

**SOUTH PUGET SOUND**  
**Geographic Response Plan**  
**(SPS-GRP)**

**CHAPTER 4**  
**Response Strategies and Priorities**

**MAY 2016**

## **Before you print this document**

This chapter and its appendices, as well as the appendix at the end of Chapter 6, are provided in “landscape” page orientation. The detailed 2-page information sheets for each pool’s response strategies, notification strategies, staging areas, and boat launch locations in appendices 4A through 4D (79 - 224 ) have been designed for duplex printing (front and back side of paper), “open to top” configuration.

## 4.1 CHAPTER INTRODUCTION

This chapter provides information on GRP response strategies and the order (priority) they should be implemented, based on Potential Oil Spill Origin Points (POSOPs) and their proximity to sensitive resources. Area maps, sector maps, and information on staging areas and boat launch locations are also provided in this chapter. 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 Section 4.3 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 Chapter 6 of this plan. Information on shoreline countermeasures can be found in the Northwest Area Shoreline Countermeasures Manual (NWACP Section 9420). The Northwest Area Contingency Plan (NWACP) is available online at <http://www.rtt10nwac.com/NWACP/Default.aspx>.

The GRP strategies provided in this chapter 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 at risk from oil spills. Although designed to be implemented during the initial phase of an oil spill, GRP strategies may continue to be used throughout a response at the discretion of the Incident Commander or Unified Command.

### 4.1.1 On-site Considerations

#### *Before Deploying a GRP Strategy (Questions to Ask)*

- Are conditions safe? Response managers and responders must first determine if efforts to implement a response strategy would pose an undue risk to worker safety or the public, based on conditions present during the time of the emergency. No strategy should be implemented if doing so would threaten public safety or present an unreasonable risk to the safety of responders.
- Has initial control and containment been sufficiently achieved? Source control and containment of the spill at or near the source of a spill are always higher priorities than the deployment of GRP response strategies, especially when concurrent response activities are not possible.
- How far downstream or out into the river environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?
- Are permits required? Consult the Northwest Area Contingency Plan Permit Summary Table (NWACP Section 9401) for information specific to your location and circumstance.

- 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.
  - Washington State Patrol District #3 (509) 575-2320
  - Washington State Patrol District #5 (360) 449-7909

### ***During Strategy Implementation (Things to Remember)***

- On-scene conditions (weather, currents, tides, waves, river speed, and debris) may require that strategies be modified in order to be effective. There is a significant chance that weather and conditions experienced at a particular strategy location during an actual spill event will be different from that when data was gathered during field visits. Response managers and responders must remain flexible and modify the strategies provided in this chapter as needed to meet the challenges experienced during an actual response.
- Certain strategies may call for access points or staging areas that are not easily reached at all times of the year or in all conditions.
- Oil containment boom must be free of twists, gaps, and debris in order to remain effective.
- The GRP response strategies provided in this chapter were designed for use with persistent heavy oils that float on water and may not be suitable for other petroleum products or hazardous substances.

### ***After Strategy Implementation (Things to Understand)***

- Oil containment boom should be maintained and periodically monitored to ensure its effectiveness. Changes in river or current speed will likely require modifications to boom deflection angles (see Table 4.1). Depending on conditions, some booming strategies may require around-the-clock tending.
- Although designed for implementation during the initial phase of an oil spill, GRP strategies may continue to be deployed and implemented throughout the entire lifespan of a response, as determined appropriate and necessary by the Incident Commander or Unified Command.

### ***Water Speed and Boom Deflection Angle***

Measure the speed that water is moving by anchoring a line with two floating markers/buoys attached that are spaced 100 feet apart. Time the movement of floating debris between the two buoys, and then use Table 4.1 to estimate the water speed based on the travel time of the debris between the two buoys. You can also measure 100 feet along a straight portion of river bank or shoreline, and time the movement of debris between those points, but this method is generally less accurate than using the buoys. The maximum boom deflection angle is also provided in the table, based on the water speed measurements.

