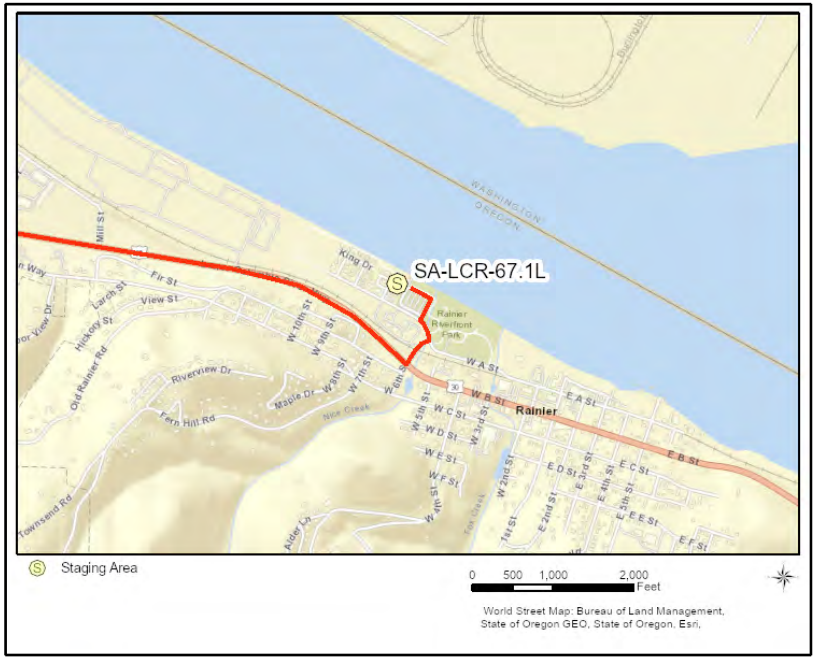
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Longview (Below Lewis & Clark Bridge) LCR-65.9R



LCR-65.9R Photo: From the main channel, looking northeast towards riverbank. Photo was taken in April.



Site Contact

Port of Longview
Land/Property Owner :
10 International Way
Longview, WA 98632
360-425-3305

Nearest Address

48 W 7th St
Rainier, OR 97048

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Rainier City Park (SABL-LCR-67.1L):
1. Head north on I-5
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach
4. Continue on WA-432
5. Bear left on WA-433 (Oregon Way)
6. Continue on Lewis And Clark Bridge
7. Head east on US-30 (Lower Columbia River Hwy)
8. Turn left on Veterans Way
9. Turn left on A St
10. Location is on your right

Vac truck can drive to:
E Port Way, Longview, WA98632

Port of Longview (Berth 4) LCR-66.2R

Position - Location:	46° 6.249', -122° 57.097'	46° 6' 14.9", -122° 57' 5.8"	46.10415, -122.95161	Rainier

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 900ft boom at anchor point A. Then extend remainder south and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to riverbank. Call port before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

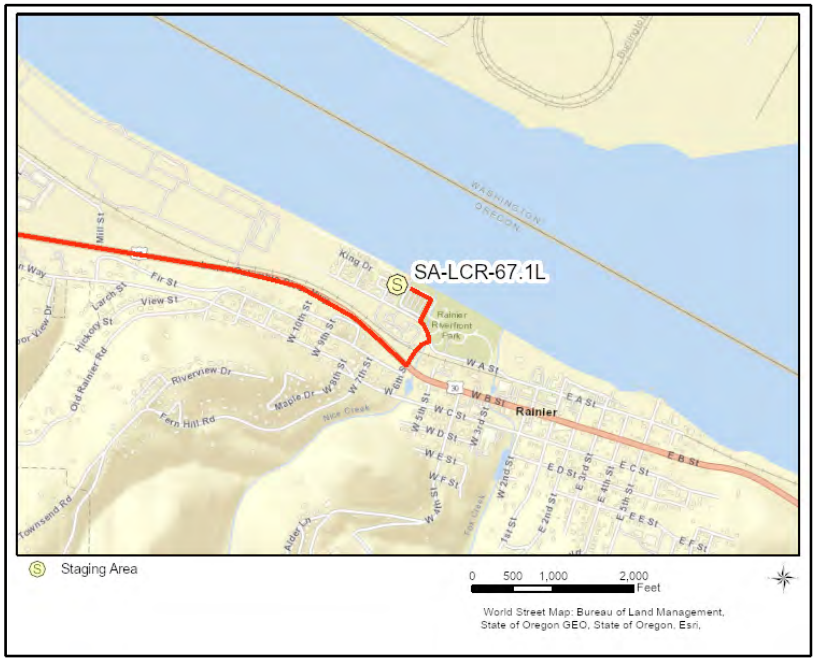
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Longview (Berth 4) LCR-66.2R



LCR-66.2R Photo: From the main channel, looking north towards riverbank. Photo was taken in April.



Site Contact

Port of Longview
Land/Property Owner :
10 International Way
Longview, WA 98632
360-425-3305

Nearest Address

48 W 7th St
Rainier, OR 97048

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Rainier City Park (SABL-LCR-67.1L):
1. Head north on I-5
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach
4. Continue on WA-432
5. Bear left on WA-433 (Oregon Way)
6. Continue on Lewis And Clark Bridge
7. Head east on US-30 (Lower Columbia River Hwy)
8. Turn left on Veterans Way
9. Turn left on A St
10. Location is on your right

Port of Longview (Log Pond Entrance) LCR-67.7R

Position - Location:	46° 5.835', -122° 55.670'	46° 5' 50.1", -122° 55' 40.2"	46.09725, -122.92783	Rainier

Strategy Objective: Exclusion : Keep oil out of channel leading to Log Pond.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom to the northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-67.1L Rainier City Park (48 W 7th St, Rainier, OR 97048).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: There is an industrial water intake within the channel. Call the associated notification strategy in the plan.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Economic Resources, Marine Mammals, Resident Fish, Salmonids



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

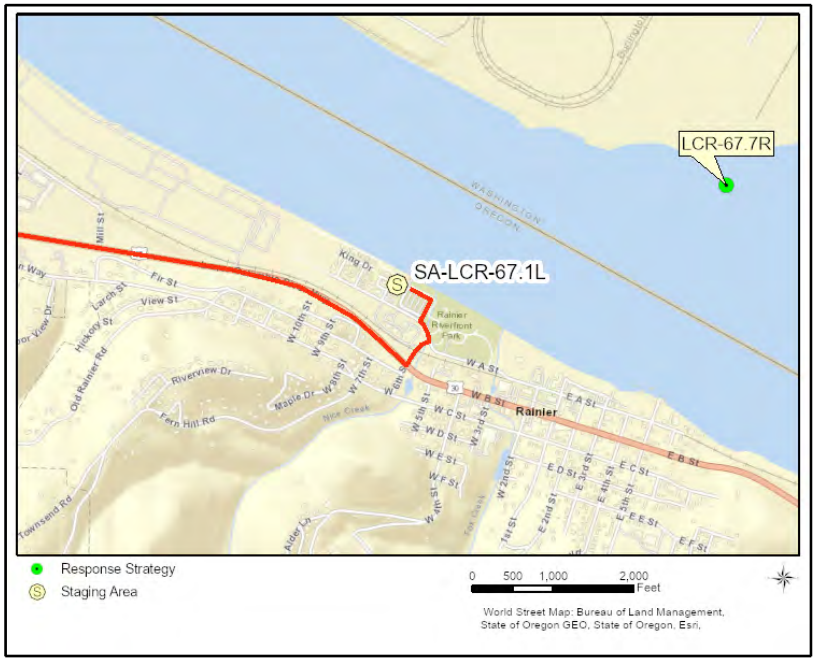
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Longview (Log Pond Entrance) LCR-67.7R



LCR-67.7R Photo: From just inside the channel to the log pond, looking southwest towards the Columbia River. Photo was taken in April.



Site Contact

Port of Longview
Land/Property Owner :
10 International Way
Longview, WA 98632
360-425-3305

Nearest Address

48 W 7th St
Rainier, OR 97048

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Rainier City Park (SABL-LCR-67.1L):
1. Head north on I-5
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach
4. Continue on WA-432
5. Bear left on WA-433 (Oregon Way)
6. Continue on Lewis And Clark Bridge
7. Head east on US-30 (Lower Columbia River Hwy)
8. Turn left on Veterans Way
9. Turn left A St
10. Location is on your right

Cottonwood Island (Carrolls Channel) LCR-70.0M

Position - Location:	46° 4.907', -122° 52.608'	46° 4' 54.4", -122° 52' 36.5"	46.08179, -122.87680	Kalama

Strategy Objective: Exclusion : Keep oil out of backwater area within channel.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend boom to the northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The north end of the channel is quite shallow so approach the location from the south. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Each	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

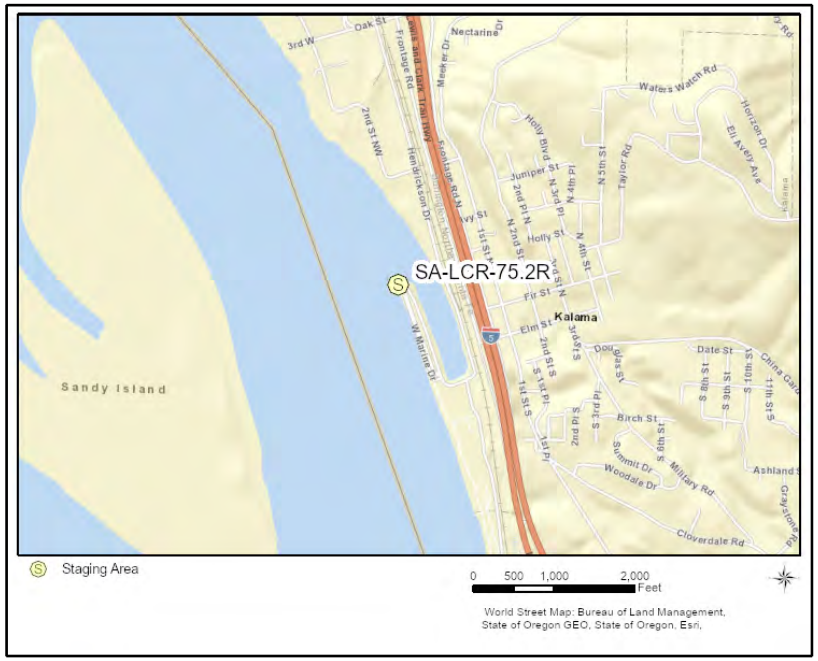
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Cottonwood Island (Carrolls Channel) LCR-70.0M



LCR-70.0M Photo: From the channel, looking south into the backwater area. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Kalama (SABL-LCR-75.2R):
1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Carrolls Channel (South End) LCR-71.4R

Position - Location:	46° 3.482', -122° 52.111'	46° 3' 28.9", -122° 52' 6.7"	46.05804, -122.86852	Kalama

Strategy Objective: Exclusion : Keep oil out of backwater area within channel.

Implementation: Using workboat, deploy 1000ft boom at anchor point A. Then extend boom to the northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: USACE may store their dredging equipment in the vicinity. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B2 (18" to 42")
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Carrolls Channel (South End) LCR-71.4R



LCR-71.4R Photo: From the channel, looking southwest towards anchor point A. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

USACE - Portland District
Land/Property Contact : Environmental
503-808-4708

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Kalama (SABL-LCR-75.2R):
1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Cottonwood Island (South End) LCR-71.5M

Position - Location:	46° 3.293', -122° 52.525'	46° 3' 17.6", -122° 52' 31.5"	46.05489, -122.87542	Kalama

Strategy Objective: Deflection : Keep oil away from western end of island.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Marine Mammals, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Each	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Cottonwood Island (South End) LCR-71.5M



LCR-71.5M Photo: From the channel entrance, looking north towards anchor point A. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Kalama (SABL-LCR-75.2R):
1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Goble Creek (OR) LCR-73.7L

Position - Location:	46° 1.231', -122° 52.594'	46° 1' 13.9", -122° 52' 35.6"	46.02052, -122.87656	Rainier

Strategy Objective: Exclusion : Prevent oil from entering Goble Creek.

Implementation: Launch workboat with 100ft. boom from Goble Marina boat launch, BL-LCR-74.5L. Deploy boom across creek mouth and anchor at A and B using natural anchors or shoreside anchor posts. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at SA-LCR-74.5L, Goble Marina. Launch at same BL-LCR-74.5L.

Site Safety: Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction. Do not allow

Field Notes: Railroad tracks and US-30 cross Goble Creek at this site. Salmon habitat. Peak times are Sept - Oct, Apr - May.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

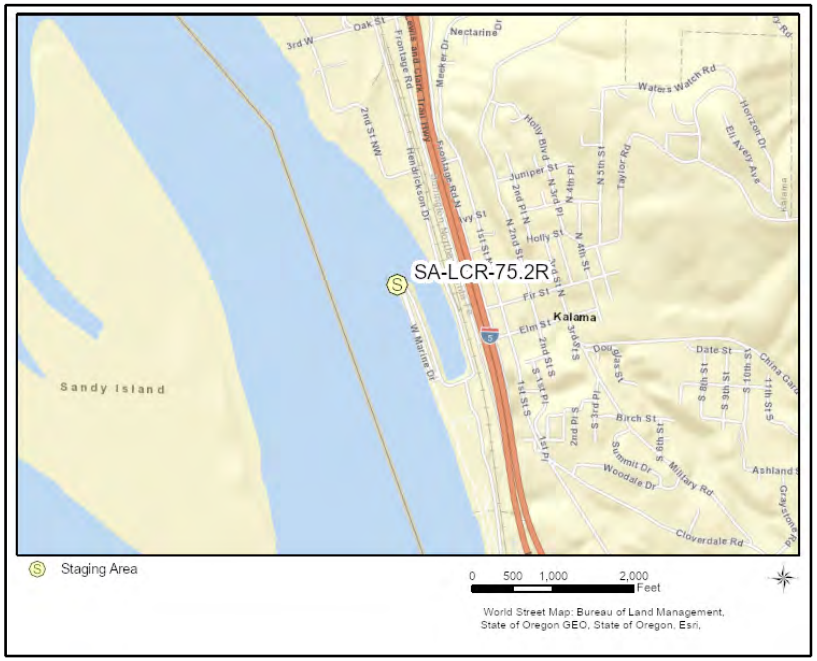
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Goble Creek (OR) LCR-73.7L



LCR-73.7L Photo: View looking SW at mouth of Goble Creek.



Site Contact

No Information
Not Determined :

Nearest Address

70360 Columbia River Hwy
Rainier, OR 97048

Driving Directions

1. Start at I-5 S, Kelso WA
2. Go southeast on I-5 (1.88 miles)
3. At exit 36 bear right onto ramp to WA-432 W toward US-30/Longview/Kelso (0.46 miles)
4. Continue on WA-432 (3.26 miles)
5. Bear left on WA-433 (Oregon Way) (1.8 miles)
6. Continue on Lewis And Clark Brg (0.63 miles)
7. Continue (0.28 miles)
8. Make sharp left on US-30 (Lower Columbia River Hwy) (8.38 miles)
9. Finish at 70360 Columbia River Hwy, 97048, on the left

Tide Creek (OR) LCR-76.0L

Position - Location:	45° 59.652', -122° 52.000'	45° 59' 39.1", -122° 51' 60.0"	45.99420, -122.86666	Kalama

Strategy Objective: Exclusion : Prevent oil from entering Tide Creek.

Implementation: Launch workboat with 1000ft. boom from Port of Kalama boat launch, BL-LCR-75.2R. Deploy boom across creek mouth and anchor at AP-1 and AP-2 using natural anchors or shoreside anchor posts. Anchor every 100-150ft. along boom length or as necessary for conditions.

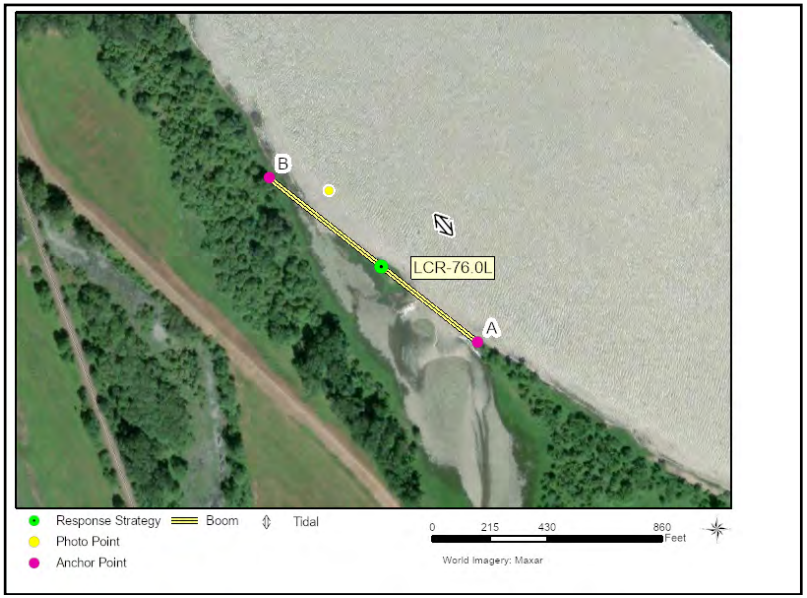
Staging Area: Remote: Stage at Port of Kalama Marina, SA-LCR-75.2R

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Log rafts in area may complicate deployment. Numerous pilings in water.

Watercourse: Creek - Mouth of Tide Creek

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Tide Creek (OR) LCR-76.0L



LCR-76.0L Photo: Close-up of entrance to Tide Creek looking south from Columbia River.



Site Contact

No Information
Not Determined :

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

Directions to SA-LCR-75.2R
From I-5 S, Kelso, WA
1. Go south on I-5 toward 36 (6.11 miles)
2. At exit 30 bear right onto ramp toward Kalama (0.36 miles)
3. Turn right on Oak St (0.05 miles)
4. Turn left on Hendrickson Dr (0.88 miles)
5. Continue on W Marine Dr (0.06 miles)
6. Finish at 380 W Marine Drive, 98625, on the right

Bybee Creek — LCR-78.4R

Position - Location:	45° 58.021', -122° 48.977'	45° 58' 1.2", -122° 48' 58.6"	45.96701, -122.81628	Kalama

Strategy Objective: Exclusion : Keep oil out of Bybee Creek.

Implementation: Using workboat, deploy 200ft boom to south side of outlet at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southwest, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Rail Traffic; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Bybee Creek enters the Columbia River through this culvert. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Bybee Creek LCR-78.4R



LCR-78.4R Photo: From middle of Columbia River, looking northeast towards culvert that passes under train tracks. Photo taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

BNSF Railway
Land/Property Owner : Service Interruption Desk
817-352-2832

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Mill Creek — LCR-78.9R

Position - Location:	45° 57.457', -122° 48.248'	45° 57' 27.4", -122° 48' 14.9"	45.95762, -122.80414	Kalama

Strategy Objective: Exclusion : Keep oil out of Mill Creek.

Implementation: Using workboat, deploy 400ft boom to south side of culvert at anchor point A. Then extend boom northwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southwest, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Mill Creek enters the Columbia River through this culvert. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Waterfowl



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Mill Creek LCR-78.9R



LCR-78.9R Photo: From the river, looking northeast towards culvert that passes under highway. Photo taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Kalama (SABL-LCR-75.2R):
1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Martin Slough (Downriver) LCR-79.5R

Position - Location:	45° 57.363', -122° 48.072'	45° 57' 21.8", -122° 48' 4.3"	45.95605, -122.80120	Kalama

Strategy Objective: Exclusion : Keep oil out of slough behind Martin Island.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom to the north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-75.2R Port of Kalama (950 W Marine Dr, Kalama, WA 98625).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Martin Slough (Downriver) LCR-79.5R



LCR-79.5R Photo: From the river, looking southeast towards anchor point A on Martin Island. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Kalama (SABL-LCR-75.2R):
1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

Goat Island - N end (OR) LCR-79.8L

Position - Location:	45° 56.881', -122° 49.241'	45° 56' 52.9", -122° 49' 14.4"	45.94802, -122.82068	Woodland

Strategy Objective: Exclusion : Prevent oil from entering slough behind Goat Island.

Implementation: Launch workboat from Woodland Bottoms boat launch, BL-LCR-82.1R, with 700ft. boom. Deploy boom across the north end of the slough behind Goat Island. Anchor to AP-1 and AP-2 using natural anchors or shoreside anchor posts and anchor every 100-150ft. along boom length or as necessary for conditions.

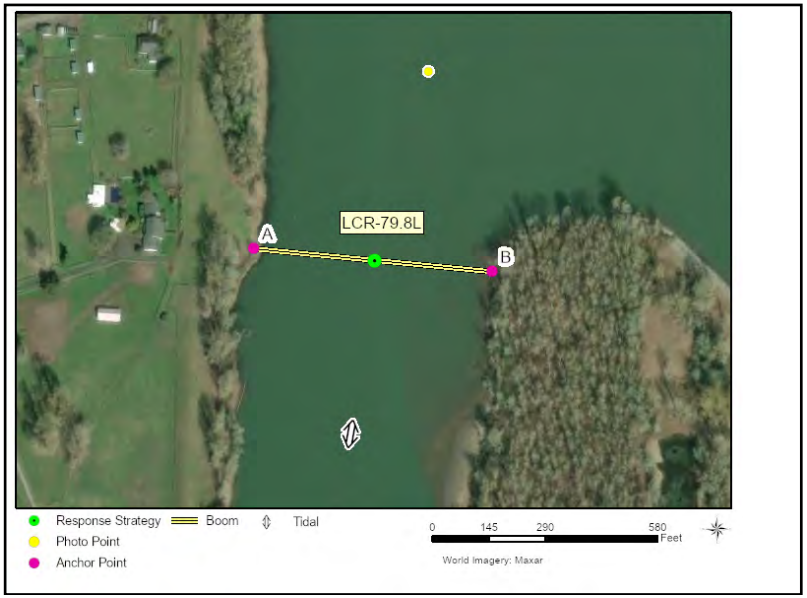
Staging Area: Remote: Stage at Woodland Bottoms, SA-LCR-82.1R. Launch at same BL-LCR-82.1R.

Site Safety: Shallow water. Slips, trips, and falls.

Field Notes: Boat access only. This strategy is mainly needed if oil is moving upriver due to wind or tidal current.

Watercourse: Slough - Goat Island Slough

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Goat Island - N end (OR) LCR-79.8L



LCR-79.8L Photo: View to the south from the northern entrance to the slough behind Goat Island. The shoreline is the left bank (Oregon side) of the Columbia River.



Site Contact

No Information
Not Determined :

Nearest Address

1635 Dike Road
Woodland, WA 98674

Driving Directions

Directions to SA-LCR-82.1R
From I-5 S, Kelso, WA
1. Go southeast on I-5 toward 36 (14.41 miles)
2. At exit 22 bear right onto ramp to Dike Access Road (0.36 miles)
3. Make sharp right on Dike Access Rd (0.26 miles)
4. Continue on Dike Rd SW (1.8 miles)
5. Finish at 1635 Dike Road, 98674, on the right

Martin Slough (Upriver) LCR-81.0M

Position - Location:	45° 56.134', -122° 47.897'	45° 56' 8.1", -122° 47' 53.8"	45.93557, -122.79829	St Helens

Strategy Objective: Exclusion : Keep oil out of slough behind Martin Island.

Implementation: Using workboat, deploy 900ft boom at anchor point A. Then extend boom to the north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L Saint Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Martin Slough (Upriver) LCR-81.0M



LCR-81.0M Photo: From the river, looking east towards the slough. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Saint Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Burke Island — LCR-81.2R

Position - Location:	45° 55.808', -122° 47.964'	45° 55' 48.5", -122° 47' 57.8"	45.93013, -122.79940	St Helens

Strategy Objective: Exclusion : Keep oil out of slough behind Burke Island.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend boom to the northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L Saint Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Each	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Burke Island LCR-81.2R



LCR-81.2R Photo: From the river, looking southeast towards the slough. Photo was taken in February.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Saint Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Goat Island - S end (OR) LCR-81.8L

Position - Location:	45° 55.554', -122° 48.934'	45° 55' 33.2", -122° 48' 56.0"	45.92590, -122.81556	Longview

Strategy Objective: Exclusion : Prevent oil from entering slough behind Goat Island.

Implementation: Launch workboat from Woodland Bottoms boat launch, BL-LCR-82.1R, with 900ft. boom. Deploy boom across the south end of the slough behind Goat Island. Anchor to A and B using natural anchors or shoreside anchor posts and anchor every 100-150ft. along boom length or as necessary for conditions.

Staging Area: Remote: Stage at Woodland Bottoms, SA-LCR-82.1R

Site Safety: Water hazards. Slips, trips, and falls.

Field Notes: Boat access only. Water is shallow with moving sand bars. Amount of boom needed will vary greatly depending on flow conditions.

Watercourse: Slough - Goat Island Slough

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Goat Island - S end (OR) LCR-81.8L



LCR-81.8L Photo: View looking NW into slough behind Goat Island



Site Contact

No Information
Not Determined :

Nearest Address

1635 Dike Road
Woodland, WA 98674

Driving Directions

Directions to SA-LCR-82.1R
From I-5 S, Kelso, WA
1. Go southeast on I-5 toward 36 (14.41 miles)
2. At exit 22 bear right onto ramp to Dike Access Road (0.36 miles)
3. Make sharp right on Dike Access Rd (0.26 miles)
4. Continue on Dike Rd SW (1.8 miles)
5. Finish at 1635 Dike Road, 98674, on the right

Deer Island Slough (OR) LCR-82.4L

Position - Location:	45° 54.850', -122° 49.022'	45° 54' 51.0", -122° 49' 1.3"	45.91417, -122.81704	Longview

Strategy Objective: Exclusion : Prevent oil from entering Deer Island Slough

Implementation: Launch workboat from Woodland Bottoms boat launch, BL-LCR-82.1R, with 400ft. boom. Deploy boom across the south end of Deer Island Slough. Anchor to AP-1 and AP-2 using natural anchors or shoreside anchor posts and anchor every 100-150ft. along boom length or as necessary for conditions.

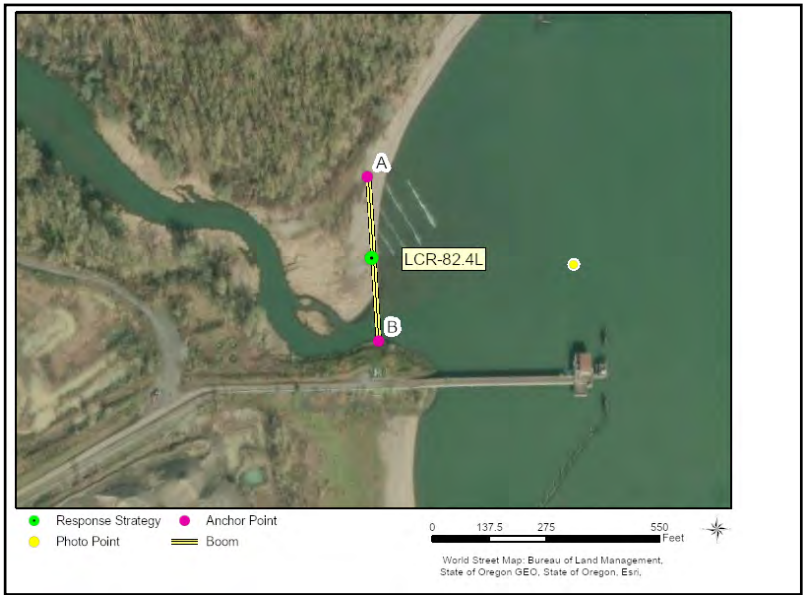
Staging Area: Remote: Stage at Woodland Bottoms, SA-LCR-82.1R. Launch at same BL-LCR-82.1R.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Shallow water and pilings in area. Slough opening will vary greatly in width depending on water flow.

Watercourse: Slough - Deer Island Slough

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Shellfish, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Deer Island Slough (OR) LCR-82.4L



LCR-82.4L Photo: View looking west at the south entrance to Deer Island Slough.



Site Contact

No Information
Not Determined :

Nearest Address

1635 Dike Road
Woodland, WA 98674

Driving Directions

Directions to SA-LCR-82.1R
From I-5 S, Kelso, WA
1. Go southeast on I-5 toward 36 (14.41 miles)
2. At exit 22 bear right onto ramp to Dike Access Road (0.36 miles)
3. Make sharp right on Dike Access Rd (0.26 miles)
4. Continue on Dike Rd SW (1.8 miles)
5. Finish at 1635 Dike Road, 98674, on the right

Goerig Slough (Downriver) LCR-85.6M

Position - Location:	45° 52.408', -122° 47.058'	45° 52' 24.5", -122° 47' 3.5"	45.87346, -122.78430	St Helens

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 700ft boom at anchor point A. Then extend boom to the northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Goerig Slough (Downriver) LCR-85.6M



LCR-85.6M Photo: From the river, looking east towards the slough. Photo was taken in January.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Goerig Slough (Upriver) LCR-85.8R

Position - Location:	45° 52.171', -122° 46.913'	45° 52' 10.2", -122° 46' 54.8"	45.86951, -122.78189	St Helens

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 1000ft boom at island. Then extend boom to the southeast and secure end to mainland. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Pile Dikes; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Pile dikes are present in the area and may be visible above the surface during low water conditions. Consider limited night operations due to submerged hazards. Call Cowlitz County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Goerig Slough (Upriver) LCR-85.8R



LCR-85.8R Photo: From the river channel, looking northeast at deployed strategy. Note pile dikes in background. Low water conditions (September).



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Austin Point — LCR-86.2R

Position - Location:	45° 51.629', -122° 46.869'	45° 51' 37.7", -122° 46' 52.1"	45.86048, -122.78115	St Helens

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend remainder southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call Port of Woodland before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Waterfowl



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Austin Point LCR-86.2R



LCR-86.2R Photo: From the park, looking southwest towards Sauvie Island. Photo was taken in January.



Site Contact

Port of Woodland
Land/Property Owner :
1608 Guild Rd
Woodland, WA 98674
360-225-6555

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Address for collection location is:
3805 Dike Rd, Woodland, WA 98674

Lancaster Lake LCR-87.3R

Position - Location:	45° 50.882', -122° 46.676'	45° 50' 52.9", -122° 46' 40.6"	45.84804, -122.77794	St. Helens

Strategy Objective: Exclusion : Keep oil out of lake (and Gee Creek).

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom to the north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

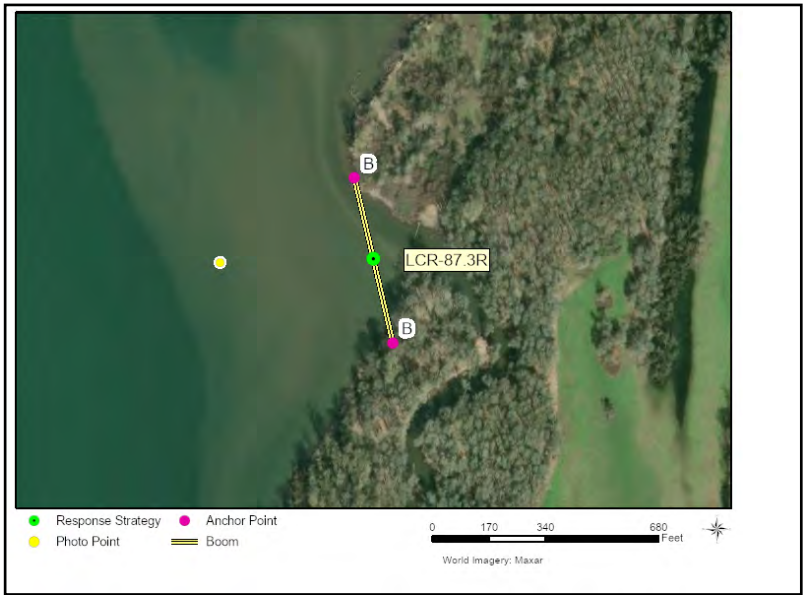
Staging Area: Remote: Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Gee Creek flows through the lake before entering the Columbia. This area makes up the northern extent of Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Habitat Restoration Site, Resident Fish, Salmonids, Sensitive Resources Nearby, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lancaster Lake LCR-87.3R



LCR-87.3R Photo: From the river, looking east towards the lake/creek. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Bachelor Island and Lake River — LCR-87.6R

Position - Location:	45° 50.524', -122° 46.803'	45° 50' 31.5", -122° 46' 48.2"	45.84207, -122.78005	St. Helens

Strategy Objective: Exclusion : Keep oil out of river.

Implementation: Using workboat, deploy 900ft boom at anchor point A. Then extend boom to the northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St. Helens Marina (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia and Lake Rivers

Resources at Risk: Backwater Habitat, Cranes, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Bachelor Island and Lake River LCR-87.6R



LCR-87.6R Photo: From the river, looking east towards anchor point B. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Primary Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
After Hours and Weekends Contact : After-Hours
360-600-6119

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Canvasback Lake — LCR-87.7R

Position - Location:	45° 50.317', -122° 46.998'	45° 50' 19.0", -122° 46' 59.9"	45.83861, -122.78330	St Helens

Strategy Objective: Exclusion : Keep oil out of Canvasback Lake

Implementation: Using workboat, deploy 600ft boom to south side of outlet at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The lake is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - Columbia River

Resources at Risk: Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Canvasback Lake LCR-87.7R



LCR-87.7R Photo: From middle of Columbia River, looking east towards strategy location with Lake River in the background. Photo taken in June 2017.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Turtle Lake — LCR-89.8R

Position - Location:	45° 48.887', -122° 47.325'	45° 48' 53.2", -122° 47' 19.5"	45.81478, -122.78875	St Helens

Strategy Objective: Exclusion : Keep oil out of Turtle Lake

Implementation: Using workboat, deploy 600ft boom to south side of outlet at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The lake is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment. Also, this location is silted at low tides and above water when St Helens gauge is below 4ft.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Turtle Lake LCR-89.8R



LCR-89.8R Photo: From right bank of lake outlet, looking west towards strategy location (and Columbia River).



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Bachelor Island Slough — LCR-91.0R

Position - Location:	45° 47.621', -122° 46.430'	45° 47' 37.2", -122° 46' 25.8"	45.79368, -122.77383	St. Helens

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 600ft boom to south side of slough at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-85.8L St Helens (134 N River St, St Helens, OR 97051).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The slough connects with the Lake River after approximately three miles. This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Cranes, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Bachelor Island Slough LCR-91.0R



LCR-91.0R Photo: From the river, looking east into slough. Photo taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)

Ridgefield, WA 98642
360-887-4106

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

TO STAGING AREA/BOAT LAUNCH at St. Helens Marina (SABL-LCR-85.8L):
1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Campbell Lake LCR-92.3R

Position - Location:	45° 46.958', -122° 46.147'	45° 46' 57.5", -122° 46' 8.8"	45.78263, -122.76912	Vancouver

Strategy Objective: Exclusion : Keep oil out of the lake.

Implementation: Using workboat, deploy 300ft boom at anchor point A. Then extend boom to the northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

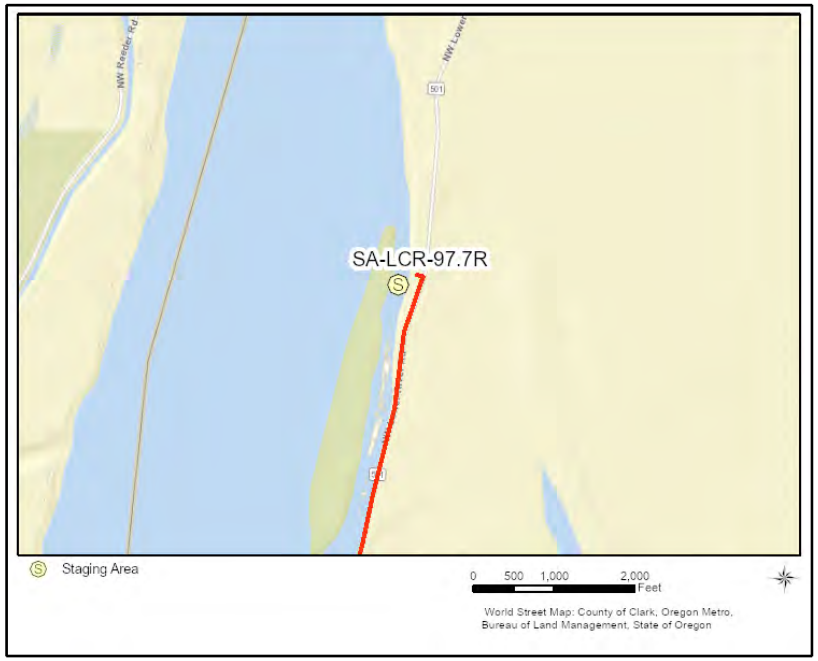
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Campbell Lake LCR-92.3R



LCR-92.3R Photo: From the river, looking east into slough that leads to lake. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)

Ridgefield, WA 98642
360-887-4106

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Post Office Lake LCR-94.3R

Position - Location:	45° 45.254', -122° 45.475'	45° 45' 15.2", -122° 45' 28.5"	45.75423, -122.75792	Vancouver

Strategy Objective: Exclusion : Keep oil out of lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

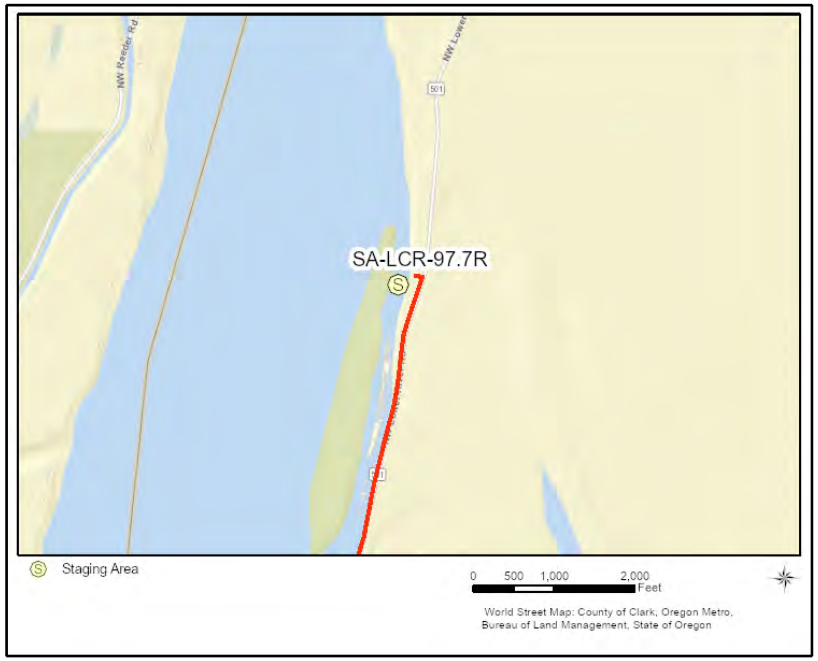
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Post Office Lake LCR-94.3R



LCR-94.3R Photo: From the river, looking northeast towards the riverbank. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)

Ridgefield, WA 98642
360-887-4106

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Willow Bar Island (OR) LCR-94.5L

Position - Location:	45° 45.176', -122° 46.122'	45° 45' 10.5", -122° 46' 7.3"	45.75293, -122.76870	Vancouver

Strategy Objective: Collection, Exclusion : Prevent oil from entering slough behind Willow Bar Islands and collect oil travelling upriver via wind or tide.

Implementation: Launch workboat from Langsdorf Landing, BL-LCR-97.7R, with 600ft. boom. Deploy boom in a chevron configuration across channel opening. Anchor to AP-1 and AP-2 using natural anchor points or shoreside anchor posts. Anchor to AP-3 using Danforth or other appropriate anchor, and anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage.

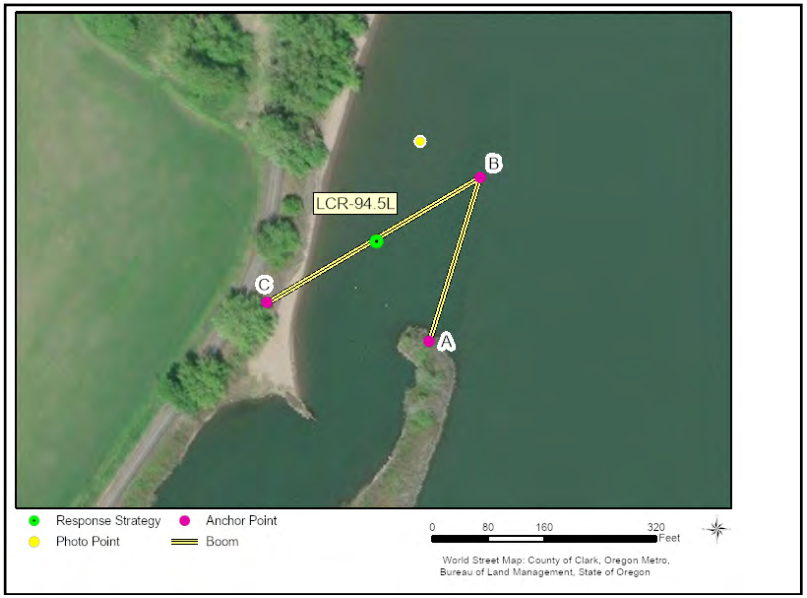
Staging Area: Remote: Stage at Langsdorf Landing, SA-LCR-97.7R

Site Safety: Slips, trips, and falls. Shallow water hazards.

Field Notes: If necessary, site can be accessed land-side from Brown Road on Sauvie Island.

Watercourse: Slough - Willow Bar Island Slough

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

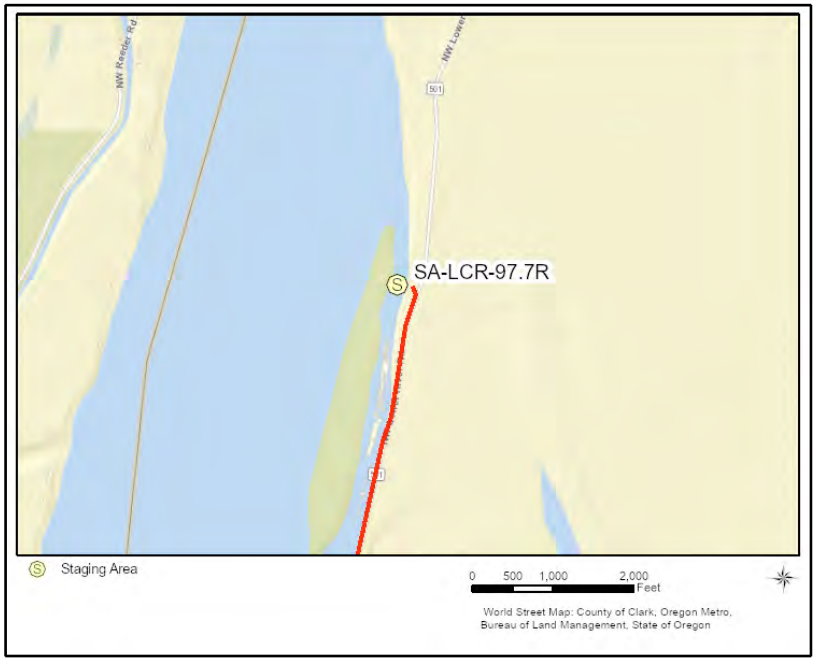
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Willow Bar Island (OR) LCR-94.5L



LCR-94.5L Photo: View to the SW at the entrance to the slough behind Willow Bar Islands.



Site Contact

No Information
Not Determined :

Nearest Address

10000 Northwest Lower River Road
Vancouver, WA 98660

Driving Directions

Directions to BL-LCR-97.7R starting from I-5 South, Ridgefield, WA
1. At exit 1D take ramp on the right to East-4th Plain Blvd-West (0.2 miles)
2. At fork keep right (0.07 miles)
3. Continue on E Fourth Plain Blvd (1.41 miles)
4. Continue (0.14 miles)
5. Continue on WA-501 (NW Lower River Rd) (6miles)
6. Boat launch will be on the left past the marina

Ridgefield Levee Breach #1 LCR-94.8R

Position - Location:	45° 44.860', -122° 45.485'	45° 44' 51.6", -122° 45' 29.1"	45.74766, -122.75809	Vancouver

Strategy Objective: Exclusion : Keep oil out of Post Office Lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

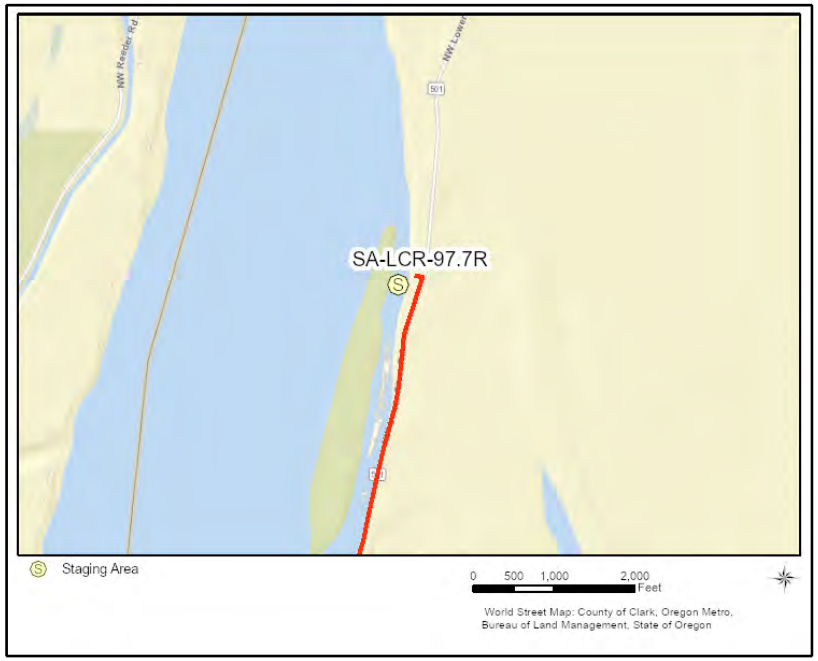
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Ridgefield Levee Breach #1 LCR-94.8R



LCR-94.8R Photo: From the river, looking east towards the riverbank. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
After Hours and Weekends Contact : After-Hours
360-600-6119

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Ridgefield Levee Breach Area #2 LCR-95.0R

Position - Location:	45° 44.698', -122° 45.467'	45° 44' 41.9", -122° 45' 28.0"	45.74496, -122.75779	Vancouver

Strategy Objective: Exclusion : Keep oil out of Post Office Lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north to opposite bank and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Aid to navigation #19 is close to this spot. The area is part of the Ridgefield National Wildlife Refuge. Call USFWS before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

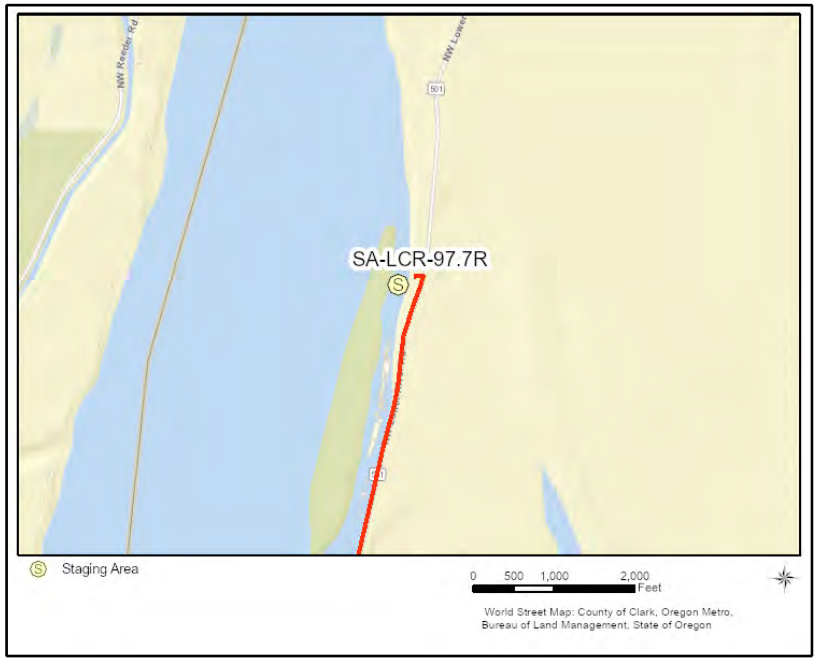
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Ridgefield Levee Breach Area #2 LCR-95.0R



LCR-95.0R Photo: From the river, looking east towards the riverbank. Photo was taken in January.



Site Contact

Ridgefield National Wildlife Refuge
Land/Property Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Land/Property Contact : After-Hours
360-600-6119

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

New Columbia Gardens LCR-97.0R

Position - Location:	45° 42.974', -122° 45.632'	45° 42' 58.5", -122° 45' 37.9"	45.71624, -122.76053	Vancouver

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend remainder southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call farm before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Sensitive Resources



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

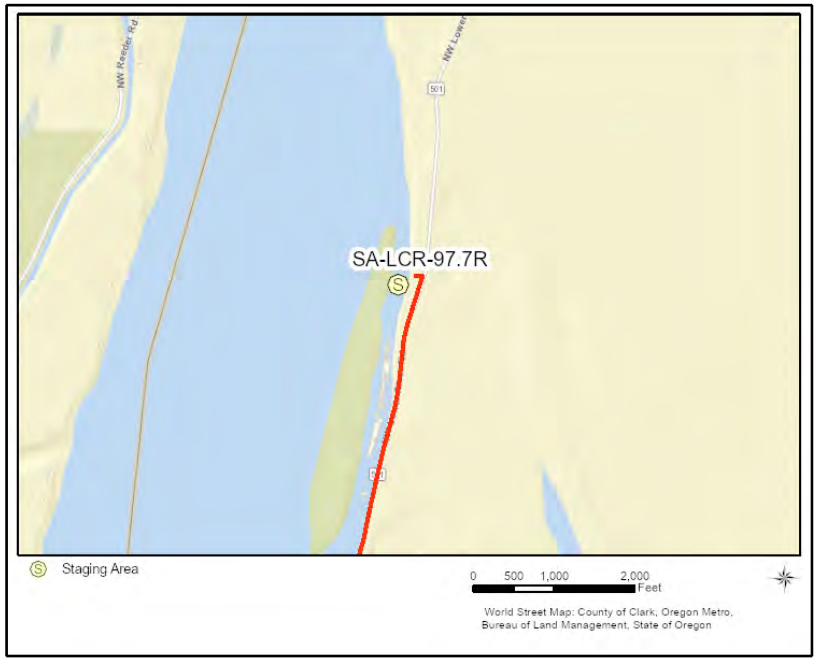
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

New Columbia Gardens LCR-97.0R



LCR-97.0R Photo: From the river, looking east towards riverbank. Photo was taken in January.



Site Contact

New Columbia Gardens
Land/Property Owner :
12112 NW Lower River Rd
Vancouver, WA 98660
360-693-4216

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Address for oil collection:
12112 NW Lower River Rd, Vancouver 98660

Caterpillar Island (Downriver) LCR-97.5R

Position - Location:	45° 42.532', -122° 45.604'	45° 42' 31.9", -122° 45' 36.3"	45.70887, -122.76007	Vancouver

Strategy Objective: Exclusion : Keep oil out of slough behind island.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom to the northeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The Shillapoo South Wildlife Area (WDFW) is located within the slough. Call Clark County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

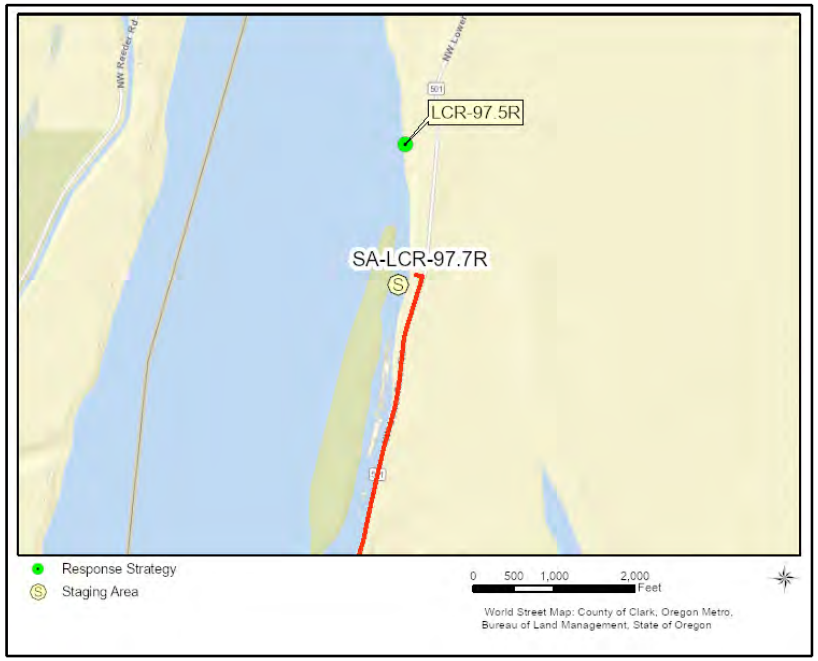
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Caterpillar Island (Downriver) LCR-97.5R



LCR-97.5R Photo: From the slough, looking north towards the river. Photo was taken in January.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Dairy Creek (OR) LCR-98.4L

Position - Location:	45° 41.892', -122° 46.568'	45° 41' 53.5", -122° 46' 34.1"	45.69820, -122.77613	Portland

Strategy Objective: Exclusion : Prevent oil from travelling into Dairy Creek and Sturgeon Lake

Implementation: From BL-LCR-97.7R, launch workboat to mouth of Dairy Creek. Deploy 300ft. boom in a chevron configuration across mouth of Dairy Creek. Anchor to A and C using shoreside anchor posts. Anchor at B using Danforth or other appropriate anchor, and anchor every 100-150ft. along boom length or as appropriate for conditions.

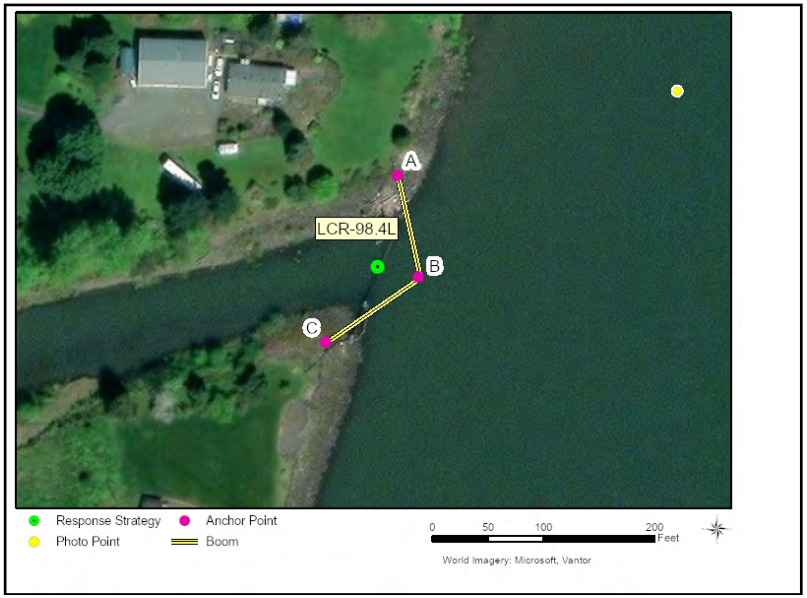
Staging Area: Remote: Stage at SA-LCR-97.7R

Site Safety: Slips, trips, and falls. Water hazards. Possible pilings, shallows and submerged hazards.

Field Notes: Dairy Creek feeds into Sturgeon Lake, which is an important wildlife area. Log jams and debris are present upstream from mouth. At low water, this strategy may not be feasible or necessary.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Habitat Restoration Site, Resident Fish, Salmonids, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

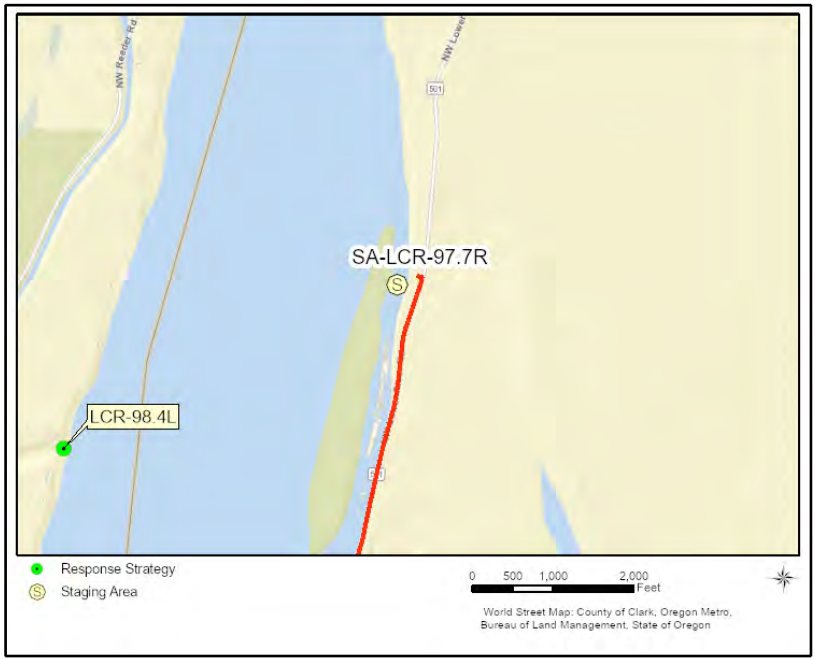
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Dairy Creek (OR) LCR-98.4L



LCR-98.4L Photo: From river, looking towards Dairy Creek.
Photo taken during drill in August 2025.



Site Contact

No Information
Not Determined :

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

Directions to SA-LCR-97.7R
From I-5 S, Vancouver, WA
1. Go south on I-5
2. At exit 1D take ramp on the right to East-4th Plain Blvd-West (0.2 miles)
3. At fork keep right (0.07 miles)
4. Continue on E Fourth Plain Blvd (1.41 miles)
5. Continue (0.14 miles)
6. Continue on WA-501 (NW Lower River Rd) (7.2 miles)
7. Finish at 16198 NW Lower River Rd, 98660, on the left

Caterpillar Island (Upriver) LCR-98.6R

Position - Location:	45° 41.636', -122° 45.877'	45° 41' 38.2", -122° 45' 52.6"	45.69394, -122.76462	Vancouver

Strategy Objective: Exclusion : Keep oil out of slough behind island.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom to the north and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The Shillapoo South Wildlife Area (WA) is located within the slough. Call Clark County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

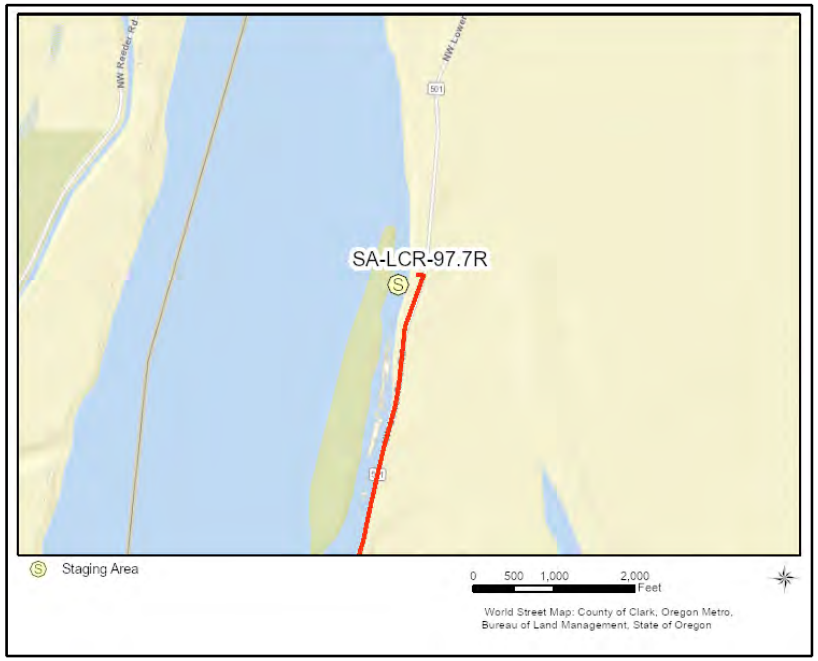
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Caterpillar Island (Upriver) LCR-98.6R



LCR-98.6R Photo: From the slough, looking southwest towards the river. Photo was taken in January.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on W Fourth Plain Blvd
5. Continue on WA-501 (NW Lower River Rd)
6. Boat launch will be on the left past the marina.

Frenchman's Bar Regional Park — LCR-99.9R

Position - Location:	45° 40.616', -122° 46.089'	45° 40' 36.9", -122° 46' 5.3"	45.67693, -122.76815	Vancouver

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend remainder southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call Clark County before deployment.

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: County Park, Resident Fish, Salmonids, Sensitive Resources, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

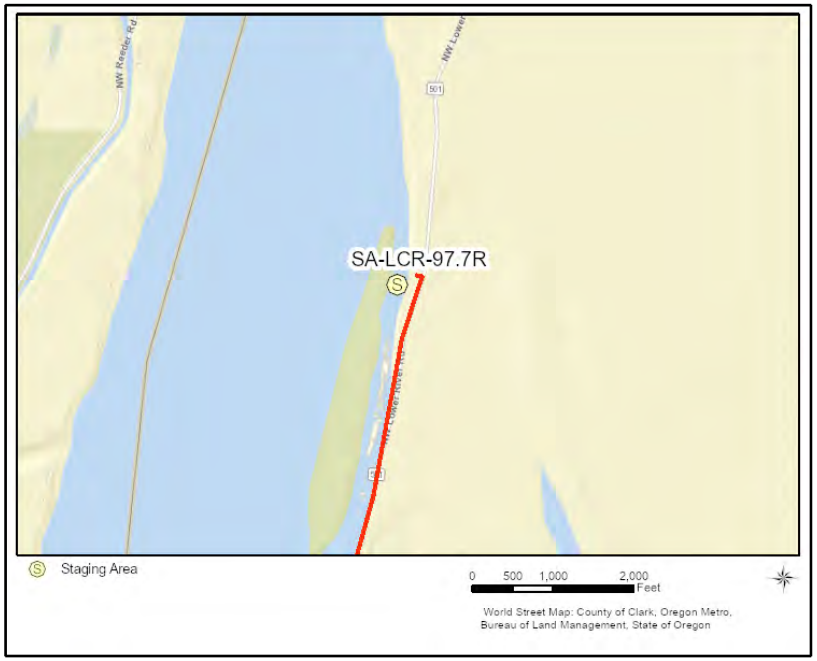
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Frenchman's Bar Regional Park LCR-99.9R



LCR-99.9R Photo: From the river, looking east towards riverbank. Photo was taken at drill in 2019.



Site Contact

Clark County Public Works
Municipality (County/City) : Parks Maintenance & Operations Manager
360-606-9825

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :
360-562-0130

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Address for oil collection:
9612 NW Lower River Rd, Vancouver, WA98660

Vancouver Lake Flushing Channel — LCR-100.8R

Position - Location:	45° 39.927', -122° 45.563'	45° 39' 55.6", -122° 45' 33.8"	45.66545, -122.75939	Vancouver

Strategy Objective: Exclusion : Keep oil out of channel leading to lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: You can drive to the north side of the channel (Blurock Landing). Collection is a possibility from this location. Activate the associated notification strategy (LCR-100.8R-N).

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Each	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

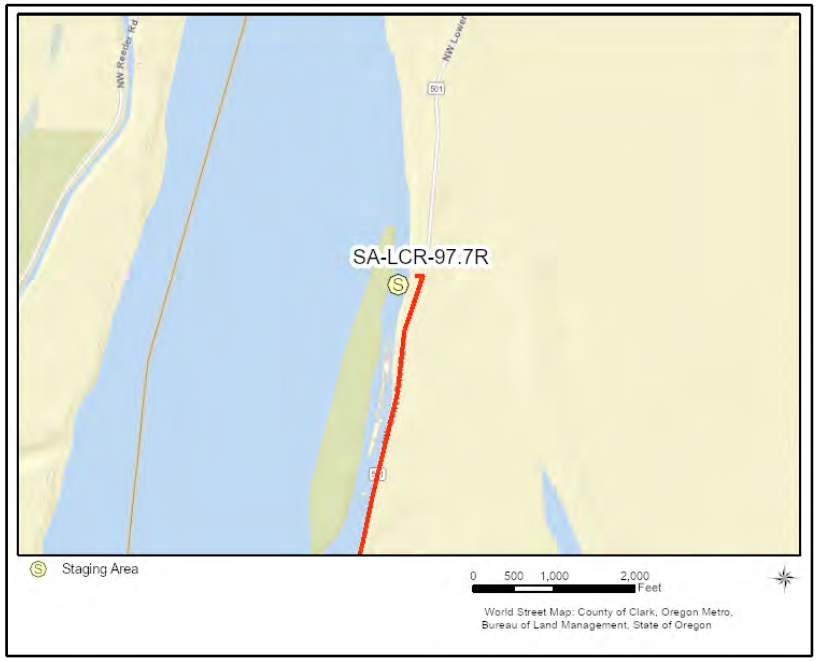
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Vancouver Lake Flushing Channel LCR-100.8R



LCR-100.8R Photo: From Blurock Landing, looking south across channel and out over the river. Photo taken in September.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Vancouver Lake Flushing Channel — LCR-100.8R

Position - Location:	45° 39.927', -122° 45.563'	45° 39' 55.6", -122° 45' 33.8"	45.66545, -122.75939	Vancouver

Strategy Objective: Exclusion : Keep oil out of channel leading to lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom north and secure end near anchor point C. Near boom midpoint, use workboat to pull boom west, creating a chevron, and set near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-97.7R Langsdorf Landing (10612 NW Lower River Rd, Vancouver, WA 98660).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: You can drive to the north side of the channel (Blurock Landing). Collection is a possibility from this location. Activate the associated notification strategy (LCR-100.8R-N).

Watercourse: River - With Tidal Influence - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wetlands



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Each	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

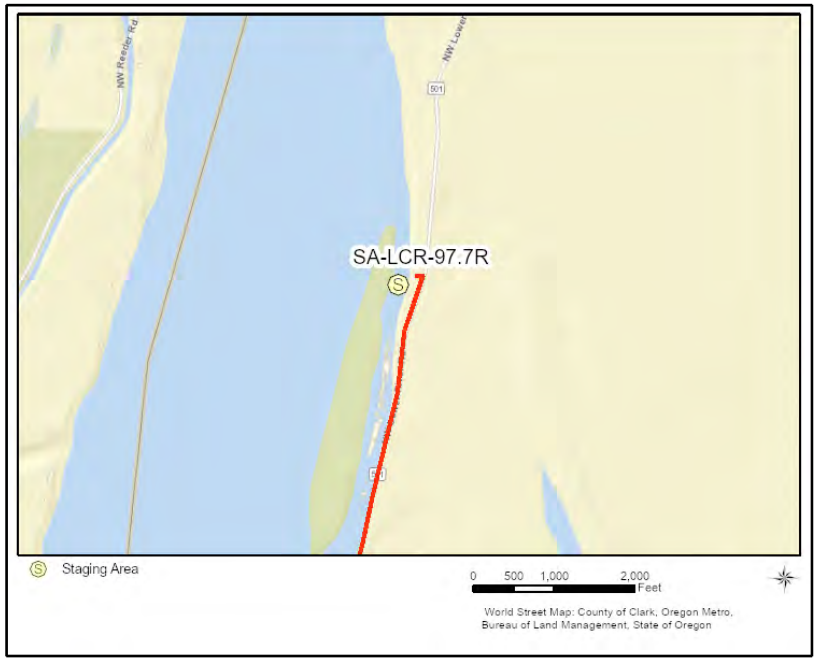
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Vancouver Lake Flushing Channel LCR-100.8R



LCR-100.8R Photo: From Blurock Landing, looking south across channel and out over the river. Photo taken in September.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Langsdorf Landing (SABL-LCR-97.7R):
1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on E Fourth Plain Blvd
5. Continue
6. Continue on WA-501 (NW Lower River Rd)
7. Boat launch will be on the left past the marina.

Waterfront Park (Sunrise Beach) LCR-107.1R

Position - Location:	45° 36.896', -122° 39.370'	45° 36' 53.8", -122° 39' 22.2"	45.61494, -122.65616	Portland

Strategy Objective: Deflection : Keep oil away from city park along riverbank.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call the City of Vancouver before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: City Park, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Waterfront Park (Sunrise Beach) LCR-107.1R



LCR-107.1R Photo: From park, looking southeast towards strategy location. Photo was taken in August.



Site Contact

City of Vancouver Parks and Recreation
Municipality (County/City) :
415 Sixth Street
Vancouver, WA 98660
360-487-8337

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR109.4L):

1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Marine Park (Boat Ramp) LCR-108.4R

Position - Location:	45° 36.714', -122° 37.969'	45° 36' 42.8", -122° 37' 58.2"	45.61190, -122.63282	Portland

Strategy Objective:	Collection : Collect oil moving downriver.
Implementation:	Using workboat, deploy 800ft boom at anchor point A. Then extend remainder southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.
Staging Area:	Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).
Site Safety:	Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard
Field Notes:	There is a wing dam/pile dike just to the east of this location. The vac truck can drive to the riverbank. Call the City of Vancouver before deployment.
Watercourse:	River - Below a Dam - Columbia River
Resources at Risk:	City Park, Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Marine Park (Boat Ramp) LCR-108.4R



LCR-108.4R Photo: From boat ramp and dock, looking southeast/upriver. Photo was taken in June.



Site Contact

City of Vancouver Parks and Recreation
Municipality (County/City) :
415 Sixth Street
Vancouver, WA 98660
360-487-8337

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Address for oil collection:
SE Marine Park Way, Vancouver, WA98661

Marine Park LCR-109.1R

Position - Location:	45° 36.776', -122° 37.400'	45° 36' 46.5", -122° 37' 24.0"	45.61293, -122.62333	Portland

Strategy Objective: Exclusion : Keep oil out of the park.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom west and secure end near anchor point C. Near boom midpoint, use workboat to pull boom south, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4325 NE Marine Dr, Portland, OR 97211).

Site Safety: Slips, Trips, Falls; Submerged Pilings; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The City of Vancouver's Water Resources Education Center is just inland from the riverbank. Call the city before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: City Park, Resident Fish, Salmonids, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Marine Park LCR-109.1R



LCR-109.1R Photo: From the riverbank, looking west towards the stream outlet. Photo was taken in August.



Site Contact

City of Vancouver Water Resources Education Center
Municipality (County/City) :
4600 SE Columbia Way
Vancouver, WA 98661
360-487-7111

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Tidewater Cove Marina — LCR-109.6R

Position - Location:	45° 36.617', -122° 36.686'	45° 36' 37.0", -122° 36' 41.1"	45.61028, -122.61143	Portland

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 500ft boom at anchor point A. Then extend remainder southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call marina before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Marina, Raptors, Resident Fish, Salmonids



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Tidewater Cove Marina LCR-109.6R



LCR-109.6R Photo: From jetty next to marina, looking east/upriver. Photo was taken in January.



Site Contact

Tidewater Cove Marina
Land/Property Owner :
5811 SE Columbia Way
Vancouver, WA 98661
360-977-2015

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Address for oil collection:
5731 SE Columbia Way, Vancouver, WA 98661

Russell Landing LCR-111.0R

Position - Location:	45° 36.267', -122° 34.813'	45° 36' 16.0", -122° 34' 48.8"	45.60445, -122.58022	Portland

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Then extend remainder southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call Clark County for assistance with access to the location.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Raptors, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Russell Landing LCR-111.0R



LCR-111.0R Photo: From river, looking northwest towards anchor point A. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Land/Property Contact :

Vancouver, WA 98660
360-562-0130

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Address for oil collection:
9017 Image Ln, Vancouver, WA98664

Government Island Slough (OR) LCR-113.3M

Position - Location:	45° 35.118', -122° 32.579'	45° 35' 7.1", -122° 32' 34.7"	45.58530, -122.54298	Portland

Strategy Objective: Exclusion : Prevent oil from entering slough.

Implementation: From M. James Gleason Memorial Boat Ramp, BL-LCR-109.4L, launch workboat with 500ft. boom to east side of I-205 bridge at north end of Government Island. Deploy 500ft. boom across the entrance to both sloughs and anchor at A and B using shoreside anchor posts. Anchor every 100-150ft. along boom length or as appropriate for conditions. Note - natural eddy will bring oil into sloughs.

Staging Area: Remote: Stage at SA-LCR-109.4L, M. James Gleason Memorial Boat Ramp. Launch from same BL-LCR-109.4L.

Site Safety: Slips, trips, and falls. Shallow water and sunken debris in area.

Field Notes: Length of boom needed will vary depending on water level.

Watercourse: Slough - Columbia River at Government Island Slough.

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Government Island Slough (OR) LCR-113.3M



LCR-113.3M Photo: Looking east into wetland slough on Government Island.



Site Contact

No Information
Not Determined :

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

1. Start at I-5 S, Vancouver, WA
2. Go southwest on I-5 (2.07 miles)
3. At exit 307 take ramp on the right to Marine Dr. toward Mlk Jr. Blvd./OR99e (0.21 miles)
4. Take ramp to Marine Dr. West toward Expo. Center (0.16 miles)
5. Turn right on OR-99E (N Marine Dr) (0.34 miles)
6. Make sharp left onto ramp to Marine Dr. E. (0.12 miles)
7. Continue on N Marine Dr (2.94 miles)
8. M. James Gleason boat ramp is on the left

McCuddy's Steamboat Landing Marina — LCR-113.8R

Position - Location:	45° 35.533', -122° 31.697'	45° 35' 32.0", -122° 31' 41.8"	45.59221, -122.52829	Portland

Strategy Objective: Deflection : Keep oil away from riverbank.

Implementation: Using workboat, deploy 800ft boom at anchor point A. Secure remainder in river channel past jetty at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-109.4L Broughton Beach Park (4141 NE Marine Dr, Portland, OR 97211).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Marina, Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

McCuddy's Steamboat Landing Marina LCR-113.8R



LCR-113.8R Photo: From end of jetty, looking northeast towards riverbank. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Jewit Lake Intake (OR) LCR-114.8M

Position - Location:	45° 34.909', -122° 30.596'	45° 34' 54.6", -122° 30' 35.7"	45.58182, -122.50993	Portland

Strategy Objective: Exclusion : Keep oil from entering Jewit Lake during high river flow conditions.

Implementation: Launch boat from M. James Gleason boat ramp, BL-LCR-109.4L, with 100ft. boom. Place boom in a chevron configuration in front of weir and anchor at A and C using natural anchor points or shoreside anchor posts. Anchor at B using Danforth or other anchor appropriate for conditions.

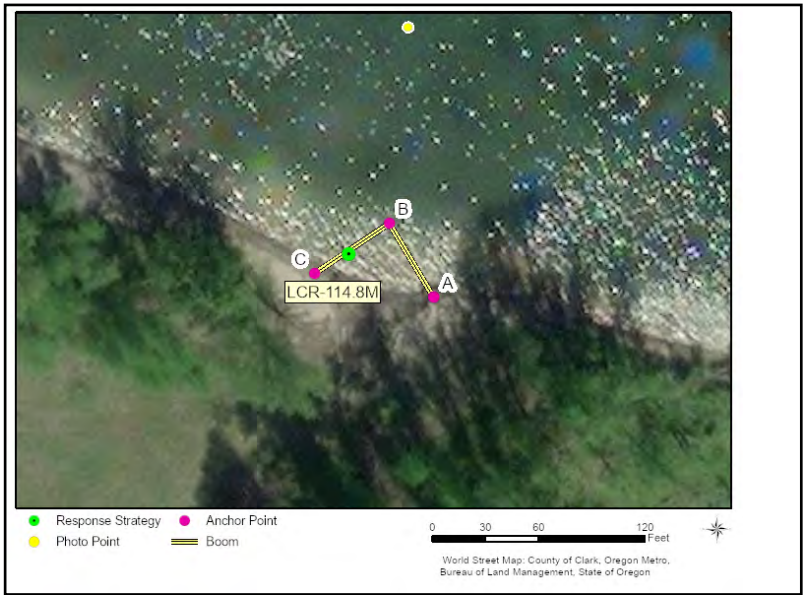
Staging Area: Remote: Stage at SA-LCR-109.4L, M. James Gleason Memorial Boat Ramp. Launch from same BL-LCR-109.4L.

Site Safety: Water hazards, slips, trips, falls.

Field Notes: Site is just downriver from Port of Portland Government Island dock. Boat access only from Vancouver or Portland. Water enters Jewit Lake through weir only during high river flow.

Watercourse: Lake - Jewit Lake

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Jewit Lake Intake (OR) LCR-114.8M



LCR-114.8M Photo: Looking south at weir (backflow preventer), entrance to Jewit Lake.



Site Contact

No Information
Not Determined :

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

1. Start at I-5 S in Vancouver, WA
2. Go southwest on I-5 (2.07 miles)
3. At exit 307 take ramp on the right to Marine Dr. toward Mlk Jr. Blvd./OR99e (0.21 miles)
4. Take ramp to Marine Dr. West toward Expo. Center (0.16 miles)
5. Turn right on OR-99E (N Marine Dr) (0.34 miles)
6. Make sharp left onto ramp to Marine Dr. E. (0.12 miles)
7. Continue on N Marine Dr (2.94 miles)
8. M. James Gleason Memorial Boat Ramp is on the left

Fisher's Landing LCR-115.0R

Position - Location:	45° 35.219', -122° 30.256'	45° 35' 13.2", -122° 30' 15.4"	45.58699, -122.50427	Fairview

Strategy Objective: Exclusion : Keep oil away from the riverbank.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom west and secure end near anchor point C. Near boom midpoint, use workboat to pull boom south, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

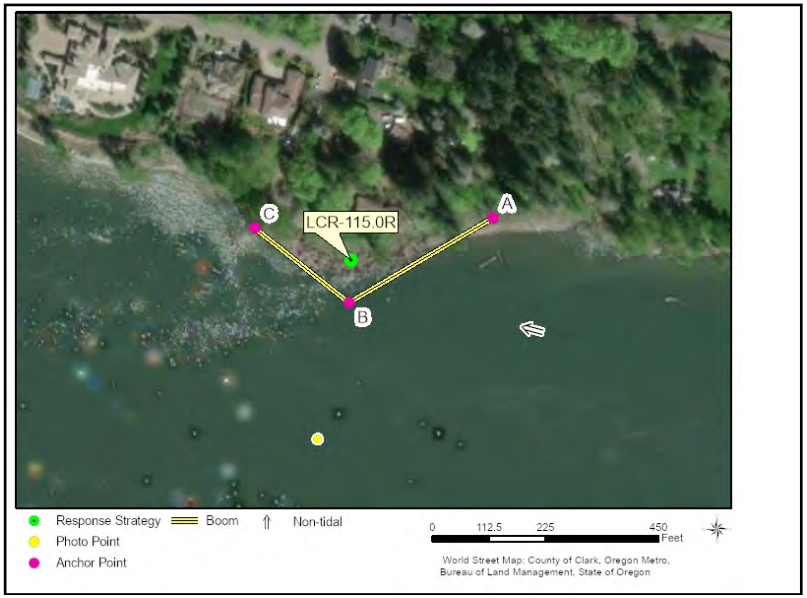
Staging Area: Remote: Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

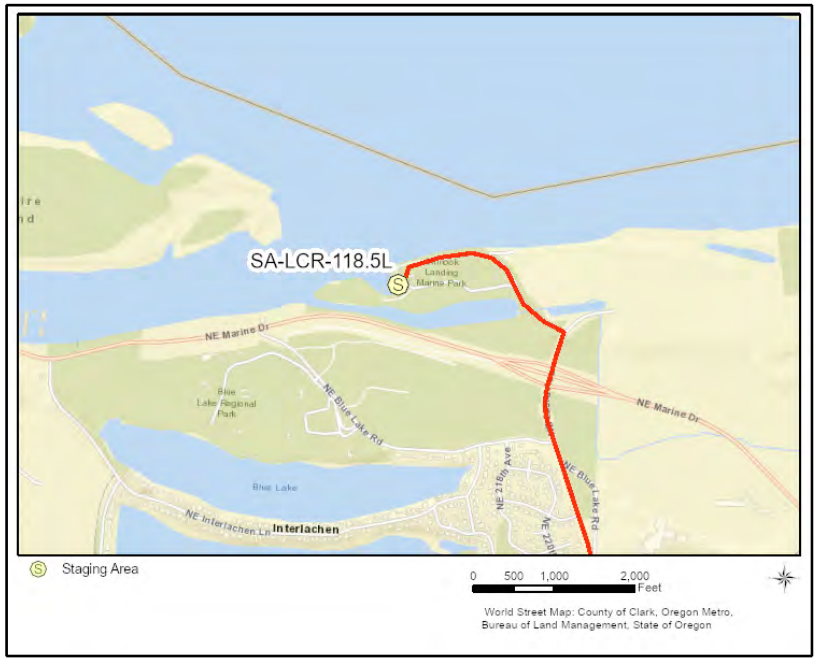
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher's Landing LCR-115.0R



LCR-115.0R Photo: From the river, looking north towards the riverbank. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Chinook Landing Marine Park (SABL-LCR-118.5L):
1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left
12. Finish at 22300 NE Marine Dr, 97024, on the left

Fisher Quarry Channel — LCR-115.7R

Position - Location:	45° 35.060', -122° 29.316'	45° 35' 3.6", -122° 29' 19.0"	45.58433, -122.48860	Fairview

Strategy Objective: Deflection : Keep oil away from riverbank.

Implementation: Using workboat, deploy 600ft boom next to private dock at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fisher Quarry Channel LCR-115.7R



LCR-115.7R Photo: From channel, looking northeast towards riverbank with private dock. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Chinook Landing Marine Park (SABL-LCR-118.5L):
1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left

Ackerman Island LCR-116.9R

Position - Location:	45° 34.814', -122° 27.724'	45° 34' 48.8", -122° 27' 43.4"	45.58023, -122.46206	Fairview

Strategy Objective: Collection : Collect oil moving downriver in side channel north of island.

Implementation: Using workboat, deploy 600ft boom next to boat ramp at anchor point A. Then extend remainder southeast and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: The vac truck can drive to the riverbank. Call Clark County for assistance with access to the location.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

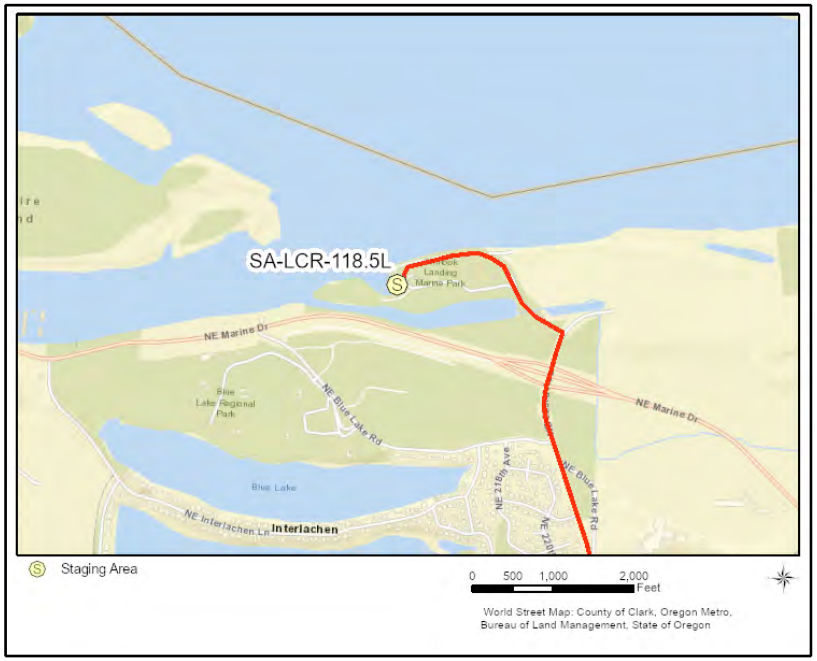
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Ackerman Island LCR-116.9R



LCR-116.9R Photo: From river, looking northwest towards anchor point A next to dirt boat ramp. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Chinook Landing Marine Park (SABL-LCR-118.5L):
1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left

Address for oil collection:
5050 SW 6th Ave, Camas, WA 98607

Lady Island and Camas Slough — LCR-118.5R

Position - Location:	45° 34.561', -122° 26.656'	45° 34' 33.7", -122° 26' 39.4"	45.57602, -122.44427	Fairview

Strategy Objective: Exclusion : Keep oil out of slough behind island.

Implementation: Using workboat, deploy 1000ft boom on island at anchor point A. Then extend boom to the northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-118.5L Chinook Marine Landing Park (5201 NE 223rd Ave, Fairview, OR 97024).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Waterfowl



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

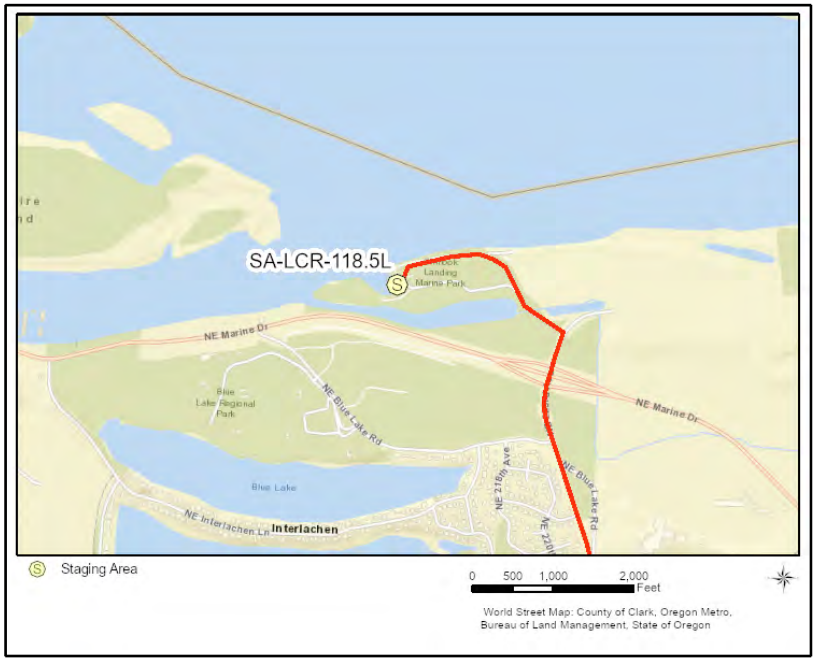
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lady Island and Camas Slough LCR-118.5R



LCR-118.5R Photo: From tip of Lady Island, looking north across mouth of slow. Photo taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Chinook Landing Marine Park (SABL-LCR-118.5L):
1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left

WA-14 Bridge over Camas Slough — LCR-120.6R

Position - Location:	45° 34.600', -122° 24.213'	45° 34' 36.0", -122° 24' 12.8"	45.57667, -122.40355	Washougal

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom west and secure end near anchor point C. Near boom midpoint, use workboat to pull boom south, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-121.6R Port of Camas-Washougal Marina (24 S A St, Washougal, WA 98671).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: If the water level is too low, deployment by land is possible. The Washougal River joins the Columbia River within the slough. Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

WA-14 Bridge over Camas Slough LCR-120.6R



LCR-120.6R Photo: From above the slough, looking south towards the bridge (Columbia River is on the far side).



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

24 S A St
Washougal, WA 98671

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Camas-Washougal Marina (SABL-LCR-121.6R):
1. Head east on WA-14
2. Turn right on 2nd St
3. Turn right on S A St
4. Turn left on S 1st St
5. Turn right on S A St
6. Location is on the right

Captain William Clark Park — LCR-124.7R

Position - Location:	45° 33.631', -122° 20.014'	45° 33' 37.8", -122° 20' .9"	45.56051, -122.33357	Washougal

Strategy Objective: Deflection : Keep oil away from county park.

Implementation: Using workboat, deploy 800ft boom on beach at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-121.6R Port of Camas-Washougal Marina (24 S A St, Washougal, WA 98671).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Steigerwald Lake NWR is just to the east of this location. Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: County Park, Resident Fish, Salmonids, Wildlife Refuge



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Captain William Clark Park LCR-124.7R



LCR-124.7R Photo: From river, looking northeast towards Cottonwood Point. Photo was taken in July.



Site Contact

Clark County Parks
Land/Property Contact :
4700 NE 78th St
Vancouver, WA 98665
564-397-2285

Nearest Address

24 S A St
Washougal, WA 98671

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Port of Camas-Washougal Marina (SABL-LCR-121.6R):
1. Head east on WA-14
2. Turn right on 2nd St
3. Turn right on S A St
4. Turn left on S 1st St
5. Turn right on S A St
6. Location is on the right

Lawton Creek — LCR-128.0R

Position - Location:	45° 33.323', -122° 16.028'	45° 33' 19.4", -122° 16' 1.7"	45.55539, -122.26713	Corbett

Strategy Objective: Exclusion : Keep oil out of creek.

Implementation: Using workboat, deploy 600ft boom at anchor point A. Then extend boom southwest and secure end near anchor point C. Near boom midpoint, use workboat to pull boom southeast, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-128.9L Rooster Rock State Park (I-84, Corbett, OR 97019).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Call Clark County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

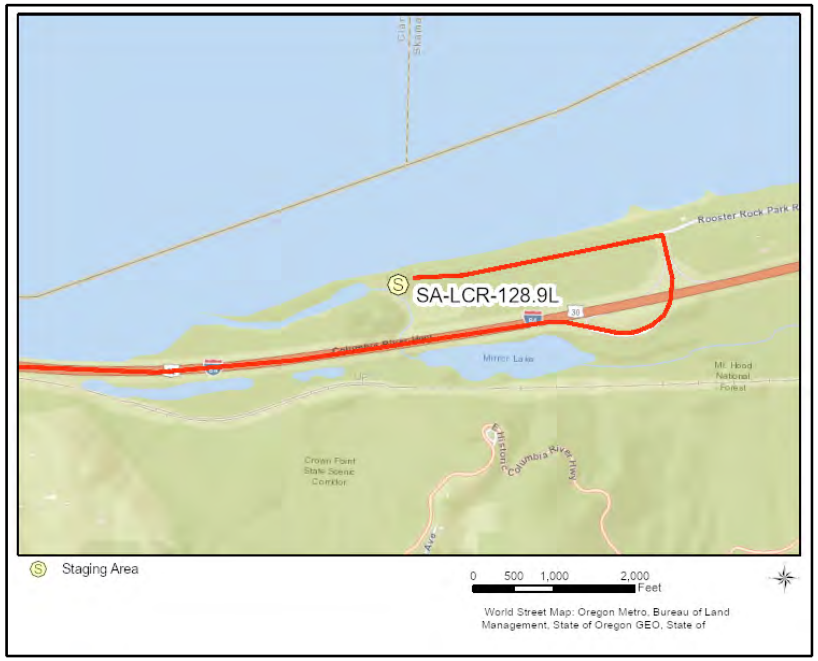
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lawton Creek LCR-128.0R



LCR-128.0R Photo: From the river, looking north towards the riverbank (downriver is to the left).



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

I-84
Corbett, OR 97019

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Rooster Rock State Park (SABL-LCR-128.9L):
1. Head east I-84 E/US-30
2. At exit 25 take ramp toward Rooster Rock Park
3. Turn left on Rooster Rock Park Rd
4. Location is at end of road

Near Cape Horn N of Sand Island (FBS MP-34.0) (OR) LCR-131.0R

Position - Location:	45° 33.771', -122° 12.594'	45° 33' 46.3", -122° 12' 35.6"	45.56285, -122.20990	Corbitt

Strategy Objective: Collection : Collect oil moving downstream from upstream source

Implementation: From BL-LCR-128.9L, launch workboat with 800ft. boom to strategy site. Deploy boom at upstream angle to collect oil travelling downstream. Anchor at AP-1 using shoreside anchor posts. Anchor at AP-2 using Danforth or other appropriate anchor, and anchor every 100-150ft. along boom length or as appropriate for conditions. Collect oil on water using portable skimmer and storage.

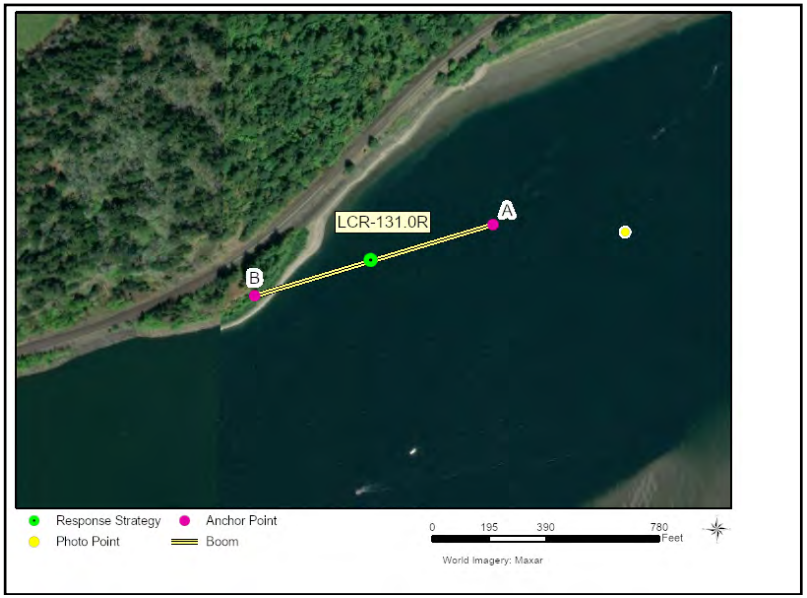
Staging Area: Remote: Stage at Rooster Rock State Park, SA-LCR-128.9L. Launch from same BL-LCR-128.9L.

Site Safety: Slippery banks when wet or icy; trip & fall hazards; water hazards; active railway hazards.

Field Notes: Site is at outcropping adjacent to BNSF railroad where it runs along the banks of the Columbia River.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



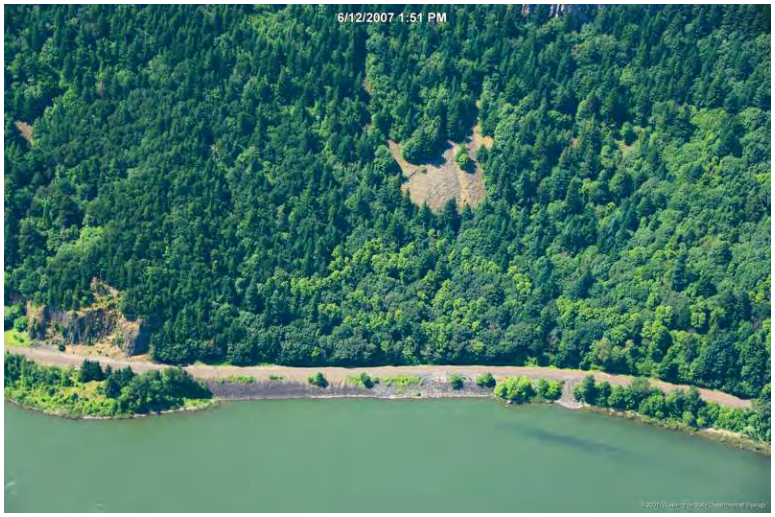
Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

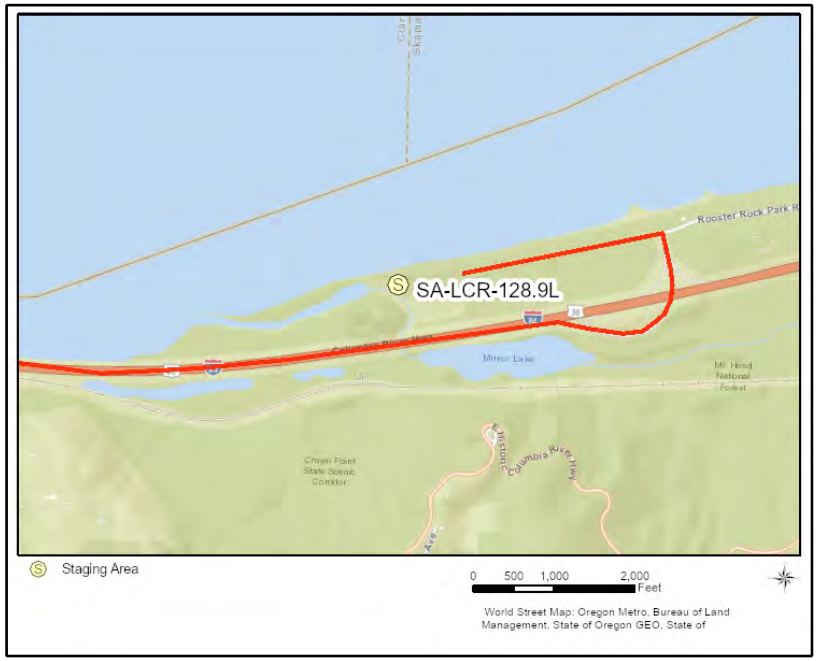
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Near Cape Horn N of Sand Island (FBS MP-34.0) (OR) LCR-131.0R



LCR-131.0R Photo: FBS MP-34.0 Photo



Site Contact

BNSF Railway
Primary Contact : Service Interruption Desk

Fort Worth, TX 76131
817-352-2832

Nearest Address

I-84
Corbett, OR 97019

Driving Directions

To Rooster Rock boat launch from I-84 in Portland, OR:
1. Head east on I-84 E (16.1 mi)
2. Take exit 25 toward Rooster Rock Park (0.5 mi)
3. Turn left at parking lot towards boat ramp. (0.6 mi)

Franz Lake — LCR-137.0R

Position - Location:	45° 35.970', -122° 6.406'	45° 35' 58.2", -122° 6' 24.4"	45.59950, -122.10677	North Bonneville

Strategy Objective: Exclusion : Keep oil out of lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom west and secure end near anchor point C. Near boom midpoint, use workboat to pull boom south, creating a chevron, and anchor near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Franz Lake NWR is just to the east of this location. Call USFWS before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Backwater Habitat, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

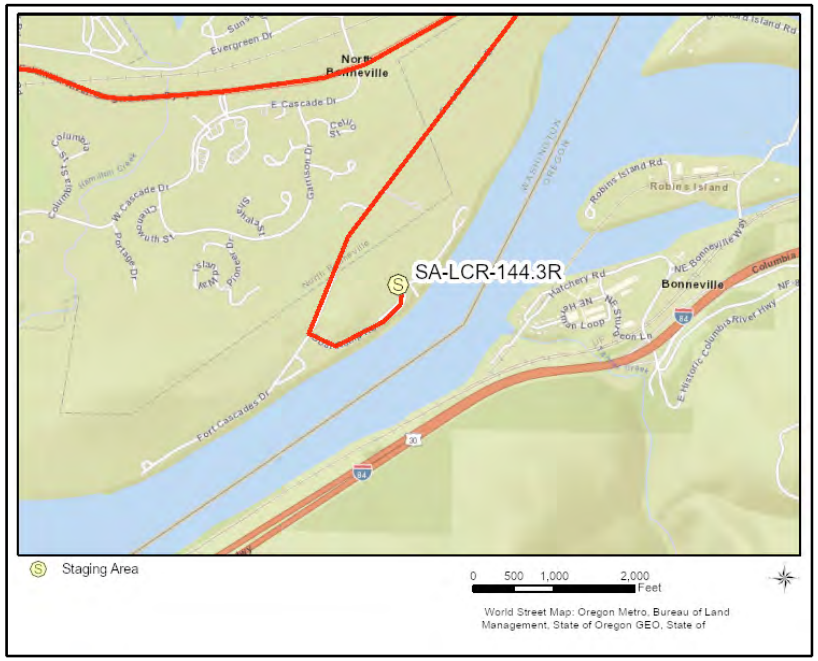
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Franz Lake LCR-137.0R



LCR-137.0R Photo: From the river, looking north towards the bridge (Columbia River is on the far side).



Site Contact

USFWS Steigerwald Lake NWR
Land/Property Contact :

Washougal, WA 98671
360-887-4106

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Hamilton Island (SABL-LCR-144.3R):
1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Horsetail / Oneonta Creeks (OR) LCR-138.0L

Position - Location:	45° 35.506', -122° 4.585'	45° 35' 30.3", -122° 4' 35.1"	45.59176, -122.07642	Corbett

Strategy Objective: Exclusion : Prevent oil from travelling into Horsetail and Oneonta Creeks.

Implementation: Launch workboat from BL-LCR-133.7L with 100ft. boom to Horsetail Creek outfall. Deploy boom across the creek outfall. Anchor at A and B using natural anchors or shoreside anchor posts.

Staging Area: Remote: Stage at Dalton Point (Rooster Rock State Park), SA-LCR-133.7L. Launch from same BL-LCR-133.7L.

Site Safety: Water hazards, slips, trips, falls.

Field Notes: Site is culvert opening to Oneonta and Horsetail Creeks which runs under I-84.

Watercourse: Creek - Horsetail Creek

Resources at Risk: Raptors, Resident Fish, Salmonids



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Horsetail / Oneonta Creeks (OR) LCR-138.0L



LCR-138.0L Photo: On-water view of Horsetail Creek outfall, looking SE



Site Contact

No Information
Not Determined :

Nearest Address

Dalton Point Rd
Corbett, OR 97019

Driving Directions

To Dalton Point boat launch from I-84 E in Troutdale, OR:
1. Head east on I-84 E (12.2 mi)
2. Use the left lane to take exit 31 to Multnomah Falls (0.3 mi)
3. Turn left in the rest/parking area to make a U-turn and head west on I-84 W (0.2 mi)
4. Take the ramp onto I-84 (1.8 mi)
5. Take exit 29 toward Dalton Point (0.1 mi)
6. Turn right to Dalton Point boat ramp (0.1 mi)

Lake Shahala LCR-140.3R

Position - Location:	45° 36.885', -122° 2.384'	45° 36' 53.1", -122° 2' 23.0"	45.61475, -122.03973	North Bonneville

Strategy Objective: Exclusion : Keep oil out of lake.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom to the west and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).

Site Safety: Pilings; Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Skamania Landing Rd deployment by land is an alternative to deployment by boat. Call Skamania County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

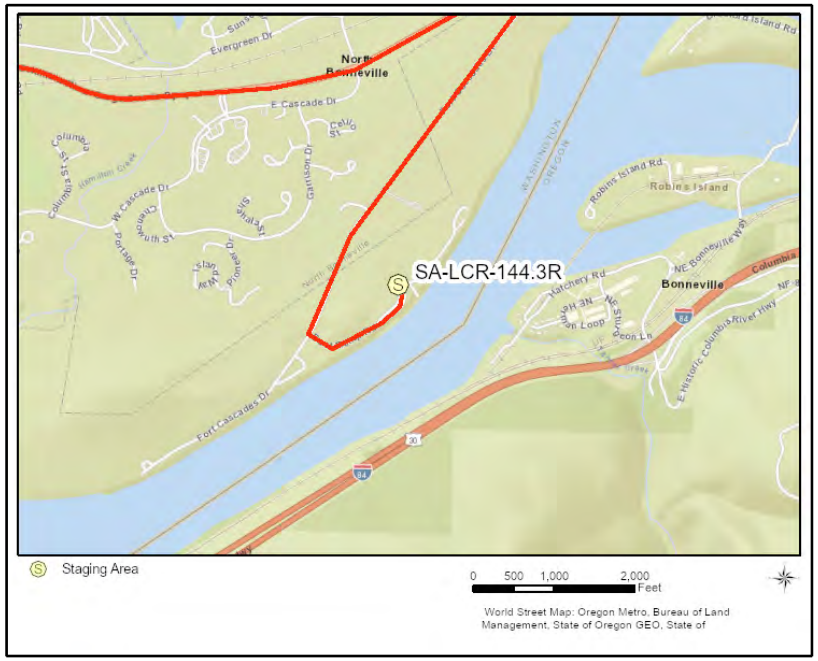
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Lake Shahala LCR-140.3R



LCR-140.3R Photo: From the river, looking north towards lake out. Photo taken in July.



Site Contact

Skamania County
Municipality (County/City) : Emergency Management
200 Vancouver Ave
Stevenson, WA 98648
509-427-8329

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Hamilton Island (SABL-LCR-144.3R):
1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Hardy Slough — LCR-141.4R

Position - Location:	45° 37.577', -122° 1.027'	45° 37' 34.6", -122° 1' 1.6"	45.62628, -122.01712	North Bonneville

Strategy Objective: Exclusion : Keep oil out of slough.

Implementation: Using workboat, deploy 400ft boom at anchor point A. Then extend boom to the west and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: This location is part of Pierce NWR. Beacon Rock State Park is just to the west. Call Skamania County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wildlife Refuge



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

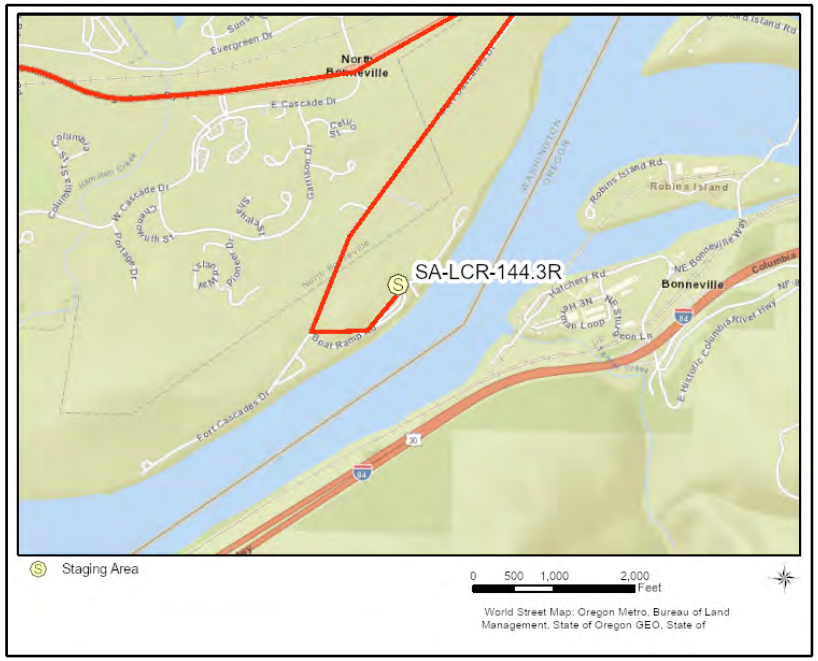
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Hardy Slough LCR-141.4R



LCR-141.4R Photo: From the side channel, looking north towards mouth of slough. Photo taken during drill in October 2020.



Site Contact

Skamania County
Municipality (County/City) : Emergency Management
200 Vancouver Ave
Stevenson, WA 98648
509-427-8329

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Hamilton Island (SABL-LCR-144.3R):
1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Ives and Pierce Islands — LCR-142.4R

Position - Location:	45° 37.216', -121° 59.886'	45° 37' 13.0", -121° 59' 53.2"	45.62027, -121.99810	North Bonneville

Strategy Objective: Deflection : Keep oil out of side channel next to state park.

Implementation: Using workboat, deploy 700ft boom on beach at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Remote: Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Beacon Rock State Park is to the west of this location. Call Skamania County before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Backwater Habitat, Herons, Raptors, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

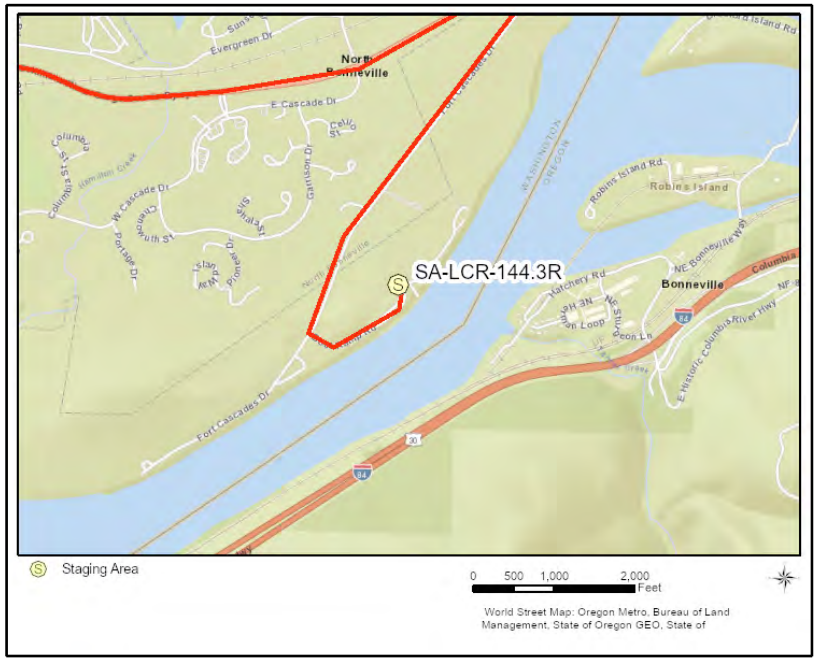
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Ives and Pierce Islands LCR-142.4R



LCR-142.4R Photo: From river, looking northeast towards gap between the islands. Photo was taken in July.



Site Contact

Skamania County
Municipality (County/City) : Emergency Management
200 Vancouver Ave
Stevenson, WA 98648
509-427-8329

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Hamilton Island (SABL-LCR-144.3R):
1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Hamilton Island — LCR-143.4R

Position - Location:	45° 37.583', -121° 58.838'	45° 37' 35.0", -121° 58' 50.3"	45.62638, -121.98064	North Bonneville

Strategy Objective: Deflection : Keep oil out of side channel next to national wildlife refuge.

Implementation: Using workboat, deploy 500ft boom on beach at anchor point A. Secure remainder in river channel at anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

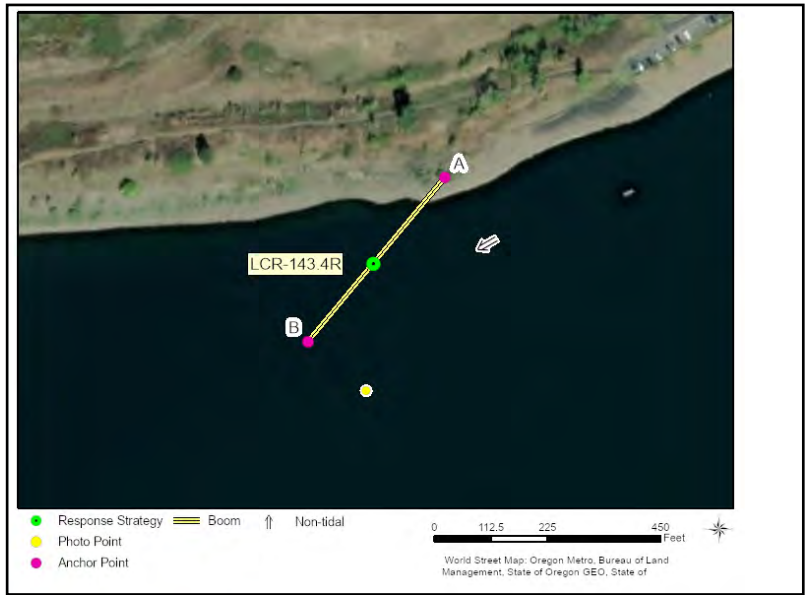
Staging Area: Remote: Stage equipment at SA-LCR-144.3R Hamilton Island (Boat Ramp Rd, North Bonneville, WA 98639).

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Pierce NWR is just to the west of this location. Call USACE Bonneville Dam before deployment.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Workboat(s) - of adequate size for type and amount of boom

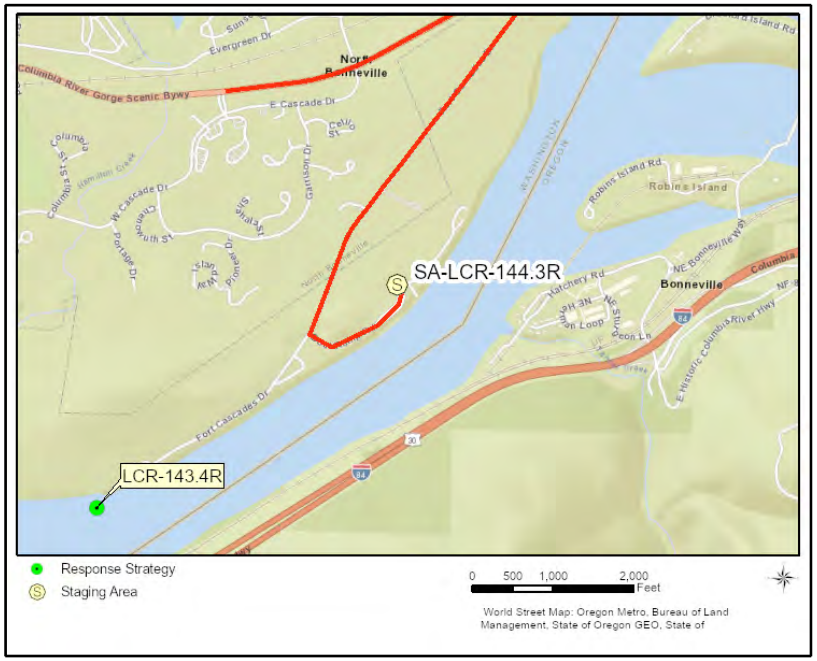
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Hamilton Island LCR-143.4R



LCR-143.4R Photo: From river, looking northeast towards anchor point A. Photo was taken in July.



Site Contact

USACE Bonneville Dam
Land/Property Contact : Control Room

Cascade Locks, OR 97014
541-374-8338

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Hamilton Island (SABL-LCR-144.3R):
1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Bonneville Dam Navigation Locks (OR) LCR-144.9L

Position - Location:	45° 38.198', -121° 57.112'	45° 38' 11.9", -121° 57' 6.7"	45.63664, -121.95187	North Bonneville

Strategy Objective: Collection : Collect oil below locks to prevent it from travelling downstream on Columbia River

Implementation: From BL-LCR-144.3R, launch workboat to dam locks. Deploy 600ft. boom across channel and anchor at A on channel right to fencing on channel wall. Anchor to channel left at B to fencing on channel wall. Collect oil in collection pocket from workboat using portable skimmer and storage.

Staging Area: Remote: Stage at SA-LCR-144.3R

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is below Bonneville Dam locks. There is minimal current in the channel.