**Table 4-1: Water Speed Drift Measurement Table**

<b>Time to Drift 100 Feet (seconds)</b>	<b>Velocity (ft/sec)</b>	<b>Velocity (m/sec)</b>	<b>Velocity (knots)</b>	<b>Max Boom Deflection Angle (degrees)</b>	<b>Boom required for 100-foot Profile to Current (feet)</b>	<b>Anchors needed if Placed Every 50 feet (number)</b>
6	16.7	5.1	10.00	4.0	1,429	30
8	12.5	3.8	7.50	5.4	1,071	22
10	10.0	3.1	6.00	6.7	857	18
12	8.3	2.5	5.00	8.0	714	15
14	7.1	2.2	4.29	9.4	612	13
17	5.9	1.8	3.53	11.4	504	11
20	5.0	1.5	3.00	13.5	429	10
24	4.2	1.3	2.50	16.3	357	8
30	3.3	1.0	2.00	20.5	286	7
40	2.5	0.8	1.50	27.8	214	5
60	1.7	0.5	1.00	44.4	143	4
>86	≤1.2	≤0.35	≤0.70	90.0	100	3

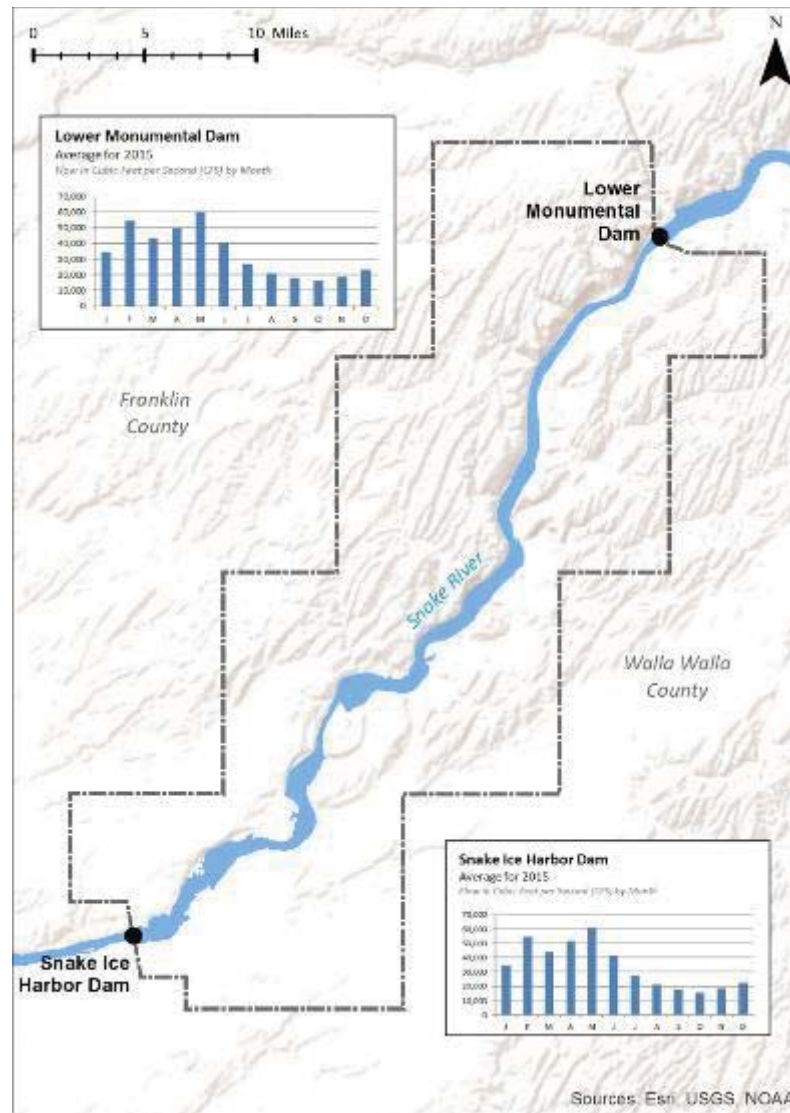
*Source: Oil Spill Response in Fast Currents. A Field Guide. U.S. Coast Guard Research and Development Center. October, 2001*

#### 4.1.2 Historical River Flow Ranges

Table 4.1.2 provides historical river outflow data which was obtained for both the Lower Monumental Dam and the Ice Harbor Dam using the University of Washington's Columbia Basin Research, Columbia River DART (Data Access in Real Time) database, (2016). Information on outflow, and other performance measures, can be found online at <http://www.cbr.washington.edu/status>. Outflow is recorded in cubic feet per second (cfs). Table 4.1 provides information that can be used to calculate river velocities based on the time it takes a floating object to drift 100 feet downstream from any given point in a river or creek. Additional information on calculating river velocities can be found in the [Northwest Area Contingency Plan Section 9302](#).

**Table 4-2: Historical River Streamflow Ranges**

2015 Monthly Average Outflow in Cubic Feet per Second (cfs)		
	Lower Monumental Dam	Ice Harbor Dam
Jan	34,520	34,660
Feb	54,120	54,580
Mar	43,310	43,490
Apr	49,820	51,460
May	60,320	60,890
Jun	40,600	41,120
Jul	27,080	27,530
Aug	20,790	20,860
Sep	18,140	17,620
Oct	16,000	15,520
Nov	18,650	18,400
Dec	22,940	22,380
Annual Averages (Ten Year Averages)	33,858 (45,832)	34,043 (46,513)



**Figure 4-1: Mean Monthly Outflow for the Ice Harbor and Lower Monumental Dams**

## 4.2 AREA OVERVIEW MAPS

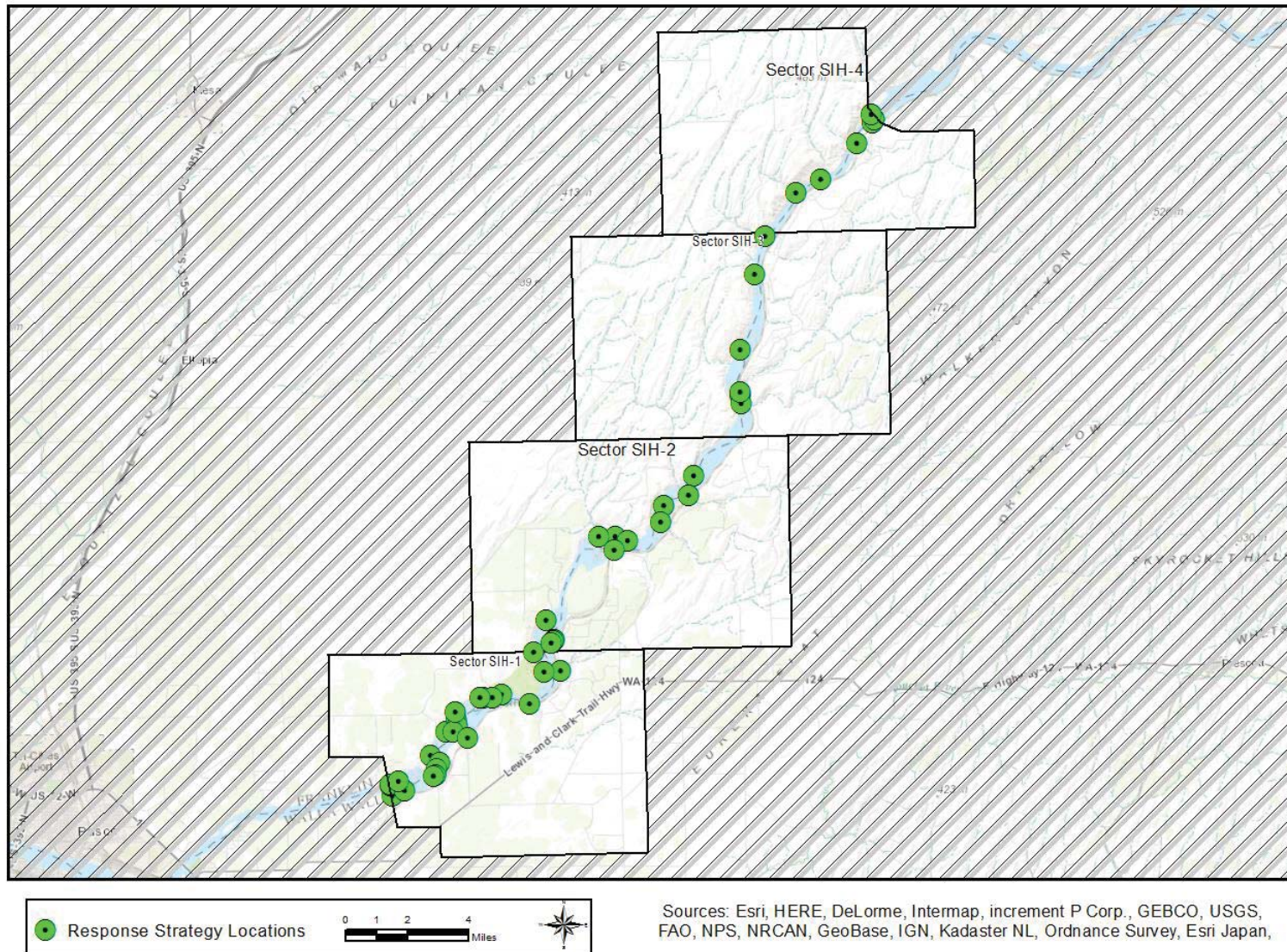
The following maps provide a geographic overview of the Ice Harbor Pool. Sector maps in Section 4.4 of this chapter provide more detail on the location of response strategies, notification strategies, staging areas, boat launch locations, and Potential Oil Spill Origin Points (POSOPs). Detailed information for each location can be found in the matrices of Section 4.5 or in the chapter appendices. Priority tables for potential oil spill origin points can be found in Section 4.3.2.