Watercourse: River - Below a Dam - Columbia River at Bonneville Dam

Resources at Risk: Resident Fish, Salmonids, State Park



Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (Contractor Boom) or equivalent
2	Each	Bridle(s) - Piling (appropriately sized for boom)
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

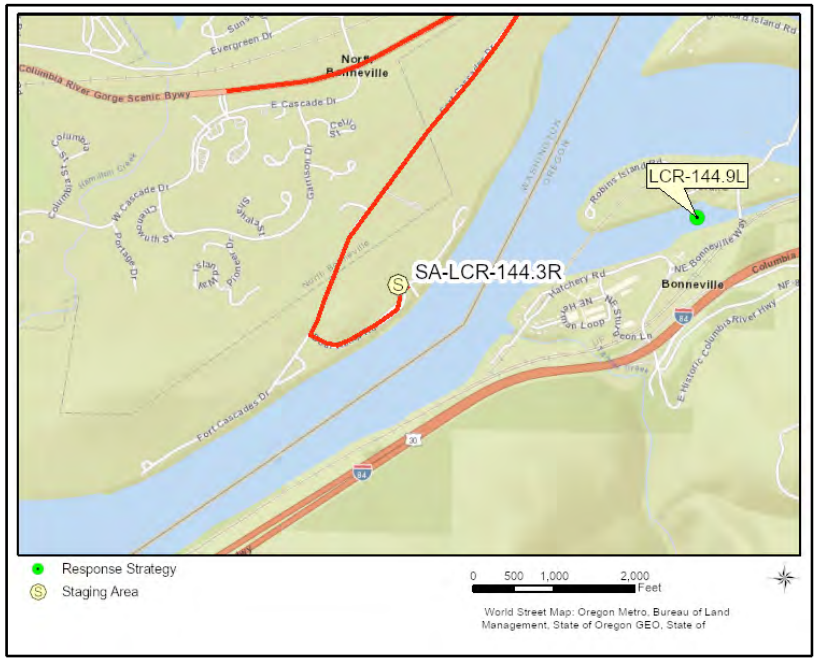
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Bonneville Dam Navigation Locks (OR) LCR-144.9L



LCR-144.9L Photo: Overhead view of channel at locks



Site Contact

USACE Bonneville Dam
Emergency Contact : Control Room

Cascade Locks, OR 97014
541-374-8338

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

Directions to SA-LCR-144.3R
From WA-14, North Bonneville, WA
1. Go east on WA-14 (Evergreen Hwy) toward Bridge Of The Gods (0.98 miles)
2. Turn right on Fort Cascade Dr (0.11 miles)
3. Turn right on Dam Access Rd (1.1 miles)
4. Turn left toward boat ramp and parking area (0.25 miles).

Lewis River Mouth — LEWR-0.4R

Position - Location:	45° 51.442', -122° 46.500'	45° 51' 26.5", -122° 46' 30.0"	45.85736, -122.77500	Woodland

Strategy Objective: Collection : Collect oil moving upriver from the Columbia.

Implementation: Using workboat, deploy 700ft boom near boat ramp and dock at anchor point A. Then extend boom south and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Collection of oil from a spill on the Lewis River is also possible at this location (see CCSWL-GRP). Call landowner before deployment.

Watercourse: River - With Tidal Influence - Lewis River

Resources at Risk: Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
6	Each	Workboat(s) - of adequate size for type and amount of boom

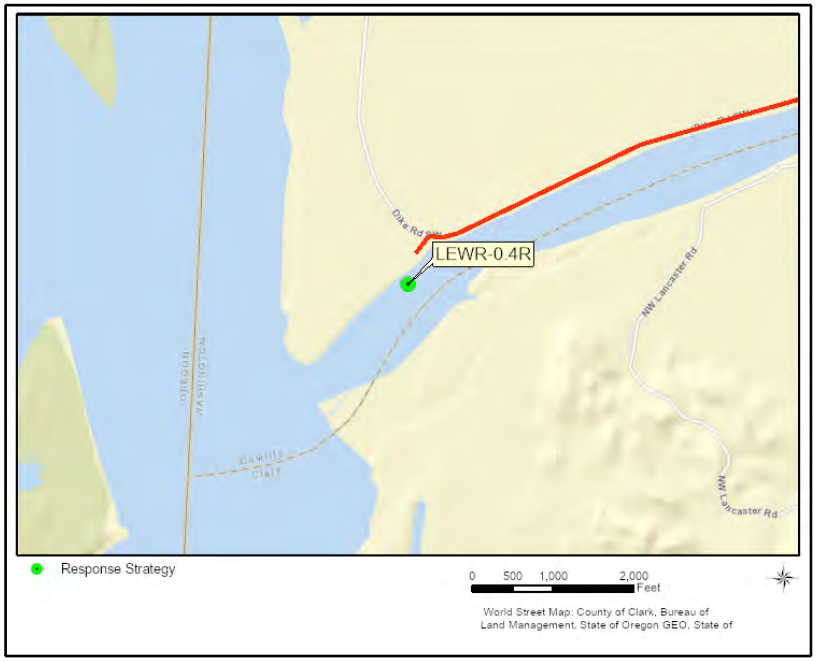
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lewis River Mouth LEWR-0.4R



LEWR-0.4R Photo: River right looking at boat launch looking S toward collection point



Site Contact

Stevens' Moorage
Primary Contact : General Manager
360-989-7367

Cowlitz County
Municipality (County/City) : Emergency Management
360-577-3130

Nearest Address

4005 Dike Rd
Woodland, WA 98674

Driving Directions

1. Head north on I-5
2. Take exit 21 on the right to WA-503 E toward Woodland / Cougar
3. At the traffic light, turn left on Lewis River Rd (WA-503)
4. Bear left on Goerig St
5. Bear right on Davidson Ave
6. Turn left on 5th St
7. Continue forward on S Pekin Rd
8. Make a sharp right on Whalen Rd
9. Turn left on Kuhnis Rd
10. Bear right on Dike Rd SW
11. Location is on the left

Lake River at City of Ridgefield — LKRVR-0.9R

Position - Location:	45° 49.091', -122° 45.137'	45° 49' 5.4", -122° 45' 8.2"	45.81818, -122.75228	Ridgefield

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 500ft boom near boat ramp at anchor point A. Then extend boom southwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vessel Traffic; Water Hazard

Field Notes: Location is owned by the Port of Ridgefield. Call port before deployment.

Watercourse: River - Lake River (Vancouver Lake)

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Waterfowl, Wildlife Refuge



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lake River at City of Ridgefield — LKRVR-0.9R



LKRVR-0.9R Photo: From north of marina, looking south/upriver in direction of Vancouver Lake. Photo was taken in September.



Site Contact

Port of Ridgefield
Land/Property Owner :

Ridgefield, WA 98642
360-887-3873

Nearest Address

109 W Division St
Ridgefield, WA 98642

Driving Directions

1. Head north on I-5
2. Take exit 14 on the right to Pioneer St toward WA-501 S / Ridgefield
3. Keep left at the fork
4. At the traffic light, turn left on Pioneer St
5. At the roundabout, take the first exit onto Pioneer St (WA-501)
6. At the roundabout, take the second exit onto Pioneer St (WA-501)
7. Continue forward
8. At the roundabout, take the second exit
9. Continue forward on Pioneer St (WA-501)
10. Turn left on W Division St
11. Location is at the end of the road

Lake River at Vancouver Lake — LKRVR-10.8R

Position - Location:	45° 42.328', -122° 43.328'	45° 42' 19.7", -122° 43' 19.7"	45.70547, -122.72214	Vancouver

Strategy Objective: Collection : Collect oil moving downriver.

Implementation: Using workboat, deploy 600ft boom near boat ramp at anchor point A. Then extend boom south and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

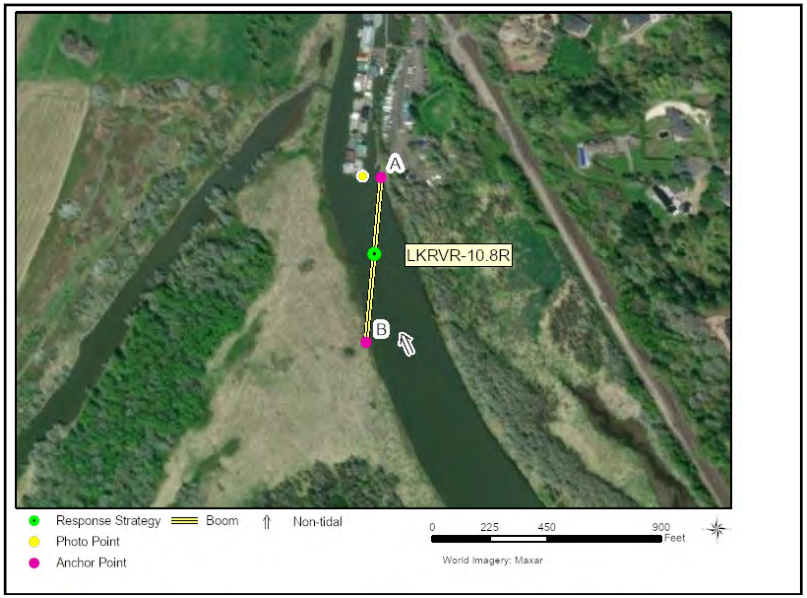
Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Water Hazard

Field Notes: Vancouver Lake drains northward via Lake River to Columbia River. Call landowner before deployment.

Watercourse: River - Lake River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B2 (18" to 42")
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lake River at Vancouver Lake — LKRVR-10.8R



LKRVR-10.8R Photo: From center of river, looking east toward boat ramp.



Site Contact

Felida Moorage
Land/Property Owner : Property Owner
360-573-3394

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :
360-562-0130

Nearest Address

4911 NW 122nd St
Vancouver, WA 98685

Driving Directions

1. Head south on I-5
2. At exit 7, bear right onto ramp to I-205 S toward WA-14/I-84/Salem
3. At exit 36 take ramp to Ne 134th St toward WSU Vancouver
4. Turn left on NE 134th St
5. Turn right on NE 20th Ave
6. Continue on NE Highway 99
7. Turn right on NE 117th St
8. Continue on NW 119th St
9. Turn right on NW 36th Ave
10. Turn left on NW 122nd St
11. Location is at end of road

Multnomah Channel entrance (OR) MC-0.1

Position - Location:	45° 36.983', -122° 47.584'	45° 36' 59.0", -122° 47' 35.1"	45.61638, -122.79307	Portland

Strategy Objective: Collection : Collect oil to prevent it from entering Multnomah Channel.

Implementation: Launch from Fred's Marina, BL-MC-1.0, with 2000ft. boom. Secure 1000 ft section of boom using shoreside anchoring system at A. Extend boom N and anchor to pilings at B, then extend boom NW towards Multnomah Channel and anchor at C. Anchor second 1000ft section of boom at C and extend east into center of Willamette River channel to anchor at D, to form collection pocket at C. Use skimmer and floating storage/barge at C to collect oil.

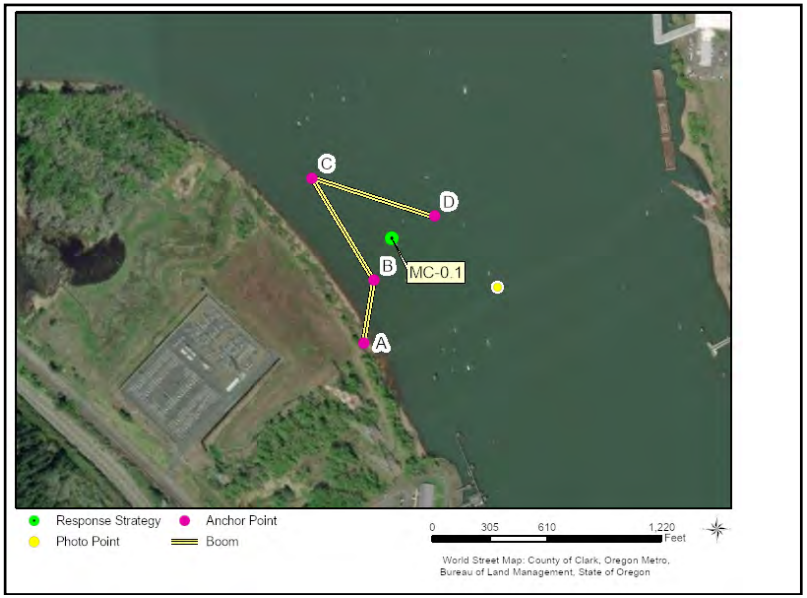
Staging Area: Remote: Stage at Fred's Marina, SA-MC-1.0

Site Safety: Submerged pilings. Slips, trips, and falls. Water hazards.

Field Notes: Site is at south entrance to Multnomah Channel. New restoration site on north side of channel. Houseboats and marina with private vessels to the west.

Watercourse: River - Side Channel - Multnomah Channel

Resources at Risk: Cranes, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
2000	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

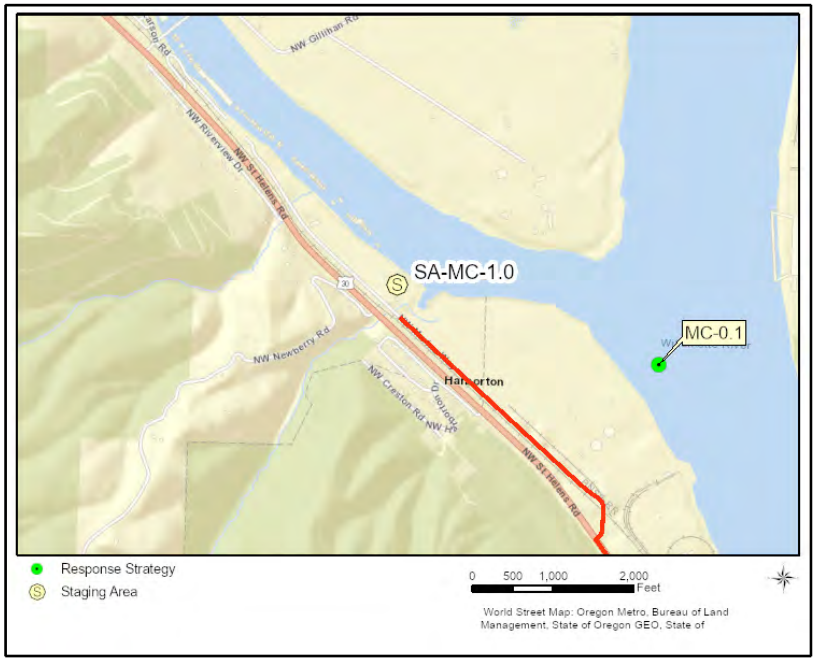
Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Multnomah Channel entrance (OR) MC-0.1



MC-0.1 Photo: From Willamette River at D, looking west at collection barge and shoreside anchors.



Site Contact

No Information
Not Determined :

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on 1405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Willamette River Entrance to Sauvie Island (OR) MC-0.2

Position - Location:	45° 37.246', -122° 47.734'	45° 37' 14.8", -122° 47' 44.0"	45.62077, -122.79556	Portland

Strategy Objective: Exclusion : Exclude oil from restored habitat.

Implementation: Anchor 700 ft section of boom to shore near A. Extend boom north along Sauvie Island shore to B. Use natural anchors or shoreside anchoring systems to secure boom. Adjust angles and anchor locations as needed depending on conditions. In low water 2 sets of 200 ft boom may be preferable.

Staging Area: Remote: Stage at Fred's Marina, SA-MC-1.0. Launch from same, BL-MC-1.0.

Site Safety: Slips, trips, and falls. Water hazards. Submerged pilings.

Field Notes: Site is at north entrance to Multnomah Channel. New restoration site on N end of channel (tip of Sauvie Island) and marina with private vessels to the west.

Watercourse: River - Side Channel - Multnomah Channel

Resources at Risk: Cranes, Habitat Restoration Site, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Willamette River Entrance to Sauvie Island (OR) MC-0.2



MC-0.2 Photo: From Willamette River, looking W at Sauvie Island restoration site shore.



Site Contact

Wildlands, Inc
Land/Property Contact :

Portland, OR
503-241-4895

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on 1405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Multnomah Channel - Sauvie Is Restoration (OR) MC-0.4

Position - Location:	45° 37.211', -122° 48.020'	45° 37' 12.6", -122° 48' 1.2"	45.62018, -122.80033	Portland

Strategy Objective: Exclusion : Exclude oil from restored habitat.

Implementation: Anchor 500 ft section of boom to shore near A. Extend boom downstream along shore and anchor near B. Use natural anchors or shoreside anchoring posts. Adjust as needed for conditions.

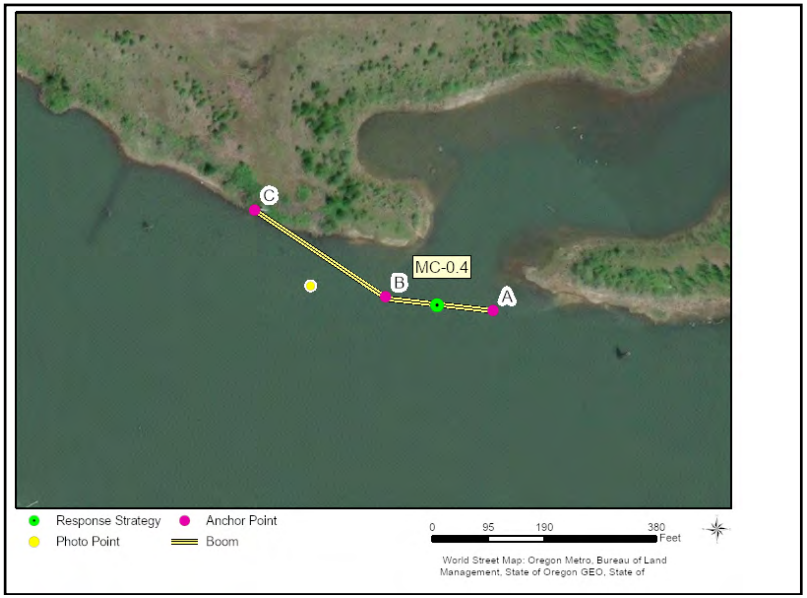
Staging Area: Remote: Stage and launch across channel at Fred's Marina, SA/BL-MC-1.0

Site Safety: Slips, trips, falls. Shallow water. Submerged pilings.

Field Notes: Multnomah Channel at entrance to new restoration site on Sauvie Island. Across river from marina with private vessels and houseboats along south shore of channel.

Watercourse: River - Side Channel - Multnomah Channel

Resources at Risk: Habitat Restoration Site, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Multnomah Channel - Sauvie Is Restoration (OR) MC-0.4



MC-0.4 Photo: From Multnomah Channel, looking N at new restoration site channel.



Site Contact

Wildlands, Inc
Land/Property Contact :

Portland, OR
503-241-4895

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on 1405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Multnomah Channel Moorages (OR) MC-0.5

Position - Location:	45° 37.144', -122° 48.101'	45° 37' 8.7", -122° 48' 6.0"	45.61907, -122.80168	Portland

Strategy Objective: Deflection : Deflect oil away from marina & houseboat community.

Implementation: Deploy 1000' boom at south side of Multnomah Channel just above pipeline crossing. Anchor halfway to clear abandoned dock and extend remaining boom NW near AP-2, or as far downstream as possible. Adjust angles and anchor points as needed for conditions.

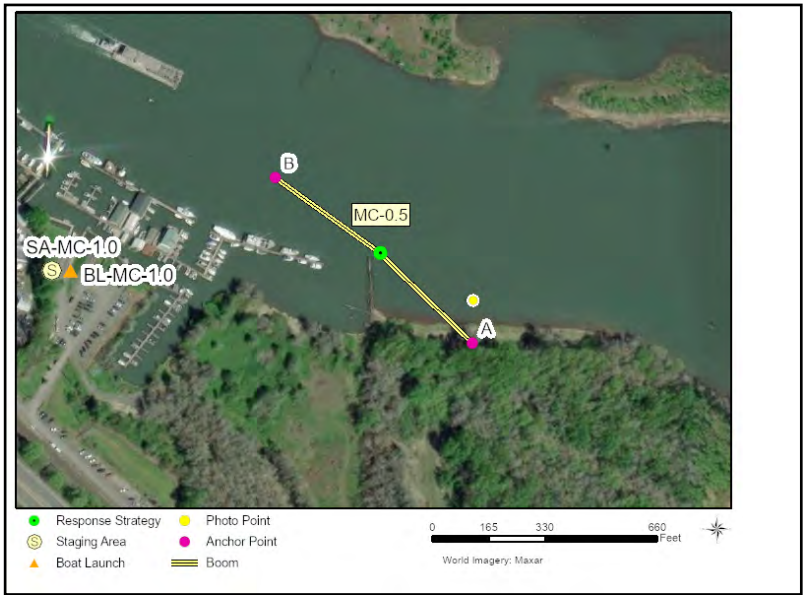
Staging Area: Remote: Stage at Fred's Marina, SA-MC-1.0. Launch from same, BL-MC-1.0.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is at south entrance to Multnomah Channel. Restoration site to the north and marina with houseboats and private vessels to the west.

Watercourse: River - Side Channel - Multnomah Channel

Resources at Risk: Economic Resources, Marina, Resident Fish, Salmonids, Wildlife Refuge



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
14	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Workboat(s) - of adequate size for type and amount of boom

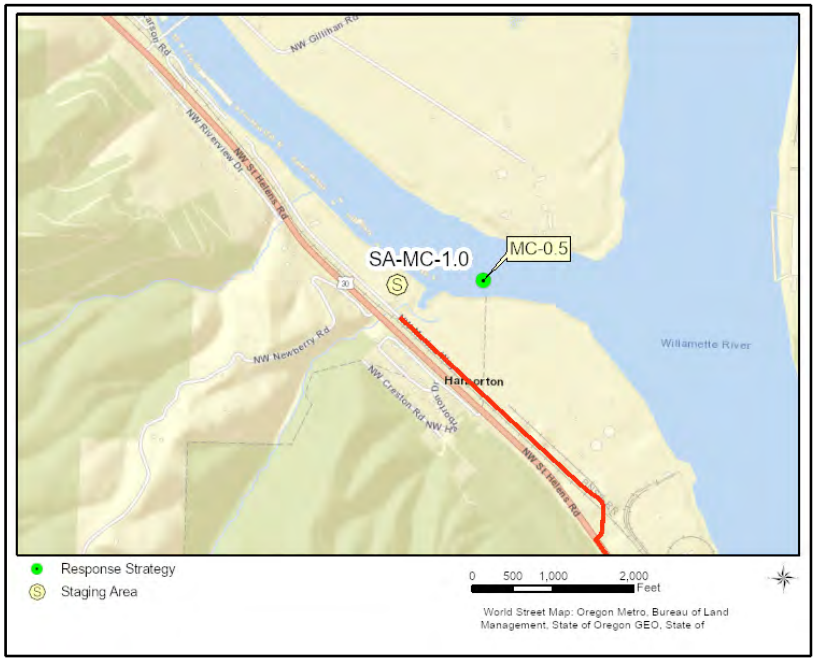
Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Multnomah Channel Moorages (OR) MC-0.5



MC-0.5 Photo: From Multnomah Channel, looking W downstream at abandoned dock anchor point, Fred's Marina and houseboats.



Site Contact

Fred's Marina
Primary Contact :
12800 NW Marina Way
Portland, OR
503-286-5537

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on 1405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Multnomah Channel - Sauvie Isl. Bridge (OR) MC-1.5

Position - Location:	45° 37.705', -122° 49.017'	45° 37' 42.3", -122° 49' 1.0"	45.62842, -122.81695	Portland

Strategy Objective: Collection : Collect oil on right bank of Multnomah Channel downstream of Sauvie Island Bridge.

Implementation: Anchor 1000 ft of boom to shore on channel left near A, just upstream of bridge. Extend boom N across channel, angling downstream to anchor near B. Collect oil onshore using vac truck on levee.

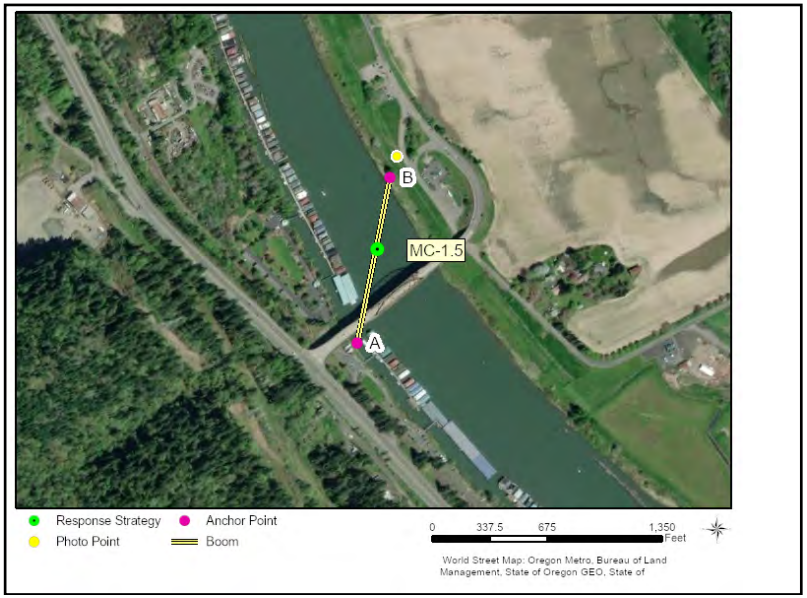
Staging Area: Remote: Stage and Launch at Fred's Marina, SA/BL-MC-1.0

Site Safety: Slips, trips, falls. Houseboat community and active marina. Water hazards.

Field Notes: Gate access to levee on channel right just off bus station parking lot at NW Sauvie Island Rd and NW Gillihan.

Watercourse: River - Side Channel - Multnomah Channel

Resources at Risk: Cranes, Economic Resources, Marsh, Raptors, Resident Fish, Salmonids, Shorebirds, Waterfowl, Reptiles and Amphibians



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck(s)
2	Each	Workboat(s) - of adequate size for type and amount of boom

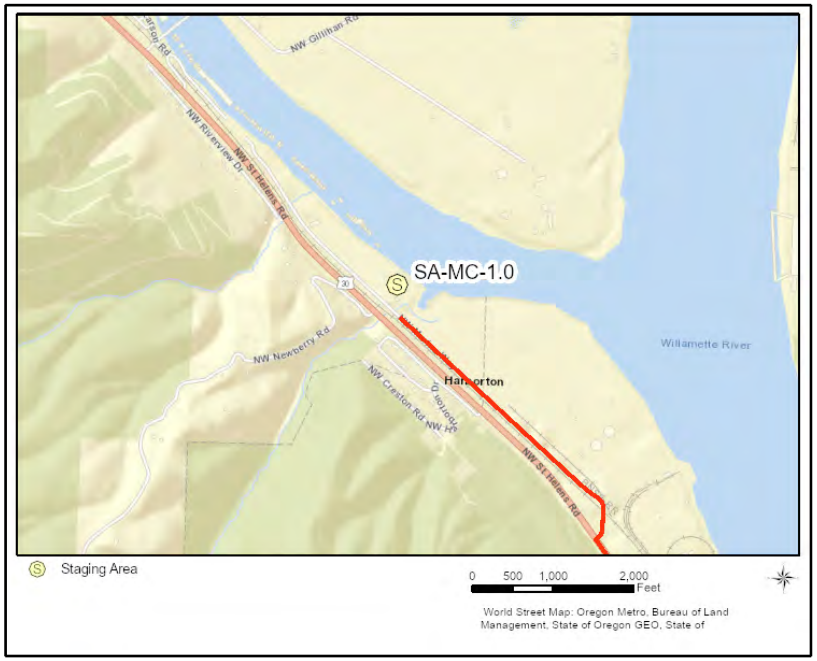
Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Multnomah Channel - Sauvie Isl. Bridge (OR) MC-1.5



MC-1.5 Photo: From levee top on Sauvie Island, looking S across Multnomah Channel at Sauvie Island Bridge and houseboats.



Site Contact

No Information
Other :

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on 1405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Swan Island Lagoon (OR) SIL-0.4

Position - Location:	45° 34.171', -122° 43.446'	45° 34' 10.3", -122° 43' 26.8"	45.56952, -122.72410	Portland

Strategy Objective: Exclusion : Keep oil in Swan Island Lagoon to prevent oil from reaching Willamette River

Implementation: Launch workboat from Swan Island Boat Ramp, BL-WR-8.0R, with 800ft. boom. Deploy boom in a chevron configuration across entrance to Swan Island Lagoon. Anchor at A at USCG or Marine base, and at C to deck structure at Vigor Industrial across lagoon. Anchor at B using Danforth or other anchor and anchor every 100-150ft. along boom length or as necessary for conditions.

Staging Area: Remote: Stage at Swan Island Boat Ramp, SA-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazard. Active railroad; expect trains at any time from either direction.

Field Notes: Do not allow people/equipment within 25' of track. Military and commercial activity. Site is at mouth of channel at north side of Port of Portland at Swan Island.

Watercourse: Lagoon - Swan Island Lagoon

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Swan Island Lagoon (OR) SIL-0.4



SIL-0.4 Photo: Looking northeast towards anchor point A. Photo was taken at a drill in September 2024.



Site Contact

No Information
Not Determined :

Nearest Address

5561 N Basin Ave
Portland, OR 97217

Driving Directions

1. Start at I 5 Portland
2. Go south on I-5 (Interstate Brg) toward 307 (3.78 miles)
3. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
4. Turn right on N Alberta St (0.16 miles)
5. Make sharp left on N Interstate Ave (0.21 miles)
6. Turn right on N Going St (0.67 miles)
7. At fork keep left on N Going St (0.1 miles)
8. Turn right on N Basin Ave (0.22 miles)
9. At fork keep right on N Basin Ave (0.38 miles)
10. Finish at 5561 N Basin Ave, 97217, on the left

Swan Lagoon - Mocks Bottom Outfall (OR) SIL-0.8

Position - Location:	45° 34.076', -122° 42.964'	45° 34' 4.6", -122° 42' 57.8"	45.56794, -122.71606	Portland

Strategy Objective: Containment : Contain and recover oil at main outfall in Mock's Bottom to prevent impact to Swan Island Lagoon.

Implementation: Launch workboat from Swan Island Boat Ramp, BL-WR-8.0R, with 100ft. of boom. Deploy boom in a chevron configuration across Mock's Bottom Outfall. Anchor at A and C using shoreside anchor posts. Anchor at B using Danforth or other anchor. Collect oil using either vac truck or skimmer & portable storage.

Staging Area: Remote: Stage at Swan Island Boat Ramp, BL-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazards. Military and commercial activity.

Field Notes: Site is at Port of Portland Dredge Base Property and NRC Office Property.

Watercourse: Lagoon - Swan Island Lagoon

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Swan Lagoon - Mocks Bottom Outfall (OR) SIL-0.8



SIL-0.8 Photo: Looking at bank and outfall at shoreline



Site Contact

No Information
Not Determined :

Nearest Address

6208 N Ensign Street
Portland, OR 97217

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.74 miles)
2. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
3. Turn right on N Alberta St (0.16 miles)
4. Make sharp left on N Interstate Ave (0.21 miles)
5. Turn right on N Going St (0.67 miles)
6. At fork keep left on N Going St (0.1 miles)
7. Turn right on N Basin Ave (0.22 miles)
8. At fork keep right on N Basin Ave (1.05 miles)
9. Turn left on N Ensign St (0.09 miles)
10. Finish at 6208 N Ensign Street, 97217, on the left

Wallooskee River at bridge (OR) WALOR-1.0

Position - Location:	46° 8.939', -123° 47.918'	46° 8' 56.4", -123° 47' 55.1"	46.14899, -123.79864	Astoria

Strategy Objective: Collection, Exclusion : Prevent oil from entering Wallooskee River and collect at highway bridge.

Implementation: Launch workboat from Astoria East Mooring Basin, with 500ft. of boom. Deploy boom across the Wallooskee River on the west side of the Highway 202 bridge at an angle to collect on the north bank. Anchor at Anchor A and Anchor B using shoreside anchor posts. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage.

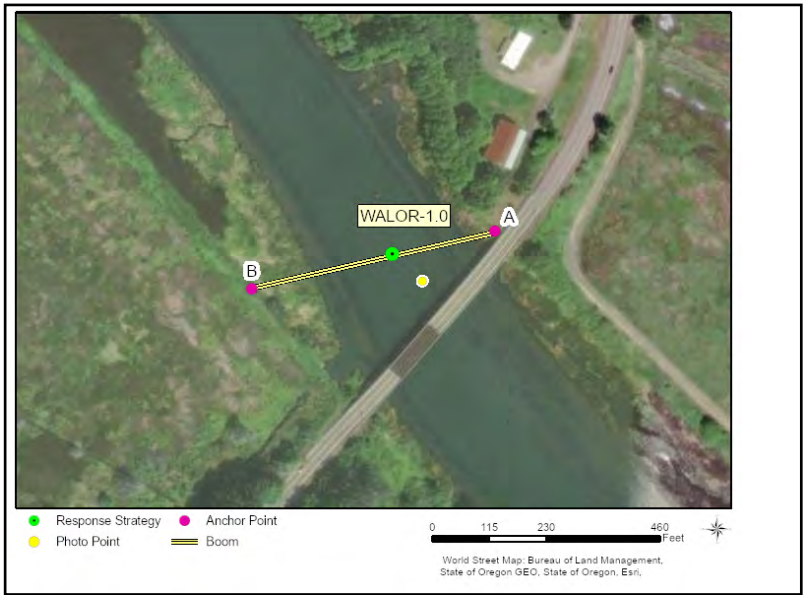
Staging Area: Remote: Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is best accessed by boat, although there is landside access via Highway 202. Highway has no shoulders for safe access.

Watercourse: River - With Tidal Influence - Wallooskee River

Resources at Risk: Crabs, Herons, Resident Fish, Salmonids, Waterfowl



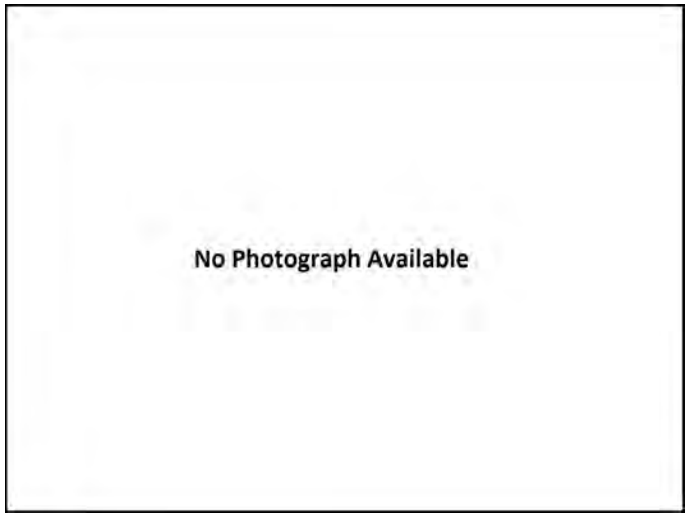
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Wallooskee River at bridge (OR) WALOR-1.0



WALOR-1.0 Photo: No photograph available



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

.

Land access from 91995 Oregon Hwy 202, Astoria OR 97103

Wallacut River WALR-0.7

Position - Location:	46° 19.205', -124° .562'	46° 19' 12.3", -124° 0' 33.7"	46.32009, -124.00936	Ilwaco

Strategy Objective: Collection : Collect oil moving upriver.

Implementation: Using workboat, deploy 200ft boom near bridge at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

Staging Area: Onsite: Stage equipment onsite.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vehicle Traffic; Water Hazard

Field Notes: Deployment by boat at river mouth may be possible during an extreme high tide. Call Pacific County before deployment.

Watercourse: River - Wallacut River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B2 (18" to 42")
100	Feet	Line - 1/2" poly line
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Wallacut River WALR-0.7



WALR-0.7 Photo: From south side of Stringtown Road bridge, looking northwest. Photo was taken in October.



Site Contact

Pacific County Emergency Management
Municipality (County/City) : PCRMA Director

South Bend, WA 98586
360-875-9338

Nearest Address

6801 Ortelius Dr
Ilwaco, WA 98624

Driving Directions

1. Head west on WA-8 W (US-101 N)
2. Continue forward on US-12 W
3. Take the exit on the right to WA-107 toward Montesano / Raymond
4. At the stop sign, turn left on WA-107 (S Main St)
5. Turn left on US-101 toward Raymond / Astoria
6. At the roundabout, take the first exit onto US-101 S toward South Bend / Astoria
7. At the stop sign, turn right on US-101
8. Turn left on US-101-ALT toward Astoria / Oregon
9. Turn right on US-101 toward Ilwaco
10. Turn left on Stringtown Rd toward Airport
11. Location is on the right

Whipple Creek at NW Krieger Rd (WA) WPPLC-0.8

Position - Location:	45° 45.221', -122° 44.615'	45° 45' 13.2", -122° 44' 36.9"	45.75368, -122.74359	Ridgefield

Strategy Objective: Collection : Collect oil moving downstream before it reaches the Columbia.

Implementation: Using workboat, deploy 100ft boom east of bridge at anchor point A. Then extend boom northwest and secure end near anchor point B. Use anchoring systems as needed to keep boom secure. Adjust boom angle and anchor points as needed for conditions. Use anchor posts, existing structures, or trees to secure boom to riverbank.

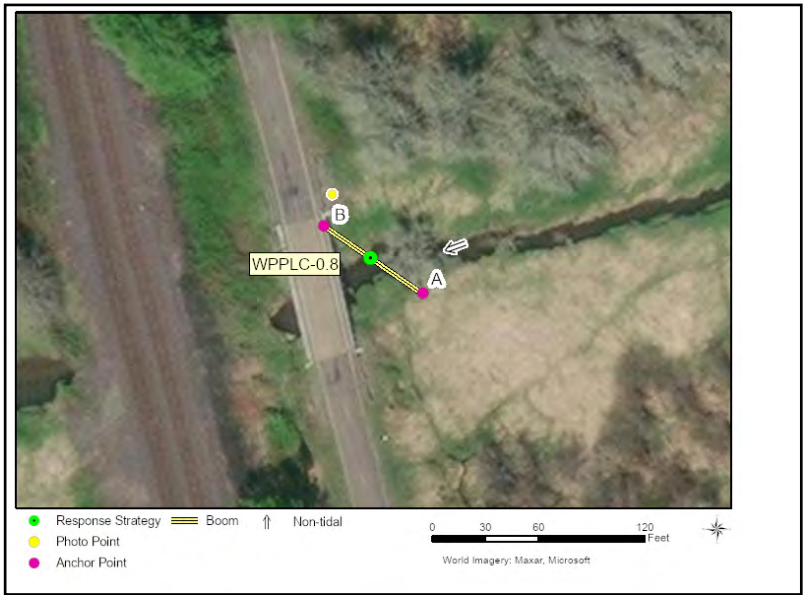
Staging Area: Onsite: From the right bank of the creek, looking south. Photo was taken in July.

Site Safety: Slips, Trips, Falls; Uneven Surfaces; Vehicle Traffic; Water Hazard

Field Notes: Work with Clark County to control vehicle traffic on road. Call county before deployment.

Watercourse: Creek - Whipple Creek

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources, Shorebirds, Waterfowl, Wetlands



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B2 (18" to 42")
100	Feet	Line - 1/2" poly line
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

2	Laborer
1	Supervisor

Whipple Creek at NW Krieger Rd (WA) WPPLC-0.8



WPPLC-0.8 Photo: From the right bank of the creek, looking south. Photo was taken in July.



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :

Vancouver, WA 98660
360-562-0130

Nearest Address

19204 NW Krieger Rd
Ridgefield, WA 98642

Driving Directions

1. Head south on Interstate-5
2. Take Exit 9 (NE 179th Street)
3. Turn right at the end of exit ramp to travel west on NW179th Street
4. Turn right to head north on NW Krieger Road
5. Location is on the right

Columbia Slough (Smith & Bybee Lakes) (OR) WR-0.9R

Position - Location:	45° 38.612', -122° 46.130'	45° 38' 36.7", -122° 46' 7.8"	45.64354, -122.76883	Portland

Strategy Objective: Exclusion : Prevent oil from entering Columbia Slough.

Implementation: Launch workboat from Fred's Marina Boat Ramp, BL-MC-1.0, with 700ft. boom. Deploy boom in a chevron configuration across slough opening. Anchor at A and C to natural anchor points or use shoreside anchor posts. Anchor every 100-150ft. along boom length or as necessary for conditions.

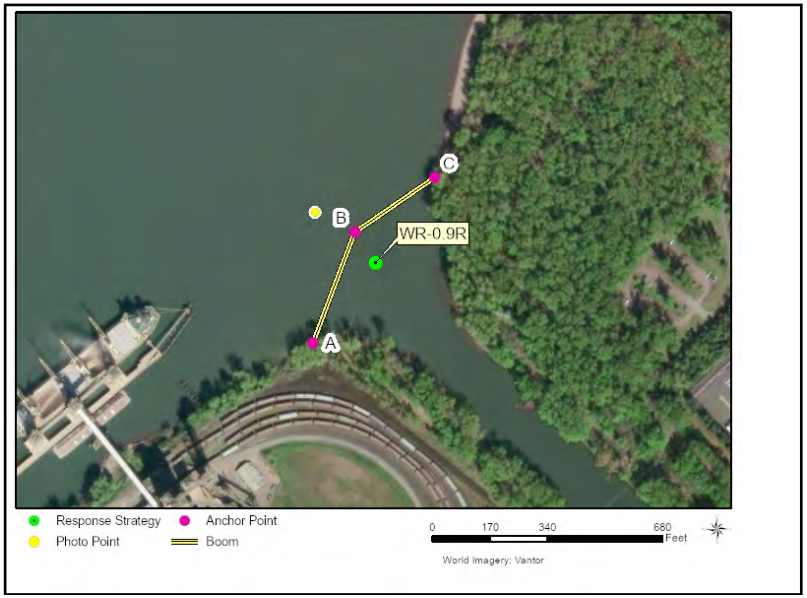
Staging Area: Remote: Stage at SA-MC-1.0, Fred's Marina. Launch at same BL-MC-1.0.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Amount of boom will vary with river levels (min 400ft to max 1000ft).

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Habitat Restoration Site, Resident Fish, Salmonids



Recommended Equipment

6	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B2 (18" to 42")
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

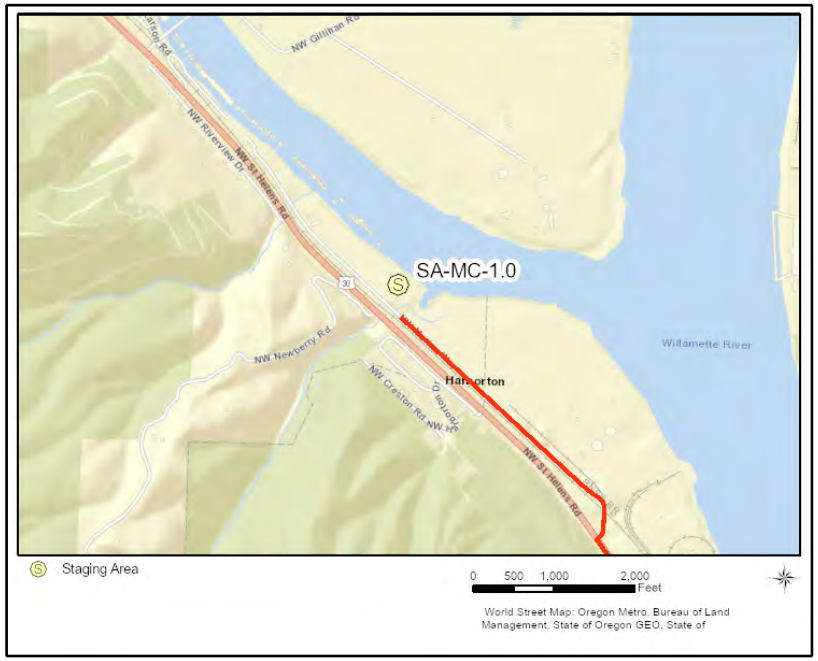
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Columbia Slough (Smith & Bybee Lakes) (OR) WR-0.9R



WR-0.9R Photo: On Willamette River looking southeast into slough



Site Contact

No Information
Not Determined :

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

1. Start at I 405 Portland
2. Go northeast on I-405 (Fremont Brg) (0.43 miles)
3. Take ramp on the right toward Kerby Ave. (0.39 miles)
4. Take ramp and go southwest on I-405 (Stadium Fwy) (1.24 miles)
5. At exit 3 take ramp on the right toward N.W. Ind. Area-St. Helens/W (7.74 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 Marina Way, 97231, on the right

International Terminals Slip (OR) WR-3.7R

Position - Location:	45° 36.661', -122° 47.027'	45° 36' 39.6", -122° 47' 1.6"	45.61101, -122.78378	Portland

Strategy Objective: Collection : Collect oil travelling downstream on Willamette River

Implementation: Launch workboat from Fred's Marina, BL-MC-1.0, with 800ft. boom. Deploy boom upstream from north shore of dredged channel to form collection pocket. Anchor at AP-1 using shoreside anchor posts, and to AP-2 using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil using vac truck staged onshore at industrial property.

Staging Area: Remote: Stage at SA-MC-1.0 Fred's Marina; launch from same BL-MC-1.0.

Site Safety: Slips, trips, and falls. Water hazards. Active industrial area with recreational and industrial vessel traffic.

Field Notes: Strategy is collection in dredged channel on east bank of the Willamette River near Port of Portland.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

International Terminals Slip (OR) WR-3.7R



WR-3.7R Photo: From the river, looking towards the riverbank



Site Contact

No Information
Not Determined :

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Owens Corning Dock (OR) WR-3.8L

Position - Location:	45° 36.521', -122° 47.283'	45° 36' 31.2", -122° 47' 17.0"	45.60868, -122.78805	Portland

Strategy Objective: Collection : Collect oil travelling downstream on the Willamette River

Implementation: Launch workboat from Fred's Marina, BL-MC-1.0, with 800ft. boom. Anchor at A to Owens Corning Dock and angle upriver to anchor at B using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water with portable skimmer and storage or using vac truck staged at Owens Corning.

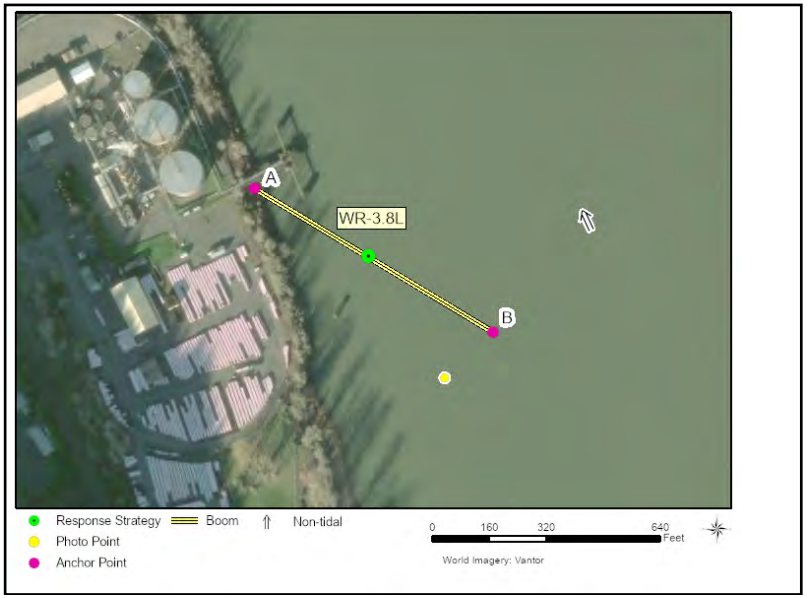
Staging Area: Remote: Stage at SA-MC-1.0 Fred's Marina; launch from same BL-MC-1.0.

Site Safety: Slips, trips, and falls. Water hazards. Active industrial area. Recreational and industrial vessel traffic in area.

Field Notes: Active industrial sites on both banks of the river in this location. Significant commercial and industrial activity.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Owens Corning Dock (OR) WR-3.8L



WR-3.8L Photo: From the river, looking northeast towards collection point with dock in the background.



Site Contact

No Information
Not Determined :

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Port of Portland Terminal 4 - Slip 3 North (OR) WR-4.2R

Position - Location:	45° 36.233', -122° 46.774'	45° 36' 14.0", -122° 46' 46.4"	45.60388, -122.77956	Portland

Strategy Objective: Collection : Prevent oil from moving downstream into the Columbia River.

Implementation: Launch workboat from Cathedral Park, BL-WR-5.8R, with 800ft. boom. Anchor boom on shore at the Port of Portland Terminal and angle upstream toward river center. Anchor at AP-1 using shoreside anchor posts or natural anchors. Anchor at AP-2 using Danforth or other anchor and anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage or vac truck staged onshore at industrial property.

Staging Area: Remote: Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.

Site Safety: Slips, trips, and falls. Water hazards. Active industrial area. Recreational and industrial vessel traffic in area.

Field Notes: Strategy is collection at dredged channel at Port of Portland.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Portland Terminal 4 - Slip 3 North (OR) WR-4.2R



WR-4.2R Photo: On Willamette River, looking NNW toward anchor point on right bank



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Port of Portland Terminal 4 - Slip 3 South (OR) WR-4.3R

Position - Location:	45° 36.244', -122° 46.708'	45° 36' 14.7", -122° 46' 42.5"	45.60407, -122.77847	Portland

Strategy Objective: Exclusion : Keep oil out of Slip 3.

Implementation: Launch workboat from Cathedral Park, BL-WR-5.8R, with 600ft. boom. Anchor at A & B using natural anchors or shoreside anchor posts. Anchor every 100-150ft. along boom length or as necessary for conditions.

Staging Area: Remote: Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic in area.

Field Notes: Port of Portland

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



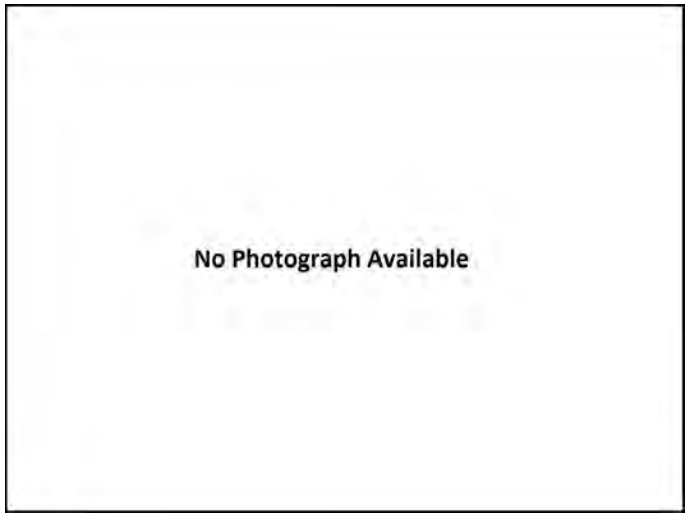
Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Portland Terminal 4 - Slip 3 South (OR) WR-4.3R



WR-4.3R Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Port of Portland Terminal 4 - Berth 412 (OR) WR-4.5R

Position - Location:	45° 35.906', -122° 46.563'	45° 35' 54.4", -122° 46' 33.8"	45.59844, -122.77605	Portland

Strategy Objective: Collection : Collect oil travelling downstream on Willamette River.

Implementation: Launch workboat from Cathedral Park, BL-WR-5.8R, with 800ft. boom. Angle boom upriver from east bank to collect oil moving downstream toward the Columbia River. Anchor at A using shoreside anchor posts or structures on site. Anchor at B using Danforth or other anchor and anchor every 100-150ft. along boom length. Collect oil using vac truck staged on shore at industrial property.

Staging Area: Remote: Stage at SA-WR-5.8R Cathedral Park; launch from same BL-WR-5.8R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic in area. Site is active industrial facility.

Field Notes: Strategy is collection at southern tip of

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Port of Portland Terminal 4 - Berth 412 (OR) WR-4.5R



WR-4.5R Photo: On river looking S at dolphin next to Berth 412.



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

St. John's Bridge East (OR) WR-5.8R

Position - Location:	45° 35.283', -122° 45.977'	45° 35' 17.0", -122° 45' 58.6"	45.58805, -122.76628	Portland

Strategy Objective: Collection : Collect oil moving downstream on Willamette River.

Implementation: Launch boat at Cathedral Park, BL-WR-5.8R with 800ft. boom. Using shoreside anchor posts, anchor boom downstream of Portland Terminal 4 at AP-1. Extend boom SW to middle of channel and anchor at AP-2 using Danforth or other anchor, and anchor every 100-150ft. along boom or as necessary for conditions. Collect oil using vac truck.

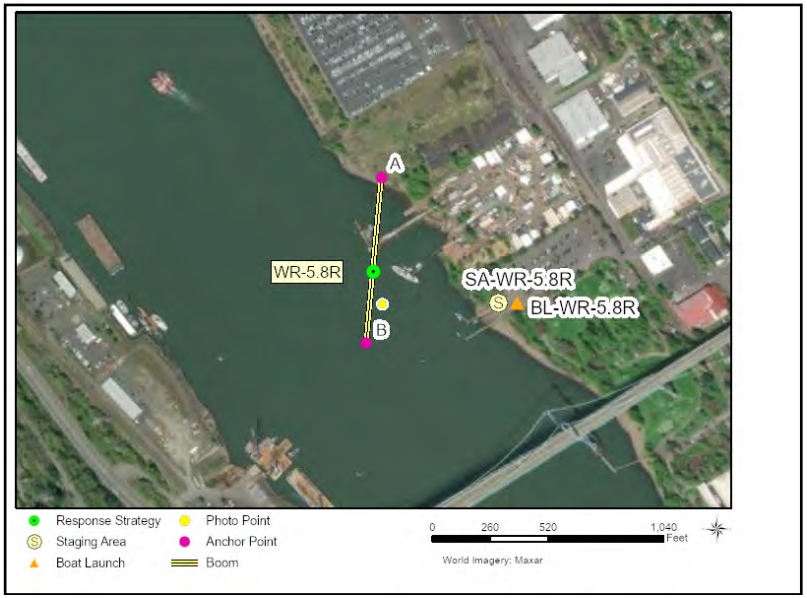
Staging Area: Onsite: Stage at Cathedral Park, SA-WR-5.8R

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial traffic in area. Active industrial areas on shores.

Field Notes: Strategy site is just downstream of Cathedral Park, on the Willamette River.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

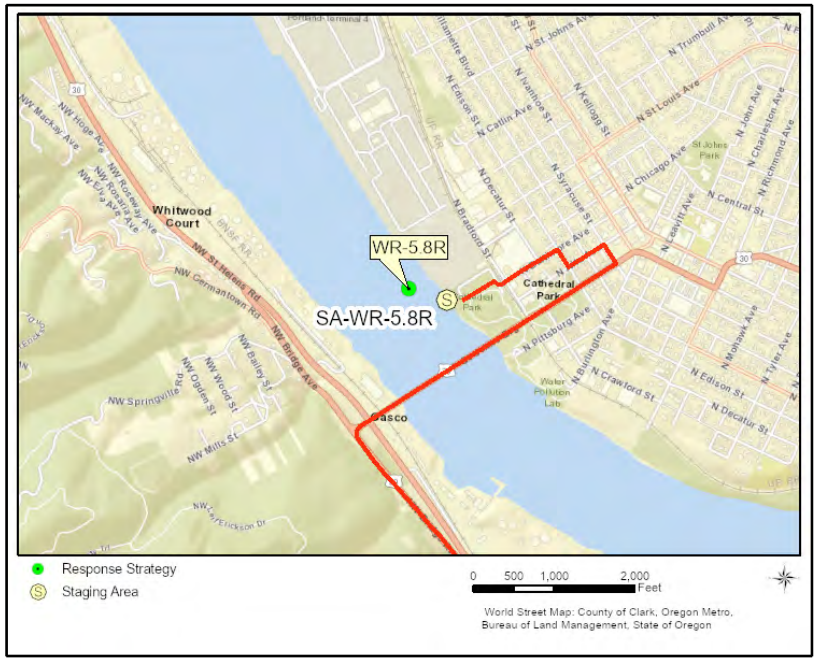
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

St. John's Bridge East (OR) WR-5.8R



WR-5.8R Photo: From river looking NE downstream, at end of pier and shoreside landing/collection area.



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Riverside Industrial Park (OR) WR-5.9L

Position - Location:	45° 35.140', -122° 46.034'	45° 35' 8.4", -122° 46' 2.1"	45.58566, -122.76724	Portland

Strategy Objective: Collection : Collect oil travelling downstream on Willamette River.

Implementation: Launch workboat from Cathedral Park, BL-WR-5.8R, with 800ft. boom. Deploy boom to dolphin or dock at Anchor A just above ramp at Riverside Industrial Park, then extend boom SE toward the center of the river. Anchor at B using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil using vac truck staged onshore at industrial facility.

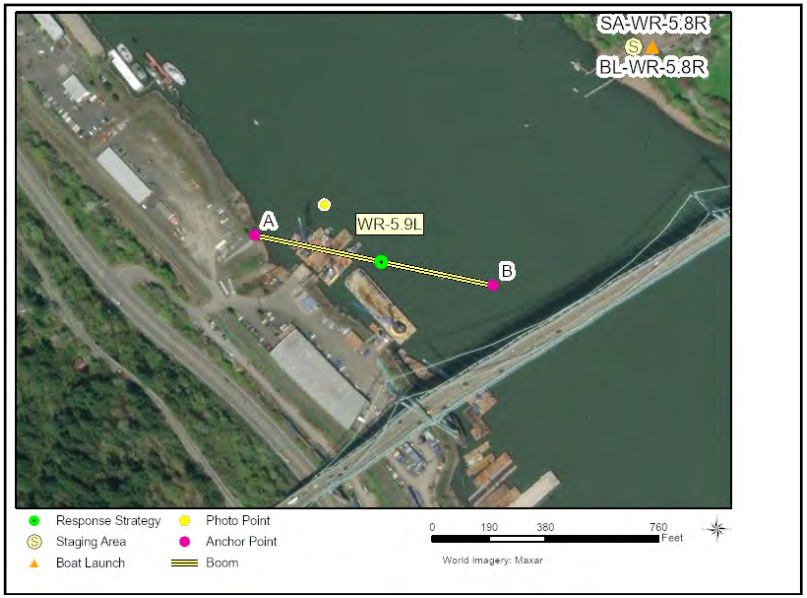
Staging Area: Remote: Stage at Cathedral Park, SA-WR-5.8R

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial traffic in area. Active industrial site on west bank.