The following area maps are provided, by pool, for reference:

- Response Strategy Locations
- Notification Strategy Locations
- Staging Areas
- Boat Launch Locations
- Potential Oil Spill Origin Points

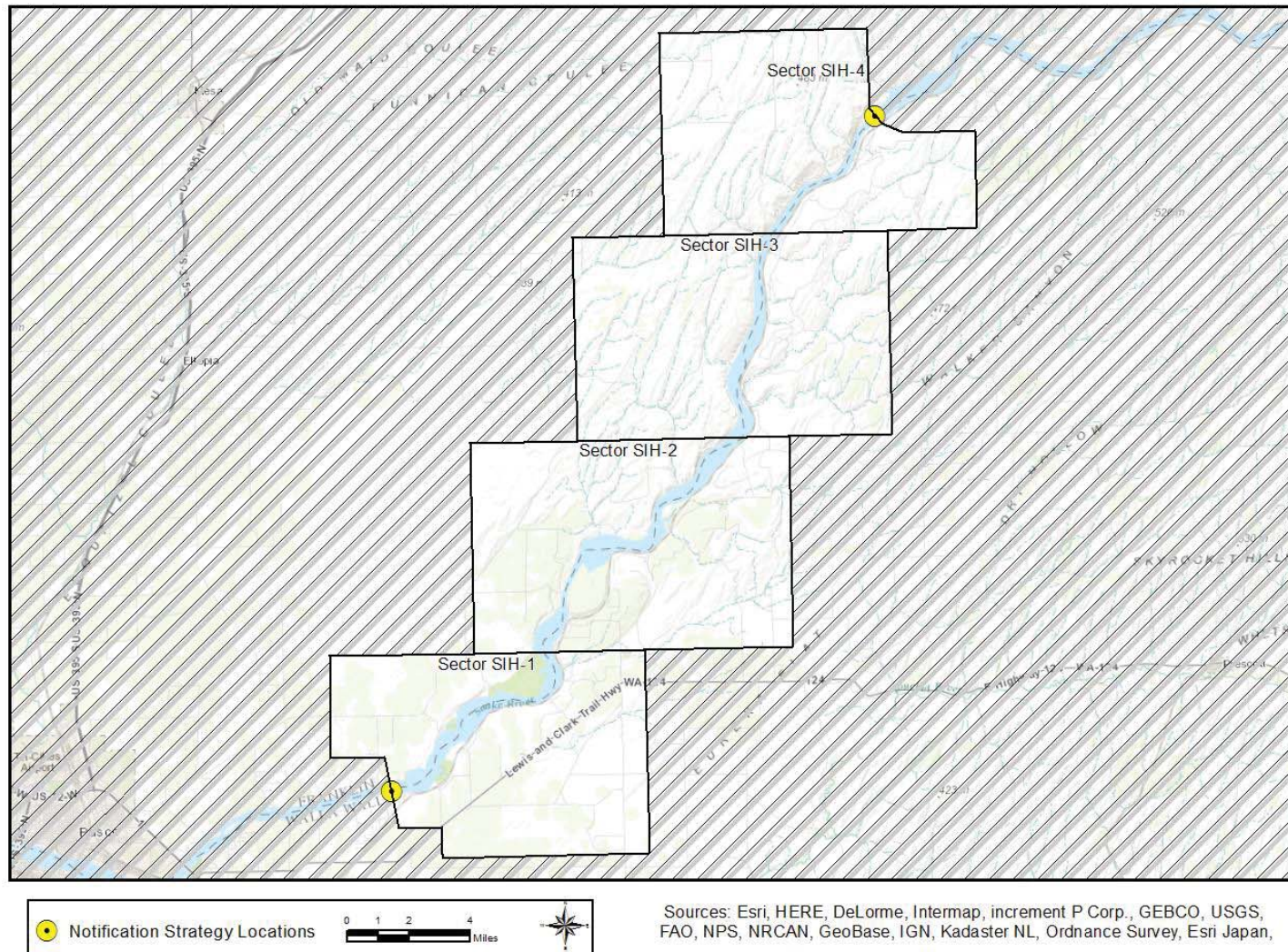


## Response Strategy Locations



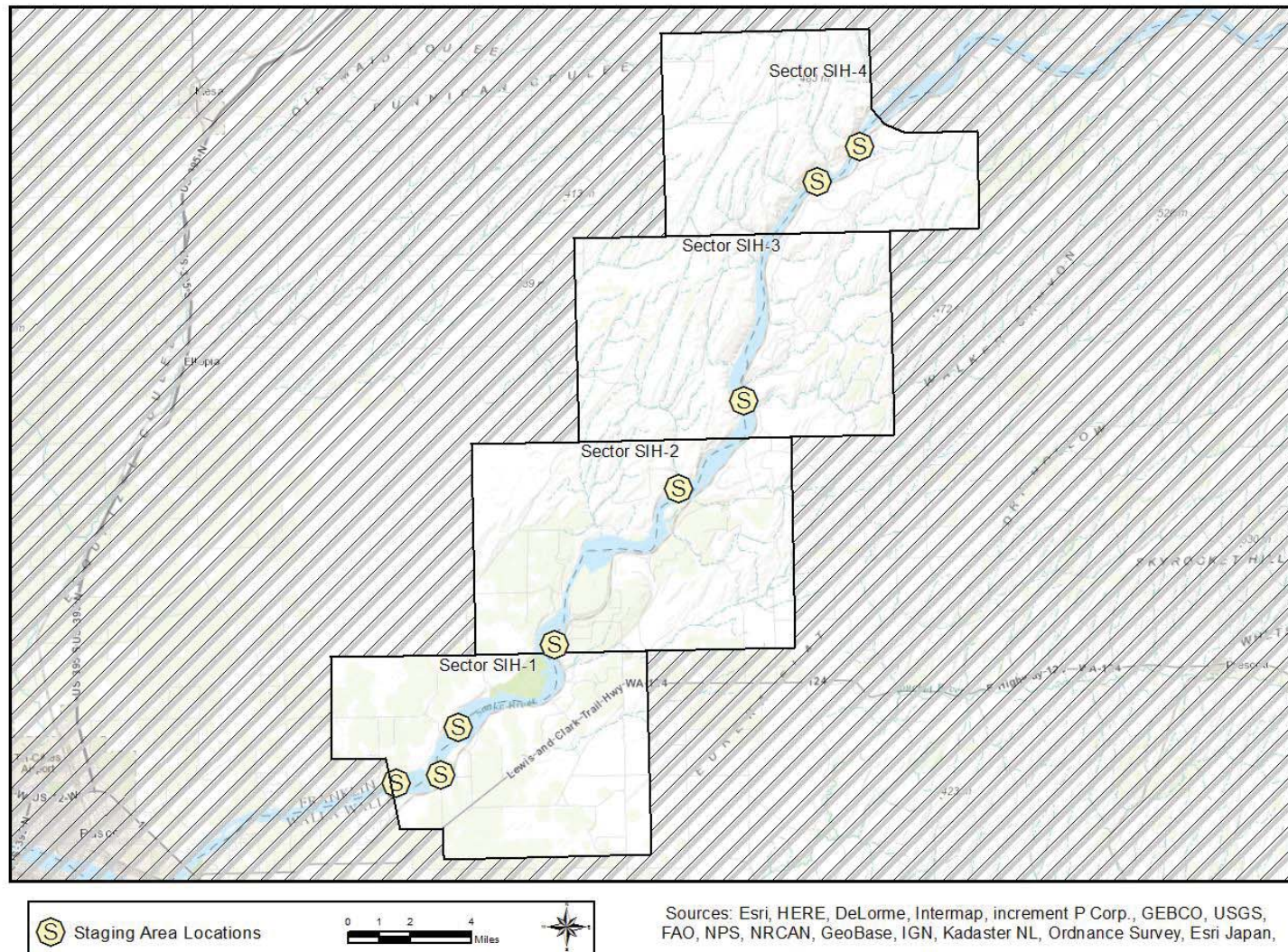


## Notification Strategy Locations



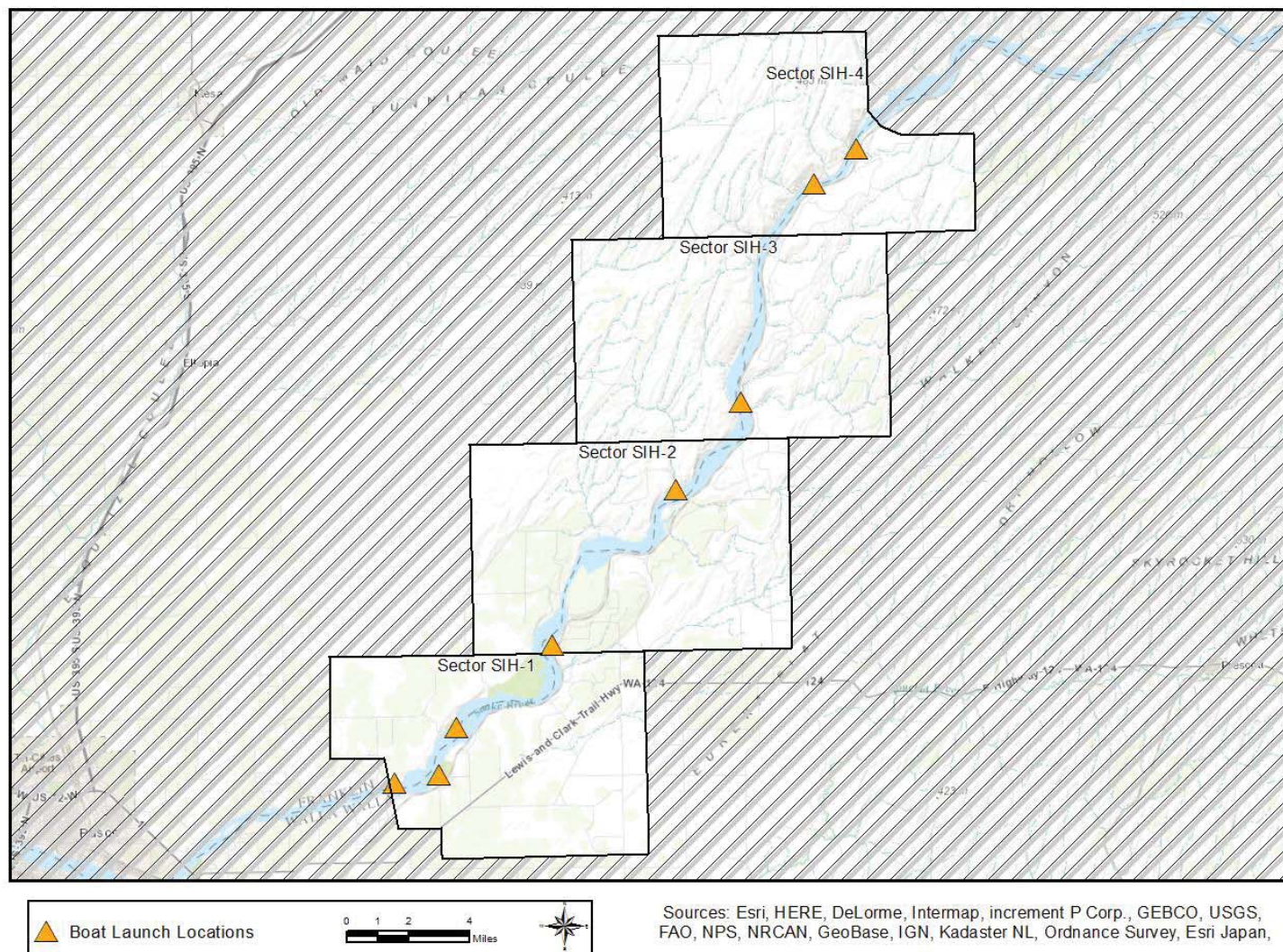


## Staging Area Locations



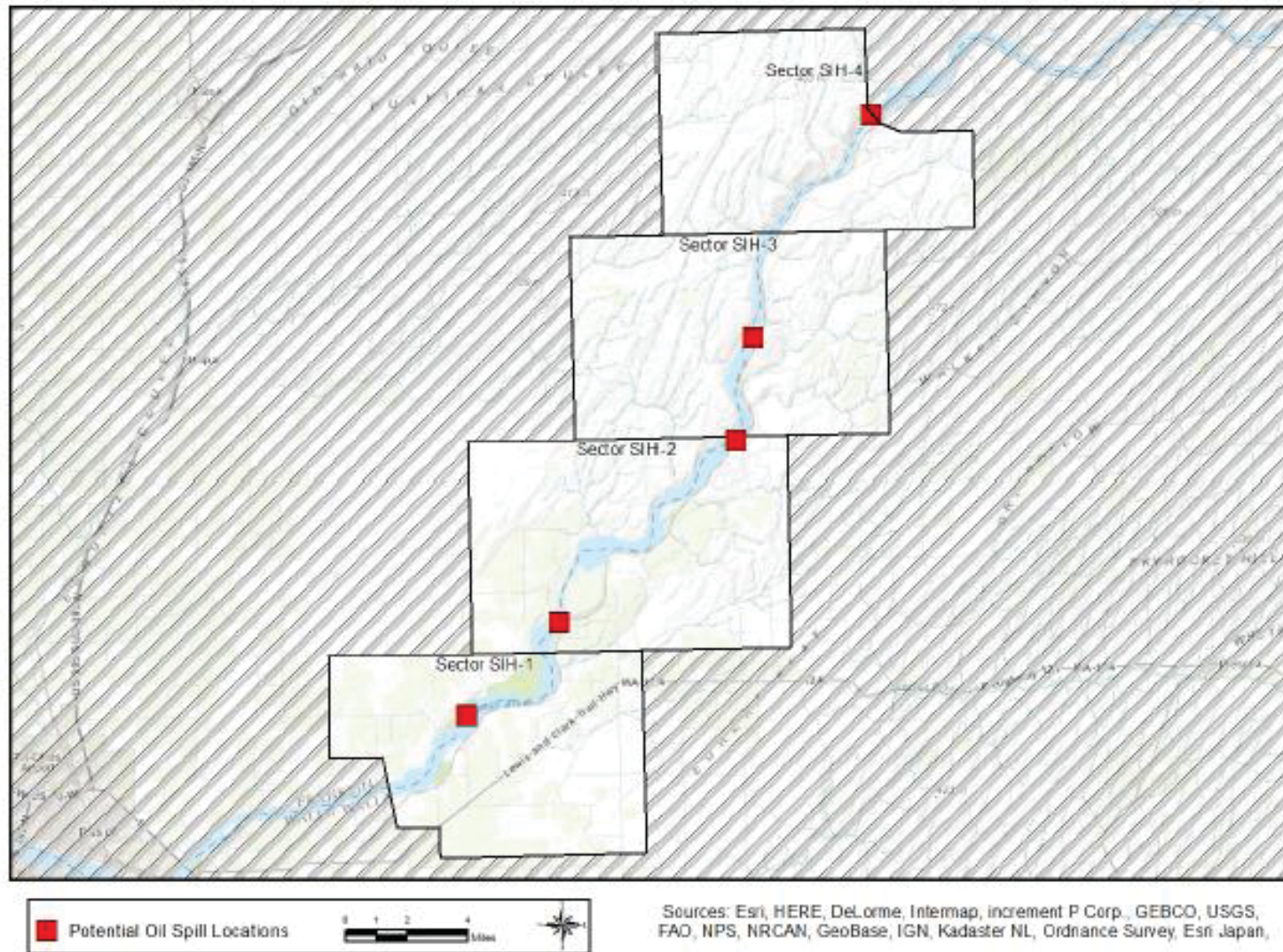


## Boat Launch Locations





## Potential Oil Spill Locations



## 4.3 STRATEGY AND RESPONSE PRIORITIES

### 4.3.1 General Response Priorities

The following list provides the order of response priorities after an oil spill in the planning area.