Field Notes: Strategy is collection at active industrial facility. Large vessels and barges may be present.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Riverside Industrial Park (OR) WR-5.9L



WR-5.9L Photo: From river looking W at shoreside landing/collection area.



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

BNRR Bridge - West End (OR) WR-6.9L

Position - Location:	45° 34.535', -122° 44.875'	45° 34' 32.1", -122° 44' 52.5"	45.57558, -122.74792	Portland

Strategy Objective: Collection : Collect oil travelling downstream on Willamette River

Implementation: Launch workboat from Cathedral Park (OR) Boat Ramp, BL-WR-5.8R, with 800ft. boom. Deploy boom at steep upstream angle to collect oil on shore. Anchor to shore at AP-1 using shoreside anchor posts and to railroad bridge pier to support boom. Extend into channel and use Danforth anchor at AP-2. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil from property using vac truck.

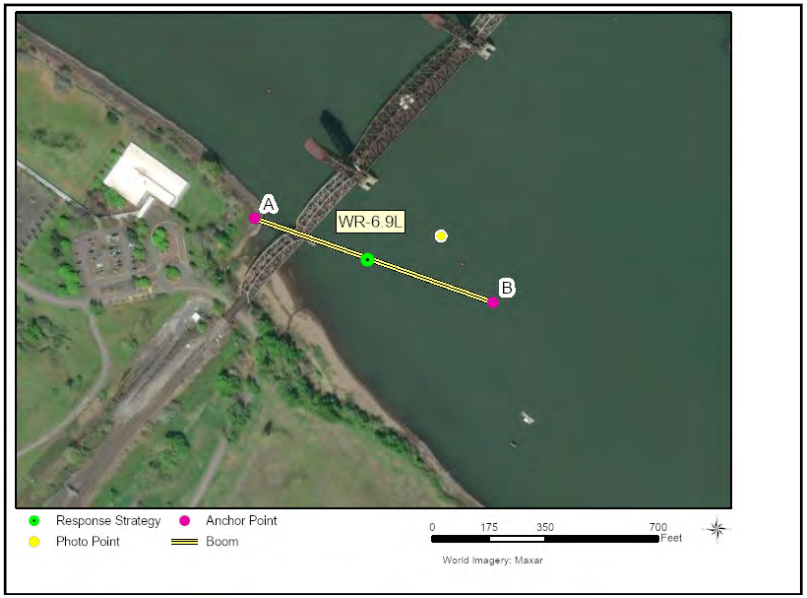
Staging Area: Remote: Stage at Cathedral Park (OR) SA-WR-5.8R

Site Safety: Slips, trips, and falls. Water hazards. Commercial and industrial vessel traffic. Active railroad bridge above strategy site.

Field Notes: Best access is by boat; shoreside access is limited by private property.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

BNRR Bridge - West End (OR) WR-6.9L



WR-6.9L Photo: On Willamette River looking west toward railroad bridge and shore beyond



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

McCormick & Baxter Restoration Site (OR) WR-6.9R

Position - Location:	45° 34.617', -122° 44.532'	45° 34' 37.0", -122° 44' 31.9"	45.57695, -122.74220	Portland

Strategy Objective: Exclusion : Prevent oil from impacting restored shoreline habitat.

Implementation: Launch workboat from Cathedral Park, BL-WR-5.8R, with 2,000ft. of boom. Anchor boom at the railroad bridge to the N of the restored shoreline, and to the NW point of outcrop on the SE side of the site. Anchor at AP-1 to boulders under railroad bridge and AP-2 using natural anchors or shoreside anchor posts. Use Danforth or other appropriate type anchor along entire boom line (every 100-150').

Staging Area: Remote: Stage at Cathedral Park, SA-WR-5.8R

Site Safety: Commercial and recreational activity

Field Notes: Boat access only. Shoreside access limited by private property.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Habitat Restoration Site, Resident Fish, Salmonids



Recommended Equipment

19	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
2000	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

2	Boat Operator
6	Laborer
1	Supervisor

McCormick & Baxter Restoration Site (OR) WR-6.9R



WR-6.9R Photo: On Willamette River looking north toward eastern end of railroad bridge and shoreline



Site Contact

No Information
Not Determined :

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Triangle Park Slip (OR) WR-7.4R

Position - Location:	45° 34.423', -122° 44.183'	45° 34' 25.4", -122° 44' 11.0"	45.57371, -122.73638	Portland

Strategy Objective: Exclusion : Keep oil away from riverbank.

Implementation: Launch workboat from Swan Island Boat Ramp, BL-WR-8.0R, with 900ft of boom. Deploy boom at upriver angle to form collection pocket. Anchor at A using shoreside anchor posts or natural anchors, and to C using Danforth or other anchor. Anchor to dock at B, and every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage.

Staging Area: Remote: Stage at Swan Island Boat Ramp, SA-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic in area.

Field Notes: The University of Portland's Boathouse & Environmental Lab are located here. This used to be an oil collection point.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Triangle Park Slip (OR) WR-7.4R



WR-7.4R Photo: From riverbank, looking southwest past dock towards deployed strategy.



Site Contact

University of Portland
Land/Property Contact : Campus Safety

Portland, OR 97203
5039437161

Nearest Address

5561 N. Basin Ave
Portland, OR 97217

Driving Directions

Directions to SA-WR-8.0R From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.74 miles)
2. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
3. Turn right on N Alberta St (0.16 miles)
4. Make sharp left on N Interstate Ave (0.21 miles)
5. Turn right on N Going St (0.67 miles)
6. At fork keep left on N Going St (0.1 miles)
7. Turn right on N Basin Ave (0.22 miles)
8. At fork keep right on N Basin Ave (0.38 miles)
9. Finish at 5561 N. Basin Ave., 97217, on the left

Elf Atochem Dock (OR) WR-7.5L

Position - Location:	45° 34.140', -122° 44.342'	45° 34' 8.4", -122° 44' 20.5"	45.56900, -122.73904	Portland

Strategy Objective: Collection : Collect oil travelling downstream on Willamette River

Implementation: Launch workboat from Swan Island Boat Launch, BL-WR-8.0R, with 800ft. of boom. Deploy boom from industrial bank on west shore at upriver angle to form collection pocket at modified shoreline. Anchor at A using shoreside anchor posts. Anchor at B using Danforth or other anchor, and anchor along boom length as necessary for conditions. If possible, use dolphin at site as one anchor point along length of boom. Collect oil on water using portable skimmer and storage.

Staging Area: Remote: Stage at Swan Island Boat Ramp, SA-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial traffic in the area. Shoreline at site is active industrial facility.

Field Notes: Strategy could be extended to enclose the Portland Tanker Basin as containment.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Elf Atochem Dock (OR) WR-7.5L



WR-7.5L Photo: On Willamette River looking NW at left bank downriver toward railroad bridge



Site Contact

No Information
Not Determined :

Nearest Address

5561 N. Basin Ave
Portland, OR 97217

Driving Directions

Directions to SA-WR-8.0R From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.74 miles)
2. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
3. Turn right on N Alberta St (0.16 miles)
4. Make sharp left on N Interstate Ave (0.21 miles)
5. Turn right on N Going St (0.67 miles)
6. At fork keep left on N Going St (0.1 miles)
7. Turn right on N Basin Ave (0.22 miles)
8. At fork keep right on N Basin Ave (0.38 miles)
9. Finish at 5561 N. Basin Ave., 97217, on the left

Steel Bridge (OR) WR-12.2R

Position - Location:	45° 31.666', -122° 40.049'	45° 31' 39.9", -122° 40' 2.9"	45.52776, -122.66748	Portland

Strategy Objective: Exclusion : Contain and recover oil at main outfall from Sullivan's Gulch drainage basin.

Implementation: Launch workboat from Swan Island Boat Ramp, BL-WR-8.0R, with 300ft. boom. Deploy boom in a chevron configuration across outfall opening. Anchor at A to cables at shoreline under pedestrian causeway under Steel Bridge. Anchor at C using natural anchors or shoreside anchor posts. Anchor at B using Danforth or other anchor and anchor along boom length as necessary for conditions.

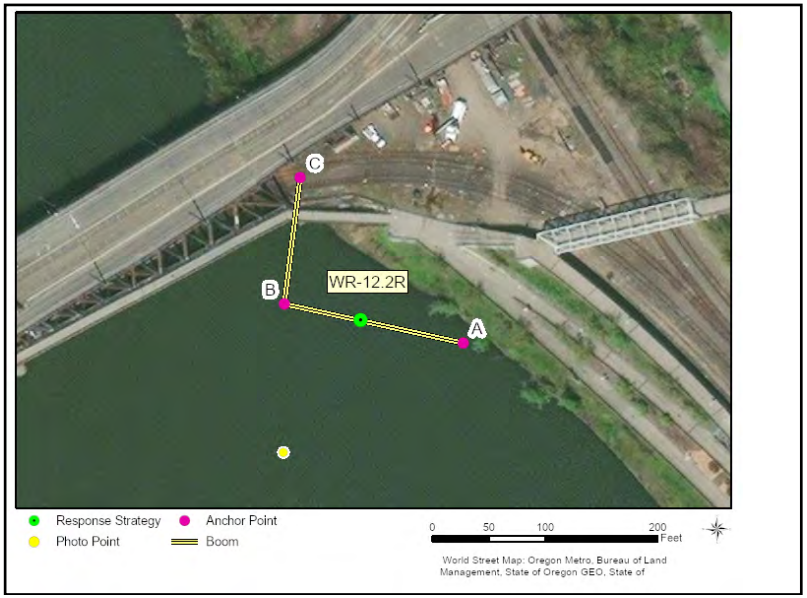
Staging Area: Remote: Stage at Swan Island Boat Ramp, SA-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazards. Active railroad; expect trains on the track at any time from either direction.

Field Notes: Do not allow people/equipment within 25ft. of track. Site is at intersection of railroad and highway. Shoreside access is possible, but best access is by boat.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Steel Bridge (OR) WR-12.2R



WR-12.2R Photo: On water looking NNE toward eastern end of bridge and shore



Site Contact

No Information
Not Determined :

Nearest Address

5561 N. Basin Ave.
Portland, OR 97217

Driving Directions

1. Start at I 5 Portland
2. Go south on I-5 (Interstate Brg) toward 307 (3.76 miles)
3. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
4. Turn right on N Alberta St (0.16 miles)
5. Make sharp left on N Interstate Ave (0.21 miles)
6. Turn right on N Going St (0.67 miles)
7. At fork keep left on N Going St (0.1 miles)
8. Turn right on N Basin Ave (0.22 miles)
9. At fork keep right on N Basin Ave (0.38 miles)
10. Finish at 5561 N. Basin Ave., 97217, on the left

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Potential land access at 300 N Winning Way, Portland 97227

Eastbank Esplanade Outfalls (OR — WR-12.7R

Position - Location:	45° 31.623', -122° 39.979'	45° 31' 37.4", -122° 39' 58.7"	45.52705, -122.66631	Portland

Strategy Objective: Collection : Contain and recover oil from large outfalls from East Portland Industrial Area drainage basin.

Implementation: Launch workboat from Swan Island Boat Ramp, BL-WR-8.0R, with 400ft. boom. Deploy boom in a chevron configuration across outfall opening. Anchor at A and C using natural anchors or shoreside anchor posts. Anchor at B using Danforth or other anchor and anchor along boom length as necessary for conditions. Collect oil with portable skimmer and storage.

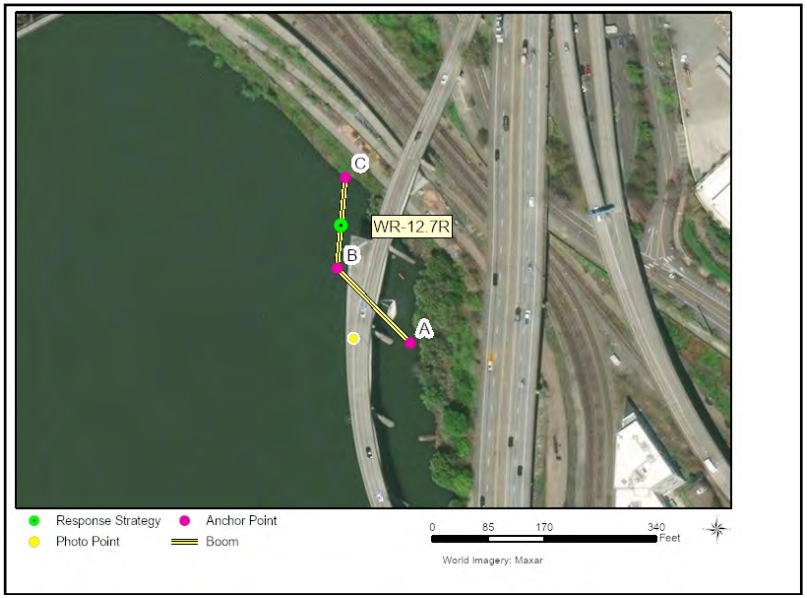
Staging Area: Remote: Stage at Swan Island Boat Ramp, SA-WR-8.0R

Site Safety: Slips, trips, and falls. Water hazards. Active railroad; expect trains on the track at any time from either direction.

Field Notes: Do not allow people/equipment within 25ft. of railroad track. I-5 underdeck slopes to river at this location; Walkways and floating decks are present at Eastbank Esplanade.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Eastbank Esplanade Outfalls (OR — WR-12.7R



WR-12.7R Photo: On water looking NNE toward outfall underneath road



Site Contact

No Information
Not Determined :

Nearest Address

5561 N Basin Ave
Portland, OR 97217

Driving Directions

1. Start at I 5 Portland
2. Go south on I-5 (Interstate Brg) toward 307 (3.68 miles)
3. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
4. Turn right on N Alberta St (0.16 miles)
5. Make sharp left on N Interstate Ave (0.21 miles)
6. Turn right on N Going St (0.67 miles)
7. At fork keep left on N Going St (0.1 miles)
8. Turn right on N Basin Ave (0.22 miles)
9. At fork keep right on N Basin Ave (0.38 miles)
10. Finish at 5561 N Basin Ave, 97217, on the left

River Place Marina (OR) WR-13.4L

Position - Location:	45° 30.604', -122° 40.268'	45° 30' 36.3", -122° 40' 16.1"	45.51007, -122.67113	Portland

Strategy Objective: Deflection : Prevent oil from entering River Place Marina.

Implementation: Launch workboat from Ross Island Sand & Gravel, BL-WR-13.9R, with 800ft. boom. Deploy boom around marina and anchor to A using shoreside anchor posts. Anchor at B to dolphin, and to C using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions.

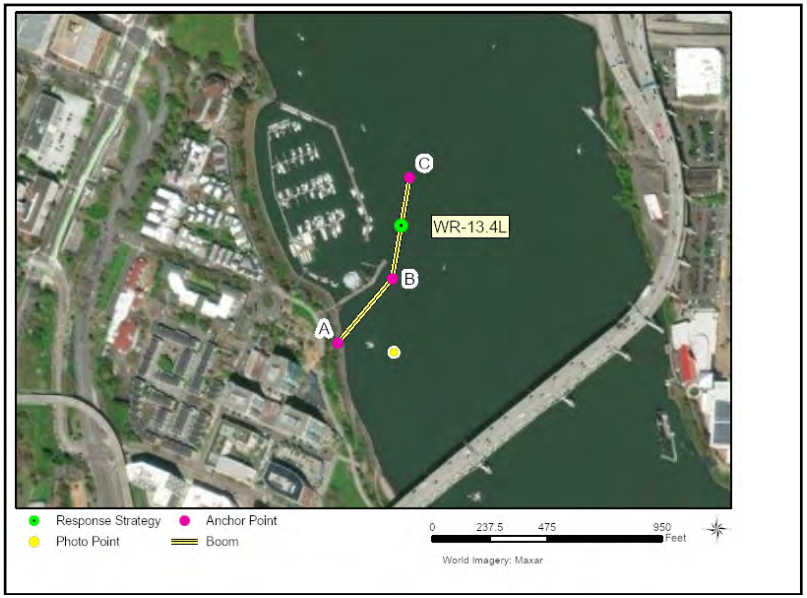
Staging Area: Remote: Stage at SA-WR-13.9R Ross Island Sand & Gravel; launch from same BL-WR-13.9R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational boating and activity in the area.

Field Notes: Site is at heavily used marina with significant recreational traffic.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Marina, Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

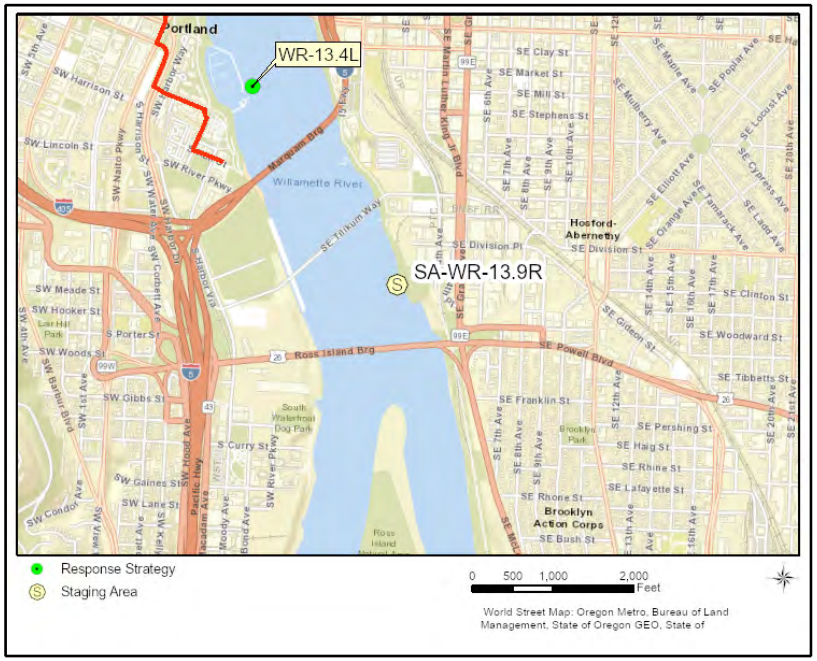
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

River Place Marina (OR) WR-13.4L



WR-13.4L Photo: On water looking NNW toward dolphin and shore



Site Contact

No Information
Not Determined :

Nearest Address

1920 SW River Square
Portland, OR 97201

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.58 miles)
2. At exit 300B bear right onto ramp to OR-99e toward Oregon City/E/Omsi (0.02 miles)
3. Take ramp toward Morrison St./City Center (0.58 miles)
4. Bear right on Morrison Brg (0.23 miles)
5. Bear right onto ramp toward Naito Pkwy/Salem/S (0.11 miles)
6. Turn right on SW Naito Pky (SW Front Ave) (0.56 miles)
7. Turn left on SW Harbor Dr (0.13 miles)
8. Turn left on SW Montgomery St (0.13 miles)
9. At roundabout, take 1st exit to proceed southwest on SW River Dr (0.1 miles)
10. Turn left on SW River Sq (SW Riversquare) (0.06 miles)
11. Finish at 1920 SW River Square, 97201, on the left

OMSI - Marquam Bridge (OR) WR-13.4R

Position - Location:	45° 30.566', -122° 40.053'	45° 30' 33.9", -122° 40' 3.2"	45.50943, -122.66755	Portland

Strategy Objective: Collection : Collect oil travelling downriver on the Willamette

Implementation: Launch workboat from Ross Island Sand & Gravel, BL-WR-13.9R, with 500ft. boom. Anchor at A to bridge piers using eye bolt in concrete if water level allows and bridle system if not. Angle boom toward shoreline and anchor at B to pilings. Place additional Danforth type anchors along boom line every 100-150 feet based on conditions of the day. Collect oil using vac truck staged onshore.

Staging Area: Remote: Stage at SA-WR-13.9R Ross Island Sand & Gravel; launch from same BL-WR-13.9R.

Site Safety: Slips, trips, and falls. Water hazards. Industrial and recreational traffic in vicinity.

Field Notes: Site is at Marquam Bridge, across the river from the River Place Marina.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

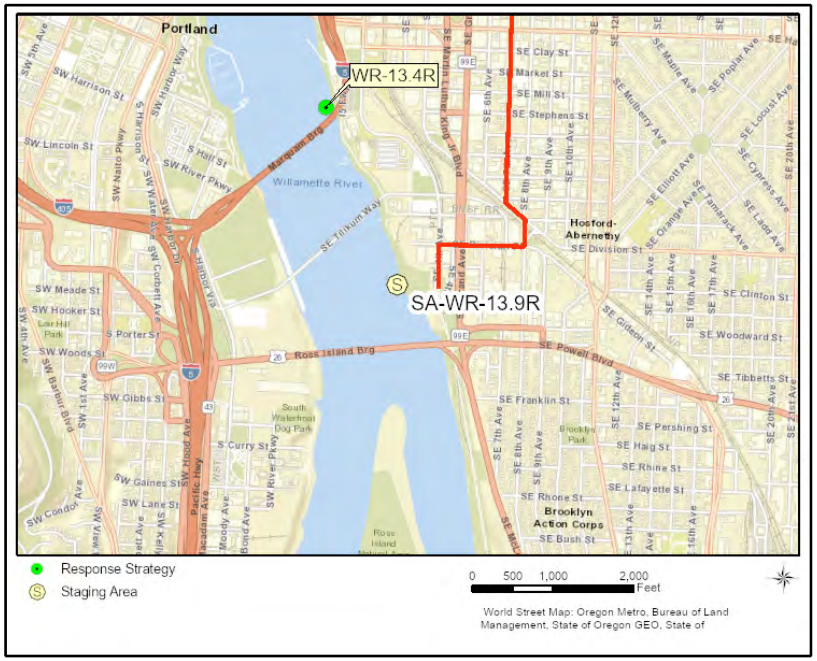
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

OMSI - Marquam Bridge (OR) WR-13.4R



WR-13.4R Photo: From upriver of Marquam Bridge near AP-1, looking NE downstream.



Site Contact

No Information
Not Determined :

Nearest Address

2611 SE 4th Avenue
Portland, OR 97202

Driving Directions

1. Start at I 5 Portland
2. Go south on I-5 (Interstate Brg) toward 307 (6.58 miles)
3. At exit 300B bear right onto ramp to OR-99e toward Oregon City/E/Omsi (0.02 miles)
4. Take ramp toward Oregon City/Omsi (0.86 miles)
5. Continue on SE Belmont St (0.1 miles)
6. Turn right on SE 7th Ave (0.7 miles)
7. Turn left on SE Division St (0.06 miles)
8. Turn right on SE 8th Ave (0.06 miles)
9. Turn right on SE Division Pl (0.2 miles)
10. Turn left on SE 4th Ave (0.1 miles)
11. Finish at 2611 SE 4th Avenue, 97202, on the right

.

From staging area to collection site located at 1945 SE Water Ave, 97214:

1. Head north on SE 4th Ave
2. Take a right onto SE Water Ave
3. Site is on the left under the I-5 Bridge.

OMSI Docks (OR) WR-13.5R

Position - Location:	45° 30.468', -122° 40.016'	45° 30' 28.1", -122° 40' 1.0"	45.50780, -122.66694	Portland

Strategy Objective: Exclusion : Prevent oiling of historic submarine.

Implementation: Launch workboat from Ross Island Sand & Gravel, BL-WR-13.9R, with 600ft. boom. Deploy boom around historic submarine and docks. Anchor at D using shoreside anchor posts. Anchor to B and C using Danforth or other anchors. Anchor at A using shoreside anchor posts or anchor to walkway supports. Anchor along boom length as necessary for conditions.

Staging Area: Remote: Stage at Ross Island Sand & Gravel, SA-WR-13.9R

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic.

Field Notes: Site is intended to protect historic submarine at OMSI and accompanying docks. There will likely be pedestrian traffic in the area.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Economic Resources, Resident Fish, Salmonids



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

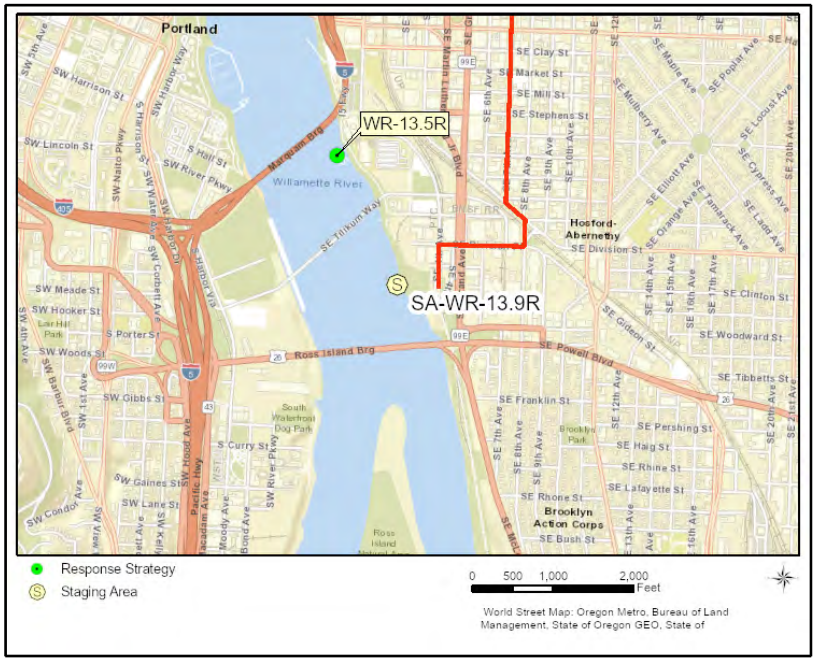
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

OMSI Docks (OR) WR-13.5R



WR-13.5R Photo: Up river end of historic submarine, looking NE downstream. AP-3 in foreground.



Site Contact

No Information
Not Determined :

Nearest Address

2611 SE 4th Ave
Portland, OR 97202

Driving Directions

1. Start at I-5 S Portland OR
2. Go south on I-5 (Pacific Hwy) (4.58 miles)
3. At exit 300B bear right onto ramp to OR-99e toward Oregon City/E/Omsi (0.02 miles)
4. Take ramp toward Oregon City/Omsi (0.86 miles)
5. Continue on SE Belmont St (0.1 miles)
6. Turn right on SE 7th Ave (0.7 miles)
7. Turn left on SE Division St (0.06 miles)
8. Turn right on SE 8th Ave (0.06 miles)
9. Turn right on SE Division Pl (0.2 miles)
10. Turn left on SE 4th Ave (0.1 miles)
11. Finish at 2611 SE 4th Ave, 97202, on the right

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Land access from 1945 SE Water Ave Portland, OR 97214 from staging area:

1. Head N on SE 4th Ave
2. OMSI is straight ahead

Zidell Yard (OR) WR-14.1L

Position - Location:	45° 29.962', -122° 40.003'	45° 29' 57.7", -122° 40' .2"	45.49937, -122.66672	Portland

Strategy Objective: Collection : Collect oil moving downstream on the Willamette River.

Implementation: Launch workboat from ramp onsite with 500ft. boom. Deploy boom at an upstream angle from north bank of marine haul-out ramp. Anchor at A using shoreside anchor posts and to B using Danforth type anchor. Anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil using vac truck staged onshore at Zidell Shipbuilding yard.

Staging Area: Onsite: Stage onsite at Zidell Marine Shipyard (SA/BL-WR-14.1L)

Site Safety: Slips, trips, and falls. Water hazards. Industrial facility with heavy equipment.

Field Notes: Site is at Zidell shipbuilding yard.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Zidell Yard (OR) WR-14.1L



WR-14.1L Photo: On water looking NW toward Zidell shipyard



Site Contact

No Information
Not Determined :

Nearest Address

3121 SW Moody Ave
Portland, OR 97239

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (2.74 miles)
2. At exit 302B take ramp on the right and go on I-405 W toward Beaverton/W/St. Helens (2.95 miles)
3 At exit 1C bear right onto ramp toward 6th. Ave./E/Ross Is. Br. (0.19 miles)
4. Continue on SW Broadway (0.13 miles)
5. Bear right on US-26 (SW 5th Ave) (0.21 miles)
6. Turn right to stay on US-26 (SW Sheridan St) (0.3 miles)
7. Make sharp left on SW Water Ave (0.05 miles)
8. Turn right on SW Arthur St (0.05 miles)
9. Turn left on SW Corbett Ave (0.05 miles)
10. Continue on SW Water Ave (0.05 miles)
11. Turn right on SW Sheridan St (0.1 miles)
12. Bear right on SW Moody Ave (0.38 miles)
13. Finish at 3121 SW Moody Ave, 97239, on the right

Ross Island E Channel (OR) WR-14.7R

Position - Location:	45° 29.454', -122° 39.491'	45° 29' 27.2", -122° 39' 29.5"	45.49090, -122.65819	Portland

Strategy Objective: Collection : Collect and recover oil and prevent oil from moving downriver.

Implementation: Launch workboat from Ross Island Sand & Gravel, BL-WR-13.9R, with 900ft. boom. Deploy boom at an upstream angle from ramp at Ross Island Sand & Gravel Co., main operations facility, to north end of Hard Tack Island. Anchor at A and B using natural anchors or shoreside anchor posts. Place additional Danforth type anchors every 100-150ft. along boom length or as necessary for conditions. Collect oil using vac truck staged on ramp at Ross Island Sand & Gravel Co.

Staging Area: Remote: Stage at Ross Island Sand & Gravel, SA-WR-13.9R; launch from same BL-WR-13.9R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic. Active rail line. Expect rail traffic at any time from either

Field Notes: Ross Island Sand & Gravel has boat ramp/ house on property at 4315 S.E. McLoughlin Blvd. (503) 239-5504.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Raptors, Resident Fish, Salmonids



Recommended Equipment

7	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
900	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

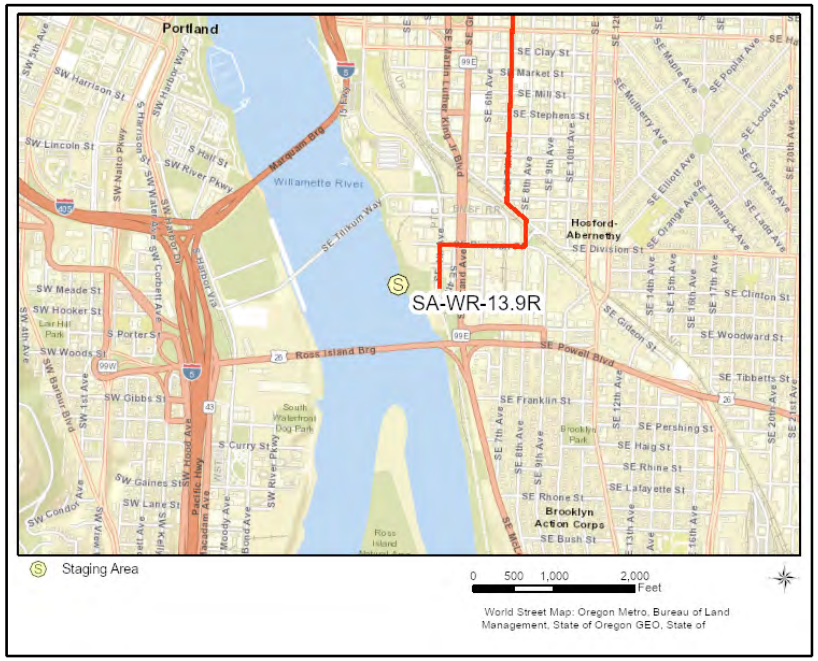
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Ross Island E Channel (OR) WR-14.7R



WR-14.7R Photo: On water looking ESE upriver toward right bank and boat ramp in foreground



Site Contact

No Information
Not Determined :

Nearest Address

2611 SE 4th Avenue
Portland, OR 97202

Driving Directions

1. Start at I-5 S Portland
2. Go south on I-5 (Pacific Hwy) (4.58 miles)
3. At exit 300B bear right onto ramp to OR-99e toward Oregon City/E/Omsi (0.02 miles)
4. Take ramp toward Oregon City/Omsi (0.86 miles)
5. Continue on SE Belmont St (0.1 miles)
6. Turn right on SE 7th Ave (0.7 miles)
7. Turn left on SE Division St (0.06 miles)
8. Turn right on SE 8th Ave (0.06 miles)
9. Turn right on SE Division Pl (0.2 miles)
10. Turn left on SE 4th Ave (0.1 miles)
11. Finish at 2611 SE 4th Avenue, 97202, on the right

Ross Island W Channel (OR) WR-14.9L

Position - Location:	45° 29.292', -122° 40.261'	45° 29' 17.5", -122° 40' 15.7"	45.48820, -122.67102	Portland

Strategy Objective: Collection : Collect and recover oil and prevent oil from moving downriver.

Implementation: Launch workboat from Zidell Shipyard, BL-WR-14.1L, with 500ft. boom. Deploy boom at an upstream angle and anchor at A by attaching boom to eye bolt in large cement block on shoreline in cove. Anchor to B using Danforth or other anchor and anchor every 100-150ft. along boom length or as necessary for conditions. Collect oil on water using portable skimmer and storage.

Staging Area: Remote: Stage at SA-WR-14.1L Zidell Shipyard; launch from same BL-WR-14.1L.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic.

Field Notes: Strategy may be accessed shoreside via paved riverwalk. There may be pedestrian traffic present.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

4	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Ross Island W Channel (OR) WR-14.9L



WR-14.9L Photo: On water looking W toward west bank of west channel around Ross Island



Site Contact

No Information
Not Determined :

Nearest Address

31231 SW Moody Avenue
Portland, OR 97239

Driving Directions

1. Start at I 5 Portland
2. Go south on I-5 (Pacific Hwy) (6.41 miles)
3. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
4. Continue on OR-43 (SW Hood Ave) (0.4 miles)
5. At fork keep left on SW Hood Ave (0.03 miles)
6. Turn left (0.05 miles)
7. Continue on OR-43 (SW Macadam Ave) (0.1 miles)
8. Turn right on SW Abernethy St (SW Abernathy St) (0.1 miles)
9. Turn left on SW Bond Ave (0.1 miles)
10. Turn left on SW Gaines St (0.05 miles)
11. Turn left on SW Moody Ave (0.07 miles)
12. Finish at 31231 SW Moody Avenue, 97239, on the left

Ross Island W Channel (OR) WR-15.5M

Position - Location:	45° 28.717', -122° 39.875'	45° 28' 43.0", -122° 39' 52.5"	45.47861, -122.66459	Portland

Strategy Objective: Deflection : Deflect oil away from shallow water habitat between Ross Island and Toe Island.

Implementation: Launch workboat from Willamette Park, BL-WR-15.6L, with 1000ft. boom. Deploy at downstream angle from southernmost tip of Ross Island. Anchor at A using natural anchors or shoreside anchor posts. Anchor at B using Danforth or other anchor, and anchor every 100-150ft. along boom length or as necessary for conditions.

Staging Area: Remote: Stage at Willamette Park, SA-WR-15.6L

Site Safety: Slips, trips, and falls. Water hazards. Recreational vessel traffic in area.

Field Notes: Boat access only. Strategy is at southernmost tip of Ross Island.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids



Recommended Equipment

9	Each	Anchoring System(s) - (anchor, lines, floats)
1	Each	Anchoring System(s)- Shoreside
1000	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Ross Island W Channel (OR) WR-15.5M



WR-15.5M Photo: On water looking E toward tip of Ross Island



Site Contact

No Information
Not Determined :

Nearest Address

6336 SW Beaver Ave
Portland, OR 97239

Driving Directions

Directions to SA-WR-15.6
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (6.41 miles)
2. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
3. Continue on OR-43 (SW Hood Ave) (0.4 miles)
4. At fork keep right on OR-43 (SW Hood Ave) (1.05 miles)
5. Turn left on SW Carolina St (0.05 miles)
6. Turn right on SW Beaver Ave (0.01 miles)
7. Finish at 6336 SW Beaver Ave, 97239, on the left

Ross Island E Channel (OR) WR-15.9R

Position - Location:	45° 28.650', -122° 39.437'	45° 28' 39.0", -122° 39' 26.2"	45.47750, -122.65728	Portland

Strategy Objective: Exclusion : Prevent oil from entering wetland.

Implementation: Launch from Willamette Park / BL-WR-15.6L with 100' of boom. Attach boom to shoreline on either side of 3' diameter pipe, that feeds water to Oaks Bottom, using shoreside anchoring systems. Add additional danforth or other appropriate type along boom line if needed for conditions.

Staging Area: Remote: Stage at Willamette Park, SA-WR-15.6L

Site Safety: Slips, trips, and falls. Water hazards. Active rail traffic. Expect rail traffic from either direction at any time. Do not allow people or

Field Notes: Site is at Oaks Bottom Wildlife Refuge and Springwater Trail Levee

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: City Park, Recreational Use Area, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Ross Island E Channel (OR) WR-15.9R



WR-15.9R Photo: On water looking S toward the right bank of the east channel toward the outfall



Site Contact

No Information
Not Determined :

Nearest Address

6336 SW Beaver Ave
Portland, OR 97239

Driving Directions

Directions to SA-WR-15.6
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (6.41 miles)
2. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
3. Continue on OR-43 (SW Hood Ave) (0.4 miles)
4. At fork keep right on OR-43 (SW Hood Ave) (1.05 miles)
5. Turn left on SW Carolina St (0.05 miles)
6. Turn right on SW Beaver Ave (0.01 miles)
7. Finish at 6336 SW Beaver Ave, 97239, on the left

Johnson Creek (OR) WR-18.4R

Position - Location:	45° 26.643', -122° 38.635'	45° 26' 38.6", -122° 38' 38.1"	45.44405, -122.64391	Milwaukie

Strategy Objective: Exclusion : Prevent oil from impacting historic features and shallow water (restored) habitat at creek mouth.

Implementation: Launch from Milwaukie Riverfront Park BL-WR-18.5R with 600' of boom. Anchor boom to shore on one side of historic pilings at the creek entrance using shoreline anchoring systems. Tow center of boom toward mid-river (~60' depth) to make a chevron formation, then attach final end of boom to shore on the opposite side of the creek. Add additional Danforth type anchors to boom line, one ever 100-150'. Adjust angle of boom, quantity and placement of anchors, based on conditions of the day. Avoid ANY impact to historic pilings. Notify Environmental Unit if deploying this strategy.

Staging Area: Remote: Stage from Milwaukie Riverfront Park SA-WR-18.5R; launch from same BL-WR-18.5R.

Site Safety: Water hazard, river traffic, submerged obstructions, historic pilings

Field Notes: Launch from BL-WR-18.5R

Watercourse: River - Below a Dam - Low/medium flow

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Shore Connect System (posts, driver, anchor, chain, line)
1	Each	Workboat(s) - of adequate size for type and amount of boom

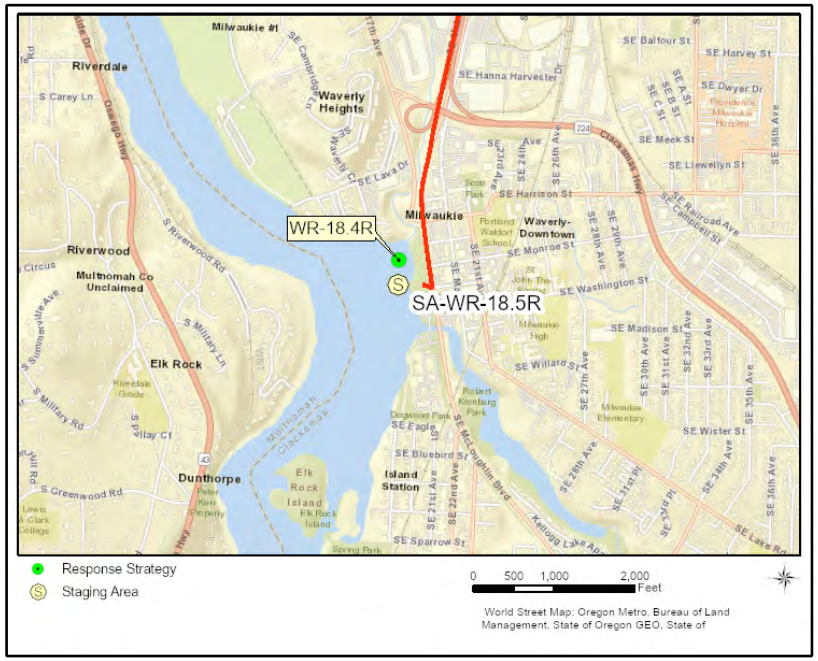
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Johnson Creek (OR) WR-18.4R



WR-18.4R Photo: WR-18.4 Photo



Site Contact

No Information
Other :

Nearest Address

10993 SE McLoughlin Blvd
Milwaukie, OR 97222

Driving Directions

1. Start at Portland, Oregon
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (4.99 miles)
10. Turn right on SE Jefferson St (0.02 miles)
11. Finish at 1855 SE Jefferson St, 97222, on the right

Kellogg Creek (OR) WR-18.5R

Position - Location:	45° 26.504', -122° 38.599'	45° 26' 30.3", -122° 38' 36.0"	45.44174, -122.64332	Portland

Strategy Objective: Exclusion : Prevent oil from entering Kellogg Creek.

Implementation: Launch workboat from Milwaukie Park BL-WR-18.5R with 300' of boom. Deploy boom in chevron configuration across entrance to Kellog Creek. Anchor at A using natural anchors or shoreside anchor posts, and anchor at C to retaining wall. Anchor at B using Danforth or other anchor, and anchor along boom length as necessary for conditions. Do NOT anchor to historic pilings. Notify Environmental Unit if deploying this strategy.

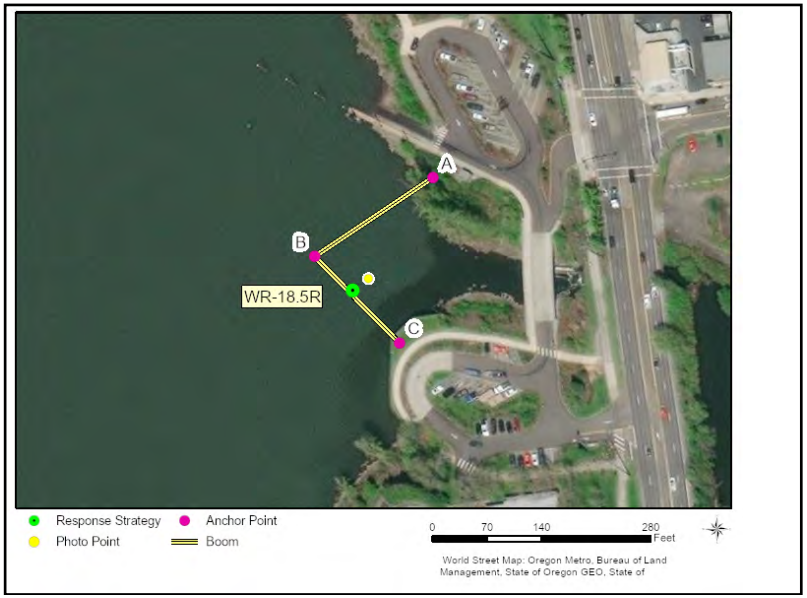
Staging Area: Onsite: Stage onsite at parking area near creek mouth or Milwaukie Park.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is operated by Clackamas Water Environment Services - Kellog Creek Sewage Treatment Plant

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Fish Ladder(s), Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

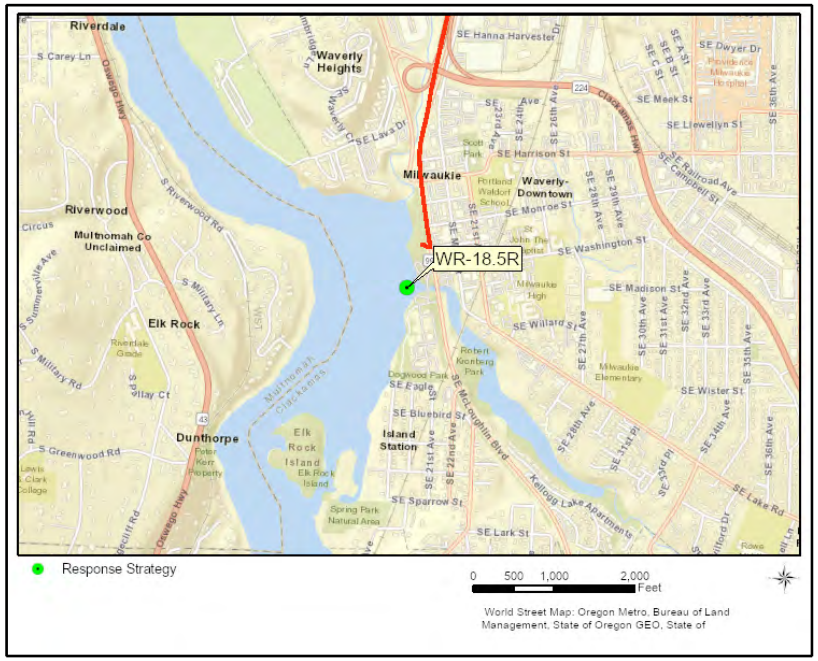
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Kellogg Creek (OR) WR-18.5R



WR-18.5R Photo: On water looking east at mouth of Kellogg Lake



Site Contact

No Information
Not Determined :

Nearest Address

1855 SE Jefferson St
Portland, OR 97222

Driving Directions

1. Start at portland, oregon
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (4.99 miles)
10. Turn right on SE Jefferson St (0.02 miles)
11. Finish at 1855 SE Jefferson St,, 97222, on the right

Cedar Island (OR) WR-23.6L

Position - Location:	45° 23.105', -122° 37.481'	45° 23' 6.3", -122° 37' 28.8"	45.38509, -122.62468	West Linn

Strategy Objective: Exclusion : Prevent oil from entering west channel behind Cedar island.

Implementation: Launch workboat from Cedaroak Boat Ramp, BL-WR-23.1L, with 500ft. boom. Deploy boom in chevron configuration across the southern entrance of the channel to the west of Cedar Island. Anchor at A and C using natural anchors or shoreside anchor posts, and anchor at B using Danforth or other anchor. Anchor along boom length as necessary for conditions.

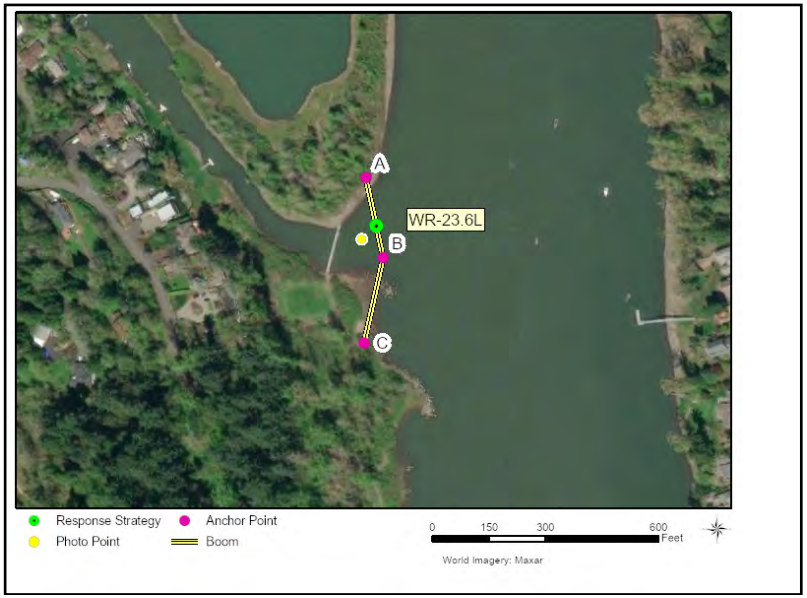
Staging Area: Remote: Stage at SA-WR-23.1L, Cedaroak Boat Ramp, launch at same BL-WR-23.1L.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes:

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Backwater Habitat, Raptors, Reptiles and Amphibians, Resident Fish, Salmonids



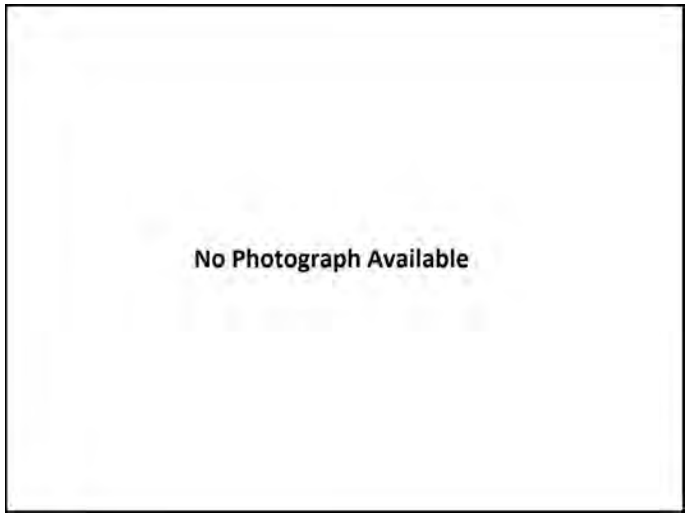
Recommended Equipment

5	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Cedar Island (OR) WR-23.6L



WR-23.6L Photo: No photo available.



Site Contact

No Information
Not Determined :

Nearest Address

4600 Elmran Drive
West Linn, OR 97068

Driving Directions

Directions to Cedaroak Boat Launch BL-WR-23.1L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.3 miles)
4. Turn right on NW Naito Pky (NW Front Ave) (1.53 miles)
5. Continue (0.05 miles)
6. Continue on SW Naito Pky (SW Front Ave) (0.16 miles)
7. Continue (0.19 miles)
8. Turn left on SW Gibbs St (0.04 miles)
9. Turn right on OR-43 (SW Hood Ave) (0.45 miles)
10. At fork keep right on OR-43 (SW Hood Ave) (7.97 miles)
11. Turn left on Walling Way (0.21 miles)
12. Turn left on Old River Dr (0.1 miles)
13. Turn right on Elmran Dr and stay on Elmran Dr until it ends at the boat launch (0.62 miles)

Unnamed Slough near Bolton (OR) WR-23.8L

Position - Location:	45° 22.823', -122° 37.339'	45° 22' 49.4", -122° 37' 20.4"	45.38038, -122.62232	Gladstone

Strategy Objective: Exclusion : Prevent oil from entering the west channel behind series of islands

Implementation: Launch workboat from Meldrum Bar Park, BL-WR-24.2R, with 1300ft. of boom. Anchor boom at A to rock outcrop at northeastern most point of island, and at C at Mary Young State Park, both using natural anchors or shoreside anchor posts. Anchor at B using Danforth or other anchor, and anchor every 100-150ft. along boom length or as necessary for conditions.

Staging Area: Remote: Stage at SA-WR-24.2R Meldrum Bar Park, launch from same BL-WR-24.2R.

Site Safety: Slips, trips, and falls. Water hazards. Shallow water.

Field Notes: Boat access only. Beware of floating dock adjacent to strategy location.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids



Recommended Equipment

12	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1300	Feet	Boom - B3 (River Boom) or equivalent
2	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Workboat(s) - of adequate size for type and amount of boom

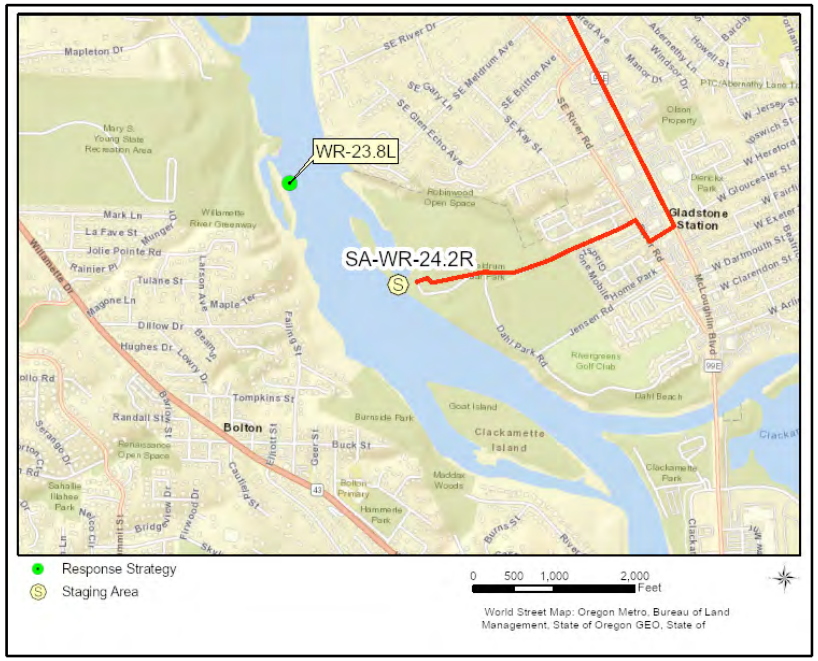
Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Unnamed Slough near Bolton (OR) WR-23.8L



WR-23.8L Photo: On water looking west toward slough on left bank



Site Contact

No Information
Not Determined :

Nearest Address

Meldrum Bar Park Road
Gladstone, OR 97027

Driving Directions

Directions to Meldrum Bar Park BL-WR-24.2R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (9.89 miles)
10. Turn right on W Gloucester St (0.07 miles)
11. Turn right on River Rd (0.06 miles)
12. Turn left on Meldrum Bar Park Rd (0.28 miles)
13. Finish at Meldrum Bar Park Road, 97027, on the right

Meldrum Slough (OR) WR-23.9R

Position - Location:	45° 22.735', -122° 37.040'	45° 22' 44.1", -122° 37' 2.4"	45.37891, -122.61734	Gladstone

Strategy Objective: Exclusion : Prevent oil from entering the Meldrum Slough and wetlands.

Implementation: Launch workboat from Meldrum Bar Park, BL-WR-24.2R, with 100ft. boom. Deploy boom across southern entrance to slough. Anchor boom at A and B using natural anchor points on each side of Meldrum Bar. Use a danforth type anchor along boom line if needed based on conditions of the day.

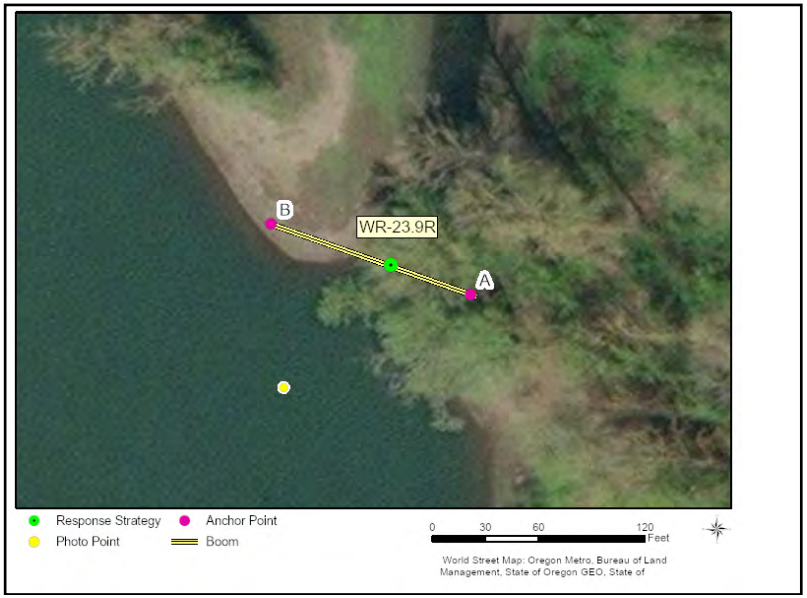
Staging Area: Remote: Stage at SA-WR-24.2R Meldrum Bar Park, launch from same BL-WR-24.2R.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Boat access only. Strategy is at the southern opening to Meldrum Slough.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

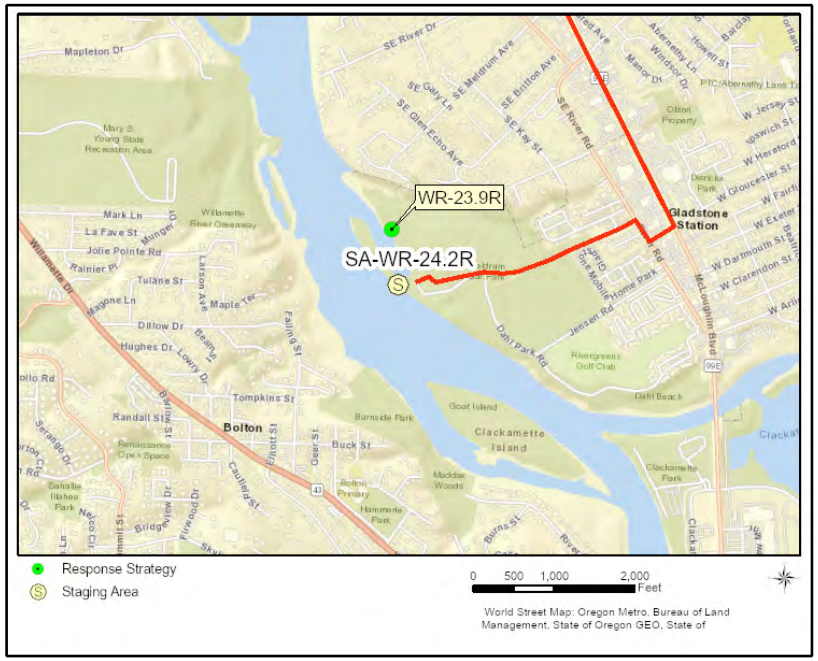
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Meldrum Slough (OR) WR-23.9R



WR-23.9R Photo: On water looking NNE at right bank of river



Site Contact

No Information
Not Determined :

Nearest Address

Meldrum Bar Park Road
Gladstone, OR 97027

Driving Directions

Directions to Meldrum Bar Park BL-WR-24.2R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (9.89 miles)
10. Turn right on W Gloucester St (0.07 miles)
11. Turn right on River Rd (0.06 miles)
12. Turn left on Meldrum Bar Park Rd (0.28 miles)
13. Finish at Meldrum Bar Park Road, 97027, on the right

Abernethy Creek Outfall (OR) WR-25.5R

Position - Location:	45° 21.893', -122° 36.127'	45° 21' 53.6", -122° 36' 7.6"	45.36488, -122.60211	Oregon City

Strategy Objective: Collection, Exclusion : Contain and collect oil at stream (culvert) entrance to river, originating from upstream industries.

Implementation: From Sportcraft Marina, deploy 100ft. of boom from shore (using line throwing device) across outfall. Anchor boom at A and B using natural anchors if possible or shoreside anchor posts. Recover oil coming downstream from outfall using vac truck staged onsite at Sportcraft Marina.

Staging Area: Onsite: Stage onsite at Sportcraft Marina.

Site Safety: Slips, trips, and falls. Water hazards. Significant recreational traffic in the area.

Field Notes: Strategy is at Sportcraft Marina, which has a boat ramp, parking area, and a marina with covered slips. Outfall is a culvert.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids, Sensitive Resources



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Vac Truck or Skimmer and Storage

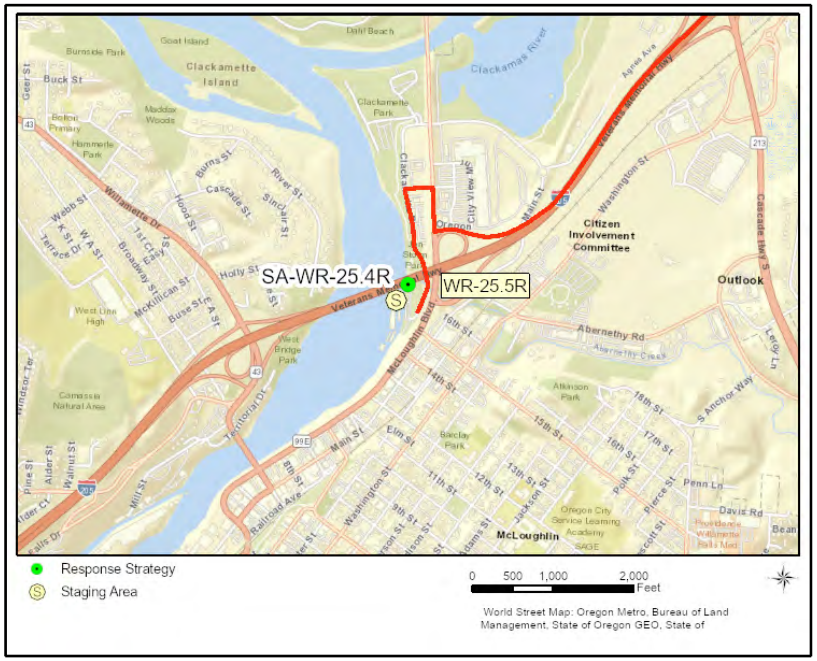
Recommended Personnel

1	Laborer
1	Supervisor

Abernethy Creek Outfall (OR) WR-25.5R



WR-25.5R Photo: On shore at boat ramp looking east at Abernathy Creek Outfall



Site Contact

No Information
Other :

Nearest Address

1701 Clackamette Drive
Oregon City, OR 97045

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.34 miles)
2. At exit 301 bear right onto ramp and go on I-84 E/US-30 E toward The Dalles (5.4 miles)
3. At exit 6 take ramp on the right to I-205 S toward Salem (0.27 miles)
4. At exit 6 keep left on I-205 S (0.16 miles)
5. Go on I-205 (Veterans Memorial Hwy) (11.62 miles)
6. At exit 9 bear right onto ramp to OR-99e toward Oregon City/Gladstone (0.08 miles)
7. Take ramp to OR-99e N toward Portland (0.31 miles)
8. Turn left on Dunes Dr (0.07 miles)
9. Turn left on Clackamette Dr (0.3 miles)
10. Finish at 1701 Clackamette Dr,97045, on the right

Hwy 43 Bridge (OR) WR-25.9R

Position - Location:	45° 21.569', -122° 36.513'	45° 21' 34.2", -122° 36' 30.8"	45.35949, -122.60855	Oregon City

Strategy Objective: Collection : Collect oil moving downriver at accessible point.

Implementation: Launch boat from Sportcraft Marina, BL-WR-25.4R with 1,000ft of boom. Deploy boom from A at west end pillar of Hwy 43 bridge, to the eastern most pillar supporting Hwy 99 viaduct (Anchor C) and then back to the west pillar of the viaduct to exclude oil from going under the highway. Collect on water using portable skimmer and storage.

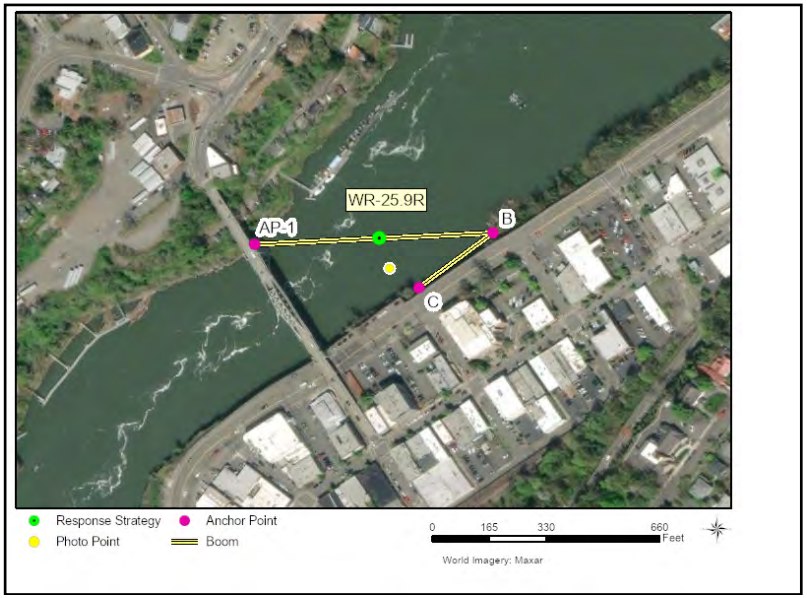
Staging Area: Remote: Stage at SA-WR-25.4R, Sportcraft Marina. Launch at same BL-WR-25.4R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic in the area.

Field Notes: Collection point is under Highway 99 viaduct.

Watercourse: River - Below a Dam - Willamette River

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

8	Each	Anchoring System(s) - (anchor, lines, floats)
1000	Feet	Boom - B3 (River Boom) or equivalent
3	Each	Bridle(s) - Bridge Pier (appropriately sized for boom)
2	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Skimmer (appropriately sized) with Portable Storage
2	Each	Workboat(s) - of adequate size for type and amount of boom

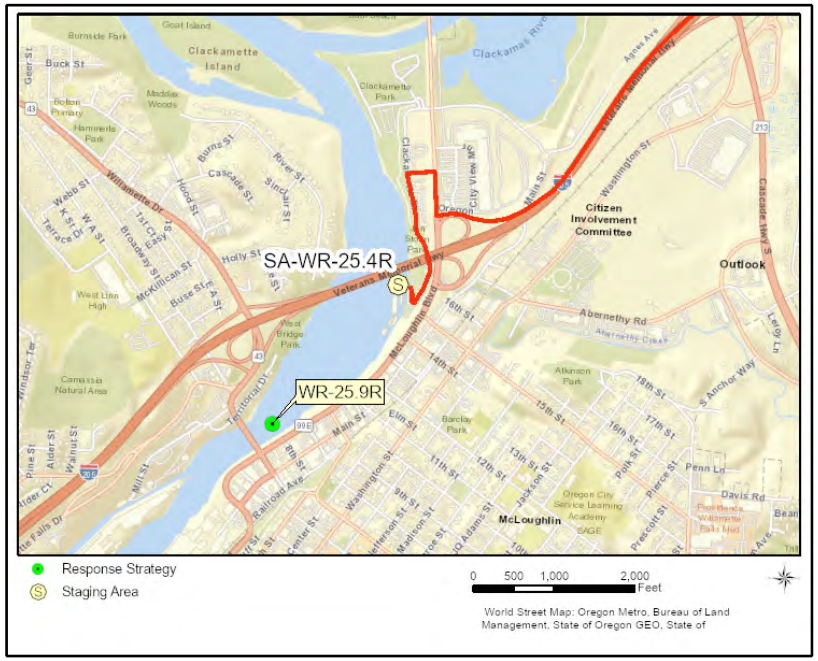
Recommended Personnel

2	Boat Operator
4	Laborer
1	Supervisor

Hwy 43 Bridge (OR) WR-25.9R



WR-25.9R Photo: On water looking E toward right bank at collection point



Site Contact

No Information
Not Determined :

Nearest Address

1701 Clackamette Drive
Oregon City, OR 97045

Driving Directions

Directions to Sportcraft Landing BL-WR-25.4R
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.34 miles)
2. At exit 301 bear right onto ramp and go on I-84 E/US-30 E toward The Dalles (5.4 miles)
3. At exit 6 take ramp on the right to I-205 S toward Salem (0.27 miles)
4. At exit 6 keep left on I-205 S (0.16 miles)
5. Go on I-205 (Veterans Memorial Hwy) (11.62 miles)
6. At exit 9 bear right onto ramp to OR-99e toward Oregon City/Gladstone (0.08 miles)
7. Take ramp to OR-99e N toward Portland (0.31 miles)
8. Turn left on Dunes Dr (0.07 miles)
9. Turn left on Clackamette Dr (0.3 miles)
10. Finish at 1701 Clackamette Dr,97045, on the right

Falls Locks (OR) WR-26.1L

Position - Location:	45° 21.465', -122° 36.744'	45° 21' 27.9", -122° 36' 44.6"	45.35775, -122.61240	Oregon City

Strategy Objective: Containment : Contain oil from source at navigation lock to prevent oil from moving downriver.

Implementation: This strategy may be used to supplement boom deployed by dam personnel in response to a spill in the locks. Launch workboat from Sportcraft Marina, BL-WR-25.4R with 200ft. boom. Anchor at A and D using natural anchors or shoreside anchor posts. Anchor at B and C using Danforth or other anchors.

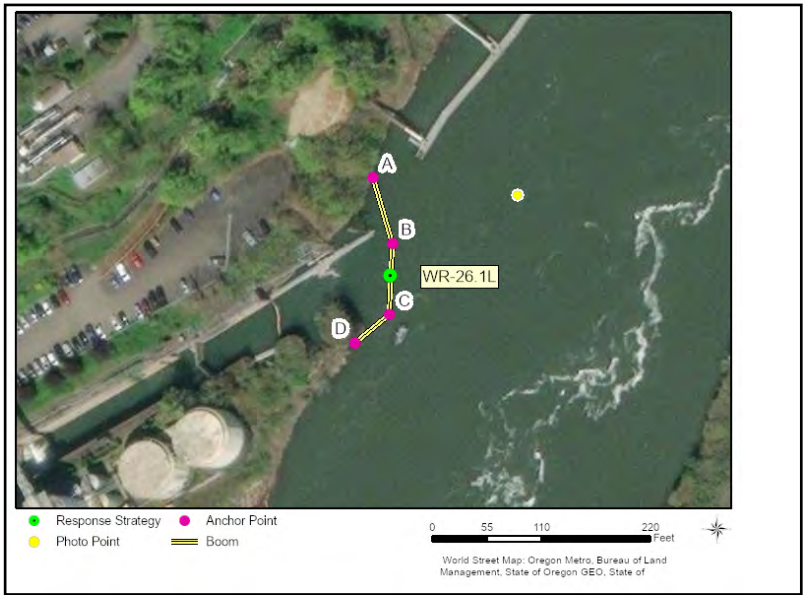
Staging Area: Remote: Stage at SA-WR-25.4R, Sportcraft Marina. Launch at same BL-WR-25.4R.

Site Safety: Slips, trips, and falls. Water hazards. Recreational and industrial vessel traffic. Active power generation dam and locks.

Field Notes: Approximately 100 feet of boom is present at the dam facility (as of 10/3/2013) to keep floating debris from backing into locks. There is an eddy and slack water in this area when the locks are closed.

Watercourse: River - Below a Dam - Willamette River- at Willamette Falls Dam

Resources at Risk: Resident Fish, Salmonids



Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

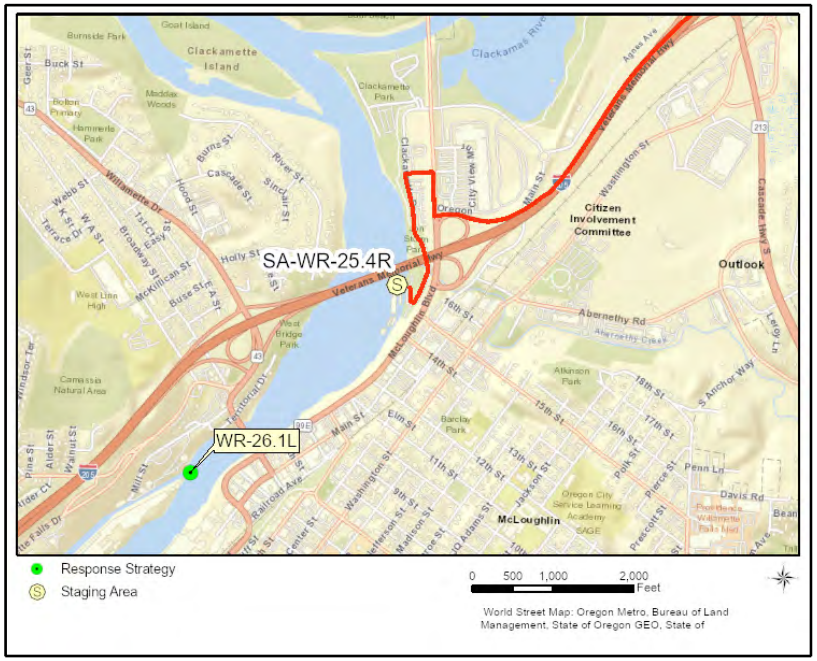
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Falls Locks (OR) WR-26.1L



WR-26.1L Photo: On water looking SW upriver into the locks



Site Contact

No Information
Other :

Nearest Address

1701 Clackamette Drive
Oregon City, OR 97045

Driving Directions

Directions to Sportcraft Landing BL-WR-25.4R
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.34 miles)
2. At exit 301 bear right onto ramp and go on I-84 E/US-30 E toward The Dalles (5.4 miles)
3. At exit 6 take ramp on the right to I-205 S toward Salem (0.27 miles)
4. At exit 6 keep left on I-205 S (0.16 miles)
5. Go on I-205 (Veterans Memorial Hwy) (11.62 miles)
6. At exit 9 bear right onto ramp to OR-99e toward Oregon City/Gladstone (0.08 miles)
7. Take ramp to OR-99e N toward Portland (0.31 miles)
8. Turn left on Dunes Dr (0.07 miles)
9. Turn left on Clackamette Dr (0.3 miles)
10. Finish at 1701 Clackamette Dr,97045, on the right

Youngs River Fish Pens #1 (OR) YOR-3.3R

Position - Location:	46° 10.200', -123° 50.264'	46° 10' 12.0", -123° 50' 15.8"	46.17000, -123.83773	Astoria

Strategy Objective: Exclusion : Prevent oil from impacting fish pens on Youngs River.

Implementation: Launch workboat from Astoria East Mooring Basin BL-LCR-15.8L, with 1600ft. boom (2 x 800ft.). Deploy boom in a diamond configuration (with two of the corners facing up and down stream). Use the two 800ft. sections of boom to surround the fish pens. Anchor at corners, Anchor A through Anchor D, and along boom lengths, using Danforth or other appropriate anchors every 100-150' or as needed for conditions of the day.

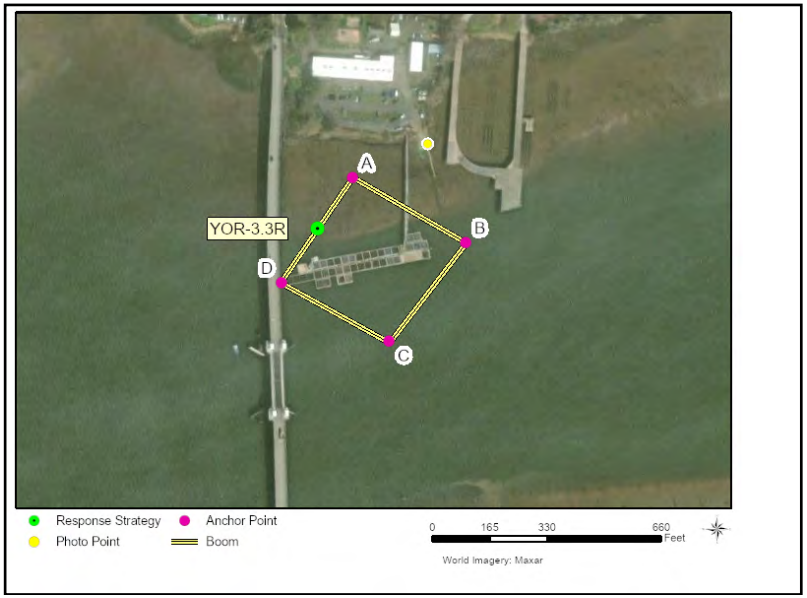
Staging Area: Remote: Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.

Site Safety: Slips, trips, and falls. Shallow water hazards.

Field Notes: Strategy is intended to protect fish pens. Water is shallow and shoaled here.

Watercourse: River - Without a Dam - Youngs River

Resources at Risk: Fish Pens, Salmonids



Recommended Equipment

16	Each	Anchoring System(s) - (anchor, lines, floats)
1600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Youngs River Fish Pens #1 (OR) YOR-3.3R



YOR-3.3R Photo: Clatsop County fish pens



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at US-30, Astoria, OR
2. Go east on US-30 (Commercial St) toward 12th St (0.04 miles)
3. Turn right on 12th St (0.14 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

.

Land access from 1896 5th St, Astoria OR 97103

Cook Slough (OR) YOR-3.6L

Position - Location:	46° 9.713', -123° 49.870'	46° 9' 42.8", -123° 49' 52.2"	46.16188, -123.83116	Astoria

Strategy Objective: Exclusion : Prevent oil from travelling through tidegate on Cook Slough during incoming tide.

Implementation: From Wireless Rd., hand launch boat to deploy 100ft. of boom in a chevron configuration on either side of tidegate on Cook Slough. Anchor at Anchor A and Anchor C using shoreside anchor posts. Anchor at Anchor B using Danforth or other appropriate anchor.

Staging Area: Onsite: Stage onsite from Wireless Road.

Site Safety: Slips, trips, and falls. Water hazards.

Field Notes: Site is accessed through private property. Make contact with land owner before deploying strategy.

Watercourse: Slough - Cook Slough

Resources at Risk: Backwater Habitat, Resident Fish, Salmonids, Wetlands



Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Cook Slough (OR) YOR-3.6L



YOR-3.6L Photo: Aerial photo of tide gate north of Wireless Rd.



Site Contact

No Information
Not Determined :

Nearest Address

92388 Wireless Rd
Astoria, OR 97103

Driving Directions

From US-30, Astoria, OR
1. Go east on US-30 (Marine Dr) toward 2nd St (0.25 miles)
2. Turn right on 7th St (0.08 miles)
3. Turn left on Commercial St (0.05 miles)
4. Turn right on 8th St (0.54 miles)
5. Turn right on Niagara Ave (0.05 miles)
6. Turn left on 7th St (0.55 miles)
7. Turn right on OR-202 (Olney Ave) (0.09 miles)
8. Turn left on 5th St (0.06 miles)
9. Bear right (0.02 miles)
10. Turn left on US-101-BR (W Marine Dr) (0.67 miles)
11. Turn left on Wireless Rd (0.03 miles)
12. Turn left to stay on Wireless Rd (0.7 miles)
13. Finish at 92388 Wireless Rd, 97103, on the right

Youngs River Fish Pens #2 (OR) YOR-4.0R

Position - Location:	46° 10.264', -123° 49.492'	46° 10' 15.8", -123° 49' 29.5"	46.17106, -123.82487	Astoria

Strategy Objective: Exclusion : Prevent oil from impacting aquaculture net pens

Implementation: Launch workboat from East Mooring Basin, BL-LCR-15.8L with 800ft. boom. Place boom around the pen to exclude oil from pens. Anchor at Anchor A through D using Danforth or other anchors. Anchor along boom length every 100-150ft. or as necessary for conditions.

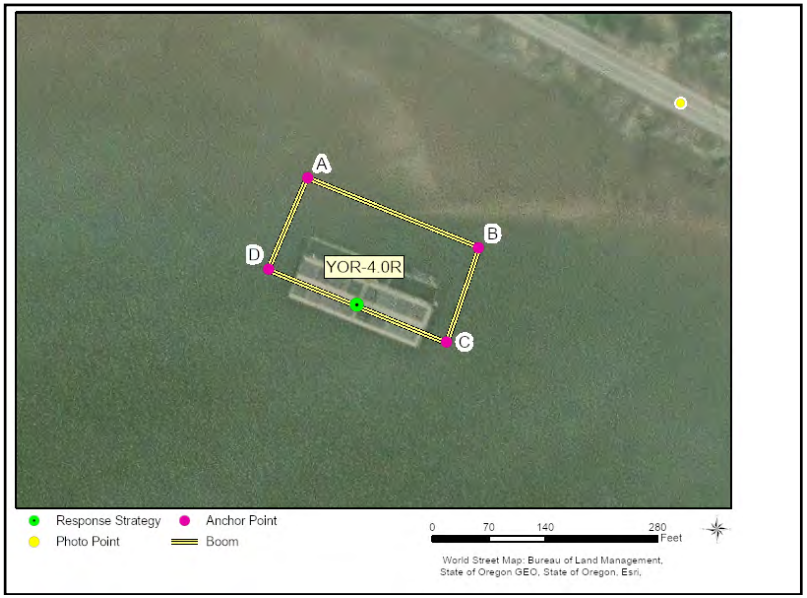
Staging Area: Remote: Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.

Site Safety: Slips, trips, and falls. Shallow water hazards.

Field Notes: Entrance to Youngs River can be shallow at low water.

Watercourse: River - Without a Dam - Youngs River

Resources at Risk: Fish Pens, Salmonids



Recommended Equipment

10	Each	Anchoring System(s) - (anchor, lines, floats)
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Youngs River Fish Pens #2 (OR) YOR-4.0R



YOR-4.0R Photo: Youngs River western pen nets



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

.
Land access from 2000 SE Front St, Astoria OR 97103

Youngs River Fish Pens #3 (OR) YOR-4.1R

Position - Location:	46° 10.231', -123° 49.364'	46° 10' 13.9", -123° 49' 21.8"	46.17052, -123.82273	Astoria

Strategy Objective: Exclusion : Prevent oil from impacting aquaculture pens

Implementation: Launch workboat from East Mooring Basin, BL-LCR-15.8L with 800ft. boom. Place boom around the pen to exclude oil from pens. Anchor at Anchor A through D using Danforth or other anchors. Anchor along boom length every 100-150ft. or as necessary for conditions.

Staging Area: Remote: Stage at Astoria East Mooring Basin, SA-LCR-15.8L. Launch from same, BL-LCR-15.8L.

Site Safety: Slips, trips, and falls. Shallow water hazards.

Field Notes: Mouth of Youngs River can be shallow at low water.

Watercourse: River - Without a Dam - Youngs River

Resources at Risk: Fish Pens, Salmonids



Recommended Equipment

10	Each	Anchoring System(s) - (anchor, lines, floats)
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Youngs River Fish Pens #3 (OR) YOR-4.1R



YOR-4.1R Photo: Youngs River eastern pen nets



Site Contact

No Information
Not Determined :

Nearest Address

241 36th St
Astoria, OR 97103

Driving Directions

1. Start at Astoria, Oregon
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (0.73 miles)
8. Turn left on 36th St (0.03 miles)
9. Finish at 241 36th St, 97103, on the left

.
Land access from 2000 SE Front St, Astoria OR 97103

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APPENDIX B

Notification Strategy 2-Pagers

Burris Creek Lift Station — BURRC-0.0-N

Position - Location:	45° 56.347', -122° 47.083'	45° 56' 20.8", -122° 47' 5.0"	45.93911, -122.78471	Woodland

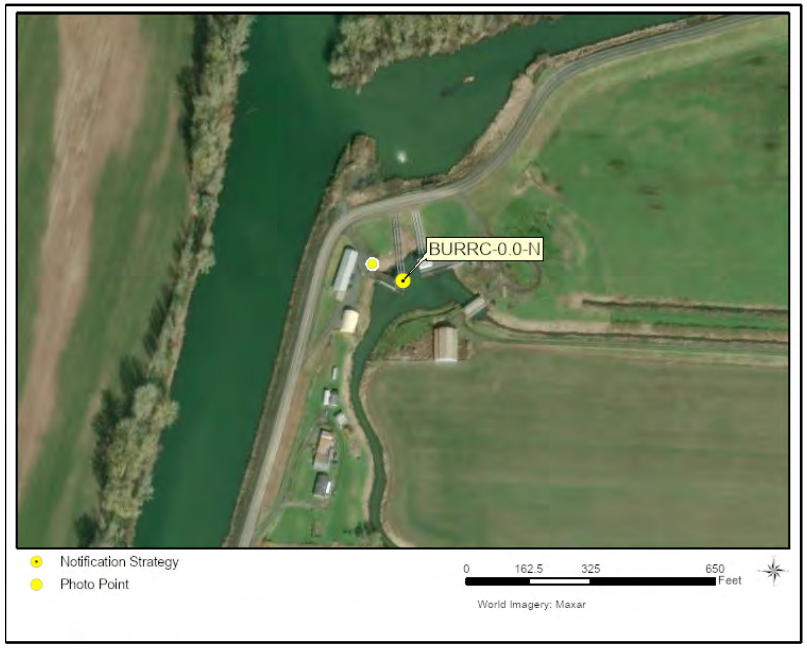
Strategy Objective: Notification : Notify Consolidated Diking Improvement District #2 so they can take action to protect their resources.

Implementation: Call CDID #2 at (360) 577-3030 or (360) 225-8935 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.

Field Notes: This location is the CDID #2 lift station. There are two pump houses. Pumps are on a float system, which starts pumping water from Burris Creek into Burke Creek/Burke Slough when water level reaches a certain height.

Watercourse: Creek - Burris Creek

Resources at Risk: Economic Resources, Resident Fish, Salmonids



Communication Process and Action:

Call CDID #2 at (360) 577-3030 or (360) 225-8935 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control. Actions might include shutting down pumps to prevent the inadvertent transfer of oily water from Burris Creek to Burke Creek/Columbia River, but the district will only shut down the Burris Creek Pump Station if turning off the pumps will not cause flooding of the surrounding area.

Burris Creek Lift Station BURRC-0.0-N



BURRC-0.0-N Photo: Lift station at Burris Creek (next to Burke Slough), looking east toward pump houses.



Site Contact

Cowlitz County Consolidated Diking Improvement District #2
Primary Contact : Maintenance Office
360-225-8935

Cowlitz County Consolidated Diking Improvement District #2
After Hours and Weekends Contact : Engineer
360-577-3030

Nearest Address

526 Dike Rd
Woodland, WA 98674

Driving Directions

1. Go south on I-5
2. At exit 22 bear right onto ramp to Dike Access Road
3. Make sharp right on Dike Access Rd
4. Continue on Dike Rd SW
5. Turn right to stay on Dike Rd SW
6. Location is on the right

Chinook River Tide Gates — CHINR-0.3-N

Position - Location:	46° 18.238', -123° 58.016'	46° 18' 14.3", -123° 58' .9"	46.30397, -123.96693	Chinook

Strategy Objective: Notification : Notify WDFW so they can take action to protect their resources.

Implementation: Call WDFW at (360)280-5493 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.

Field Notes: Johns River Wildlife Area is nearby. This location is a WDFW habitat restoration site. Tide gates were rebuilt in 2007 and are mechanically controlled. The gates can only be closed at slack tide.

Watercourse: River - With Tidal Influence - Chinook River

Resources at Risk: Habitat Restoration Site, Resident Fish, Salmonids, Wetlands



Communication Process and Action:

Call WDFW at (360)280-5493 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control. The agency will send personnel to the site to close gates. Personnel are at least 1.5 hours away and gates must be closed at slack tide. Until gates can be closed, deploy and maintain exclusion response strategy CHINR-0.3.

Chinook River Tide Gates — CHINR-0.3-N



CHINR-0.3-N Photo: From the Hwy 101 Bridge, looking downriver/west towards Baker Bay. Photo was taken in August.



Site Contact

Washington Department of Fish and Wildlife
Land/Property Contact : Project Manager

Olympia, WA
360-280-5493

Nearest Address

1032 U.S. 101
Chinook, WA 98614

Driving Directions

From US-101 S, Ilwaco, WA
1. Go east on US-101 (Pacific Coast Scenic Bywy) toward Cooks Rd NE (4.86 miles)
2. Finish at 1032 U.S. 101, 98614, on the left

WDFW Beaver Creek Hatchery — ELOCR-5.9-N

Position - Location:	46° 13.526', -123° 19.739'	46° 13' 31.5", -123° 19' 44.4"	46.22543, -123.32899	Cathlamet

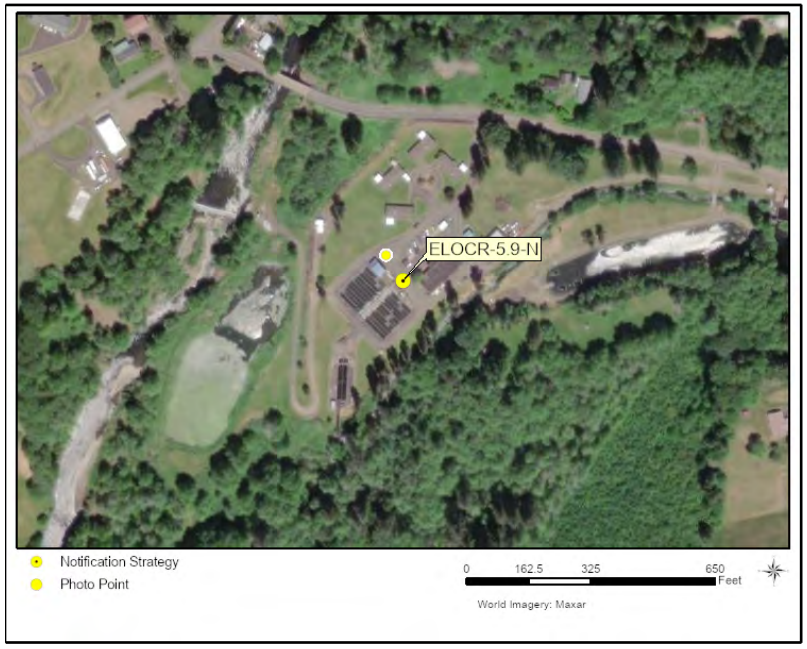
Strategy Objective: Notification : Notify WDFW so they can take action to protect the resources under their control.

Implementation: Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Elochoman River, so they can take action to protect the resources under their control.

Field Notes: WDFW has just one hatchery in Wahkiakum County.

Watercourse: River - Elochoman River

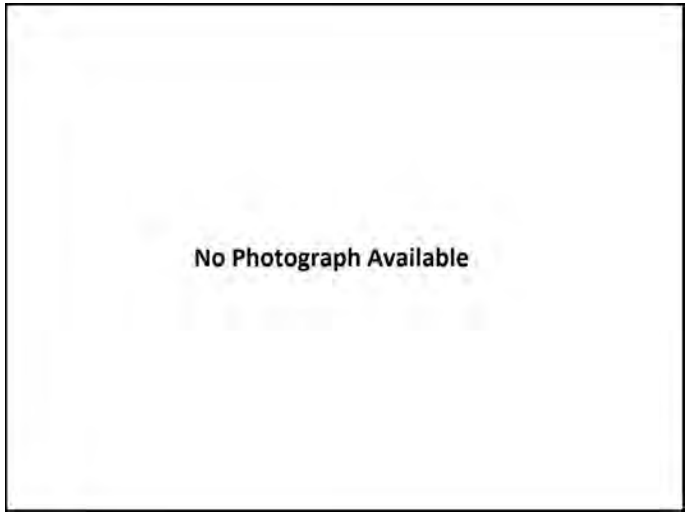
Resources at Risk: Fish Hatchery



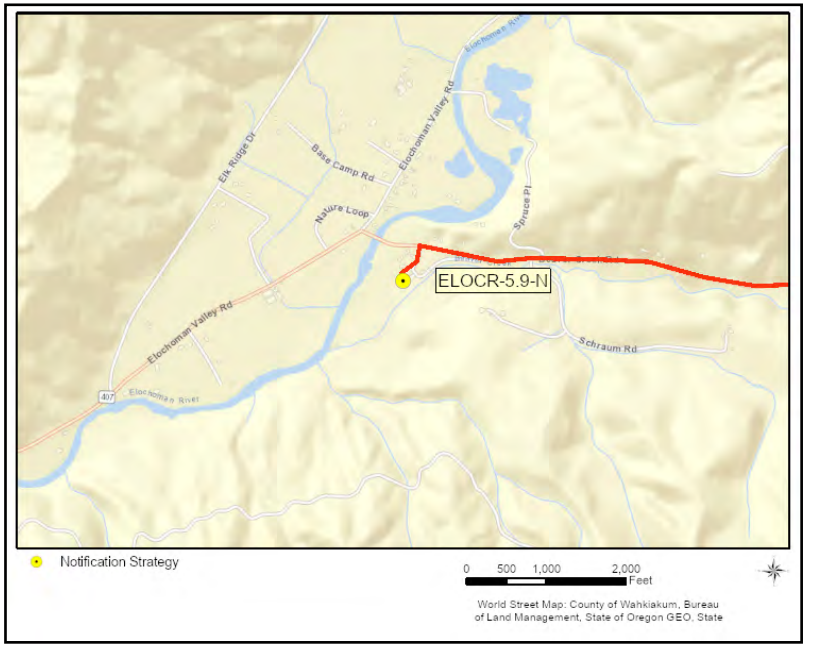
Communication Process and Action:

Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatcheries along the Elochoman River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

WDFW Beaver Creek Hatchery ELOCR-5.9-N



ELOCR-5.9-N Photo: No photograph available



Site Contact

Washington Dept. of Fish and Wildlife
Land/Property Contact : Hatchery Division Manager
360-601-1301

Washington Dept. of Fish and Wildlife
Land/Property Contact : Assistant Hatchery Division Manager
360-460-6993

Nearest Address

28 Beaver Creek Rd
Cathlamet, WA 98612

Driving Directions

1. Head west on Ocean Beach Hwy (WA-4)
2. Turn right on Mill Creek Rd
3. Turn left on Spruce Creek Rd
4. Turn right on Cathlamet Rd
5. Continue forward on Beaver Creek Rd (Cathlamet Rd)
6. Turn left
7. Location is at the end of the road

Sea Resources Hatchery GRAYR-4.0-N

Position - Location:	46° 16.163', -123° 55.891'	46° 16' 9.8", -123° 55' 53.4"	46.26939, -123.93151	Chinook

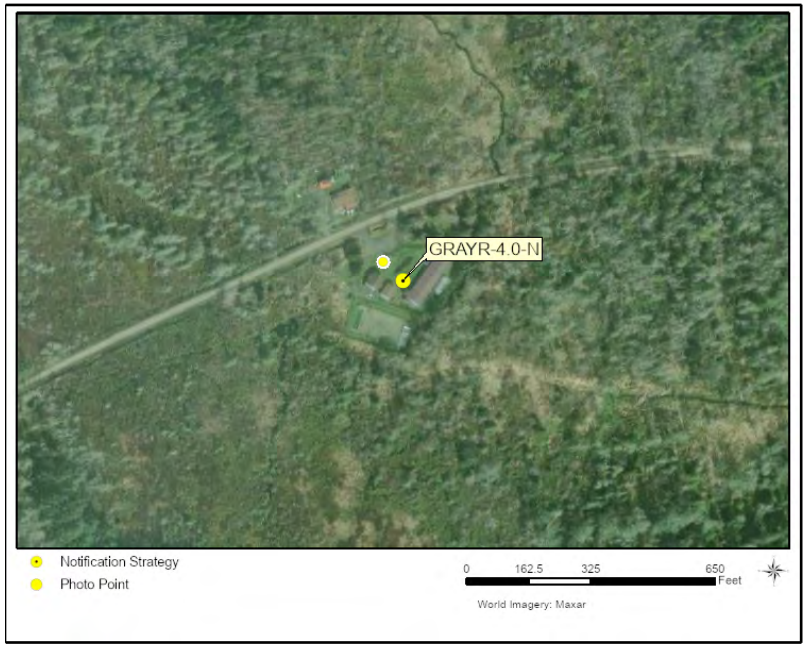
Strategy Objective: Notification : Notify the non-profit so they can take action to protect the resources under their control.

Implementation: Call the non-profit at (360) 777-8229 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Chinook River, so they can take action to protect the resources under their control.

Field Notes: This facility is Washington State's oldest salmon hatchery. Be sure to activate the nearby notification strategy CHINR-0.3-N and deploy the response strategy at the same location.

Watercourse: River - Chinook River

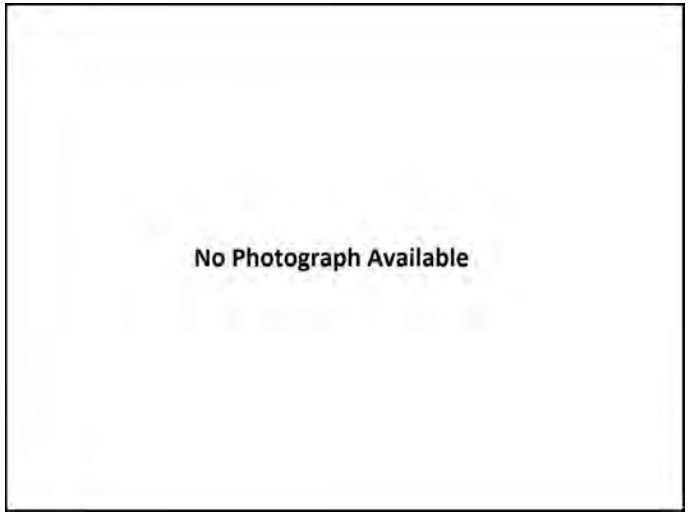
Resources at Risk: Fish Hatchery



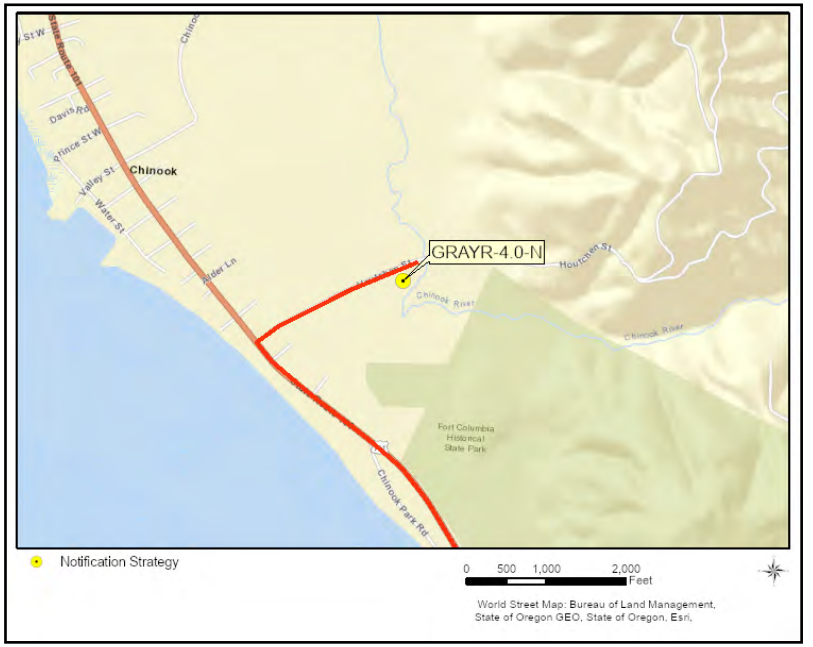
Communication Process and Action:

Call the non-profit at (360) 777-8229 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Chinook River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

Sea Resources Hatchery GRAYR-4.0-N



GRAYR-4.0-N Photo: No photograph available.



Site Contact

Sea Resources, Inc.
Land/Property Owner :
70 Houtchen Rd
Chinook, WA 98614
360-777-8229

Nearest Address

70 Houchen St
Chinook, WA 98614

Driving Directions

1. Head west on State Route 4 (Lewis and Clark Trail Hwy)
2. Continue forward on W State Road 4
3. Turn left on State Route 401 (Lewis and Clark Trail Hwy)
4. At the traffic light, continue forward on Highway 101 (Pacific Coast Scenic Byway)
5. Make a sharp right on Houtchen St
6. Location is on the right

WDFW Grays River Hatchery — GRAYR-13.0-N

Position - Location:	46° 19.793', -123° 38.740'	46° 19' 47.6", -123° 38' 44.4"	46.32989, -123.64567	Grays River

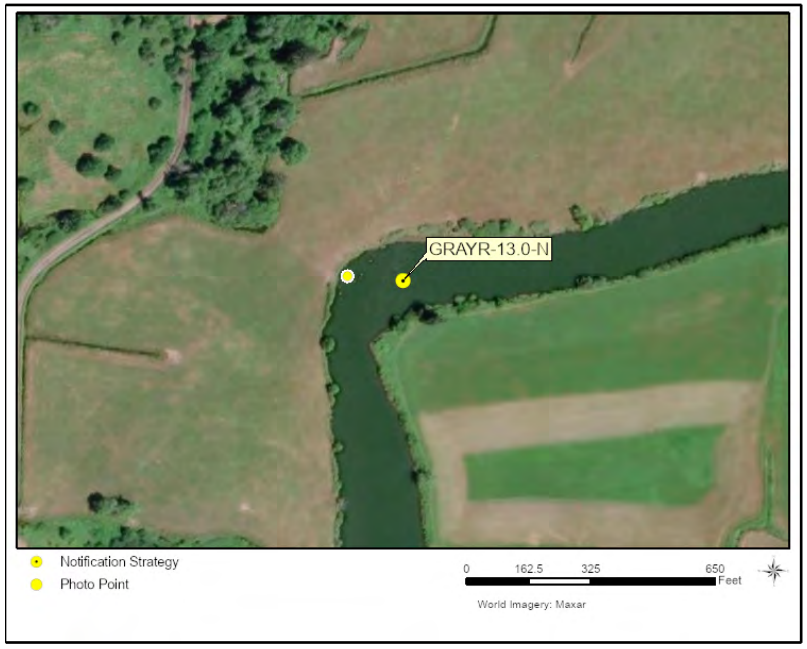
Strategy Objective: Notification : Notify WDFW so they can take action to protect the resources under their control.

Implementation: Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Grays River, so they can take action to protect the resources under their control.

Field Notes: The hatchery's true location is outside of the planning area (on the West Fork Grays River). WDFW has four hatcheries in Pacific County.

Watercourse: River - Grays River

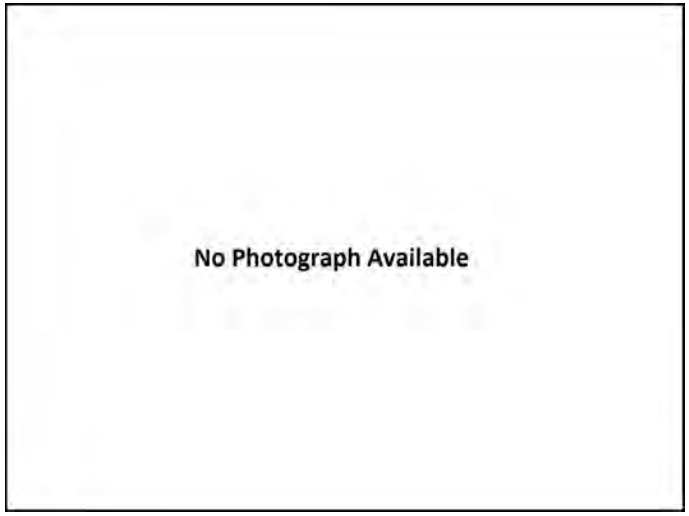
Resources at Risk: Fish Hatchery



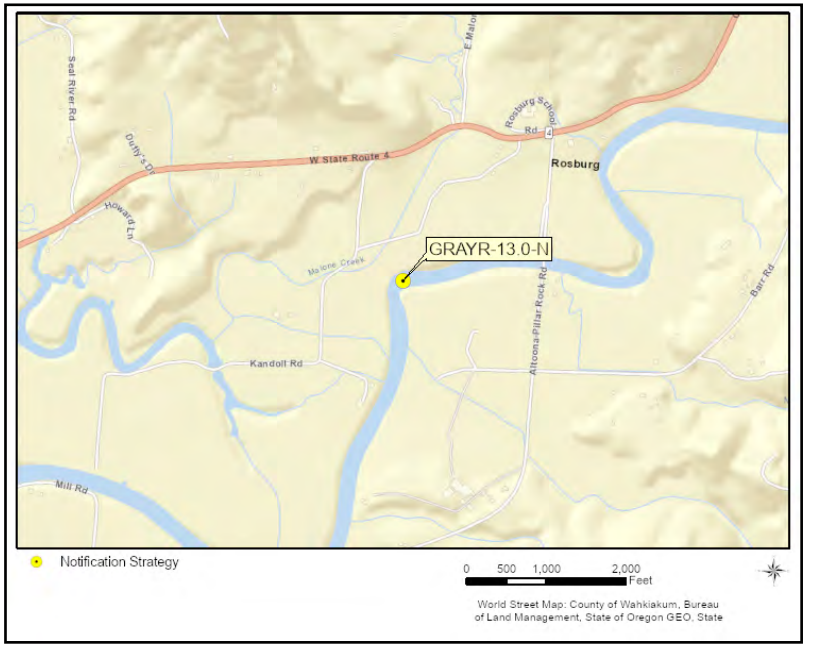
Communication Process and Action:

Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Grays River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

WDFW Grays River Hatchery GRAYR-13.0-N



GRAYR-13.0-N Photo: No photograph available.



Site Contact

Washington Dept. of Fish and Wildlife
Land/Property Contact : Hatchery Division Manager
360-601-1301

Washington Dept. of Fish and Wildlife
Land/Property Contact : Assistant Hatchery Division Manager
360-460-6993

Nearest Address

Shannon Rd
Grays River, WA 98621

Driving Directions

1. Head west on Ocean Beach Hwy (WA-4)
2. Head west on E State Route 4 (Lewis and Clark Trail Hwy)
3. Make a sharp right on Shannon Rd
4. Location is on the left

Clatsop Community College Dock Fish Pen — LCR-19.0L-N

Position - Location:	46° 11.395', -123° 44.882'	46° 11' 23.7", -123° 44' 52.9"	46.18991, -123.74803	Astoria

Strategy Objective: Notification : Notify Clatsop County Fisheries Management/ODFW of spills that could impact Tongue Point Fish Pens

Implementation: Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.

Field Notes: Fish pen located off dock just south of Tongue Point in Columbia River side channel/Cathlamet Bay

Watercourse: River - With Tidal Influence - Side channel with tidal influence

Resources at Risk: Fish Pens, Salmonids



Communication Process and Action:

Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred. Ask about the status of the pens and if strategies can or should be deployed.

Afterhours contact:
Steve Meshke
503-741-0767
Work Cell

Clatsop Community College Dock Fish Pen — LCR-19.0L-N



LCR-19.0L-N Photo: From dock, the Clatsop Community College Fish Pens



Site Contact

Clatsop County
Primary Contact :

OR
503-325-9306

Nearest Address

6550 Liberty Lane
Astoria, OR 97103

Driving Directions

1. Start at Astoria, OR
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (3.05 miles)
8. Bear left on Liberty Ln (0.33 miles)
9. Finish at 6550 Liberty Lane, 97103, on the right

Blind Slough Net Pens — LCR-29.0L-N

Position - Location:	46° 12.201', -123° 32.665'	46° 12' 12.1", -123° 32' 39.9"	46.20335, -123.54442	Knappa

Strategy Objective: Notification : Notify Clatsop County Fisheries Management/ODFW of spills that could impact Blind Slough Fish Pens

Implementation: Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.

Field Notes: Net pens are in channel on north side of Blind Slough near Barendse Road bridge/Gnat Creek.

Watercourse: Slough - Blind Slough near Gnat Creek

Resources at Risk: Fish Pens, Salmonids



Communication Process and Action:

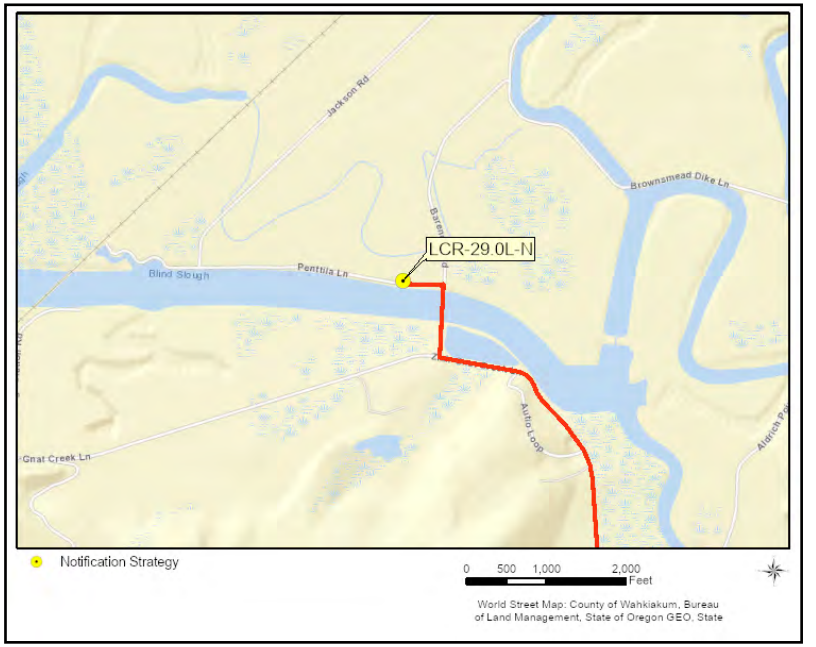
Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred. Ask about the status of the pens and if strategies can or should be deployed.

Afterhours contact:
Steve Meshke
503-741-0767
Work Cell

Blind Slough Net Pens LCR-29.0L-N



LCR-29.0L-N Photo: Standing on shore to the northeast.



Site Contact

Clatsop County
Primary Contact :

OR
503-325-9306

Nearest Address

43133 Penttila Ln
Knappa, OR 97103

Driving Directions

1. Start at Astoria, OR
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (16.25 miles)
8. Turn left on Ziak-Gnat Creek Ln (Ziak Gnat Creek Ln) (2.11 miles)
9. Turn right on Barendse Rd (0.18 miles)
10. Turn left on Penttila Ln (0.09 miles)
11. Finish at 43133 Penttila Ln, 97103, on the right

Georgia Pacific Wauna Mill — LCR-42.4L-N

Position - Location:	46° 9.137', -123° 23.870'	46° 9' 8.2", -123° 23' 52.2"	46.15229, -123.39783	Clatskanie

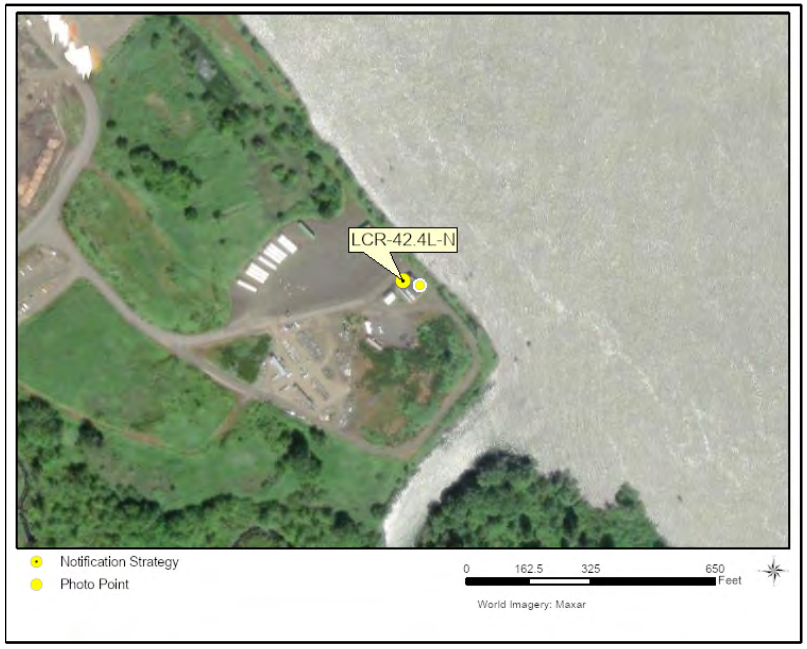
Strategy Objective: Notification : Notify Georgia Pacific of spills that could impact their water intake at the facility.

Implementation: Call Georgia Pacific at 503-266-1933 and inform them that a spill has occurred.

Field Notes: The water intake is on the left bank immediately downriver of Driscoll Slough.

Watercourse: River - With Tidal Influence - Columbia River

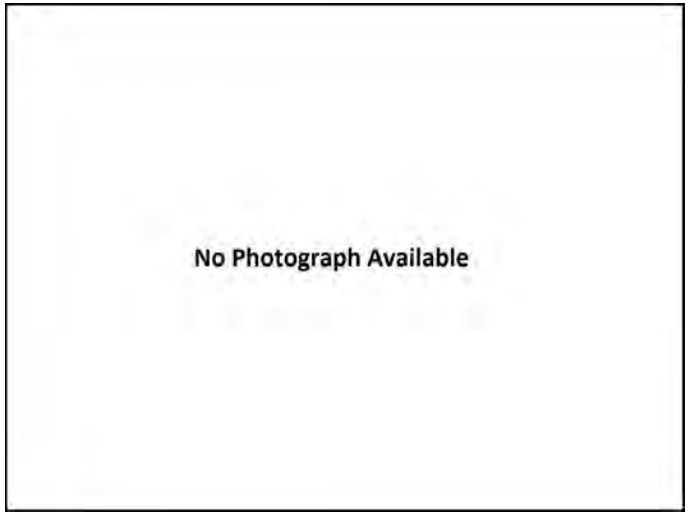
Resources at Risk: Water Intakes



Communication Process and Action:

Call Georgia Pacific at 503-266-1933 and inform them that a spill has occurred. Call the facility so they can monitor and potentially shut off their large industrial surface water withdrawal system. This intake also supplies drinking water to the mill.

Georgia Pacific Wauna Mill LCR-42.4L-N



LCR-42.4L-N Photo: No Photo Available



Site Contact

Georgia Pacific Wauna Mill
Primary Contact : Main Phone
92326 Taylorville Rd
Clatskanie, OR 97016
503-266-1933

Nearest Address

92326 Taylorville Road
Clatskanie, OR 97016

Driving Directions

1. Start at Astoria, OR
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn left on Franklin Ave (0.29 miles)
5. Turn left on 17th St (0.07 miles)
6. Turn right on Exchange St (0.38 miles)
7. Turn right on US-30 (Marine Dr) (22.73 miles)
8. Take ramp toward Taylorville/Wauna (0.16 miles)
9. Turn left on Taylorville Rd (0.17 miles)
10. Finish at 92326 Taylorville Road, 97016, on the left

Port of St. Helens - Point Westward LCR-53.8L-N

Position - Location:	46° 10.914', -123° 10.561'	46° 10' 54.8", -123° 10' 33.7"	46.18190, -123.17602	Clatskanie

Strategy Objective: Notification : Notify Port of St. Helens of spills that could impact their industrial well and water intake at Point Westward.

Implementation: Call Port of St. Helens at 971-203-9733 and inform them that a spill has occurred.

Field Notes: Industrial well 500 ft from riverbank near Point Westward

Watercourse: River - Columbia River

Resources at Risk: Water Intakes

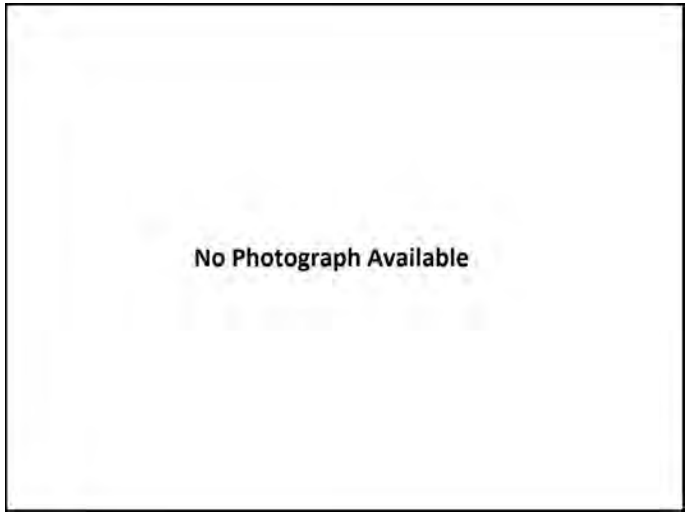


Communication Process and Action:

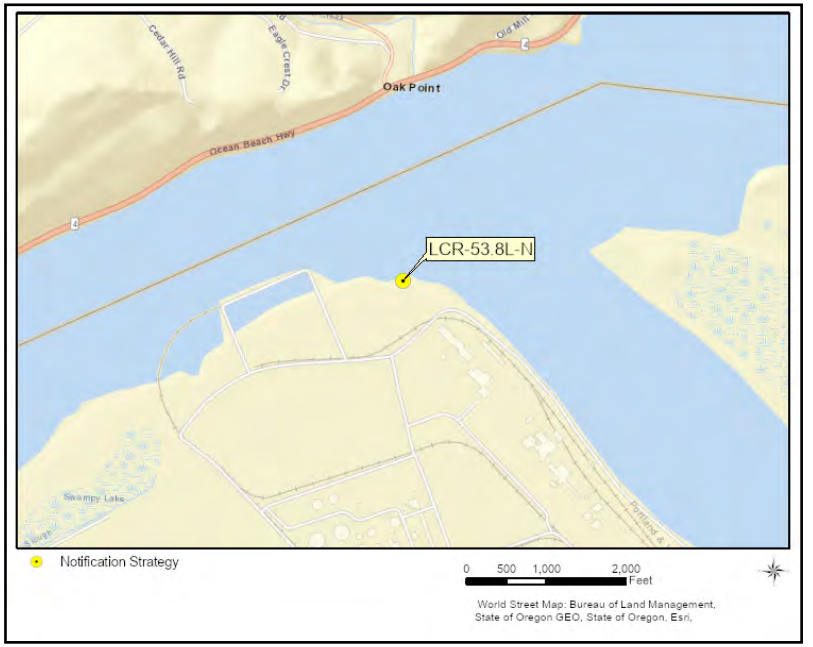
Call Port of St. Helens at 971-203-9733 and inform them that a spill has occurred. Alert them that they may need to monitor and potentially shut off large industrial well located less than 500 feet from river bank. This well is both a surface water and groundwater withdrawal.

Afterhours contact:
Sean Clark
Emergency for Port of St. Helens
971-203-9733

Port of St. Helens - Point Westward LCR-53.8L-N



LCR-53.8L-N Photo: No Photo Available



Site Contact

Port of St. Helens
Primary Contact : Property & Operations Manager
100 E Street
Columbia City, OR 97018
503-397-2888

Nearest Address

Kallunki Road
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (1.03 miles)
11. Finish at Kallunki Road, 97016, on the right

PGE Beaver Generating Facility — LCR-55.1L-N

Position - Location:	46° 10.309', -123° 9.474'	46° 10' 18.5", -123° 9' 28.4"	46.17181, -123.15790	Clatskanie

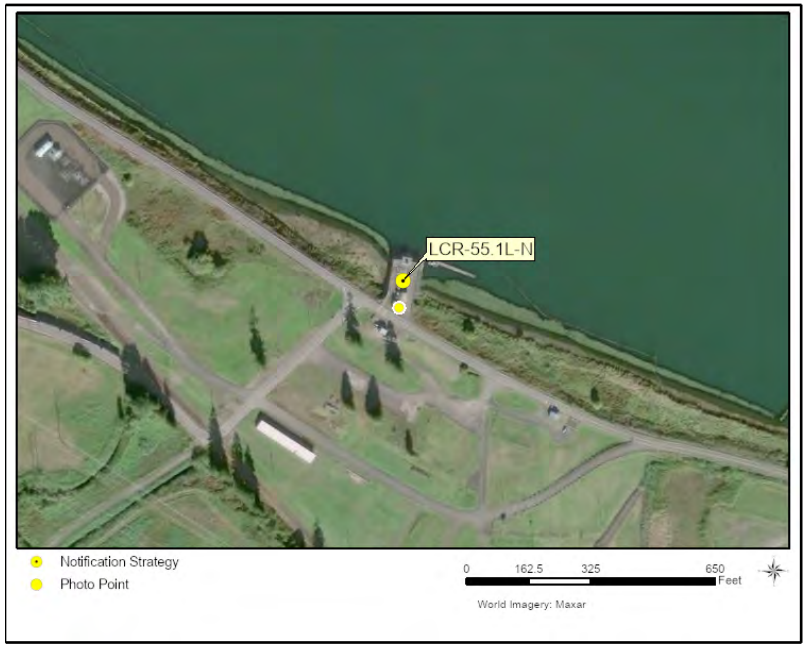
Strategy Objective: Notification : Notify PGE of spills that could impact their industrial water intake at the Beaver Generating Facility near Port Westward

Implementation: Call Portland General Electric (PGE) at 503-728-7211 and inform them that a spill has occurred.

Field Notes: Intake is on south shore of Bradbury Slough across from Crims Island

Watercourse: Slough - Bradbury Slough - Side channel of Columbia River

Resources at Risk: Water Intakes



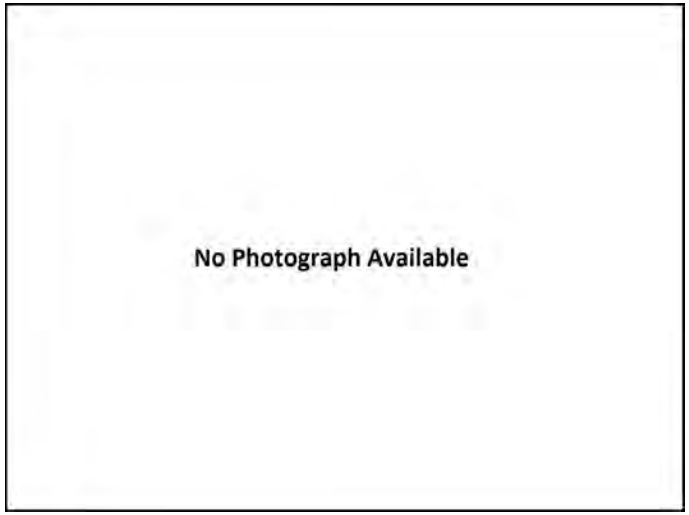
Communication Process and Action:

Call Portland General Electric (PGE) at 503-728-7211 and inform them that a spill has occurred.

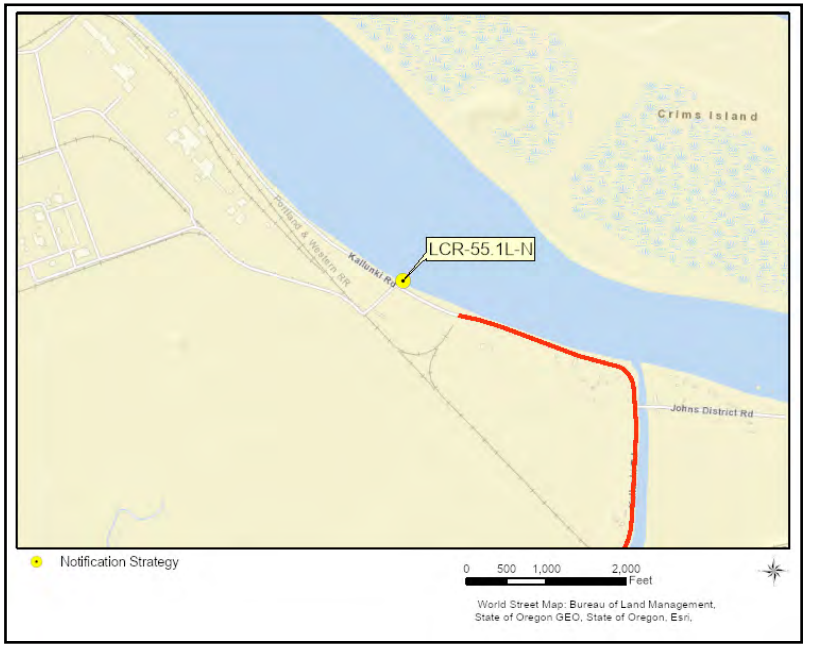
Alert them that they may need to monitor and potentially shut off intake at large industrial system located at river bank. This system also provides drinking water to facility.

Afterhours contact:
Wayne Law
PGE Beaver Control Room
503-728-7251

PGE Beaver Generating Facility LCR-55.1L-N



LCR-55.1L-N Photo: No Photo Available



Site Contact

Portland General Electric (PGE)
Emergency Contact : Beaver Plant (Port Westward)
80997 Kallunki Road
Clatskanie, OR 97016
503-728-7251

Nearest Address

80997 Kallunki Road
Clatskanie, OR 97016

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (0.05 miles)
4. Turn left on NE Conyers St (0.08 miles)
5. Turn right on Park St (0.19 miles)
6. Turn left on NE 5th St (0.1 miles)
7. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
8. Continue on Beaver Falls Rd (2.38 miles)
9. Continue on Quincy Mayger Rd (2.13 miles)
10. Turn left on Kallunki Rd (1.13 miles)
11. Finish at 80997 Kallunki Road, 97016, on the left

City of Rainier Water Intake — LCR-67.8L-N

Position - Location:	46° 5.413', -122° 55.999'	46° 5' 24.8", -122° 55' 60.0"	46.09021, -122.93332	Rainier

Strategy Objective: Notification : Notify City of Rainier of spills that could impact their municipal water intake on the Columbia River.

Implementation: Call City of Rainier at 503-410-2180 and inform them that a spill has occurred.

Field Notes: Intake is on riverbank at end of E 3rd St in Rainier.

Watercourse: River - Columbia River

Resources at Risk: Water Intakes



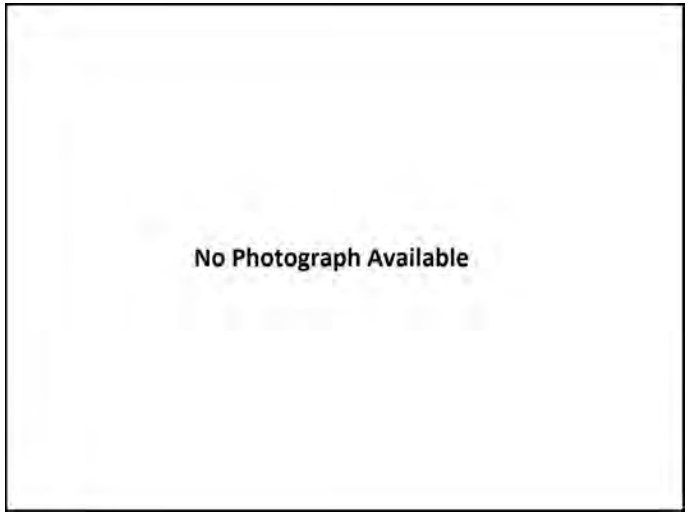
Communication Process and Action:

Call City of Rainier at 503-410-2180 and inform them that a spill has occurred.

Alert them that they may need to monitor and potentially shut off intake for large municipal surface water withdrawal system located at river bank.

Afterhours contact:
James Dahlquist
County E-Com
503-397-1521

City of Rainier Water Intake LCR-67.8L-N



LCR-67.8L-N Photo: No Photo Available



Site Contact

City of Rainier Utilities
Primary Contact :

Rainier, OR
503-410-2180

Nearest Address

105 E 3rd St
Rainier, OR 97048

Driving Directions

1. Start at Clatskanie, OR
2. Go northeast on S Nehalem St toward SW 4th St/SE 4th St (0.25 miles)
3. Turn right on US-30 (Lower Columbia River Hwy) (13.49 miles)
4. Turn left on E 3rd St (0.05 miles)
5. Finish at 105 E 3rd St, 97048, on the right

City of Prescott — LCR-71.5L-N

Position - Location:	46° 3.259', -122° 53.416'	46° 3' 15.6", -122° 53' 24.9"	46.05432, -122.89026	Rainier

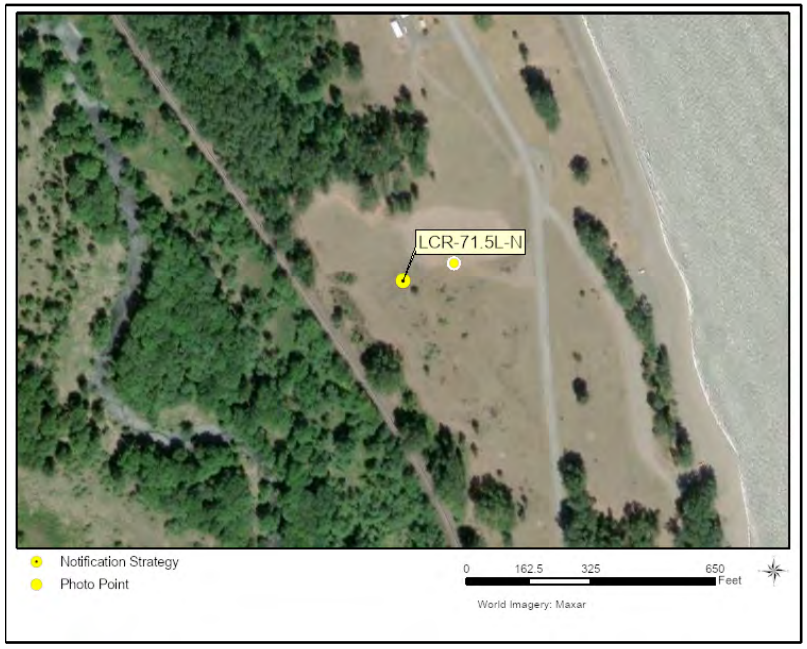
Strategy Objective: Notification : Notify City of Prescott of spills that could impact their municipal well near the Columbia River/rail line.

Implementation: Call City of Prescott at 503-397-1744 and inform them that a spill has occurred.

Field Notes: Well is inland, groundwater withdrawal but close to Columbia River and rail line.

Watercourse: River - Columbia River

Resources at Risk: Water Intakes

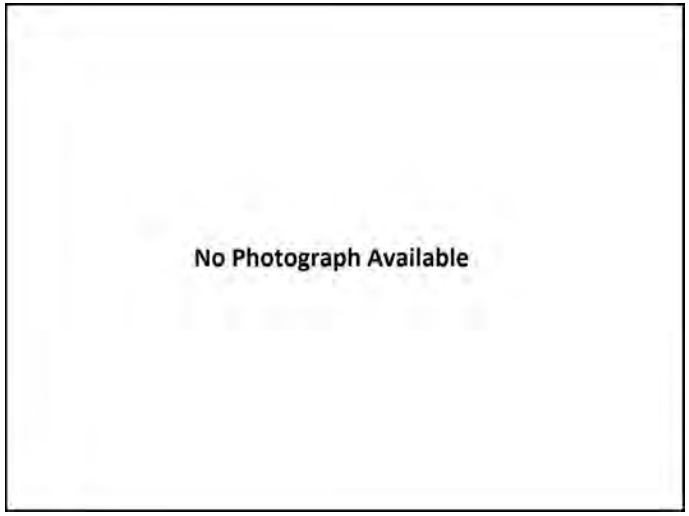


Communication Process and Action:

Call City of Prescott at 503-397-1744 and inform them that a spill has occurred.

Alert them that they need to monitor and potentially shut off large municipal well located less than 1000 feet from river bank and adjacent to rail line. This well is shown as being groundwater withdrawal. The well serves community of Prescott.

City of Prescott LCR-71.5L-N



LCR-71.5L-N Photo: No Photo Available



Site Contact

McMullen Water Systems
Emergency Contact : Drinking well for Prescott, OR
Prescott Beach Drive
Prescott, OR 97048
503-397-1744

Nearest Address

Prescott Beach Drive
Rainier, OR 97048

Driving Directions

1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (41.62 miles)
6. Turn right on Graham Rd (0.45 miles)
7. Turn left on Blakely St (0.14 miles)
8. Turn left on Prescott Beach Dr (0.32 miles)
9. Finish at Prescott Beach Drive, 97048, on the left

PGE Trojan Park — LCR-73.1L-N

Position - Location:	46° 1.892', -122° 52.984'	46° 1' 53.5", -122° 52' 59.1"	46.03154, -122.88307	Rainier

Strategy Objective: Notification : Notify PGE of spills that could impact their drinking water and industrial intake at Trojan Park on the Columbia River.

Implementation: Call PGE at 503-556-7089 and inform them that a spill has occurred.

Field Notes: Intake draws from the Columbai River on the bank across from the Port of Kalama.

Watercourse: River - Columbia River

Resources at Risk: Water Intakes



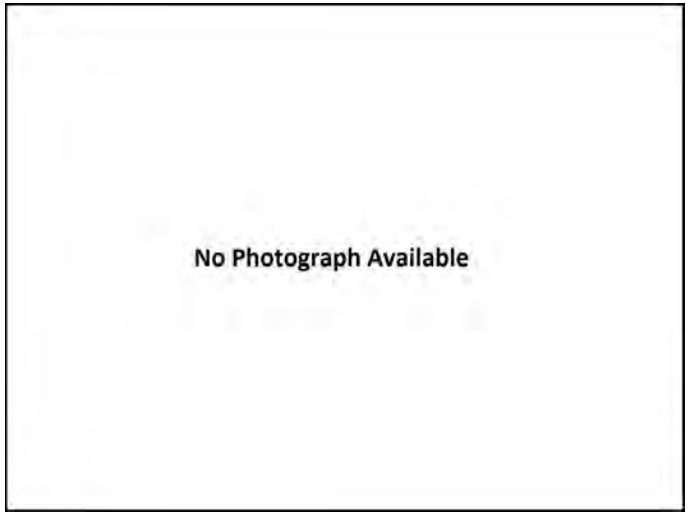
Communication Process and Action:

Call Portland General Electric (PGE) at 503-556-7089 and inform them that a spill has occurred.

Alert them that they need to monitor and potentially shut off intake at large industrial system located at riverbank. This system also provides drinking water to facility.

Afterhours contact
Jim VanLooven
PGE Env. Svcs. Pager
503-464-2187

PGE Trojan Park LCR-73.1L-N



LCR-73.1L-N Photo: No Photo Available



Site Contact

Portland General Electric (PGE)
Emergency Contact : Trojan Park / Environmental Services Pager
71760 Columbia River Hwy
Rainier, OR 97048
503-464-2187

Nearest Address

71760 Columbia River Hwy
Rainier, OR 97048

Driving Directions

1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (39.85 miles)
6. Finish at 71760 Columbia River Hwy, 97048, on the right

City of St. Helens Drinking Wells — LCR-83.8L-N

Position - Location:	45° 53.672', -122° 48.466'	45° 53' 40.3", -122° 48' 27.9"	45.89453, -122.80776	Columbia City

Strategy Objective: Notification : Notify City of St. Helens of spills that could impact their drinking water well (groundwater) near the Columbia River.

Implementation: Call City of St. Helens at 503-397-3532 and inform them that a spill has occurred.

Field Notes: Community drinking water wells are located near riverbank.

Watercourse: River - Columbia River

Resources at Risk: Water Intakes



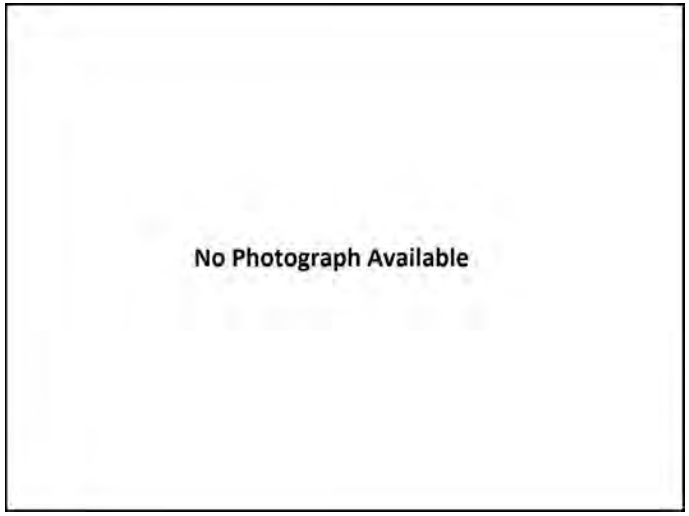
Communication Process and Action:

Call City of St. Helens at 503-397-3532 and inform them that a spill has occurred.

Alert them that they need to monitor and potentially shut off two community wells located along riverbank. The wells are shown as ground water withdrawals.

Afterhours Contact:
Neal Sheppeard
County E-Com
503-397-1521

City of St. Helens Drinking Wells LCR-83.8L-N



LCR-83.8L-N Photo: No Photo Available



Site Contact

Columbia County Emergency Dispatch
After Hours and Weekends Contact : Afterhours E-Com

OR
503-397-1521

Nearest Address

100 E Street
Columbia City, OR 97051

Driving Directions

1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (27.16 miles)
6. Make sharp left on Columbia Blvd (0.13 miles)
7. Turn right on US-30 Lower Columbia River Hw (1.1 miles)
8. Turn right onto E-Street

Vancouver Lake Flushing Channel — LCR-100.8R-N

Position - Location:	45° 40.151', -122° 44.720'	45° 40' 9.1", -122° 44' 43.2"	45.66919, -122.74533	Vancouver

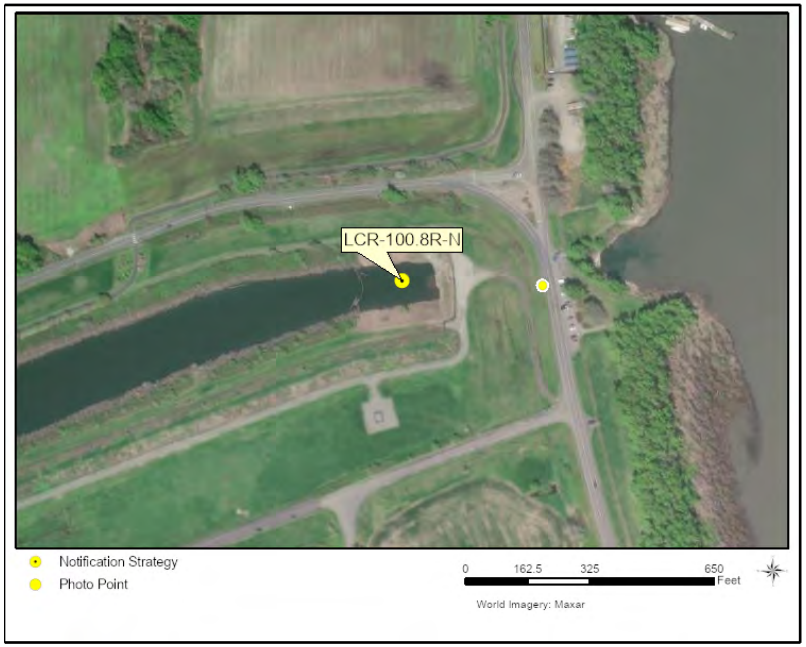
Strategy Objective: Notification : Notify Port of Vancouver so they can take action to protect their resources.

Implementation: Call port at (360) 992-1120 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.

Field Notes: Water only flows from the channel (and river) into Vancouver Lake, not the other direction.

Watercourse: Lake - Vancouver Lake

Resources at Risk: Resident Fish, Salmonids



Communication Process and Action:

Call port at (360) 992-1120 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control. Actions taken may include shutting down pumps to prevent oil moving from the Columbia River into Vancouver Lake.

Vancouver Lake Flushing Channel LCR-100.8R-N



LCR-100.8R-N Photo: Pumping station between Vancouver Lake and Flushing Channel.



Site Contact

Port of Vancouver
Land/Property Owner : 24-Hour Security
3103 NW Lower River Road
Vancouver, WA 98660
360-992-1120

Nearest Address

6801 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

1. Head south on I-5, at exit 1D take ramp on the right to East-4th Plain Blvd-West
2. At fork keep right
3. Continue on E Fourth Plain Blvd
4. Continue
5. Continue on WA-501 (NW Lower River Rd)
6. Pumps are on the right

WDFW Vancouver Hatchery — LCR-112.8R-N

Position - Location:	45° 35.988', -122° 32.759'	45° 35' 59.3", -122° 32' 45.6"	45.59980, -122.54599	Vancouver

Strategy Objective: Notification : Notify WDFW so they can take action to protect the resources under their control.

Implementation: Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Columbia River, so they can take action to protect the resources under their control.

Field Notes: WDFW has one hatchery in Clark County.

Watercourse: River - Columbia River

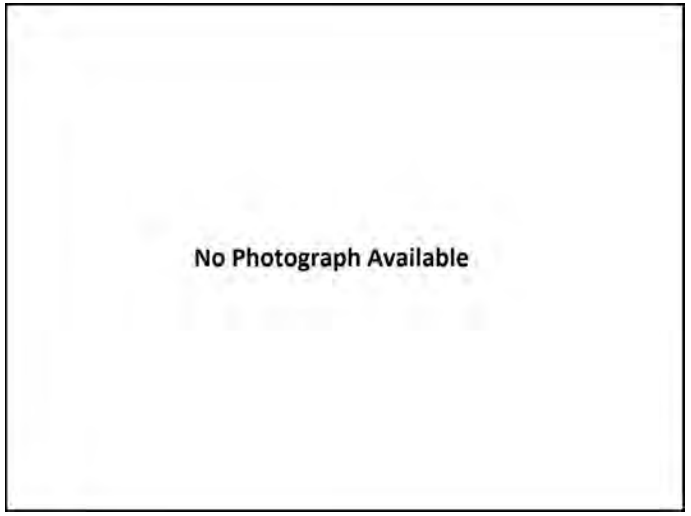
Resources at Risk: Fish Hatchery



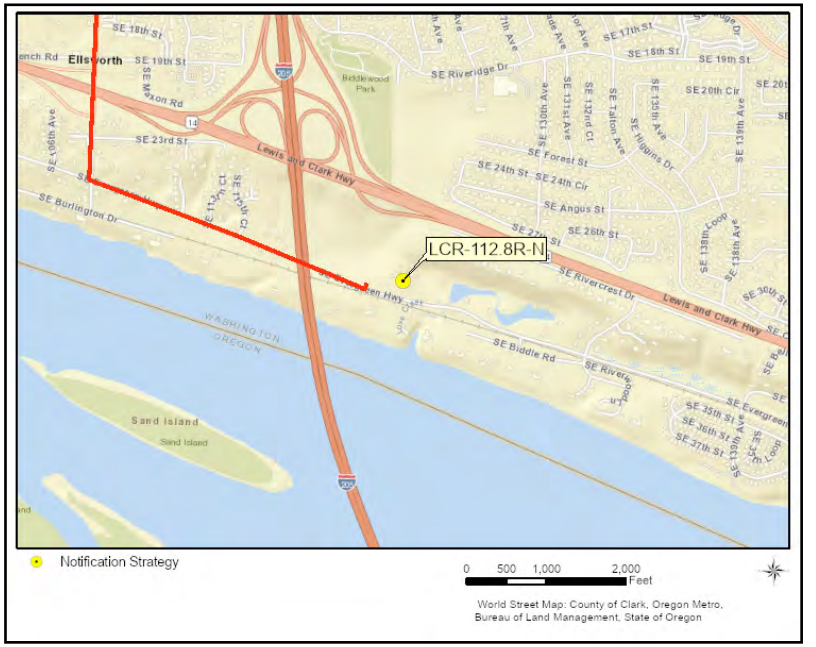
Communication Process and Action:

Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Columbia River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

WDFW Vancouver Hatchery LCR-112.8R-N



LCR-112.8R-N Photo: No photograph available.



Site Contact

Washington Dept. of Fish and Wildlife
Land/Property Contact : Hatchery Division Manager
360-601-1301

Washington Dept. of Fish and Wildlife
Land/Property Contact : Assistant Hatchery Division Manager
360-460-6993

Nearest Address

12208 SE Evergreen Hwy
Vancouver, WA 98683

Driving Directions

1. Head south on I-5 toward Portland
5. Keep right at exit 7 onto I-205 S toward NE 134th St / Salem
6. Take exit 28 on the right to Mill Plain Blvd
7. Keep left at the fork
8. At the traffic light, keep right at the fork onto SE Mill Plain Blvd
9. At the traffic light, turn right on SE Chkalov Dr
10. At the traffic light, turn left on SE McGillivray Blvd
11. Turn right on SE 121st Ave
12. Turn left on SE 15th St
13. Turn right on SE 123rd Ave
14. Turn right on SE Riverridge Dr, then turn left
15. Location is on the left

City of Portland - East Wellfield — LCR-115.0L-N

Position - Location:	45° 33.829', -122° 30.888'	45° 33' 49.7", -122° 30' 53.3"	45.56381, -122.51480	Portland

Strategy Objective: Notification : Notify Portland Water Bureau of a spill that could impact their wellfield on the left bank of the river near Troutdale.

Implementation: Call the Portland Water Bureau and inform them that a spill has occurred.

Field Notes: Wellfield is spread along riverbank between I-5 and Troutdale (approximately seven miles).

Watercourse: River - Columbia River

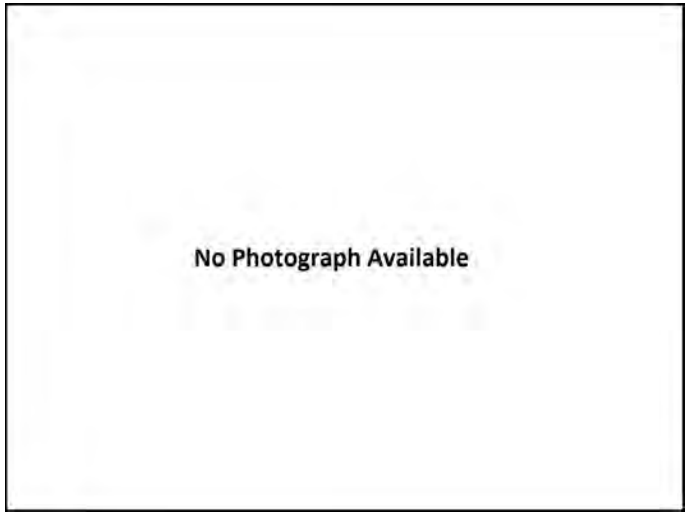
Resources at Risk: Water Intakes



Communication Process and Action:

Alert the bureau so they can monitor and potentially shut off parts of community backup well system located along bank of Columbia River from I-5 to Troutdale. Dial 311 or 911 during a spill. The bureau's non-emergency line is (503) 823-3333.

City of Portland - East Wellfield LCR-115.0L-N



LCR-115.0L-N Photo: No Photo Available



Site Contact

Portland Water Control Center
Emergency Contact : Emergency Contact

Portland, OR
503-823-1560

Nearest Address

NE Marine Drive
Portland, OR 97230

Driving Directions

1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.25 miles)
8. Turn left on OR-99E (NE Grand Ave) (0.15 miles)
9. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles (5.8 miles)
10. At exit 8 take ramp on the right and go on I-205 N toward Seattle/Portland Airport (2.41 miles)
11. At exit 24B take ramp on the right to Airport Way E. (0.28 miles)
12. Continue on NE Airport Way (0.76 miles)
13. Turn left on NE 122nd Blvd (0.17 miles)
14. Turn right on NE Marine Dr (1.83 miles)
15. Finish at NE Marine Drive, 97230, on the right

Oregon Watermaster — LCR-118.0L-N

Position - Location:	45° 33.833', -122° 26.551'	45° 33' 50.0", -122° 26' 33.1"	45.56389, -122.44252	Salem

Strategy Objective: Notification : Notify municipalities to close water intakes potentially impacted by a spill on the Columbia River.

Implementation: Notify the following entities that may divert municipal water from the Columbia River below Bonneville Dam. City of Rainier 503-397 -1521, City of St. Helens 503-397-1521, Port of St. Helens 503-369-0856, Port of Portland 503-460-4747

Field Notes: These municipalities have water rights that allow them to divert water from the Columbia River.

Watercourse: River - Below a Dam - Columbia River

Resources at Risk: Water Intakes



Communication Process and Action:

Notify Oregon Watermaster of a spill potentially impacting Columbia River municipal water intakes. Watermaster will notify municipalities that draw water from the Columbia River and they will take actions to protect their water intakes.

Oregon Watermaster LCR-118.0L-N



LCR-118.0L-N Photo: On right bank of river looking W toward Portland and Vancouver



Site Contact

Oregon Water Resources Department
Primary Contact : Watermaster

OR
503-737-5101

Nearest Address

725 Summer Street NE, Suite A
Salem, OR 97301

Driving Directions

From I-5 S, Vancouver, WA
1. Go southwest on I-5 (57.3 miles)
2. At exit 260A take ramp on the right to OR-99e-Br/Salem Parkway (0.43 miles)
3. Continue on OR-99E-BR (Salem Pky NE) (2.15 miles)
4. Turn left on Cherry Ave NE (0.75 miles)
5. Turn right on Pine St NE (0.09 miles)
6. Turn left on Myrtle Ave NE (0.35 miles)
7. Turn left at Tamarack St NE to stay on Myrtle Ave NE (0.07 miles)
8. Make sharp right on Fairgrounds Rd NE (0.1 miles)
9. Continue on Summer St NE (0.82 miles)
10. Finish at 725 Summer Street NE, Suite A, 97301, on the right

Georgia Pacific Paper Mill — LCR-120.5R-N

Position - Location:	45° 34.855', -122° 24.242'	45° 34' 51.3", -122° 24' 14.5"	45.58091, -122.40404	Camas

Strategy Objective: Notification : Notify Georgia Pacific so they can take action to protect their resources.

Implementation: Call mill at (360) 834-3201 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.

Field Notes: The mill draws eight million gallons per day for normal operations. There is also an emergency water intake at the fire pump house, which is run for 30 minutes per week for testing.

Watercourse: River - Below a Dam - Columbia River (Camas Slough)

Resources at Risk: Economic Resources, Water Intakes



Communication Process and Action:

Call mill at (360) 834-3201 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control. Actions taken may include shutting off their water intake.

Georgia Pacific Paper Mill — LCR-120.5R-N



LCR-120.5R-N Photo: Aerial image of mill property and water intakes in bottom right corner.



Site Contact

Georgia Pacific Paper Mill
Land/Property Owner : 24-Hour Main Phone
SE 3rd Avenue
Camas, WA 98607
360-834-3201

Nearest Address

401 NE Adams St
Camas, WA 98607

Driving Directions

1. Head south on I-5
2. At exit 1A bear right onto ramp and go on WA-14 E toward Camas
3. At exit 12 take ramp on the right to WA-14 Business Loop toward Camas
4. At fork keep right toward Camas
5. Continue on NW 6th Ave
6. Turn right on NE Adams St
7. Bear left on NE 3rd Ave
8. Turn right on NE Birch St
9. Turn left on NE 2nd Ave
10. Turn right on WA-500 (SE 6th Ave)
11. Turn right on SE Everett St
12. Turn right on SE 3rd Ave

Bonneville Hatchery — LCR-144.6L-N

Position - Location:	45° 37.993', -121° 57.462'	45° 37' 59.6", -121° 57' 27.7"	45.63321, -121.95770	Cascade Locks

Strategy Objective: Notification : Notify Bonneville Hatchery of spills that could impact their water intakes below the Bonneville Dam.

Implementation: Call ODFW Bonneville Hatchery at 541-374-8393 and inform them that a spill has occurred.

Field Notes: Hatchery is just downstream of Bonneville Dam along Tanner Creek.

Watercourse: Creek - Tanner Creek at Columba River

Resources at Risk: Fish Hatchery, Salmonids, Water Intakes

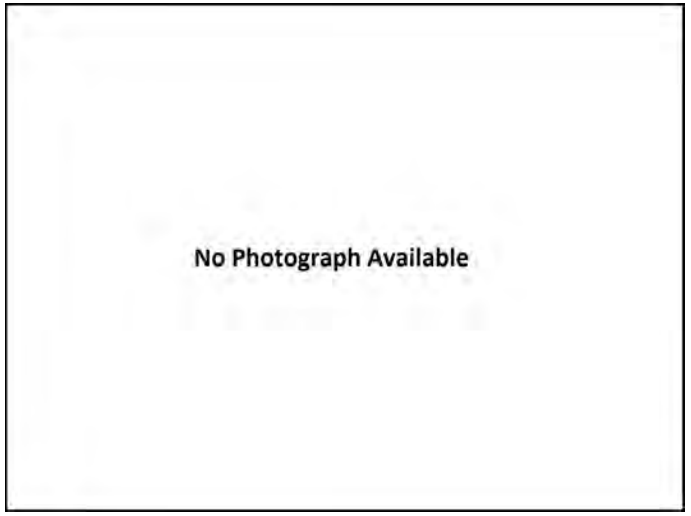


Communication Process and Action:

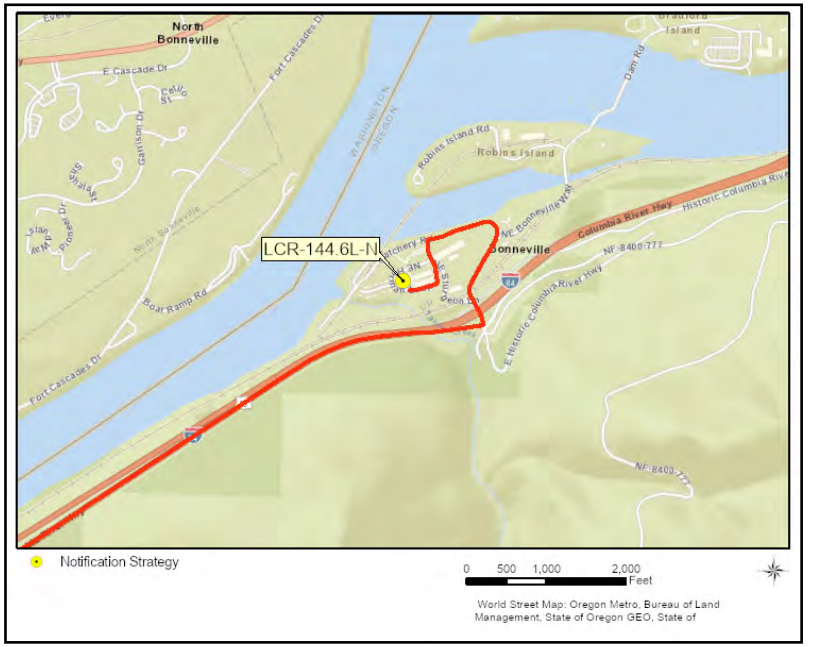
Call ODFW Bonneville Hatchery at 541-374-8393 and inform them that a spill has occurred.

Notify the hatchery that water intakes could be impacted, and establish coordination point for incident repsonse.

Bonneville Hatchery LCR-144.6L-N



LCR-144.6L-N Photo: No Photo Available



Site Contact

Oregon Department of Fish and Wildlife
Primary Contact : Bonneville Hatchery
70543 NE Herman Loop
Cascade Locks, OR 97014
541-374-8393

Nearest Address

70543 NE Herman Loop
Cascade Locks, OR 97014

Driving Directions

1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.25 miles)
8. Turn left on OR-99E (NE Grand Ave) (0.15 miles)
9. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles (37.3 miles)
10. At exit 40 take ramp to Tanner Creek Rd (0.15 miles)
11. Turn left on Tanner Creek Rd (0.23 miles)
12. Bear left on Hatchery Rd (0.2 miles)
13. Turn left on NE Sturgeon Ln (0.11 miles)
14. Bear right on NE Herman Loop (0.07 miles)
15. Finish at 70543 NE Herman Loop, 97014, on the right

USFWS Ridgefield National Wildlife Refuge — LKRVR-1.8-N

Position - Location:	45° 48.438', -122° 44.470'	45° 48' 26.3", -122° 44' 28.2"	45.80730, -122.74116	Ridgefield

Strategy Objective: Notification : Notify the US Fish & Wildlife Service so they can take action to protect the resources under their control.

Implementation: Call USFWS at (360) 887-4106 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control.

Field Notes: USFWS's after-hour contacts are (360) 600-6119 and/or (360) 921-2116. The refuge has 3 water intakes on Bachelor Island Slough and one water intake on Lake River. The intakes typically run from August through December.

Watercourse: River - Columbia River

Resources at Risk: Sensitive Resources, Water Intakes, Wildlife Refuge



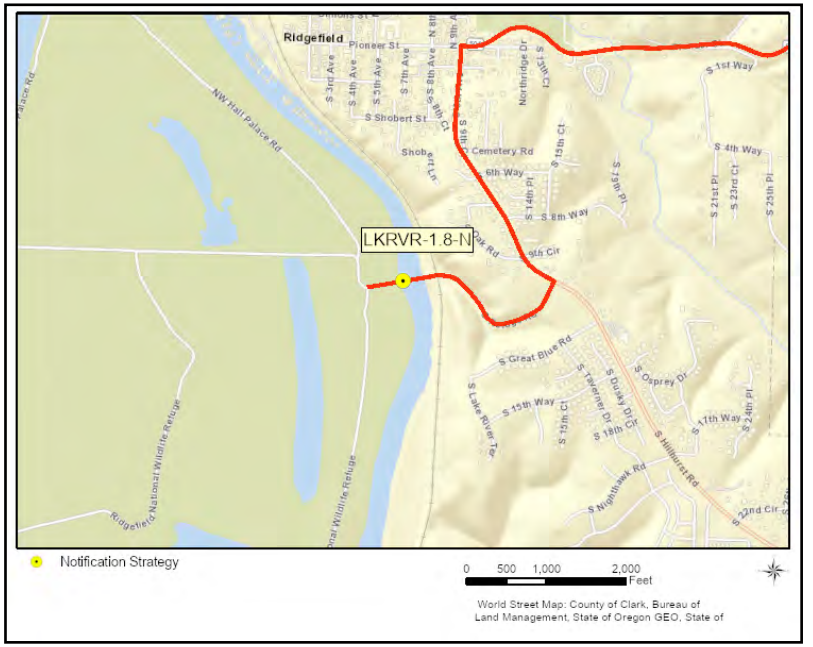
Communication Process and Action:

Call USFWS at (360) 887-4106 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact the infrastructure, so they can take action to protect the resources under their control. Actions taken may include shutting off their water intake.

USFWS Ridgefield National Wildlife Refuge — LKRVR-1.8-N



LKRVR-1.8-N Photo: From above the City of Ridgefield, looking southwest across Lake River towards the refuge. Photo was taken in June 2017.



Site Contact

Ridgefield National Wildlife Refuge
Primary Contact : Main Office (Daytime Hours)
360-887-4106

Ridgefield National Wildlife Refuge
Alternate Contact : After-Hours
360-600-6119

Nearest Address

1071 S Hillhurst Rd
Ridgefield, WA 98642

Driving Directions

1. Head south on I-5
2. At exit 14 take ramp on the right to WA-501 S/Pioneer St toward Ridgefield
3. Turn right on WA-501 (Pioneer St)
4. At roundabout, take 2nd exit to proceed west on WA-501 (Pioneer St)
5. Turn left on S 9th Ave
6. Continue on S Hillhurst Rd
7. Turn right on S. Refuge Rd
8. Location is just past the bridge

WDFW Skamania Hatchery WASHR-14.0-N

Position - Location:	45° 37.260', -122° 12.996'	45° 37' 15.6", -122° 12' 59.8"	45.62100, -122.21660	Washougal

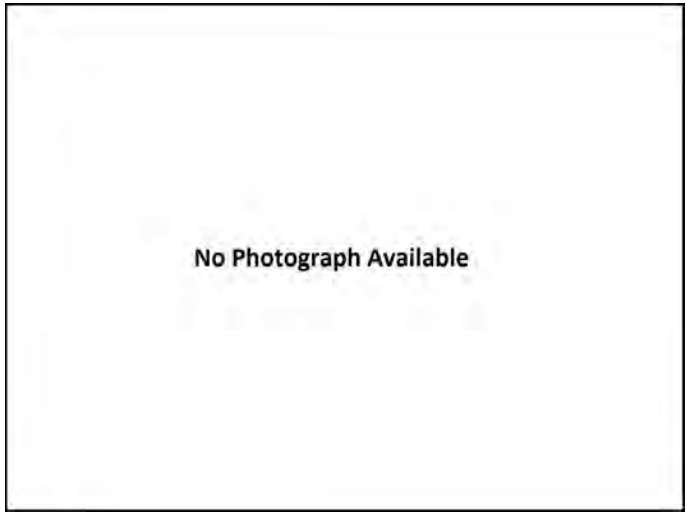
Strategy Objective:	Notification : Notify WDFW so they can take action to protect the resources under their control.
Implementation:	Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Washougal River, so they can take action to protect the resources under their control.
Field Notes:	WDFW has two hatcheries in Skamania County.
Watercourse:	River - Washougal River
Resources at Risk:	Fish Hatchery



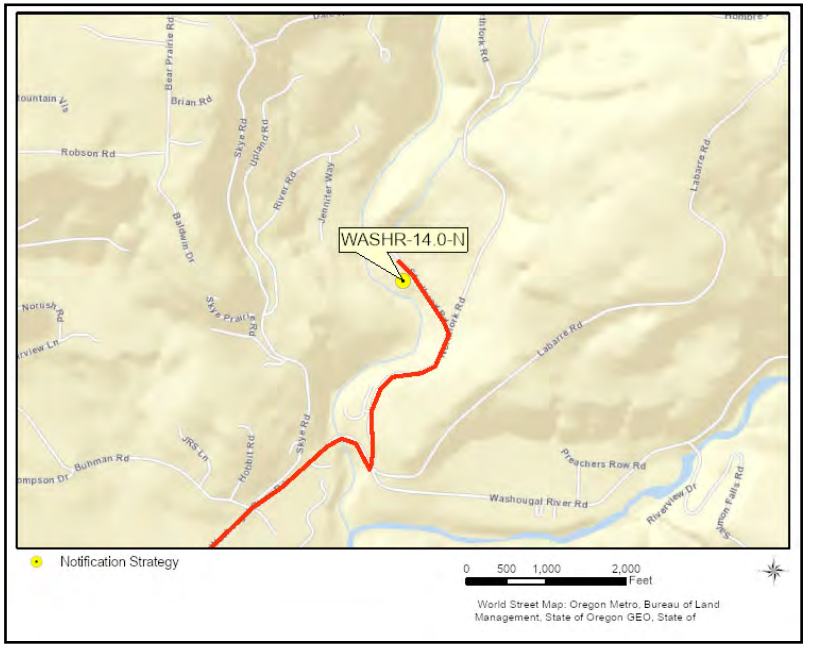
Communication Process and Action:

Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Washougal River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

WDFW Skamania Hatchery WASHR-14.0-N



WASHR-14.0-N Photo: No photograph available.



Site Contact

Washington Dept. of Fish and Wildlife
Land/Property Contact : Hatchery Division Manager
360-601-1301

Washington Dept. of Fish and Wildlife
Land/Property Contact : Assistant Hatchery Division Manager
360-460-6993

Nearest Address

391 Steelhead Rd
Washougal, WA 98671

Driving Directions

1. Head east on WA-14 toward Camas
7. At the roundabout, take the third exit onto Washougal River Rd
8. Make a sharp left on Labarre Rd
9. Continue forward on N Fork Rd
10. Turn left on Steelhead Rd
11. Location is at the end of the road

WDFW Washougal Hatchery — WASHR-20.0-N

Position - Location:	45° 39.194', -122° 10.156'	45° 39' 11.7", -122° 10' 9.3"	45.65324, -122.16926	Washougal

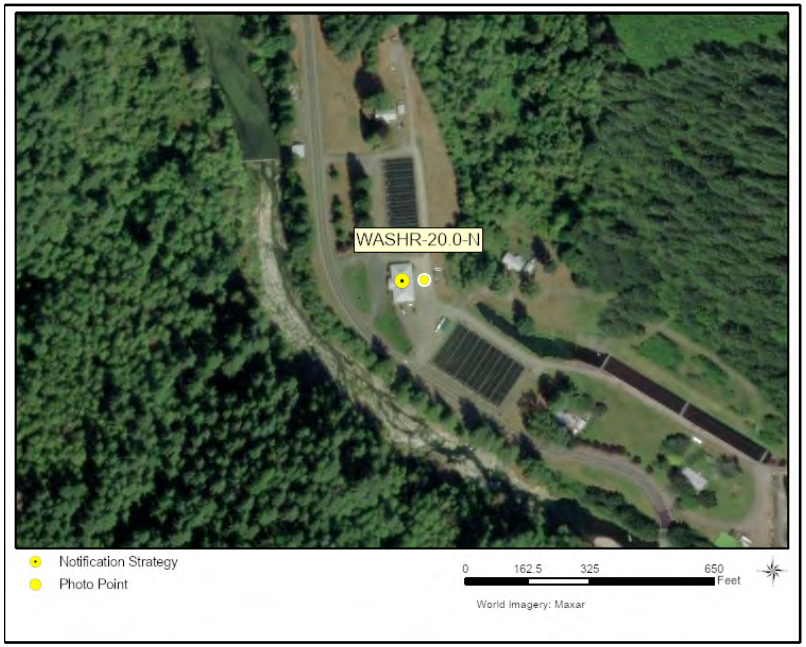
Strategy Objective: Notification : Notify WDFW so they can take action to protect the resources under their control.

Implementation: Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Washougal River, so they can take action to protect the resources under their control.

Field Notes: WDFW has two hatcheries in Skamania County.

Watercourse: River - Washougal River

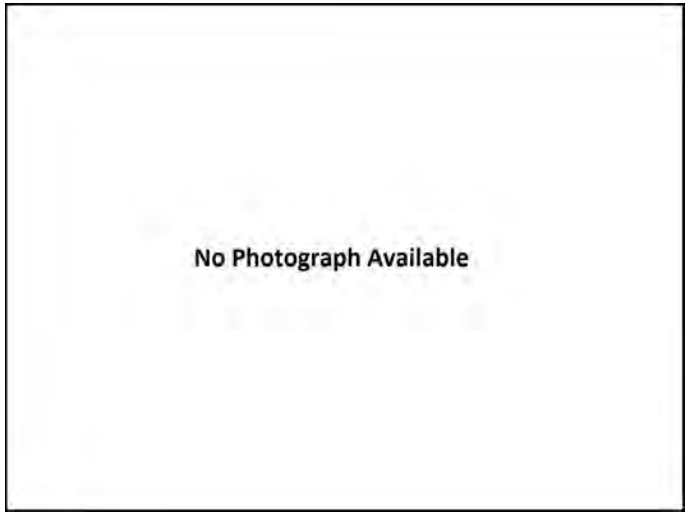
Resources at Risk: Fish Hatchery



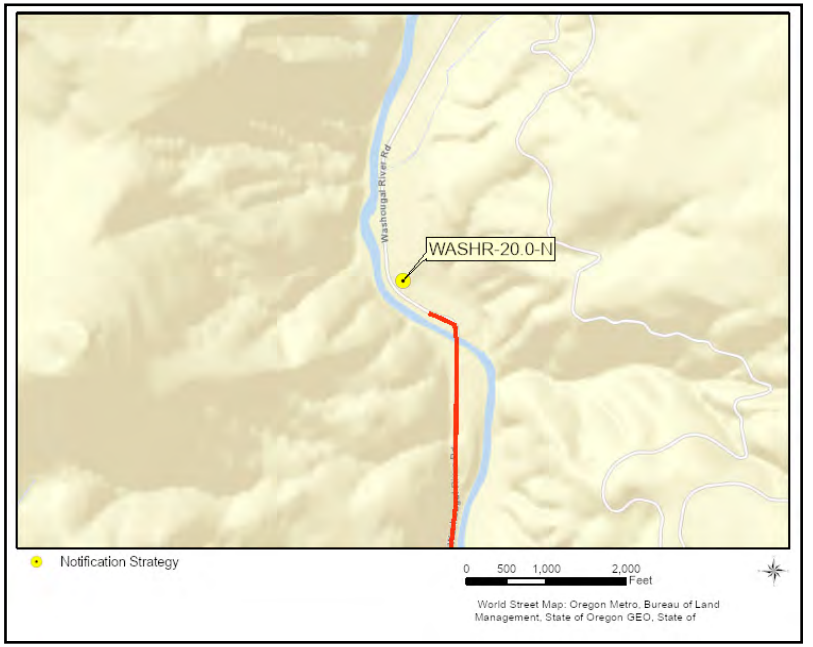
Communication Process and Action:

Call WDFW at (360) 601-1301 and notify them of any significant oil spill, or potential spill, that impacts, or threatens to impact, the hatchery along the Washougal River, so they can take action to protect the resources under their control. Actions taken by hatchery staff might include shutting down the intake pumps, closing intake valves, and/or delaying the release of fish.

WDFW Washougal Hatchery WASHR-20.0-N



WASHR-20.0-N Photo: No photograph available.



Site Contact

Washington Dept. of Fish and Wildlife
Land/Property Contact : Hatchery Division Manager
360-601-1301

Washington Dept. of Fish and Wildlife
Land/Property Contact : Assistant Hatchery Division Manager
360-460-6993

Nearest Address

15632 Washougal River Rd
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. Go northwest on NE Dallas St (WA-500) toward NE 3rd Ave
3. At the traffic light, turn right on NE 3rd Ave (WA-500)
4. At the traffic light, turn left on Shepherd Rd
5. At the stop sign, turn left on N Washougal River Rd
6. Location is on the right

Willamette River - Oswego Creek (OR) WR-21.1L-N

Position - Location:	45° 24.614', -122° 39.654'	45° 24' 36.9", -122° 39' 39.2"	45.41024, -122.66090	Lake Oswego

Strategy Objective: Notification : Notify Lake Oswego Corporation to close locks and prevent transfer of oil from Lake Oswego to Willamette River.

Implementation: Call Lake Oswego Corporation at 503-636-1422 to notify them of a spill potentially impacting Lake Oswego.

Field Notes: Lake Oswego Corporation manages the water level in Lake Oswego with a floodgate.

Watercourse: Lake - Lake Oswego

Resources at Risk: Resident Fish, Salmonids



Communication Process and Action:

Call Lake Oswego Corporation to notify them of a spill that could impact Lake Oswego and its oulet to the Willamette River. They will make the determination whether to close the flood gate and prevent flow from the lake to the Willamette River.

Willamette River - Oswego Creek (OR) WR-21.1L-N

No Photograph Available

WR-21.1L-N Photo: No photo available.



Site Contact

Lake Oswego Corporation
Primary Contact :
700 McVey Street
Lake Oswego, OR 97034
503-636-1422

Nearest Address

700 McVey Street
Lake Oswego, OR 97034

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (6.4 miles)
2. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
3. Continue on OR-43 (SW Hood Ave) (0.4 miles)
4. At fork keep right on OR-43 (SW Hood Ave) (6.04 miles)
5. Bear right (0.05 miles)
6. Bear right on Mcvey Ave (0.1 miles)
7. Finish at 700 McVey Street, 97034, on the right

Youngs Bay Fish Pens — YOR-3.3-N

Position - Location:	46° 10.253', -123° 50.240'	46° 10' 15.2", -123° 50' 14.4"	46.17088, -123.83733	Astoria

Strategy Objective: Notification : Notify Clatsop County Fisheries Management/ODFW of spills that could impact Youngs Bay Fish Pens

Implementation: Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred.

Field Notes: Three fish pens in Youngs Bay/River, at river miles 3.3., 4.0 and 4.1

Watercourse: River - With Tidal Influence - Youngs Bay/Youngs River

Resources at Risk: Fish Pens, Salmonids



Communication Process and Action:

Call Clatsop County Fisheries Management at 503-325-6452 and inform them that a spill has occurred. Ask about the status of the pens and if strategies can or should be deployed.

Afterhours contact:
Steve Meshke
503-741-0767
Work Cell

Youngs Bay Fish Pens YOR-3.3-N



YOR-3.3-N Photo: Youngs Bay fish pens



Site Contact

Clatsop County
Primary Contact :

OR
503-325-9306

Nearest Address

1820 SE Front Avenue
Astoria, OR 97103

Driving Directions

1. Start at Astoria, OR
2. Go east on Exchange St toward 12th St (0.05 miles)
3. Turn right on 12th St (0.05 miles)
4. Turn right on Franklin Ave (0.12 miles)
5. Turn left on 10th St (0.05 miles)
6. Turn right on Grand Ave (0.09 miles)
7. Turn left on 8th St (0.35 miles)
8. Turn right on Niagara Ave (0.05 miles)
9. Turn left on 7th St (0.55 miles)
10. Turn left on OR-202 (Olney Ave) (0.75 miles)
11. Finish at 1820 SE Front Avenue, 97103, on the left

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APPENDIX C

Staging Area 2-Pagers

John Day Park Boat Ramp SA-JDAYR-0.5

Staging Area

Position - Location:	46° 10.683', -123° 45.064'	46° 10' 41.0", -123° 45' 3.9"	46.17805, -123.75107	Astoria

Comments: Large paved parking area 66,400 sq ft



GRP Response Strategies Served:

LCR-20.0L, LCR-19.9L, LCR-19.2L, LCR-20.3L, LCR-19.3L

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Plank	2
Estimated Lot Size	Square Feet	66400 Sq Ft
Parking - Car	Marked	100
Parking - Trailer	Marked	75
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$3/day parking
Waste Disposal	No Information	
Water (potable)	Yes	

John Day Park Boat Ramp SA-JDAYR-0.5



SA-JDAYR-0.5 Photo: From parking area looking NW at double boat ramps and dock.



Site Contact

Clatsop County
Land/Property Contact :

OR
503-325-9306

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

Directions to John Day Park boat launch BL-JDAYR-0.5
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (41.7 miles)
12. Finish at John Day Park boat launch on the right

Port of Ilwaco Marina SA-LCR-3.1R

Staging Area

Position - Location:	46° 18.151', -124° 2.192'	46° 18' 9.1", -124° 2' 11.5"	46.30252, -124.03654	Ilwaco

Comments: Public staging area and boat launch on the right bank of the Columbia River (Baker Bay). Notify the port before staging equipment (360-642-3143).



GRP Response Strategies Served:

LCR-8.4R, LCR-2.4R, LCR-2.2R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	65000
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	25
Parking - Trailer	Marked	45
Power	No	
Restroom	Restroom - Portable	1
User Fee	Yes	10 $ daily
Waste Disposal	Pumpout	
Water (potable)	Yes	Vending machine

Port of Ilwaco Marina SA-LCR-3.1R



SA-LCR-3.1R Photo: From the top of the boat ramps, looking west with other boat slips in the background. Photo was taken in early October.



Site Contact

Port of Ilwaco
Primary Contact : Port Manager

Ilwaco, WA 98624
360-642-3143

Nearest Address

Outer Harbor Way SE
Ilwaco, WA 98624

Driving Directions

1. Go northwest on WA-4 (Ocean Beach Hwy) toward Messinger Hill Dr
2. Keep left at the fork onto WA-4
3. Continue forward on US-101 toward Long Beach / Ilwaco
4. Turn left on US-101-ALT toward Astoria / Oregon
5. Turn right on US-101 toward Ilwaco
6. Turn left on Elizabeth St toward Port of Iiwaco / Grays Harbor College
7. Continue forward on Outer Harbor Way SE
8. Location is at the end of the road

Hammond Marina SA-LCR-8.7L

Staging Area

Position - Location:	46° 12.142', -123° 57.164'	46° 12' 8.5", -123° 57' 9.9"	46.20237, -123.95274	Warrenton

Comments: Adjoining Seafarer's Park and Fort Stevens State Park



GRP Response Strategies Served:

LCR-10.1L, LCR-6.8L , LCR-7.1L, LCR-7.5L

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	175 Wet slips
Boat Ramp(s)	Concrete, Plank	4
Covered Spaces	Unknown	
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	84
Parking - Trailer	Marked	70
Power	Yes	
Restroom	Restroom - with Showers	
User Fee	Yes	5 Daily parking/launch
Waste Disposal	Pumpout	
Water (potable)	Yes	

Hammond Marina SA-LCR-8.7L



SA-LCR-8.7L Photo: Top of Hammond Marina boat ramp (right lane) looking NE at jetty opening to Columbia River.



Site Contact

Warrenton Harbor Master
Land/Property Contact : Marinas (Warrenton/Hammond)
225 S. Main Avenue PO Box 250
Warrenton, OR 97146
503-861-3197

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Highway 101, Astoria, OR
2. Go northeast on US-101 (W Marine Dr) (0.11 miles)
3. Make sharp left to stay on US-101 (W Marine Dr) (0.17 miles)
4. At roundabout, take 1st exit to proceed southwest on US-101 (Oregon Coast Hwy) (3.2 miles)
5. Continue (0.04 miles)
6. Continue on US-101-ALT (Alternate Hwy 101) (0.86 miles)
7. Turn left at OR-104 to stay on US-101-ALT (S Main Ave) (0.23 miles)
8. Turn right on SW 18th St (Delaura Beach Ln) (0.76 miles)
9. Continue on SW Ridge Rd (3.32 miles)
10. Continue on Lake Dr (0.44 miles)
11. Turn right on Iredale St (0.01 miles)
12. Finish at 1085 Iredale Street, 97121, on the left

East Mooring Basin SA-LCR-15.8L

Staging Area

Position - Location:	46° 11.679', -123° 48.140'	46° 11' 40.7", -123° 48' 8.4"	46.19465, -123.80234	Astoria

Comments: Large asphalt parking area with 54 trailer spaces and restrooms.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	82 Wet open slips
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	Unknown	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	54
Parking - Trailer	Marked	54
Power	Unknown	
Restroom	Restroom - with Showers	
User Fee	Yes	$12 - $20 based on boat length
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

GRP Response Strategies Served:

YOR-3.3R, YOR-4.0R, YOR-4.1R, L&C-2.3, L&C-1.2, L&C-2.6, L&C-1.7, WALOR-1.0

East Mooring Basin SA-LCR-15.8L



SA-LCR-15.8L Photo: From docks looking SE at East Mooring Basin boat ramps.



Site Contact

Port of Astoria
Land/Property Owner : Executive Director
10 Pier One, Suite 308
Astoria, OR 97103

Nearest Address

37th Street
Astoria, OR 97103

Driving Directions

Directions to East Mooring Basin BL-LCR-15.8L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (44.74 miles)
12. Turn right on 37th St (0.06 miles)
13. Take a left through the parking area to cross the railroad tracks at the launch ramps.14. Finish at 37th Street, 97103, on the left

Tongue Point - Cathlamet Channel SA-LCR-17.7L

Staging Area

Position - Location:	46° 11.928', -123° 45.742'	46° 11' 55.7", -123° 45' 44.5"	46.19880, -123.76236	Astoria

Comments: Massive paved parking area in an industrial complex.



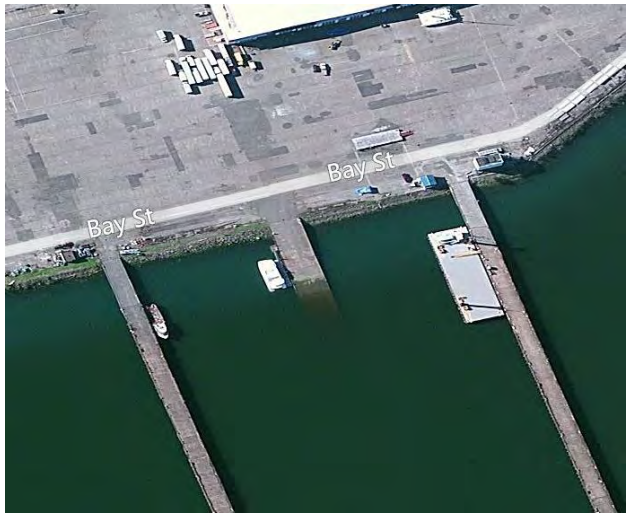
GRP Response Strategies Served:

LCR-26.4M, LCR-27.5L, LCR-29.2L, LCR-29.0L, LCR-19.0L, LCR-27.2L, LCR-27.9L

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	1
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	200 +
Parking - Trailer	Not Marked	200 +
Power	Yes	Fees per use
Restroom	Not Determined	
User Fee	Yes	8 daily launch; add'l for utilities
Waste Disposal	Dump Station	Fees based on use
Water (potable)	Yes	Fees per use

Tongue Point - Cathlamet Channel SA-LCR-17.7L



SA-LCR-17.7L Photo: Aerial photo looking due west at boat launch and portion of parking area at Tongue Point industrial site.



Site Contact

Port of Astoria
Land/Property Owner : Executive Director
10 Pier One, Suite 308
Astoria, OR 97103

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

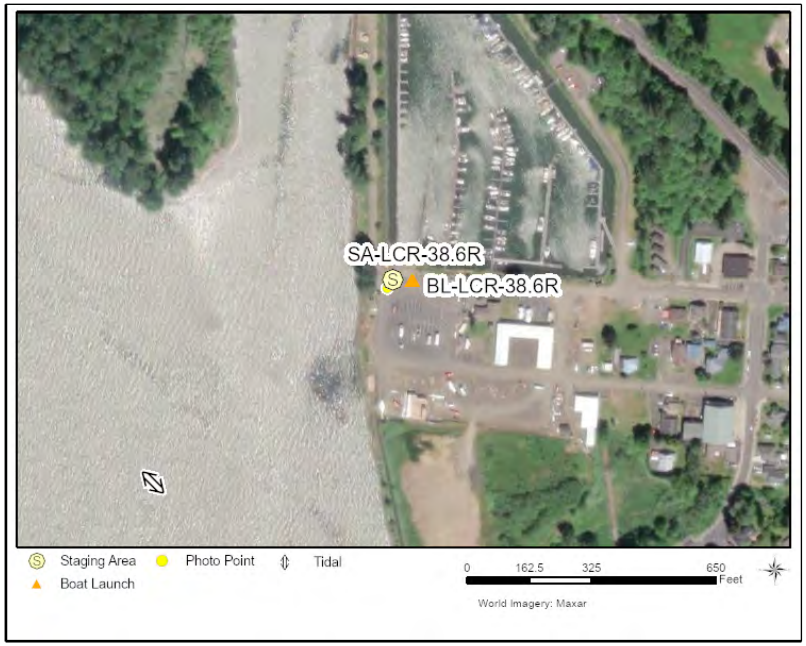
Directions to Tongue Point BL-LCR-17.7L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (42.67 miles)
12. Turn right on Old Columbia River Hwy (Old Us-30) (0.26 miles)
13. Turn right (0.15 miles)
14. Turn left on Railroad Ave (0.26 miles)
15. Finish at Railroad Avenue, 97103, on the right

Elochoman Slough Marina — SA-LCR-38.6R

Staging Area

Position - Location:	46° 12.332', -123° 23.288'	46° 12' 19.9", -123° 23' 17.3"	46.20554, -123.38814	Cathlamet

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	60000
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	30
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Flush	2
User Fee	Yes	6 $
Waste Disposal	Pumpout	
Water (potable)	Yes	

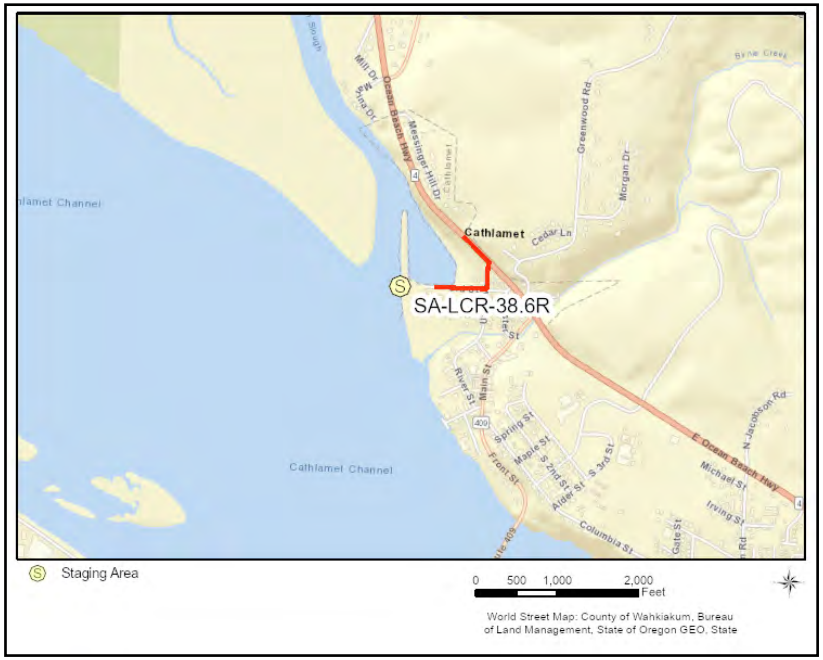
GRP Response Strategies Served:

LCR-38.2L, LCR-35.0R, LCR-35.7R, LCR-41.3M, LCR-45.0M, LCR-33.6bR, LCR-35.3R, LCR-37.7M, LCR-38.8L, LCR-44.3M, LCR-36.0R, LCR-45.2M, LCR-38.6R, LCR-40.5M, LCR-33.6aR, LCR-44.1M, LCR-37.2R, LCR-38.5M, LCR-44.0M

Elochoman Slough Marina SA-LCR-38.6R



SA-LCR-38.6R Photo: Elochoman Slough Marina looking N at boat ramp



Site Contact

Elochoman Slough Marina
Primary Contact :

WA
360-795-3501

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

From WA-4, Cathlamet, WA
1. Head south on WA-4 E toward Elochoman Valley Rd
2. Turn right onto Una Ave (0.1 mi)
3. Turn right at 3rd Street, and continue to boat ramp and parking area.

Westport Boat Ramp SA-LCR-43.8L

Staging Area

Position - Location:	46° 8.199', -123° 22.378'	46° 8' 11.9", -123° 22' 22.7"	46.13665, -123.37297	Westport

Comments: Large paved area with restrooms.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1
Parking - Car	Not Marked	50
Parking - Trailer	Not Marked	30
Power	Not Determined	
Restroom	Restroom - Portable	
User Fee	No	
Waste Disposal	None	
Water (potable)	Unknown	

GRP Response Strategies Served:

LCR-48.8M, LCR-48.6M, LCR-42.5L, LCR-43.2L, LCR-48.1M

Westport Boat Ramp SA-LCR-43.8L



SA-LCR-43.8L Photo: From top of Westport boat ramp looking N at Westport Slough.



Site Contact

Clatsop County
Land/Property Contact :

OR
503-325-9306

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at Clatskanie, OR 97016
2. Go northeast on OR-47 (Mist-Clatskanie Hwy) (0.8 miles)
3. Turn left on Palm Hill Rd (1.26 miles)
4. Turn left on US-30 (Highway 30) (6.98 miles)
5. Bear right on Old Mill Town Rd (0.38 miles)
6. At the T-intersection, turn right on Westport Boat Ramp Lane. Boat ramp is at the end of the lane (0.2 miles).

Port Westward (Columbia Pacific) SA-LCR-53.8L

Staging Area

Position - Location:	46° 10.889', -123° 10.424'	46° 10' 53.4", -123° 10' 25.4"	46.18149, -123.17373	Clatskanie

Comments: Empty gravel parking area 90'x160'=14,400 sq ft, no facilities



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	10
Power	No	
Restroom	Not Determined	
User Fee	Unknown	
Waste Disposal	Not Determined	
Water (potable)	No	

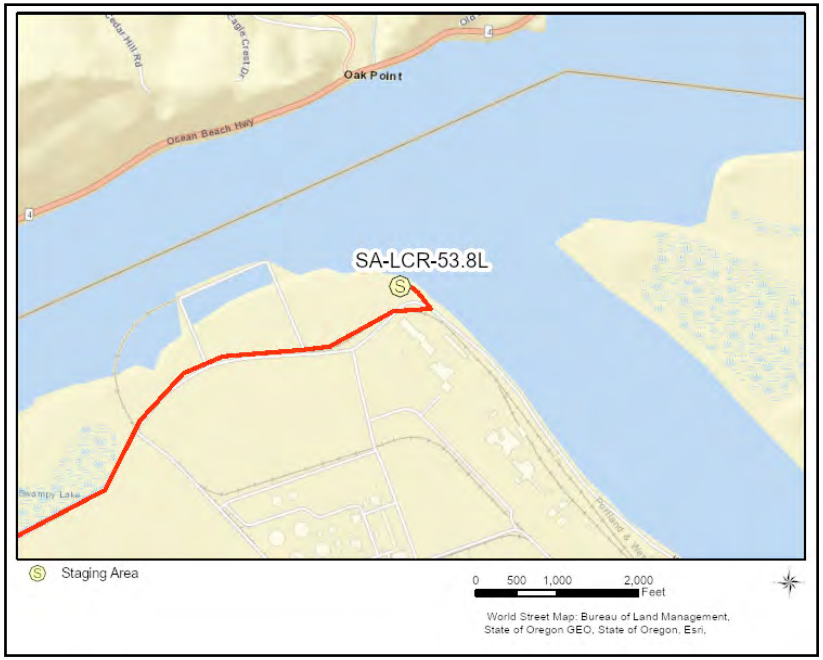
GRP Response Strategies Served:

LCR-49.8L, LCR-54.4M, LCR-50.5L, LCR-55.4L, LCR-49.1M, LCR-49.7L, LCR-55.6M, LCR-55.1M

Port Westward (Columbia Pacific) SA-LCR-53.8L



SA-LCR-53.8L Photo: From Bradbury Slough at Columbia River, looking SW at ramp and parking.



Site Contact

Columbia Pacific Bio-Refinery
Land/Property Owner : Port Westward

Clatskanie, OR
503-728-7000

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

Directions to Port Westward (Columbia Pacific) BL-LCR-53.8L
1. Start at Portland OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.94 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
7. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
8. Continue on WA-432 (3.46 miles)
9. Bear left on WA-433 (Oregon Way) (1.8 miles)
10. Continue on Lewis And Clark Brg (0.63 miles)
11. Continue (0.28 miles)
12. Continue on US-30 (Lower Columbia River Hwy) (11 miles)
13. Turn right on NE Van St (0.11 miles)
14. Turn left on NE 5th St (0.36 miles)
15. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
16. Continue on Beaver Falls Rd (0.08 miles)

Willow Grove Beach SA-LCR-57.8R

Staging Area

Position - Location:	46° 10.446', -123° 5.172'	46° 10' 26.8", -123° 5' 10.3"	46.17410, -123.08620	Longview

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.



GRP Response Strategies Served:

LCR-58.8R, LCR-59.8L, LCR-55.7R, LCR-55.3M, LCR-53.8R, LCR-55.5M, LCR-60.2M, LCR-58.7M, LCR-54.2R, LCR-58.9M, LCR-59.0M , LCR-64.0M, LCR-55.9R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	3
Boat Ramp(s)	Concrete, Solid	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	200000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	70
Parking - Trailer	Marked	100
Power	No	
Restroom	Restroom - Flush	2
User Fee	No	
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

Willow Grove Beach SA-LCR-57.8R



SA-LCR-57.8R Photo: From the top of the boat ramps, looking east towards Fisher Island. Photo was taken in April.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Rainier City Park — SA-LCR-67.1L

Staging Area

Position - Location:	46° 5.612', -122° 56.593'	46° 5' 36.7", -122° 56' 35.6"	46.09353, -122.94321	Rainier

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify the city before staging equipment.



GRP Response Strategies Served:

LCR-64.4L, LCR-65.9R, LCR-67.7R, LCR-66.2R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	1
Cell Phone Coverage	Yes	4G LTE
Covered Spaces	No	
Estimated Lot Size	Square Feet	53000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	20
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Flush	1
User Fee	Yes	5 $ Daily
Waste Disposal	Trash Receptacle	1
Water (potable)	Yes	

Rainier City Park SA-LCR-67.1L



SA-LCR-67.1L Photo: Top of Rainier City Marina boat ramp, looking NE at docks and Columbia River.



Site Contact

City of Rainier
Land/Property Contact :

Rainier, OR 97048
503-556-7301

Nearest Address

48 W 7th St
Rainier, OR 97048

Driving Directions

Directions to Rainier City Marina BL-LCR-67.1L
1. Head north on I-5
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach
4. Continue on WA-432
5. Bear left on WA-433 (Oregon Way)

6. Continue on Lewis And Clark Bridge
7. Head east on US-30 (Lower Columbia River Hwy)
8. Turn left on Veterans Way
9. Turn left A St
10. Location is on your right

Port of Kalama Marina SA-LCR-75.2R

Staging Area

Position - Location:	46° .554', -122° 50.962'	46° 0' 33.2", -122° 50' 57.7"	46.00923, -122.84936	Kalama

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.



GRP Response Strategies Served:

LCR-71.5M, LCR-70.0M, LCR-76.0L, LCR-73.7L, LCR-78.4R, LCR-71.4R, LCR-78.9R, LCR-79.5R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Asphalt	2 ramps
Covered Spaces	No	
Estimated Lot Size	Marked	50000 Sq Ft
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	100
Parking - Trailer	Gravel	25
Power	No	
Restroom	Restroom - Flush	1
User Fee	No	
Waste Disposal	Pumpout	1
Water (potable)	No	

Port of Kalama Marina — SA-LCR-75.2R



SA-LCR-75.2R Photo: From the top of the boat ramps, looking east towards N Hendrickson Dr. Columbia River is to the left.



Site Contact

Port of Kalama
Primary Contact :

Kalama, WA 98625
360-673-2325

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

St. Helens Marina — SA-LCR-85.8L

Staging Area

Position - Location:	45° 52.038', -122° 47.941'	45° 52' 2.3", -122° 47' 56.5"	45.86730, -122.79902	St. Helens

Comments: Staging area and boat launch on the left bank of the Columbia River. Notify the marina before staging equipment.



GRP Response Strategies Served:

LCR-87.7R, LCR-87.6R, LCR-81.0M, LCR-85.6M, LCR-81.2R, LCR-89.8R, LCR-87.3R, LCR-91.0R, LCR-85.8R, LCR-86.2R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	30000
Fuel	Yes	
Lot Cover (Primary)	Gravel	60 %
Parking - Car	Marked	32
Parking - Trailer	Marked	15
Power	Yes	
Restroom	Restroom - with Showers	1
User Fee	Yes	5 $
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

St. Helens Marina SA-LCR-85.8L



SA-LCR-85.8L Photo: From the top of the boat ramp, looking east towards Sand Island and the Columbia River.



Site Contact

St. Helens Marina
Land/Property Owner :
134 N River St
St. Helens, OR 97051
503-397-4162

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Langsdorf Landing SA-LCR-97.7R

Staging Area

Position - Location:	45° 42.246', -122° 45.580'	45° 42' 14.8", -122° 45' 34.8"	45.70410, -122.75967	Vancouver

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Asphalt	1
Covered Spaces	No	
Estimated Lot Size	Square Feet	25000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	20 spaces
Parking - Trailer	Marked	10
Power	No	
Restroom	Restroom - Vault	1
User Fee	Yes	Discover Pass
Waste Disposal	Trash Receptacle	1
Water (potable)	No	

GRP Response Strategies Served:

LCR-97.0R, LCR-92.3R, LCR-94.5L, LCR-98.4L, LCR-98.6R, LCR-100.8R, LCR-94.8R, LCR-95.0R, LCR-94.3R, LCR-97.5R, LCR-99.9R

Langsdorf Landing SA-LCR-97.7R



SA-LCR-97.7R Photo: Channel right at WDFW Boat Launch-Langsdorf Landing Fishing Area



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :
360-562-0130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on W Fourth Plain Blvd
5. Continue on WA-501 (NW Lower River Rd)
6. Boat launch will be on the left past the marina.

Broughton Beach Park — SA-LCR-109.4L

Staging Area

Position - Location:	45° 36.051', -122° 37.127'	45° 36' 3.1", -122° 37' 7.6"	45.60085, -122.61879	Portland

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.



GRP Response Strategies Served:

LCR-113.8R, LCR-109.1R, LCR-107.1R, LCR-111.0R, LCR-108.4R, LCR-113.3M, LCR-109.6R, LCR-114.8M

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	200000
Fuel	No	
Lot Cover (Primary)	Asphalt	County Marine Patrol office on site
Parking - Car	Marked	225
Parking - Trailer	Marked	200
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$5 per day
Waste Disposal	Pumpout	
Water (potable)	Yes	

Broughton Beach Park SA-LCR-109.4L



SA-LCR-109.4L Photo: From docks, looking towards boat ramp.



Site Contact

Oregon Metro
Land/Property Contact :

Portland, OR
503-797-1700

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Chinook Landing Marine Park SA-LCR-118.5L

Staging Area

Position - Location:	45° 33.623', -122° 26.557'	45° 33' 37.4", -122° 26' 33.4"	45.56038, -122.44261	Fairview

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.



GRP Response Strategies Served:

LCR-115.0R, LCR-116.9R, LCR-118.5R, LCR-115.7R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	4
Boat Ramp(s)	Concrete, Solid	3
Covered Spaces	Yes	
Estimated Lot Size	Square Feet	225000
Fuel	Unknown	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	75
Parking - Trailer	Marked	200
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	5 per day
Waste Disposal	Pumpout	
Water (potable)	Yes	

Chinook Landing Marine Park SA-LCR-118.5L



SA-LCR-118.5L Photo: From top of ramp, looking west towards the river.



Site Contact

Oregon Metro
Land/Property Contact :

Portland, OR
503-797-1700

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left

Port of Camas-Washougal Marina — SA-LCR-121.6R

Staging Area

Position - Location:	45° 34.696', -122° 22.864'	45° 34' 41.8", -122° 22' 51.8"	45.57827, -122.38106	Washougal

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify port before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	3
Boat Ramp(s)	Loading Float	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	70000
Fuel	Yes	
Lot Cover (Primary)	Dirt/Gravel	90 %
Parking - Car	Marked	50
Parking - Trailer	Gravel	30
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	$7
Waste Disposal	Pumpout	
Water (potable)	No	

GRP Response Strategies Served:

LCR-120.6R, LCR-124.7R

Port of Camas-Washougal Marina SA-LCR-121.6R



SA-LCR-121.6R Photo: From top of ramps, looking south towards the river (downriver to the right).



Site Contact

Port of Camas-Washougal
Land/Property Owner :

Washougal, WA 98671
360-835-2196

Nearest Address

24 S A St
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. Turn right on 2nd St
3. Turn right on S A St
4. Turn left on S 1st St
5. Turn right on S A St
6. Location is on the right

Rooster Rock State Park — SA-LCR-128.9L

Staging Area

Position - Location:	45° 32.678', -122° 14.924'	45° 32' 40.7", -122° 14' 55.5"	45.54463, -122.24874	Corbett

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify state park before staging equipment.



GRP Response Strategies Served:

LCR-128.0R, LCR-131.0R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	3
Covered Spaces	No	
Estimated Lot Size	Square Feet	800000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	200
Parking - Trailer	Marked	100
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$3/day
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

Rooster Rock State Park SA-LCR-128.9L



SA-LCR-128.9L Photo: From top of ramps, looking southeast towards the boat basin (river is to the right).



Site Contact

OR State Parks
Land/Property Contact : Rooster Rock State Park

Corbett, OR 97019
503-695-2261

Nearest Address

I-84
Corbett, OR 97019

Driving Directions

1. Head east I-84 E/US-30
2. At exit 25 take ramp toward Rooster Rock Park
3. Turn left on Rooster Rock Park Rd
4. Location is at end of road

Hamilton Island SA-LCR-144.3R

Staging Area

Position - Location:	45° 38.051', -121° 57.946'	45° 38' 3.0", -121° 57' 56.7"	45.63418, -121.96576	North Bonneville

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify USACE before staging equipment.



GRP Response Strategies Served:

LCR-140.3R, LCR-144.9L, LCR-137.0R, LCR-143.4R, LCR-141.4R, LCR-142.4R

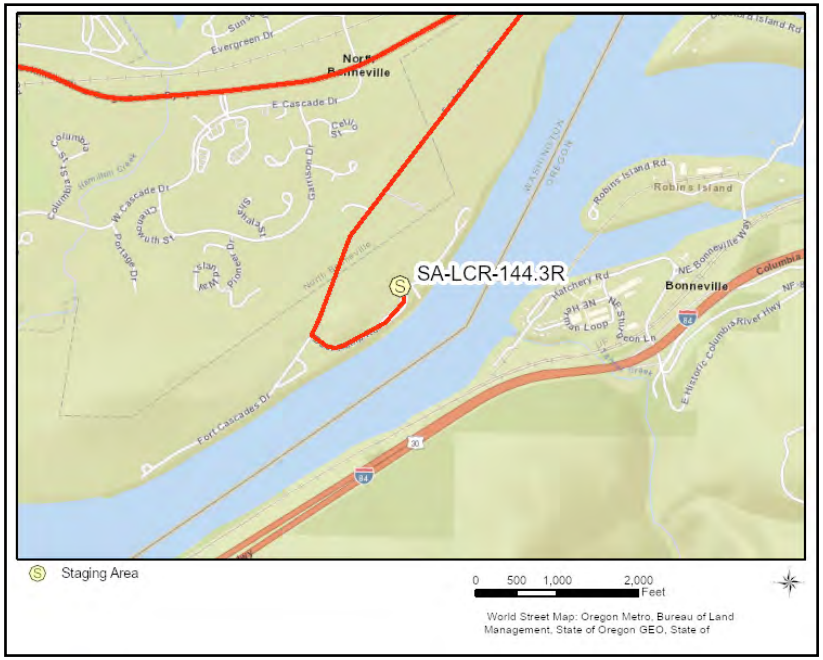
Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	1
Covered Spaces	No	
Estimated Lot Size	Square Feet	48000
Fuel	No	
Lot Cover (Primary)	Asphalt	2 100%
Parking - Car	Marked	10
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	
Waste Disposal	Not Determined	
Water (potable)	No	1

Hamilton Island SA-LCR-144.3R



SA-LCR-144.3R Photo: From top of ramp, looking southeast towards the river (dam is to the left).



Site Contact

USACE Bonneville Dam
Land/Property Contact : Control Room

Cascade Locks, OR 97014
541-374-8338

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Fred's Marina SA-MC-1.0

Staging Area

Position - Location:	45° 37.131', -122° 48.320'	45° 37' 7.9", -122° 48' 19.2"	45.61885, -122.80533	Portland

Comments: Paved parking area 37,950 sq ft



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	37950 Sq Ft
Fuel	Yes	
Parking - Car	Marked	50
Parking - Trailer	Marked	30
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Unknown	
Waste Disposal	No Information	
Water (potable)	Yes	

GRP Response Strategies Served:

MC-0.2, WR-3.7R, WR-0.9R, MC-0.5, MC-0.4, MC-0.1, MC-1.5, WR-3.8L

Fred's Marina SA-MC-1.0



SA-MC-1.0 Photo: Top of ramp at Fred's Marina, looking N at Multnomah Channel and Sauvie Island.



Site Contact

Fred's Marina
Land/Property Owner :
12800 NW Marina Way
Portland, OR
503-286-5537

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Warrenton Marina — SA-SKPR-1.4

Staging Area

Position - Location:	46° 9.858', -123° 55.252'	46° 9' 51.5", -123° 55' 15.1"	46.16430, -123.92087	Warrenton

Comments: Huge paved parking area 50,000 sq ft.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	Yes	Store
Estimated Lot Size	Square Feet	50000 Sq Ft
Parking - Car	Marked	75
Parking - Trailer	Marked	50
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	5 $/day incl park + launch
Waste Disposal	Pumpout	and Dump Station
Water (potable)	Yes	

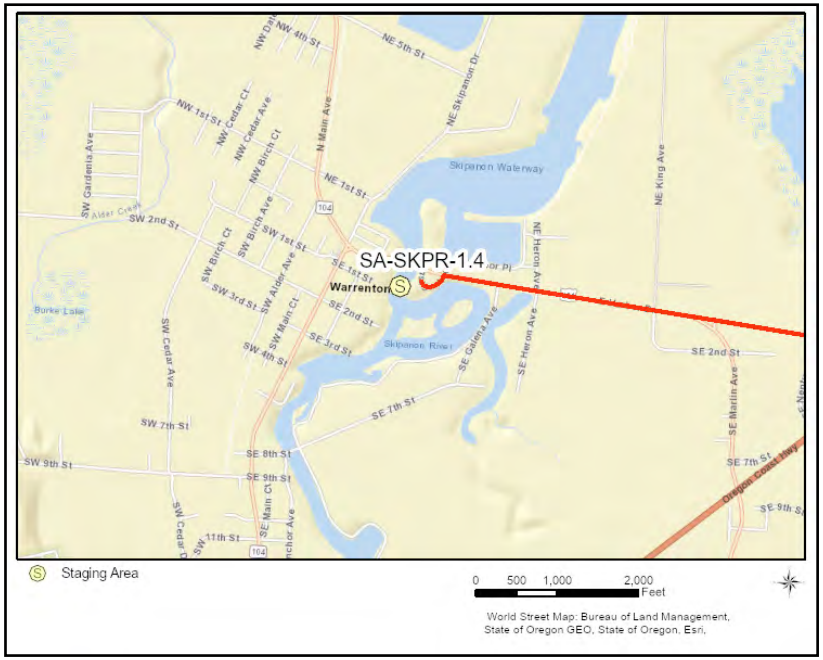
GRP Response Strategies Served:

LCR-10.9L, LCR-10.8L

Warrenton Marina SA-SKPR-1.4



SA-SKPR-1.4 Photo: Top of ramp at Warrenton Marina, looking N at the Skipanon River.



Site Contact

Warrenton Harbor Master
Primary Contact : Marinas (Warrenton/Hammond)
225 S. Main Avenue PO Box 250
Warrenton, OR 97146
503-861-3197

Nearest Address

553 Ensign Drive
Warrenton, OR 97146

Driving Directions

1. Start at Highway 101 S, Astoria OR
2. Go southwest on US-101 (Oregon Coast Hwy) (2.21 miles)
3. Turn right on US-101-BR (E Harbor Dr) (1.11 miles)
4. Turn left on Ensign Ave (0.07 miles)
5. Finish at 553 Ensign Drive, 97146, on the left

Cathedral Park (OR) SA-WR-5.8R

Staging Area

Position - Location:	45° 35.263', -122° 45.833'	45° 35' 15.8", -122° 45' 50.0"	45.58771, -122.76388	Portland

Comments: Cathedral Park Parking and Staging



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Concrete, Solid	2 ramps
Parking - Trailer	Marked	50 spaces
Restroom	Restroom - Flush	2

GRP Response Strategies Served:

WR-6.9R, WR-4.3R, WR-6.9L, WR-5.9L, WR-5.8R, WR-4.2R , WR-4.5R

Cathedral Park (OR) SA-WR-5.8R



SA-WR-5.8R Photo: From Willamette River, looking SE at Cathedral Park boat ramp.



Site Contact

City of Portland Parks and Recreation
Municipality (County/City) :
1120 SW Fifth Ave., Suite 1302
Portland, OR 97204
503-823-7529

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Swan Island Boat Ramp (OR) SA-WR-8.0R

Staging Area

Position - Location:	45° 33.751', -122° 42.347'	45° 33' 45.1", -122° 42' 20.8"	45.56252, -122.70578	Portland

Comments: Swan Island Boat Ramp Parking and Staging



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Asphalt	1 ramp
Parking - Car	Marked	25 spaces
Parking - Trailer	Marked	35 spaces
Restroom	Restroom - Portable	1

GRP Response Strategies Served:

WR-7.4R, WR-12.2R, SIL-0.8, WR-7.5L, SIL-0.4, WR-12.7R

Swan Island Boat Ramp (OR) SA-WR-8.0R



SA-WR-8.0R Photo: From water in Swan Island Basin, looking SE at Swan Island Boat Ramp.



Site Contact

No Information
Not Determined :

Nearest Address

5561 N. Basin Ave.
Portland, OR 97217

Driving Directions

Directions to SA-WR-8.0R From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.74 miles)
2. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
3. Turn right on N Alberta St (0.16 miles)
4. Make sharp left on N Interstate Ave (0.21 miles)
5. Turn right on N Going St (0.67 miles)
6. At fork keep left on N Going St (0.1 miles)
7. Turn right on N Basin Ave (0.22 miles)
8. At fork keep right on N Basin Ave (0.38 miles)
9. Finish at 5561 N. Basin Ave., 97217, on the left

Ross Island Sand and Gravel — SA-WR-13.9R

Staging Area

Position - Location:	45° 30.209', -122° 39.800'	45° 30' 12.5", -122° 39' 48.0"	45.50348, -122.66334	Portland

Comments: Commercial business, 23,400 sq ft grass/gravel parking area



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1
Estimated Lot Size	Square Feet	23400 Sq Ft
Parking - Car	Field	10
Parking - Trailer	Field	5
Power	Unknown	
Restroom	No Information	
User Fee	Unknown	
Waste Disposal	No Information	
Water (potable)	Unknown	

GRP Response Strategies Served:

WR-13.4R, WR-13.5R, WR-14.7R, WR-13.4L

Ross Island Sand and Gravel SA-WR-13.9R



SA-WR-13.9R Photo: From Willamette River, looking NNE at Ross Island Sand + Gravel boat ramp.



Site Contact

Ross Island Sand & Gravel Company
Land/Property Owner :
4315 SE McLoughlin Blvd
Portland, OR 97202

Nearest Address

2611 SE 4th Avenue
Portland, OR 97202

Driving Directions

Directions to Ross Island Sand and Gravel BL-WR-13.9R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.45 miles)
9. Turn left on SE Belmont St (0.15 miles)
10. Turn right on SE 7th Ave (0.7 miles)
11. Turn left on SE Division St (0.06 miles)
12. Turn right on SE 8th Ave (0.06 miles)
13. Turn right on SE Division Pl (0.2 miles)
14. Turn left on SE 4th Ave (0.1 miles)
15. Turn right into Ross Island Sand and Gravel at 2611 SE 4th Avenue, 97202

Zidell Marine (Shipyard) SA-WR-14.1L

Staging Area

Position - Location:	45° 29.970', -122° 40.100'	45° 29' 58.2", -122° 40' 6.0"	45.49950, -122.66834	Portland

Comments: Commercial shipyard - may have facilities available upon request



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	3 Industrial
Parking - Car	Marked	100 Large industrial area
Parking - Trailer	Not Marked	50 Large industrial area

GRP Response Strategies Served:

WR-14.9L

Zidell Marine (Shipyard) SA-WR-14.1L



SA-WR-14.1L Photo: From Willamette River looking W at Zidell Marine ramps.



Site Contact

Zidell Corporation
Land/Property Owner : Zidell Marine
31231 SW Moody Ave
Portland, OR 97239
503-228-8691

Nearest Address

3121 SW Moody Avenue
Portland, OR 97239

Driving Directions

Directions to Zidell Marine BL-WR-14.1L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.3 miles)
4. Turn right on NW Naito Pky (NW Front Ave) (0.91 miles)
5. Turn left on SW Harbor Dr (0.34 miles)
6. Take ramp to Sheridan St. (0.13 miles)
7. Turn left on SW Sheridan St (0.08 miles)
8. Bear right on SW Moody Ave (0.38 miles)
9. Finish at 3121 SW Moody Avenue, 97239, on the right

Willamette Park (OR) SA-WR-15.6L

Staging Area

Position - Location:	45° 28.538', -122° 40.144'	45° 28' 32.3", -122° 40' 8.7"	45.47563, -122.66907	Portland

Comments: Willamette Park Parking and Staging



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Concrete, Solid	2 ramps
Parking - Car	Marked	35 spaces
Parking - Trailer	Marked	60 spaces
Restroom	Restroom - Flush	
User Fee	Yes	$5 per day parking for trailers

GRP Response Strategies Served:

WR-15.9R, WR-15.5M

Willamette Park (OR) SA-WR-15.6L



SA-WR-15.6L Photo: From end of middle dock at Willamette Park boat ramp, looking W at ramps and parking area.



Site Contact

City of Portland Parks and Recreation
Municipality (County/City) :
1120 SW Fifth Ave., Suite 1302
Portland, OR 97204
503-823-7529

Nearest Address

6336 SW Beaver Ave
Portland, OR 97239

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (6.41 miles)
2. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
3. Continue on OR-43 (SW Hood Ave) (0.4 miles)
4. At fork keep right on OR-43 (SW Hood Ave) (1.05 miles)
5. Turn left on SW Carolina St (0.05 miles)
6. Turn right on SW Beaver Ave (0.01 miles)
7. Finish at 6336 SW Beaver Ave, 97239, on the left

Milwaukie Riverfront Park — SA-WR-18.5R

Staging Area

Position - Location:	45° 26.593', -122° 38.603'	45° 26' 35.6", -122° 38' 36.2"	45.44322, -122.64338	Milwaukie

Comments: Paved parking area 42,000 sq ft



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	New boarding dock
Boat Ramp(s)	Asphalt	1
Estimated Lot Size	Square Feet	42000 Sq Ft
Parking - Car	Marked	50
Parking - Trailer	Marked	25
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

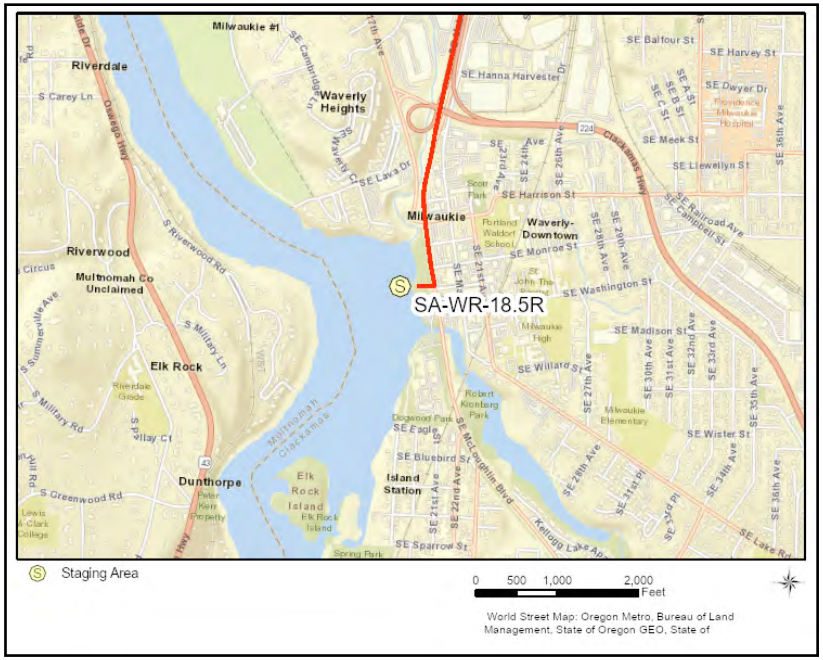
GRP Response Strategies Served:

WR-18.4R

Milwaukie Riverfront Park SA-WR-18.5R



SA-WR-18.5R Photo: From Willamette River, looking N at newly upgraded 23rd Street boat ramp/Milwaukie Riverfront Park.



Site Contact

City of Milwaukie
Land/Property Contact : Jefferson Street Boat Ramp
10722 SE Main Street
Milwaukie, OR 97222
503-786-7508

Nearest Address

10993 SE McLoughlin Blvd
Milwaukie, OR 97222

Driving Directions

Directions to Milwaukie Riverfront Park BL-WR-18.5R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (4.97 miles)
10. Finish at 10993 SE McLoughlin Blvd at the intersection with SE Jefferson, boat launch is on the right at the end of SE Jefferson.

Cedaroak Boat Ramp — SA-WR-23.1L

Staging Area

Position - Location:	45° 23.431', -122° 37.762'	45° 23' 25.9", -122° 37' 45.7"	45.39052, -122.62937	West Linn

Comments: Large paved parking area 60,000 sq ft



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	60000 Sq Ft
Parking - Car	Marked	10 +61 trailer stalls
Parking - Trailer	Marked	61
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

GRP Response Strategies Served:

WR-23.6L

Cedaroak Boat Ramp SA-WR-23.1L



SA-WR-23.1L Photo: From end of floating dock on Willamette River, looking SE at Cedaroak Ramp and parking area.



Site Contact

West Linn Parks & Recreation
Land/Property Contact : Cedaroak Boat Ramp
4600 Elmran Drive
West Linn, OR 97068
503-557-4700

Nearest Address

4600 Elmran Drive
West Linn, OR 97068

Driving Directions

Directions to Cedaroak Boat Launch BL-WR-23.1L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.3 miles)
4. Turn right on NW Naito Pky (NW Front Ave) (1.53 miles)
5. Continue (0.05 miles)
6. Continue on SW Naito Pky (SW Front Ave) (0.16 miles)
7. Continue (0.19 miles)
8. Turn left on SW Gibbs St (0.04 miles)
9. Turn right on OR-43 (SW Hood Ave) (0.45 miles)
10. At fork keep right on OR-43 (SW Hood Ave) (7.97 miles)
11. Turn left on Walling Way (0.21 miles)
12. Turn left on Old River Dr (0.1 miles)
13. Turn right on Elmran Dr and stay on Elmran Dr until it ends at the boat launch (0.62 miles)

Meldrum Bar Park SA-WR-24.2R

Staging Area

Position - Location:	45° 22.622', -122° 36.986'	45° 22' 37.3", -122° 36' 59.2"	45.37704, -122.61644	Gladstone

Comments: Paved parking area 30,000 sq ft.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	30000 Sq Ft
Parking - Car	Marked	70
Parking - Trailer	Marked	37
Power	Unknown	
Restroom	Restroom - Vault	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

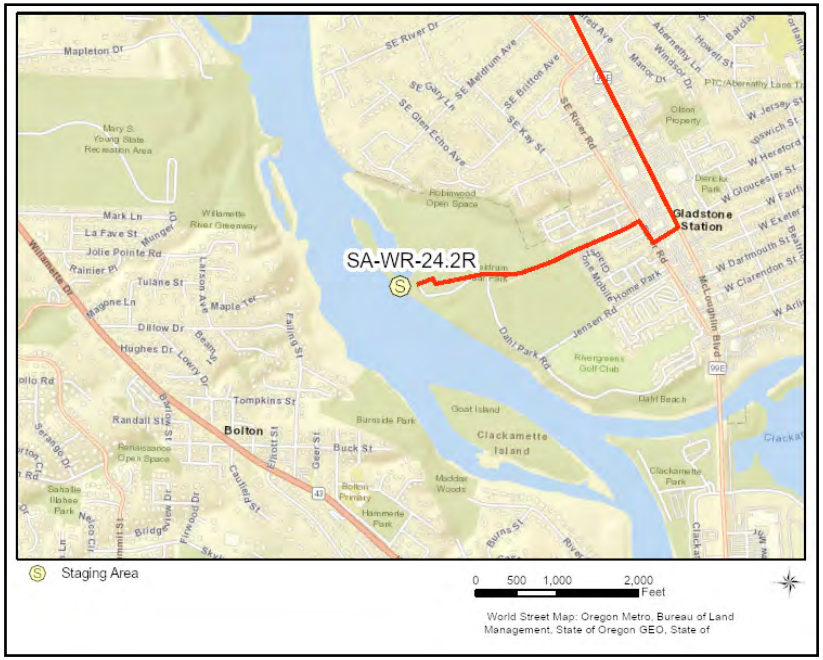
GRP Response Strategies Served:

WR-23.8L, WR-23.9R

Meldrum Bar Park SA-WR-24.2R



SA-WR-24.2R Photo: From top of double ramps at Meldrum Bar Park, looking NW at Willamette River.



Site Contact

Gladstone Parks & Recreation
Land/Property Contact : Meldrum Bar Park

Gladstone, OR
503-557-2769

Nearest Address

Meldrum Bar Park Road
Gladstone, OR 97027

Driving Directions

Directions to Meldrum Bar Park BL-WR-24.2R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (9.89 miles)
10. Turn right on W Gloucester St (0.07 miles)
11. Turn right on River Rd (0.06 miles)
12. Turn left on Meldrum Bar Park Rd (0.28 miles)
13. Finish at Meldrum Bar Park Road, 97027, on the right

Sportcraft Marina — SA-WR-25.4R

Staging Area

Position - Location:	45° 21.860', -122° 36.128'	45° 21' 51.6", -122° 36' 7.7"	45.36434, -122.60214	Oregon City

Comments: Very large paved parking area 40,000 sq ft



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	40000 Sq Ft
Parking - Car	Marked	60
Parking - Trailer	Marked	33
Power	Unknown	
Restroom	Restroom - Portable	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Unknown	

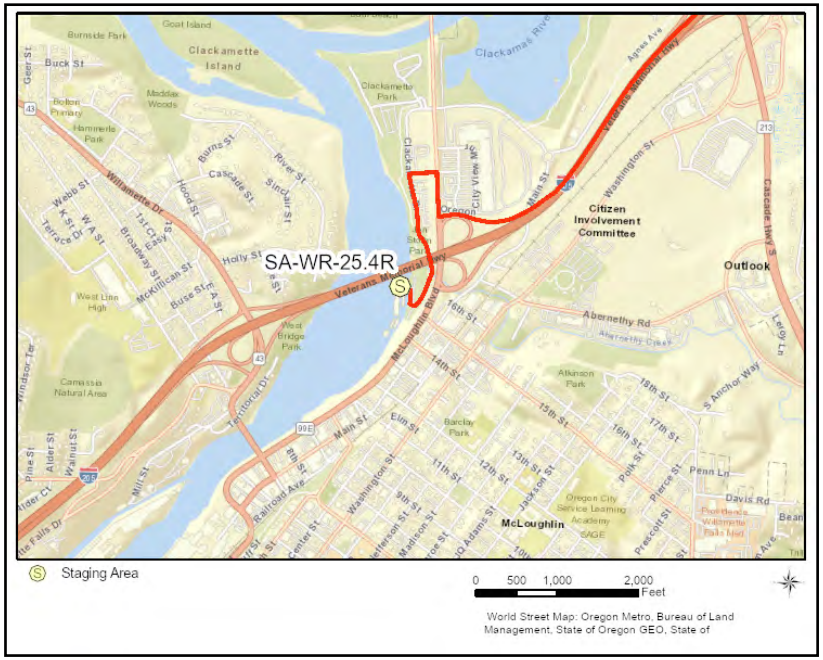
GRP Response Strategies Served:

WR-25.5R, WR-25.9R, WR-26.1L

Sportcraft Marina SA-WR-25.4R



SA-WR-25.4R Photo: From Willamette River, looking SE at new double ramps at Sportcraft Marina.



Site Contact

Sportcraft Landing
Land/Property Owner : Sportcraft Marina
1701 Clackamette Dr
Oregon City, OR
503-655-0981

Nearest Address

1701 Clackamette Drive
Oregon City, OR 97045

Driving Directions

Directions to Sportcraft Landing BL-WR-25.4R
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.34 miles)
2. At exit 301 bear right onto ramp and go on I-84 E/US-30 E toward The Dalles (5.4 miles)
3. At exit 6 take ramp on the right to I-205 S toward Salem (0.27 miles)
4. At exit 6 keep left on I-205 S (0.16 miles)
5. Go on I-205 (Veterans Memorial Hwy) (11.62 miles)
6. At exit 9 bear right onto ramp to OR-99e toward Oregon City/Gladstone (0.08 miles)
7. Take ramp to OR-99e N toward Portland (0.31 miles)
8. Turn left on Dunes Dr (0.07 miles)
9. Turn left on Clackamette Dr (0.3 miles)
10. Finish at 1701 Clackamette Dr, 97045, on the right

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APPENDIX D

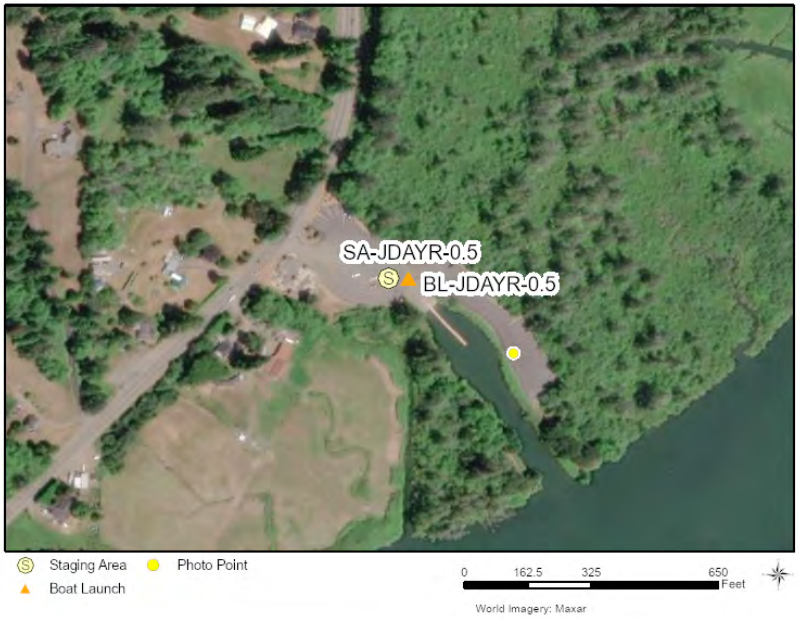
Boat Launch 2-Pagers

John Day Park Boat Ramp BL-JDAYR-0.5

Boat Launch Location

Position - Location:	46° 10.683', -123° 45.064'	46° 10' 41.0", -123° 45' 3.9"	46.17805, -123.75107	Astoria

Comments:	Double concrete ramp with one floating dock



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Plank	2
Estimated Lot Size	Square Feet	66400 Sq Ft
Parking - Car	Marked	100
Parking - Trailer	Marked	75
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$3/day parking
Waste Disposal	No Information	
Water (potable)	Yes	

GRP Response Strategies Served:

LCR-20.0L, LCR-19.9L, LCR-19.2L, LCR-20.3L, LCR-19.3L

John Day Park Boat Ramp BL-JDAYR-0.5



SA-JDAYR-0.5 Photo: From parking area looking NW at double boat ramps and dock.



Site Contact

Clatsop County
Land/Property Contact :

OR
503-325-9306

Nearest Address

E Columbia River Hwy
Astoria, OR 97103

Driving Directions

Directions to John Day Park boat launch BL-JDAYR-0.5
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (41.7 miles)
12. Finish at John Day Park boat launch on the right

Port of Ilwaco Marina — BL-LCR-3.1R

Boat Launch Location

Position - Location:	46° 18.151', -124° 2.192'	46° 18' 9.1", -124° 2' 11.5"	46.30252, -124.03654 Ilwaco

Comments: Port of Ilwaco Marina



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	65000
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	25
Parking - Trailer	Marked	45
Power	No	
Restroom	Restroom - Portable	1
User Fee	Yes	10 $ daily
Waste Disposal	Pumpout	
Water (potable)	Yes	Vending machine

GRP Response Strategies Served:

LCR-8.4R, LCR-2.4R, LCR-2.2R

Port of Ilwaco Marina BL-LCR-3.1R



SA-LCR-3.1R Photo: From the top of the boat ramps, looking west with other boat slips in the background. Photo was taken in early October.



Site Contact

Port of Ilwaco
Primary Contact : Port Manager

Ilwaco, WA 98624
360-642-3143

Nearest Address

Outer Harbor Way SE
Ilwaco, WA 98624

Driving Directions

1. Go northwest on WA-4 (Ocean Beach Hwy) toward Messinger Hill Dr
2. Keep left at the fork onto WA-4
3. Continue forward on US-101 toward Long Beach / Ilwaco
4. Turn left on US-101-ALT toward Astoria / Oregon
5. Turn right on US-101 toward Ilwaco
6. Turn left on Elizabeth St toward Port of Iiwaco / Grays Harbor College
7. Continue forward on Outer Harbor Way SE
8. Location is at the end of the road

Hammond Marina BL-LCR-8.7L

Boat Launch Location

Position - Location:	46° 12.142', -123° 57.164'	46° 12' 8.5", -123° 57' 9.9"	46.20237, -123.95274	Warrenton

Comments:	Concrete Ramp with 4 Lanes



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	175 Wet slips
Boat Ramp(s)	Concrete, Plank	4
Covered Spaces	Unknown	
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	84
Parking - Trailer	Marked	70
Power	Yes	
Restroom	Restroom - with Showers	
User Fee	Yes	5 Daily parking/launch
Waste Disposal	Pumpout	
Water (potable)	Yes	

GRP Response Strategies Served:

LCR-10.1L, LCR-6.8L , LCR-7.1L, LCR-7.5L

Hammond Marina BL-LCR-8.7L



SA-LCR-8.7L Photo: Top of Hammond Marina boat ramp (right lane) looking NE at jetty opening to Columbia River.



Site Contact

Warrenton Harbor Master
Land/Property Contact : Marinas (Warrenton/Hammond)
225 S. Main Avenue PO Box 250
Warrenton, OR 97146
503-861-3197

Nearest Address

1085 Iredale Street
Warrenton, OR 97121

Driving Directions

1. Start at Highway 101, Astoria, OR
2. Go northeast on US-101 (W Marine Dr) (0.11 miles)
3. Make sharp left to stay on US-101 (W Marine Dr) (0.17 miles)
4. At roundabout, take 1st exit to proceed southwest on US-101 (Oregon Coast Hwy) (3.2 miles)
5. Continue (0.04 miles)
6. Continue on US-101-ALT (Alternate Hwy 101) (0.86 miles)
7. Turn left at OR-104 to stay on US-101-ALT (S Main Ave) (0.23 miles)
8. Turn right on SW 18th St (Delaura Beach Ln) (0.76 miles)
9. Continue on SW Ridge Rd (3.32 miles)
10. Continue on Lake Dr (0.44 miles)
11. Turn right on Iredale St (0.01 miles)
12. Finish at 1085 Iredale Street, 97121, on the left

East Mooring Basin BL-LCR-15.8L

Boat Launch Location

Position - Location:	46° 11.679', -123° 48.140'	46° 11' 40.7", -123° 48' 8.4"	46.19465, -123.80234	Astoria

Comments: Double boat ramps and short dock next to larger marina.



GRP Response Strategies Served:

YOR-3.3R, YOR-4.0R, YOR-4.1R, L&C-2.3, L&C-1.2, L&C-2.6, L&C-1.7, WALOR-1.0

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	82 Wet open slips
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	Unknown	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	54
Parking - Trailer	Marked	54
Power	Unknown	
Restroom	Restroom - with Showers	
User Fee	Yes	$12 - $20 based on boat length
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

East Mooring Basin BL-LCR-15.8L



SA-LCR-15.8L Photo: From docks looking SE at East Mooring Basin boat ramps.



Site Contact

Port of Astoria
Land/Property Owner : Executive Director
10 Pier One, Suite 308
Astoria, OR 97103

Nearest Address

37th Street
Astoria, OR 97103

Driving Directions

Directions to East Mooring Basin BL-LCR-15.8L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (44.74 miles)
12. Turn right on 37th St (0.06 miles)
13. Take a left through the parking area to cross the railroad tracks at the launch ramps.14. Finish at 37th Street, 97103, on the left

Tongue Point - Cathlamet Channel — BL-LCR-17.7L

Boat Launch Location

Position - Location:	46° 11.928', -123° 45.742'	46° 11' 55.7", -123° 45' 44.5"	46.19880, -123.76236	Astoria

Comments: Wide concrete boat launch next to massive paved area. Docks nearby.



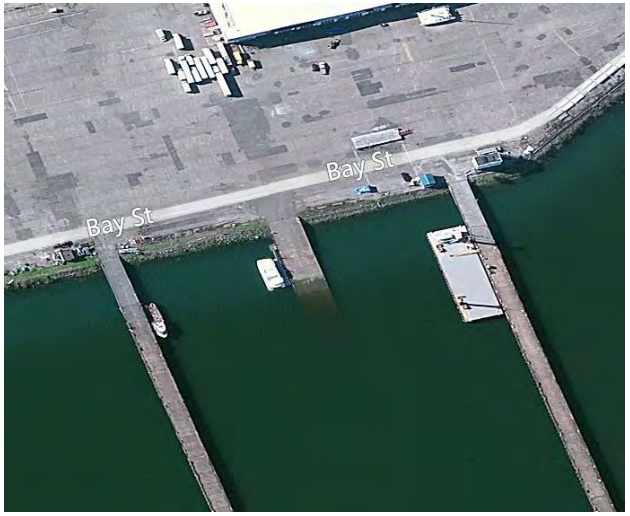
Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	1
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	200 +
Parking - Trailer	Not Marked	200 +
Power	Yes	Fees per use
Restroom	Not Determined	
User Fee	Yes	8 daily launch; add'l for utilities
Waste Disposal	Dump Station	Fees based on use
Water (potable)	Yes	Fees per use

GRP Response Strategies Served:

LCR-26.4M, LCR-27.5L, LCR-29.2L, LCR-29.0L, LCR-19.0L, LCR-27.2L, LCR-27.9L

Tongue Point - Cathlamet Channel BL-LCR-17.7L



SA-LCR-17.7L Photo: Aerial photo looking due west at boat launch and portion of parking area at Tongue Point industrial site.



Site Contact

Port of Astoria
Land/Property Owner : Executive Director
10 Pier One, Suite 308
Astoria, OR 97103

Nearest Address

Railroad Avenue
Astoria, OR 97103

Driving Directions

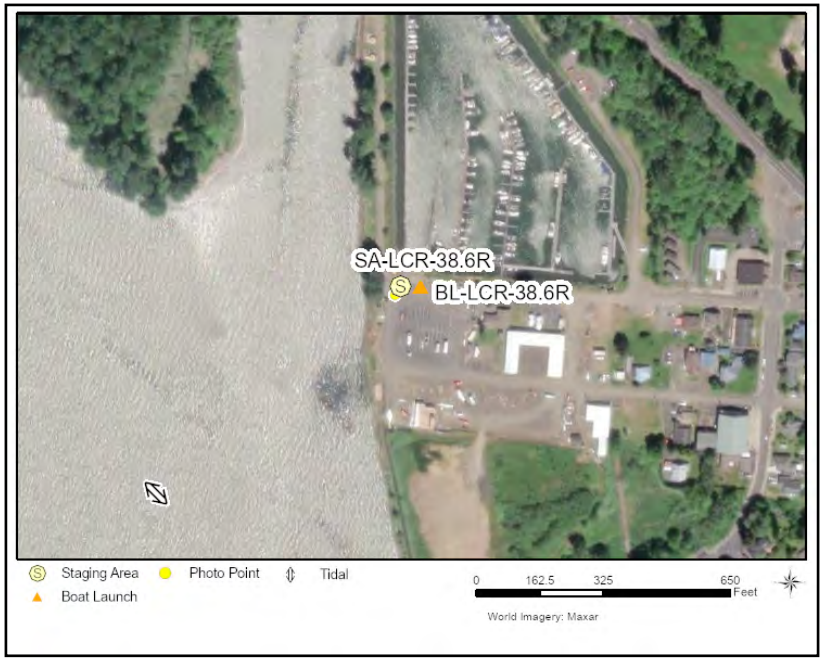
Directions to Tongue Point BL-LCR-17.7L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.93 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.49 miles)
7. Continue on WA-432 (3.46 miles)
8. Bear left on WA-433 (Oregon Way) (1.8 miles)
9. Continue on Lewis And Clark Brg (0.63 miles)
10. Continue (0.28 miles)
11. Continue on US-30 (Lower Columbia River Hwy) (42.67 miles)
12. Turn right on Old Columbia River Hwy (Old Us-30) (0.26 miles)
13. Turn right (0.15 miles)
14. Turn left on Railroad Ave (0.26 miles)
15. Finish at Railroad Avenue, 97103, on the right

Elochoman Slough Marina — BL-LCR-38.6R

Boat Launch Location

Position - Location:	46° 12.332', -123° 23.288'	46° 12' 19.9", -123° 23' 17.3"	46.20554, -123.38814	Cathlamet

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	60000
Fuel	Yes	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	30
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Flush	2
User Fee	Yes	6 $
Waste Disposal	Pumpout	
Water (potable)	Yes	

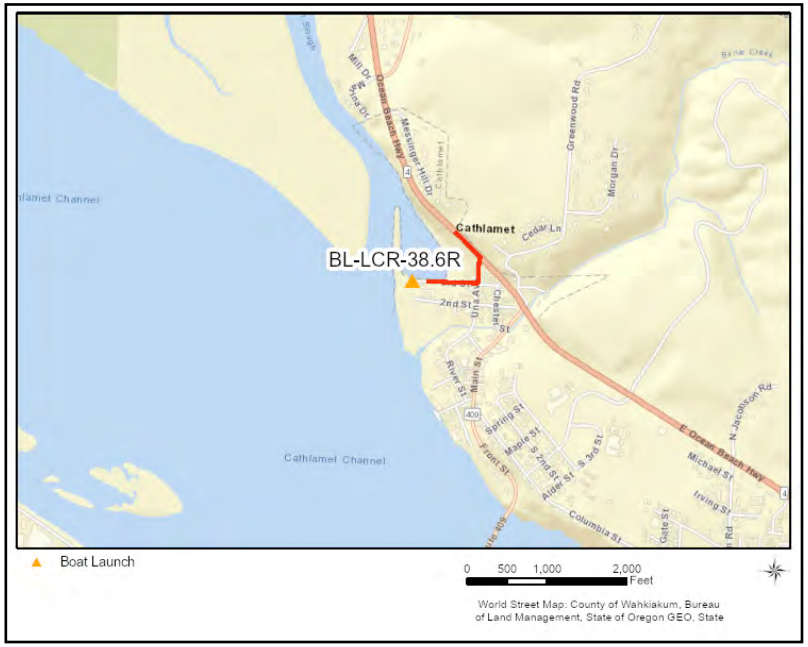
GRP Response Strategies Served:

LCR-38.2L, LCR-35.0R, LCR-35.7R, LCR-41.3M, LCR-45.0M, LCR-33.6bR, LCR-35.3R, LCR-37.7M, LCR-38.8L, LCR-44.3M, LCR-36.0R, LCR-45.2M, LCR-38.6R, LCR-40.5M, LCR-33.6aR, LCR-44.1M, LCR-37.2R, LCR-38.5M, LCR-44.0M

Elochoman Slough Marina BL-LCR-38.6R



SA-LCR-38.6R Photo: Elochoman Slough Marina looking N at boat ramp



Site Contact

Elochoman Slough Marina
Primary Contact :

WA
360-795-3501

Nearest Address

500 2nd St
Cathlamet, WA 98612

Driving Directions

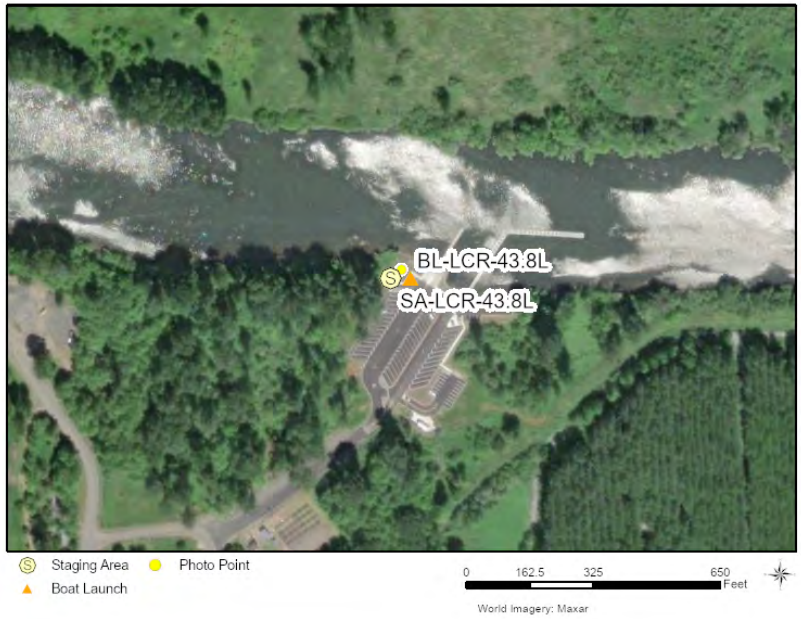
From WA-4, Cathlamet, WA
1. Head south on WA-4 E toward Elochoman Valley Rd
2. Turn right onto Una Ave (0.1 mi)
3. Turn right at 3rd Street, and continue to boat ramp and parking area.

Westport Boat Ramp BL-LCR-43.8L

Boat Launch Location

Position - Location:	46° 8.199', -123° 22.378'	46° 8' 11.9", -123° 22' 22.7"	46.13665, -123.37297	Westport

Comments: Limited depth. Wide concrete ramp with docks on either side.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1
Parking - Car	Not Marked	50
Parking - Trailer	Not Marked	30
Power	Not Determined	
Restroom	Restroom - Portable	
User Fee	No	
Waste Disposal	None	
Water (potable)	Unknown	

GRP Response Strategies Served:

LCR-48.8M, LCR-48.6M, LCR-42.5L, LCR-43.2L, LCR-48.1M

Westport Boat Ramp BL-LCR-43.8L



SA-LCR-43.8L Photo: From top of Westport boat ramp looking N at Westport Slough.



Site Contact

Clatsop County
Land/Property Contact :

OR
503-325-9306

Nearest Address

Old Mill Town Rd
Westport, OR 97016

Driving Directions

1. Start at Clatskanie, OR 97016
2. Go northeast on OR-47 (Mist-Clatskanie Hwy) (0.8 miles)
3. Turn left on Palm Hill Rd (1.26 miles)
4. Turn left on US-30 (Highway 30) (6.98 miles)
5. Bear right on Old Mill Town Rd (0.38 miles)
6. At the T-intersection, turn right on Westport Boat Ramp Lane. Boat ramp is at the end of the lane (0.2 miles).

Port Westward (Columbia Pacific) BL-LCR-53.8L

Boat Launch Location

Position - Location:	46° 10.889', -123° 10.424'	46° 10' 53.4", -123° 10' 25.4"	46.18149, -123.17373	Clatskanie

Comments:	Small concrete boat launch with floating dock



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	10
Power	No	
Restroom	Not Determined	
User Fee	Unknown	
Waste Disposal	Not Determined	
Water (potable)	No	

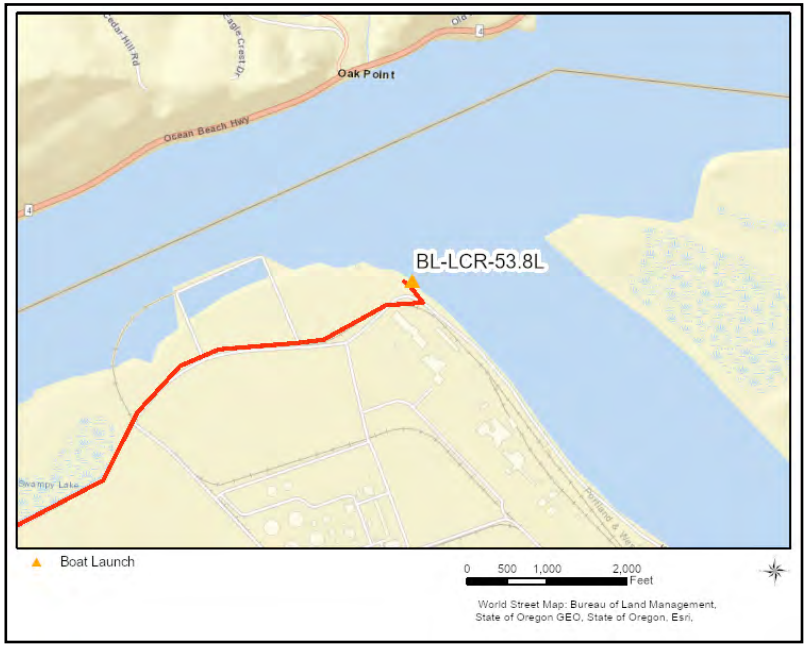
GRP Response Strategies Served:

LCR-49.8L, LCR-54.4M, LCR-50.5L, LCR-55.4L, LCR-49.1M, LCR-49.7L, LCR-55.6M, LCR-55.1M

Port Westward (Columbia Pacific) BL-LCR-53.8L



SA-LCR-53.8L Photo: From Bradbury Slough at Columbia River, looking SW at ramp and parking.



Site Contact

Columbia Pacific Bio-Refinery
Land/Property Owner : Port Westward

Clatskanie, OR
503-728-7000

Nearest Address

81566 Kallunki Rd
Clatskanie, OR 97016

Driving Directions

Directions to Port Westward (Columbia Pacific) BL-LCR-53.8L
1. Start at Portland OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (1.49 miles)
5. Take ramp and go on I-5 N toward Seattle (41.94 miles)
6. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
7. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
8. Continue on WA-432 (3.46 miles)
9. Bear left on WA-433 (Oregon Way) (1.8 miles)
10. Continue on Lewis And Clark Brg (0.63 miles)
11. Continue (0.28 miles)
12. Continue on US-30 (Lower Columbia River Hwy) (11 miles)
13. Turn right on NE Van St (0.11 miles)
14. Turn left on NE 5th St (0.36 miles)
15. Turn right at Nehalem St/NW 5th St to stay on NE 5th St (Old Columbia River Hwy) (0.52 miles)
16. Continue on Beaver Falls Rd (0.08 miles)
17. Turn left on Depot St (0.12 miles)

Willow Grove Beach BL-LCR-57.8R

Boat Launch Location

Position - Location:	46° 10.446', -123° 5.172'	46° 10' 26.8", -123° 5' 10.3"	46.17410, -123.08620	Longview

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	3
Boat Ramp(s)	Concrete, Solid	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	200000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	70
Parking - Trailer	Marked	100
Power	No	
Restroom	Restroom - Flush	2
User Fee	No	
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

GRP Response Strategies Served:

LCR-58.8R, LCR-59.8L, LCR-55.7R, LCR-55.3M, LCR-53.8R, LCR-55.5M, LCR-60.2M, LCR-58.7M, LCR-54.2R, LCR-58.9M, LCR-59.0M , LCR-64.0M, LCR-55.9R

Willow Grove Beach BL-LCR-57.8R



SA-LCR-57.8R Photo: From the top of the boat ramps, looking east towards Fisher Island. Photo was taken in April.



Site Contact

Cowlitz County
Municipality (County/City) : Emergency Management

Kelso, WA 98626
360-577-3130

Nearest Address

7141 Willow Grove Rd
Longview, WA 98632

Driving Directions

1. Head south on I-5
2. Take exit 40 on the right to N Kelso Ave
3. At the stop sign, turn right on Kelso Ave N (WA-431)
4. Continue forward on Pacific Ave N (WA-431)
5. At the traffic light, turn right on Cowlitz Way (WA-4)
6. At the traffic light, continue forward on Washington Way
7. Bear right on Louisiana St
8. Bear left on 17th Ave
9. Turn right on Washington Way
10. At the traffic light, bear right on Industrial Way (WA-432)
11. Continue forward on Mt Solo Rd (WA-432)
12. Continue forward on Willow Grove Rd (WA-432)
13. Turn left at Willow Grove Connection Rd to stay on Willow Grove Rd
14. Bear left
15. Boat launch is on the left

Rainier City Park — BL-LCR-67.1L

Boat Launch Location

Position - Location:	46° 5.612', -122° 56.593'	46° 5' 36.7", -122° 56' 35.6"	46.09353, -122.94321	Rainier

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify the city before staging equipment.



GRP Response Strategies Served:

LCR-64.4L, LCR-65.9R, LCR-67.7R, LCR-66.2R

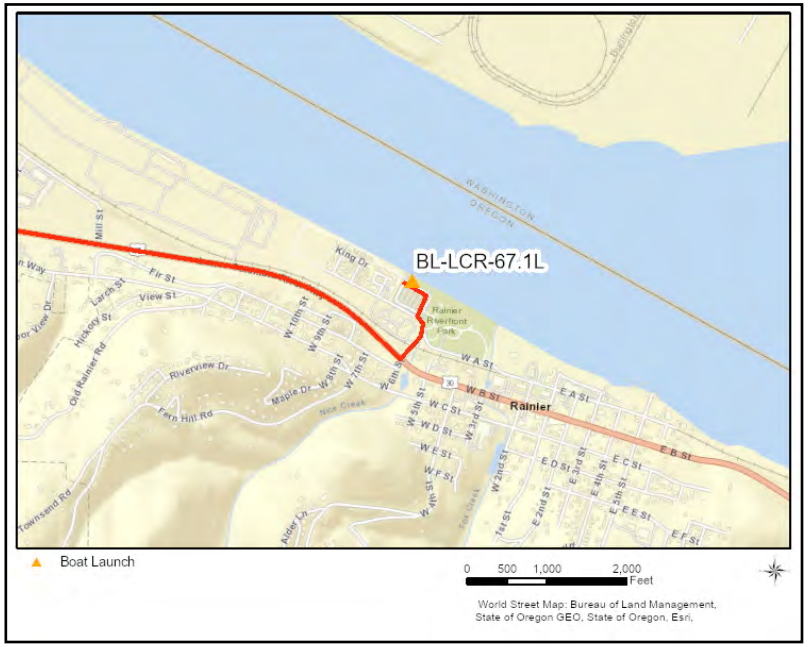
Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	1
Cell Phone Coverage	Yes	4G LTE
Covered Spaces	No	
Estimated Lot Size	Square Feet	53000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	20
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Flush	1
User Fee	Yes	5 $ Daily
Waste Disposal	Trash Receptacle	1
Water (potable)	Yes	

Rainier City Park BL-LCR-67.1L



SA-LCR-67.1L Photo: Top of Rainier City Marina boat ramp, looking NE at docks and Columbia River.



Site Contact

City of Rainier
Land/Property Contact :

Rainier, OR 97048
503-556-7301

Nearest Address

48 W 7th St
Rainier, OR 97048

Driving Directions

Directions to Rainier City Marina BL-LCR-67.1L
1. Head north on I-5
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach
4. Continue on WA-432
5. Bear left on WA-433 (Oregon Way)

6. Continue on Lewis And Clark Bridge
7. Head east on US-30 (Lower Columbia River Hwy)
8. Turn left on Veterans Way
9. Turn left A St
10. Location is on your right

Port of Kalama Marina BL-LCR-75.2R

Boat Launch Location

Position - Location:	46° .554', -122° 50.962'	46° 0' 33.2", -122° 50' 57.7"	46.00923, -122.84936	Kalama

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the port before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Asphalt	2 ramps
Covered Spaces	No	
Estimated Lot Size	Marked	50000 Sq Ft
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	100
Parking - Trailer	Gravel	25
Power	No	
Restroom	Restroom - Flush	1
User Fee	No	
Waste Disposal	Pumpout	1
Water (potable)	No	

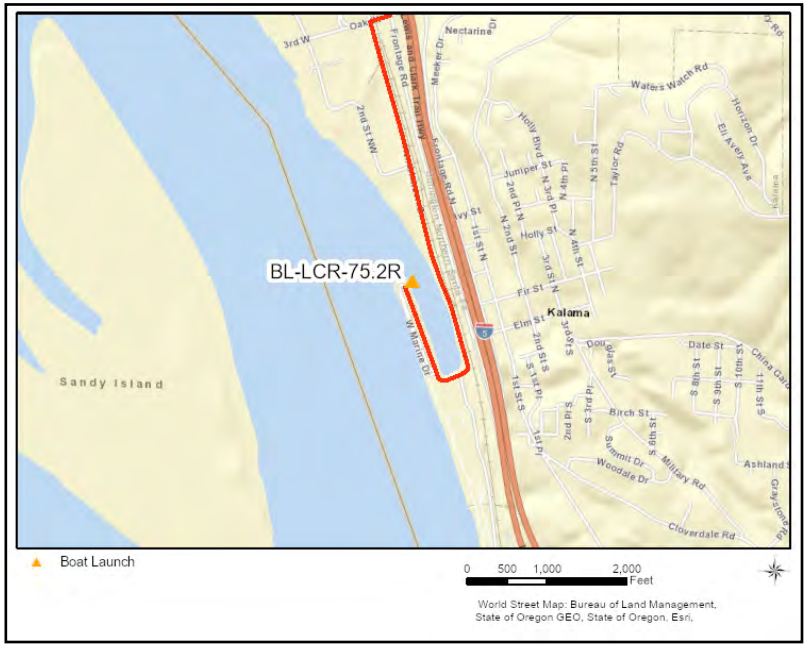
GRP Response Strategies Served:

LCR-71.5M, LCR-70.0M, LCR-76.0L, LCR-73.7L, LCR-78.4R, LCR-71.4R, LCR-78.9R, LCR-79.5R

Port of Kalama Marina — BL-LCR-75.2R



SA-LCR-75.2R Photo: From the top of the boat ramps, looking east towards N Hendrickson Dr. Columbia River is to the left.



Site Contact

Port of Kalama
Primary Contact :

Kalama, WA 98625
360-673-2325

Nearest Address

950 W Marine Dr
Kalama, WA 98625

Driving Directions

1. Head south on I-5
2. Take exit 30 on the right toward Kalama
3. At the stop sign, turn right on Oak St
4. Bear right on Hendrickson Dr
5. Continue forward on W Marine Dr
6. Location is at the end of the road

St. Helens Marina — BL-LCR-85.8L

Boat Launch Location

Position - Location:	45° 52.038', -122° 47.941'	45° 52' 2.3", -122° 47' 56.5"	45.86730, -122.79902	St. Helens

Comments:	Staging area and boat launch on the left bank of the Columbia River. Notify the marina before staging equipment.



GRP Response Strategies Served:

LCR-87.7R, LCR-87.6R, LCR-81.0M, LCR-85.6M, LCR-81.2R, LCR-89.8R, LCR-87.3R, LCR-91.0R, LCR-85.8R, LCR-86.2R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	No	
Estimated Lot Size	Square Feet	30000
Fuel	Yes	
Lot Cover (Primary)	Gravel	60 %
Parking - Car	Marked	32
Parking - Trailer	Marked	15
Power	Yes	
Restroom	Restroom - with Showers	1
User Fee	Yes	5 $
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

St. Helens Marina BL-LCR-85.8L



SA-LCR-85.8L Photo: From the top of the boat ramp, looking east towards Sand Island and the Columbia River.



Site Contact

St. Helens Marina
Land/Property Owner :
134 N River St
St. Helens, OR 97051
503-397-4162

Nearest Address

134 N River St
St. Helens, OR 97051

Driving Directions

1. Head northwest from Portland
2. Drive north on Lower Columbia River Hwy (US-30)
3. At the traffic light, turn right on Gable Rd
4. Continue forward on Old Portland Rd
5. Continue forward on St Helens St (Old Portland Rd)
6. Turn left on S River St
7. Location is on the right

Langsdorf Landing BL-LCR-97.7R

Boat Launch Location

Position - Location:	45° 42.246', -122° 45.580'	45° 42' 14.8", -122° 45' 34.8"	45.70410, -122.75967	Vancouver

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify the county before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Asphalt	1
Covered Spaces	No	
Estimated Lot Size	Square Feet	25000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	20 spaces
Parking - Trailer	Marked	10
Power	No	
Restroom	Restroom - Vault	1
User Fee	Yes	Discover Pass
Waste Disposal	Trash Receptacle	1
Water (potable)	No	

GRP Response Strategies Served:

LCR-97.0R, LCR-92.3R, LCR-94.5L, LCR-98.4L, LCR-98.6R, LCR-100.8R, LCR-94.8R, LCR-95.0R, LCR-94.3R, LCR-97.5R, LCR-99.9R

Langsdorf Landing BL-LCR-97.7R



SA-LCR-97.7R Photo: Channel right at WDFW Boat Launch-Langsdorf Landing Fishing Area



Site Contact

Clark Regional Emergency Services Agency (CRESA)
Municipality (County/City) :
360-562-0130

WDFW Region 5 (Southwest)
Land/Property Contact :
360-696-6211

Nearest Address

10612 NW Lower River Rd
Vancouver, WA 98660

Driving Directions

1. Head south on I-5
2. At exit 1D, take ramp on the right to East-4th Plain Blvd-West
3. At fork, keep right
4. Continue on W Fourth Plain Blvd
5. Continue on WA-501 (NW Lower River Rd)
6. Boat launch will be on the left past the marina.

Broughton Beach Park BL-LCR-109.4L

Boat Launch Location

Position - Location:	45° 36.051', -122° 37.127'	45° 36' 3.1", -122° 37' 7.6"	45.60085, -122.61879	Portland

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.



GRP Response Strategies Served:

LCR-113.8R, LCR-109.1R, LCR-107.1R, LCR-111.0R, LCR-108.4R, LCR-113.3M, LCR-109.6R, LCR-114.8M

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2
Boat Ramp(s)	Concrete, Solid	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	200000
Fuel	No	
Lot Cover (Primary)	Asphalt	County Marine Patrol office on site
Parking - Car	Marked	225
Parking - Trailer	Marked	200
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$5 per day
Waste Disposal	Pumpout	
Water (potable)	Yes	

Broughton Beach Park BL-LCR-109.4L



SA-LCR-109.4L Photo: From docks, looking towards boat ramp.



Site Contact

Oregon Metro
Land/Property Contact :

Portland, OR
503-797-1700

Nearest Address

4325 NE Marine Drive
Portland, OR 97211

Driving Directions

TO STAGING AREA/BOAT LAUNCH at Broughton Beach Park (SABL-LCR-109.4L):
1. Head north on I-5
2. At exit 307 bear right onto ramp to Marine Dr. toward OR-99e
3. Take ramp toward Delta Park/Marine Dr. East
4. Turn left on N Marine Way
5. Continue on N Marine Dr
6. Turn left into boat launch location

Chinook Landing Marine Park — BL-LCR-118.5L

Boat Launch Location

Position - Location:	45° 33.623', -122° 26.557'	45° 33' 37.4", -122° 26' 33.4"	45.56038, -122.44261	Fairview

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify Oregon Metro before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	4
Boat Ramp(s)	Concrete, Solid	3
Covered Spaces	Yes	
Estimated Lot Size	Square Feet	225000
Fuel	Unknown	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	75
Parking - Trailer	Marked	200
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	5 per day
Waste Disposal	Pumpout	
Water (potable)	Yes	

GRP Response Strategies Served:

LCR-115.0R, LCR-116.9R, LCR-118.5R, LCR-115.7R

Chinook Landing Marine Park BL-LCR-118.5L



SA-LCR-118.5L Photo: From top of ramp, looking west towards the river.



Site Contact

Oregon Metro
Land/Property Contact :

Portland, OR
503-797-1700

Nearest Address

5201 NE 223rd Ave
Fairview, OR 97024

Driving Directions

1. Head east on OR-99
2. Turn right onto ramp and go on I-84 E/US-30 E toward Portland Airport/The Dalles
3. At exit 14 take ramp on the right to Fairview Parkway
4. Turn left on NE Fairview Pky
5. Turn right on US-30-BYP (NE Sandy Blvd)
6. Turn left onNE 223rd Ave/Fairview Ave
7. Boat ramp is on the left

Port of Camas-Washougal Marina BL-LCR-121.6R

Boat Launch Location

Position - Location:	45° 34.696', -122° 22.864'	45° 34' 41.8", -122° 22' 51.8"	45.57827, -122.38106	Washougal

Comments: Public staging area and boat launch on the right bank of the Columbia River. Notify port before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	3
Boat Ramp(s)	Loading Float	4
Covered Spaces	No	
Estimated Lot Size	Square Feet	70000
Fuel	Yes	
Lot Cover (Primary)	Dirt/Gravel	90 %
Parking - Car	Marked	50
Parking - Trailer	Gravel	30
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	$7
Waste Disposal	Pumpout	
Water (potable)	No	

GRP Response Strategies Served:

LCR-120.6R, LCR-124.7R

Port of Camas-Washougal Marina — BL-LCR-121.6R



SA-LCR-121.6R Photo: From top of ramps, looking south towards the river (downriver to the right).



Site Contact

Port of Camas-Washougal
Land/Property Owner :

Washougal, WA 98671
360-835-2196

Nearest Address

24 S A St
Washougal, WA 98671

Driving Directions

1. Head east on WA-14
2. Turn right on 2nd St
3. Turn right on S A St
4. Turn left on S 1st St
5. Turn right on S A St
6. Location is on the right

Rooster Rock State Park — BL-LCR-128.9L

Boat Launch Location

Position - Location:	45° 32.678', -122° 14.924'	45° 32' 40.7", -122° 14' 55.5"	45.54463, -122.24874	Corbett

Comments: Public staging area and boat launch on the left bank of the Columbia River. Notify state park before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	3
Covered Spaces	No	
Estimated Lot Size	Square Feet	800000
Fuel	No	
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	200
Parking - Trailer	Marked	100
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	$3/day
Waste Disposal	Trash Receptacle	
Water (potable)	Yes	

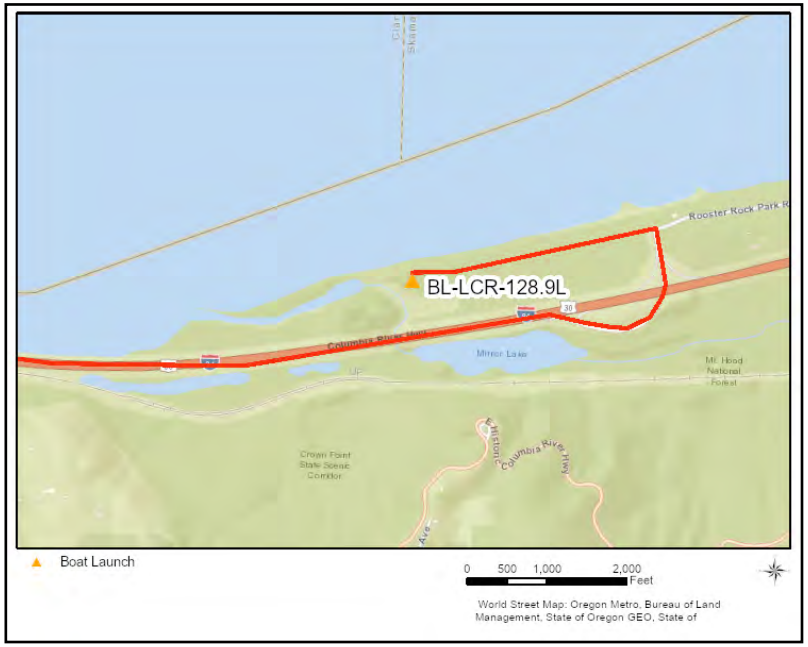
GRP Response Strategies Served:

LCR-128.0R, LCR-131.0R

Rooster Rock State Park BL-LCR-128.9L



SA-LCR-128.9L Photo: From top of ramps, looking southeast towards the boat basin (river is to the right).



Site Contact

OR State Parks
Land/Property Contact : Rooster Rock State Park

Corbett, OR 97019
503-695-2261

Nearest Address

I-84
Corbett, OR 97019

Driving Directions

1. Head east I-84 E/US-30
2. At exit 25 take ramp toward Rooster Rock Park
3. Turn left on Rooster Rock Park Rd
4. Location is at end of road

Hamilton Island BL-LCR-144.3R

Boat Launch Location

Position - Location:	45° 38.051', -121° 57.946'	45° 38' 3.0", -121° 57' 56.7"	45.63418, -121.96576	North Bonneville

Comments:	Public staging area and boat launch on the right bank of the Columbia River. Notify USACE before staging equipment.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Concrete, Solid	1
Covered Spaces	No	
Estimated Lot Size	Square Feet	48000
Fuel	No	
Lot Cover (Primary)	Asphalt	2 100%
Parking - Car	Marked	10
Parking - Trailer	Marked	20
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	
Waste Disposal	Not Determined	
Water (potable)	No	1

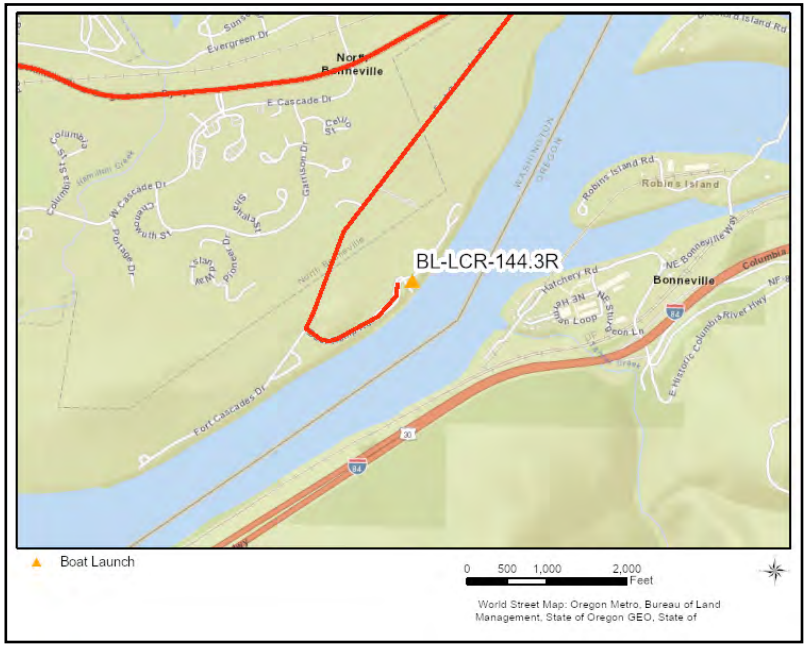
GRP Response Strategies Served:

LCR-140.3R, LCR-144.9L, LCR-137.0R, LCR-143.4R, LCR-141.4R, LCR-142.4R

Hamilton Island BL-LCR-144.3R



SA-LCR-144.3R Photo: From top of ramp, looking southeast towards the river (dam is to the left).



Site Contact

USACE Bonneville Dam
Land/Property Contact : Control Room

Cascade Locks, OR 97014
541-374-8338

Nearest Address

Boat Ramp Rd
North Bonneville, WA 98639

Driving Directions

1. Go east on WA-14 (Lewis And Clark Hwy)
2. Turn right on Fort Cascade Dr
3. Turn right on Dam Access Rd
4. Turn left and follow road to boat ramp and parking area.

Fred's Marina BL-MC-1.0

Boat Launch Location

Position - Location:	45° 37.131', -122° 48.320'	45° 37' 7.9", -122° 48' 19.2"	45.61885, -122.80533	Portland

Comments:	Double concrete ramps with two floating docks and slips available at marina



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	37950 Sq Ft
Fuel	Yes	
Parking - Car	Marked	50
Parking - Trailer	Marked	30
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Unknown	
Waste Disposal	No Information	
Water (potable)	Yes	

GRP Response Strategies Served:

MC-0.2, WR-3.7R, WR-0.9R, MC-0.5, MC-0.4, MC-0.1, MC-1.5, WR-3.8L

Fred's Marina BL-MC-1.0



SA-MC-1.0 Photo: Top of ramp at Fred's Marina, looking N at Multnomah Channel and Sauvie Island.



Site Contact

Fred's Marina
Land/Property Owner :
12800 NW Marina Way
Portland, OR
503-286-5537

Nearest Address

12800 NW Marina Way
Portland, OR 97231

Driving Directions

Directions to Fred's Marina BL-MC-1
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (7.86 miles)
6. Turn right on NW Marina Way (0.74 miles)
7. Finish at 12800 NW Marina Way, 97231, on the right

Warrenton Marina BL-SKPR-1.4

Boat Launch Location

Position - Location:	46° 9.858', -123° 55.252'	46° 9' 51.5", -123° 55' 15.1"	46.16430, -123.92087	Warrenton

Comments:	Double concrete ramp with two floating docks and ~400 slips at marina



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Covered Spaces	Yes	Store
Estimated Lot Size	Square Feet	50000 Sq Ft
Parking - Car	Marked	75
Parking - Trailer	Marked	50
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	Yes	5 $/day incl park + launch
Waste Disposal	Pumpout	and Dump Station
Water (potable)	Yes	

GRP Response Strategies Served:

LCR-10.9L, LCR-10.8L

Warrenton Marina BL-SKPR-1.4



SA-SKPR-1.4 Photo: Top of ramp at Warrenton Marina, looking N at the Skipanon River.



Site Contact

Warrenton Harbor Master
Primary Contact : Marinas (Warrenton/Hammond)
225 S. Main Avenue PO Box 250
Warrenton, OR 97146
503-861-3197

Nearest Address

553 Ensign Drive
Warrenton, OR 97146

Driving Directions

1. Start at Highway 101 S, Astoria OR
2. Go southwest on US-101 (Oregon Coast Hwy) (2.21 miles)
3. Turn right on US-101-BR (E Harbor Dr) (1.11 miles)
4. Turn left on Ensign Ave (0.07 miles)
5. Finish at 553 Ensign Drive, 97146, on the left

Cathedral Park (OR) BL-WR-5.8R

Boat Launch Location

Position - Location:	45° 35.263', -122° 45.833'	45° 35' 15.8", -122° 45' 50.0"	45.58771, -122.76388	Portland

Comments:	Cathedral Park Boat Launch



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Concrete, Solid	2 ramps
Parking - Trailer	Marked	50 spaces
Restroom	Restroom - Flush	2

GRP Response Strategies Served:

WR-6.9R, WR-4.3R, WR-6.9L, WR-5.9L, WR-5.8R, WR-4.2R , WR-4.5R

Cathedral Park (OR) BL-WR-5.8R



SA-WR-5.8R Photo: From Willamette River, looking SE at Cathedral Park boat ramp.



Site Contact

City of Portland Parks and Recreation
Municipality (County/City) :
1120 SW Fifth Ave., Suite 1302
Portland, OR 97204
503-823-7529

Nearest Address

6635 N Baltimore Ave
Portland, OR 97203

Driving Directions

Directions to SA-WR-5.8R Cathedral Park from I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.12 miles)
2. At exit 304 take ramp on the right to Rosa Parks Way (0.17 miles)
3. Turn right on N Rosa Parks Way (N Portland Blvd) (0.98 miles)
4. Continue on N Willamette Blvd (3.36 miles)
5. Turn left on N Alta Ave (0.05 miles)
6. Turn right on N Edison St (0.05 miles)
7. Turn left on N Baltimore Ave (0.1 miles)
8. Finish at 6635 N Baltimore Ave, 97203, on the right

Swan Island Boat Ramp (OR) BL-WR-8.0R

Boat Launch Location

Position - Location:	45° 33.751', -122° 42.347'	45° 33' 45.1", -122° 42' 20.8"	45.56252, -122.70578	Portland

Comments:	Swan Island Boat Ramp



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Asphalt	1 ramp
Parking - Car	Marked	25 spaces
Parking - Trailer	Marked	35 spaces
Restroom	Restroom - Portable	1

GRP Response Strategies Served:

WR-7.4R, WR-12.2R, SIL-0.8, WR-7.5L, SIL-0.4, WR-12.7R

Swan Island Boat Ramp (OR) BL-WR-8.0R



SA-WR-8.0R Photo: From water in Swan Island Basin, looking SE at Swan Island Boat Ramp.



Site Contact

No Information
Not Determined :

Nearest Address

5561 N. Basin Ave.
Portland, OR 97217

Driving Directions

Directions to SA-WR-8.0R From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (1.74 miles)
2. At exit 303 take ramp on the right to Alberta St. toward Swan Island (0.31 miles)
3. Turn right on N Alberta St (0.16 miles)
4. Make sharp left on N Interstate Ave (0.21 miles)
5. Turn right on N Going St (0.67 miles)
6. At fork keep left on N Going St (0.1 miles)
7. Turn right on N Basin Ave (0.22 miles)
8. At fork keep right on N Basin Ave (0.38 miles)
9. Finish at 5561 N. Basin Ave., 97217, on the left

Ross Island Sand and Gravel — BL-WR-13.9R

Boat Launch Location

Position - Location:	45° 30.209', -122° 39.800'	45° 30' 12.5", -122° 39' 48.0"	45.50348, -122.66334	Portland

Comments:	Single concrete ramp



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1
Estimated Lot Size	Square Feet	23400 Sq Ft
Parking - Car	Field	10
Parking - Trailer	Field	5
Power	Unknown	
Restroom	No Information	
User Fee	Unknown	
Waste Disposal	No Information	
Water (potable)	Unknown	

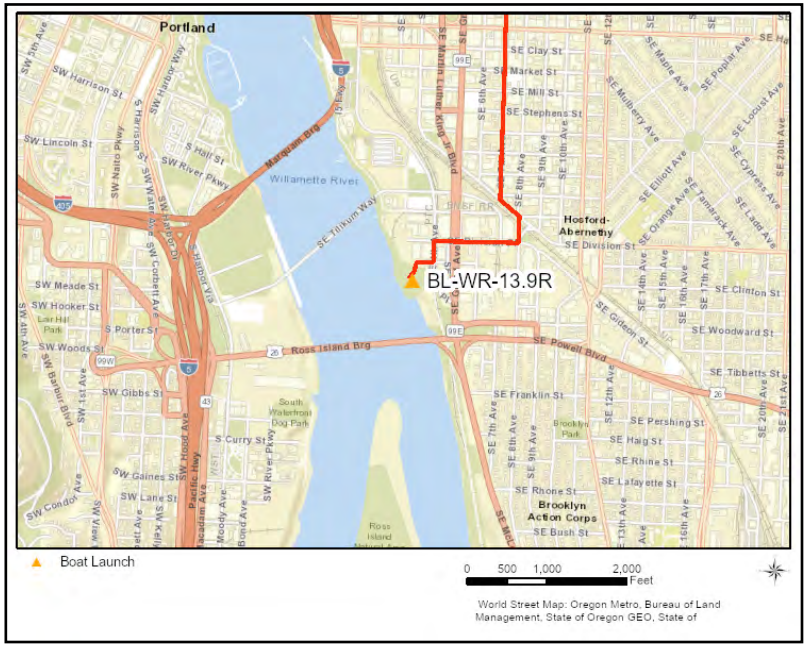
GRP Response Strategies Served:

WR-13.4R, WR-13.5R, WR-14.7R, WR-13.4L

Ross Island Sand and Gravel BL-WR-13.9R



SA-WR-13.9R Photo: From Willamette River, looking NNE at Ross Island Sand + Gravel boat ramp.



Site Contact

Ross Island Sand & Gravel Company
Land/Property Owner :
4315 SE McLoughlin Blvd
Portland, OR 97202

Nearest Address

2611 SE 4th Avenue
Portland, OR 97202

Driving Directions

Directions to Ross Island Sand and Gravel BL-WR-13.9R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.45 miles)
9. Turn left on SE Belmont St (0.15 miles)
10. Turn right on SE 7th Ave (0.7 miles)
11. Turn left on SE Division St (0.06 miles)
12. Turn right on SE 8th Ave (0.06 miles)
13. Turn right on SE Division Pl (0.2 miles)
14. Turn left on SE 4th Ave (0.1 miles)
15. Turn right into Ross Island Sand and Gravel at 2611 SE 4th Avenue, 97202

Zidell Marine (Shipyard) BL-WR-14.1L

Boat Launch Location

Position - Location:	45° 29.970', -122° 40.100'	45° 29' 58.2", -122° 40' 6.0"	45.49950, -122.66834	Portland

Comments:	Three commercial size concrete ramps



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	3 Industrial
Parking - Car	Marked	100 Large industrial area
Parking - Trailer	Not Marked	50 Large industrial area

GRP Response Strategies Served:

WR-14.9L, WR-14.1L

Zidell Marine (Shipyard) BL-WR-14.1L



SA-WR-14.1L Photo: From Willamette River looking W at Zidell Marine ramps.



Site Contact

Zidell Corporation
Land/Property Owner : Zidell Marine
31231 SW Moody Ave
Portland, OR 97239
503-228-8691

Nearest Address

3121 SW Moody Avenue
Portland, OR 97239

Driving Directions

Directions to Zidell Marine BL-WR-14.1L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.3 miles)
4. Turn right on NW Naito Pky (NW Front Ave) (0.91 miles)
5. Turn left on SW Harbor Dr (0.34 miles)
6. Take ramp to Sheridan St. (0.13 miles)
7. Turn left on SW Sheridan St (0.08 miles)
8. Bear right on SW Moody Ave (0.38 miles)
9. Finish at 3121 SW Moody Avenue, 97239, on the right

Willamette Park (OR) BL-WR-15.6L

Boat Launch Location

Position - Location:	45° 28.538', -122° 40.144'	45° 28' 32.3", -122° 40' 8.7"	45.47563, -122.66907	Portland

Comments:	Willamette Park Boat Launch



Location Information

Asset	Type/Status	Amount/Number
Boat Ramp(s)	Concrete, Solid	2 ramps
Parking - Car	Marked	35 spaces
Parking - Trailer	Marked	60 spaces
Restroom	Restroom - Flush	
User Fee	Yes	$5 per day parking for trailers

GRP Response Strategies Served:

WR-15.9R, WR-15.5M

Willamette Park (OR) BL-WR-15.6L



SA-WR-15.6L Photo: From end of middle dock at Willamette Park boat ramp, looking W at ramps and parking area.



Site Contact

City of Portland Parks and Recreation
Municipality (County/City) :
1120 SW Fifth Ave., Suite 1302
Portland, OR 97204
503-823-7529

Nearest Address

6336 SW Beaver Ave
Portland, OR 97239

Driving Directions

From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (6.41 miles)
2. At exit 299A take ramp on the right to OR-43 toward Lake Oswego (0.21 miles)
3. Continue on OR-43 (SW Hood Ave) (0.4 miles)
4. At fork keep right on OR-43 (SW Hood Ave) (1.05 miles)
5. Turn left on SW Carolina St (0.05 miles)
6. Turn right on SW Beaver Ave (0.01 miles)
7. Finish at 6336 SW Beaver Ave, 97239, on the left

Milwaukie Riverfront Park — BL-WR-18.5R

Boat Launch Location

Position - Location:	45° 26.593', -122° 38.603'	45° 26' 35.6", -122° 38' 36.2"	45.44322, -122.64338	Milwaukie

Comments:	Single concrete ramp, no floating dock but can pull up to the shoreline



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	New boarding dock
Boat Ramp(s)	Asphalt	1
Estimated Lot Size	Square Feet	42000 Sq Ft
Parking - Car	Marked	50
Parking - Trailer	Marked	25
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

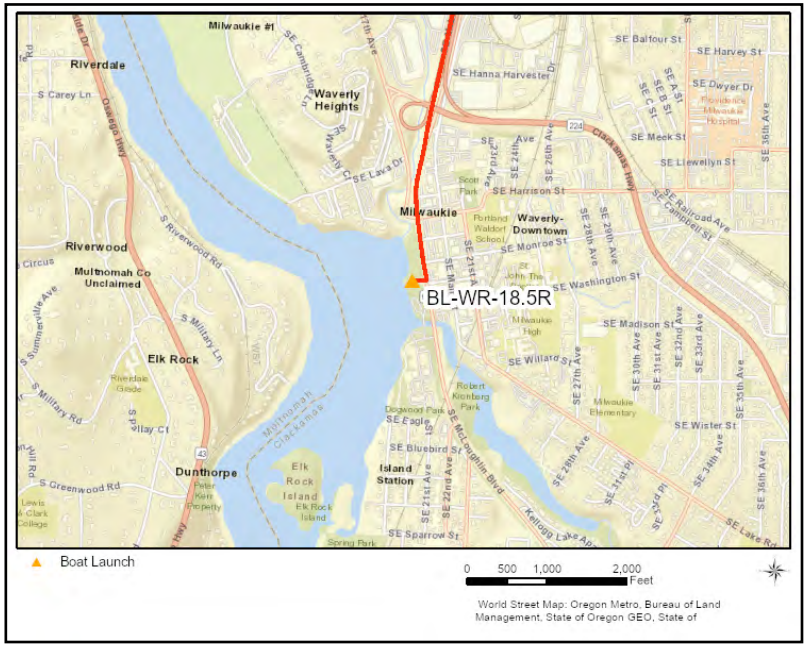
GRP Response Strategies Served:

WR-18.5R, WR-18.4R

Milwaukie Riverfront Park BL-WR-18.5R



SA-WR-18.5R Photo: From Willamette River, looking N at newly upgraded 23rd Street boat ramp/Milwaukie Riverfront Park.



Site Contact

City of Milwaukie
Land/Property Contact : Jefferson Street Boat Ramp
10722 SE Main Street
Milwaukie, OR 97222
503-786-7508

Nearest Address

10993 SE McLoughlin Blvd
Milwaukie, OR 97222

Driving Directions

Directions to Milwaukie Riverfront Park BL-WR-18.5R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (4.97 miles)
10. Finish at 10993 SE McLoughlin Blvd at the intersection with SE Jefferson, boat launch is on the right at the end of SE Jefferson.

Cedaroak Boat Ramp BL-WR-23.1L

Boat Launch Location

Position - Location:	45° 23.431', -122° 37.762'	45° 23' 25.9", -122° 37' 45.7"	45.39052, -122.62937	West Linn

Comments: Double concrete boat launch with two floating docks



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	60000 Sq Ft
Parking - Car	Marked	10 +61 trailer stalls
Parking - Trailer	Marked	61
Power	Unknown	
Restroom	Restroom - Flush	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

GRP Response Strategies Served:

WR-23.6L

Cedaroak Boat Ramp BL-WR-23.1L



SA-WR-23.1L Photo: From end of floating dock on Willamette River, looking SE at Cedaroak Ramp and parking area.



Site Contact

West Linn Parks & Recreation
Land/Property Contact : Cedaroak Boat Ramp
4600 Elmran Drive
West Linn, OR 97068
503-557-4700

Nearest Address

4600 Elmran Drive
West Linn, OR 97068

Driving Directions

Directions to Cedaroak Boat Launch BL-WR-23.1L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.3 miles)
4. Turn right on NW Naito Pky (NW Front Ave) (1.53 miles)
5. Continue (0.05 miles)
6. Continue on SW Naito Pky (SW Front Ave) (0.16 miles)
7. Continue (0.19 miles)
8. Turn left on SW Gibbs St (0.04 miles)
9. Turn right on OR-43 (SW Hood Ave) (0.45 miles)
10. At fork keep right on OR-43 (SW Hood Ave) (7.97 miles)
11. Turn left on Walling Way (0.21 miles)
12. Turn left on Old River Dr (0.1 miles)
13. Turn right on Elmran Dr and stay on Elmran Dr until it ends at the boat launch (0.62 miles)

Meldrum Bar Park BL-WR-24.2R

Boat Launch Location

Position - Location:	45° 22.622', -122° 36.986'	45° 22' 37.3", -122° 36' 59.2"	45.37704, -122.61644	Gladstone

Comments:	Double concrete ramps with floating dock, as well as dirt ramp Less than 100' to the west.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	30000 Sq Ft
Parking - Car	Marked	70
Parking - Trailer	Marked	37
Power	Unknown	
Restroom	Restroom - Vault	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Yes	

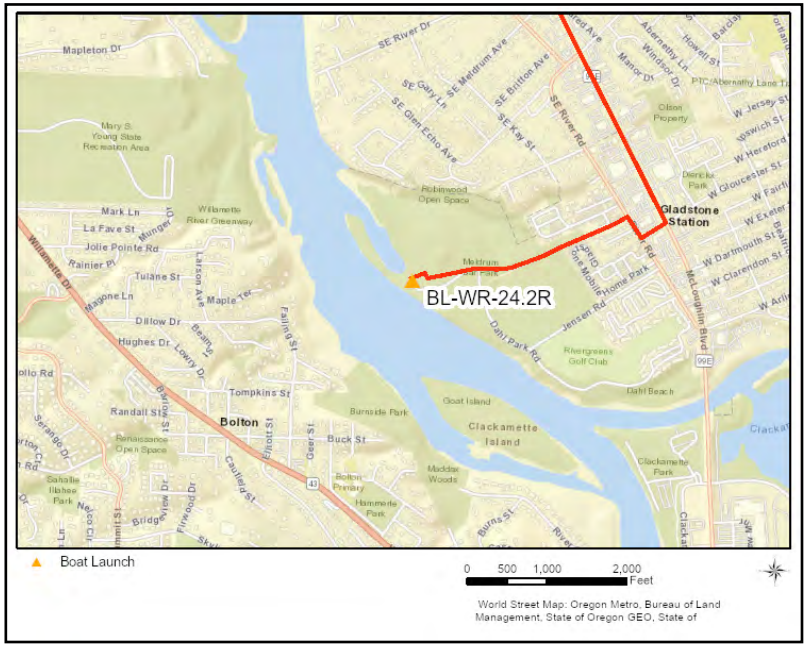
GRP Response Strategies Served:

WR-23.8L, WR-23.9R

Meldrum Bar Park BL-WR-24.2R



SA-WR-24.2R Photo: From top of double ramps at Meldrum Bar Park, looking NW at Willamette River.



Site Contact

Gladstone Parks & Recreation
Land/Property Contact : Meldrum Bar Park

Gladstone, OR
503-557-2769

Nearest Address

Meldrum Bar Park Road
Gladstone, OR 97027

Driving Directions

Directions to Meldrum Bar Park BL-WR-24.2R
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn right on NW Couch St (0.15 miles)
4. Turn right on NW 3rd Ave (0.05 miles)
5. Turn left on W Burnside St (0.2 miles)
6. Continue on Burnside Brg (0.16 miles)
7. Continue on E Burnside St (0.2 miles)
8. Turn right on OR-99E (SE Martin Luther King Jr Blvd) (0.89 miles)
9. At fork keep right on OR-99E (SE Martin Luther King Jr Blvd) (9.89 miles)
10. Turn right on W Gloucester St (0.07 miles)
11. Turn right on River Rd (0.06 miles)
12. Turn left on Meldrum Bar Park Rd (0.28 miles)
13. Finish at Meldrum Bar Park Road, 97027, on the right

Sportcraft Marina — BL-WR-25.4R

Boat Launch Location

Position - Location:	45° 21.860', -122° 36.128'	45° 21' 51.6", -122° 36' 7.7"	45.36434, -122.60214	Oregon City

Comments: Double concrete ramp with floating dock. Large marina.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	
Boat Ramp(s)	Concrete, Solid	2
Estimated Lot Size	Square Feet	40000 Sq Ft
Parking - Car	Marked	60
Parking - Trailer	Marked	33
Power	Unknown	
Restroom	Restroom - Portable	
User Fee	No	
Waste Disposal	No Information	
Water (potable)	Unknown	

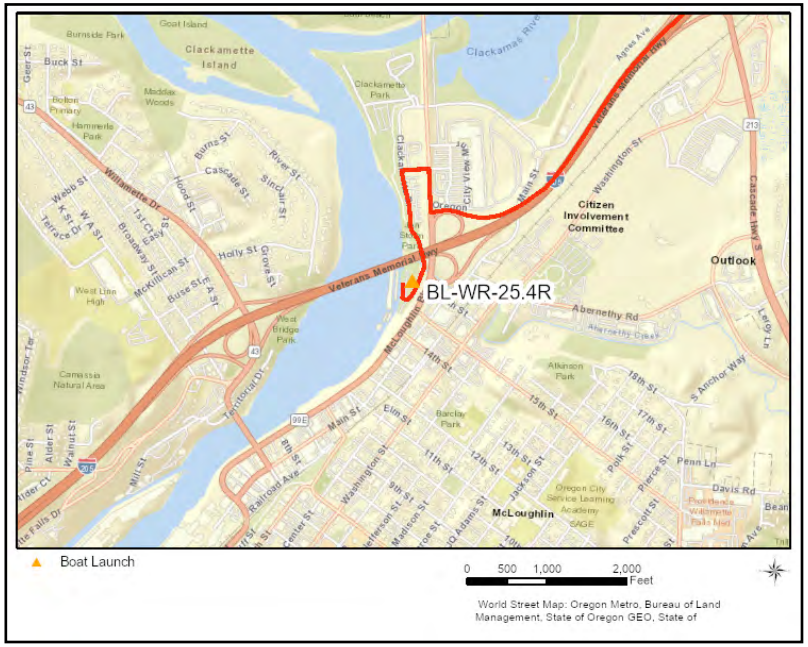
GRP Response Strategies Served:

WR-25.5R, WR-25.9R, WR-26.1L

Sportcraft Marina BL-WR-25.4R



SA-WR-25.4R Photo: From Willamette River, looking SE at new double ramps at Sportcraft Marina.



Site Contact

Sportcraft Landing
Land/Property Owner : Sportcraft Marina
1701 Clackamette Dr
Oregon City, OR
503-655-0981

Nearest Address

1701 Clackamette Drive
Oregon City, OR 97045

Driving Directions

Directions to Sportcraft Landing BL-WR-25.4R
From I-5 S, Portland, OR
1. Go south on I-5 (Pacific Hwy) (4.34 miles)
2. At exit 301 bear right onto ramp and go on I-84 E/US-30 E toward The Dalles (5.4 miles)
3. At exit 6 take ramp on the right to I-205 S toward Salem (0.27 miles)
4. At exit 6 keep left on I-205 S (0.16 miles)
5. Go on I-205 (Veterans Memorial Hwy) (11.62 miles)
6. At exit 9 bear right onto ramp to OR-99e toward Oregon City/Gladstone (0.08 miles)
7. Take ramp to OR-99e N toward Portland (0.31 miles)
8. Turn left on Dunes Dr (0.07 miles)
9. Turn left on Clackamette Dr (0.3 miles)
10. Finish at 1701 Clackamette Dr, 97045, on the right