- Safety is always the number one priority. Do not implement GRP strategies or take actions that will unduly jeopardize public, worker, or personal safety.
- Notify local public health and safety personnel.
- Control and contain the source of the spill; mobilize resources to the spill location. Source control and containment are always a higher priority than the implementation of GRP strategies.
- Determine the priority or order GRP strategies should be implemented based on the location of the spill or affected area. Priorities based on POSOPs are included in this chapter and should be used unless the situation or circumstances dictate otherwise (see Section 4.3.2).
- As response resources become available, implement the GRP Strategies in order of priority.
- In Washington State, if strategy implementation reduces, interrupts, or diverts the flow of water in streams, including the installation of a culvert block or underflow dam, an Emergency HPA must be obtained from WDFW (24-hour pager: 360/534-8233).

### 4.3.2 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 Section 4.3. The placement of each POSOP is often based on spill risks in the area, including oil pipelines, railways, highways/roadways, tributaries, and vessel movements. Intersections of two or more of these risk locations typically represent a higher spill risk than any one individually, increasing the probability of an oil spill. 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 boxes. In establishing response priorities during a response, or selecting an appropriate POSOP, the downstream and/or tidal movement of spilled oil and the time it takes to mobilize and deploy response resources must be considered. Generally, 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. PSOPs are alphabetically designated.

The following tables provide the strategy implementation order for Potential Oil Spill Origin Points in the Ice Harbor Pool-GRP; example include, points SIH-A, SIH-B, SIH-C and SIH-D. 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, tides or currents, deployment time, proximity to the spill source, trustee input, and other considerations.

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

**Table 4-3: SIH-A (Lower Monumental Dam ~SIH-41.55)**

SIH-A (Lower Monumental Dam SIH-41.55)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	SIH-37.77R	52	67	167
2	SIH-38.6R	52	68	169
3	SIH-34.75R	51	67	163
4	SIH-36.0R	51	67	165
5	SIH-40.45L	52	68	171
6	SIH-41.4L	52	68	173
7	SIH-41.5L	52	69	175
8	SIH-41.5R	52	69	177
9	SIH-32.15R	51	66	161
10	SIH-30.6L	51	66	157



**Table 4-4: SIH-B (Union Pacific RR Switch ~SIH-33.0)**

SIH-B (Union Pacific RR Switch SIH-33.0)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	SIH-30.6L	51	66	157
2	SIH-30.7L	51	66	159
3	SIH-30.5L	51	67	155
4	SIH-30.25L	51	65	153
5	SIH-32.15R	51	66	161
6	SIH-27.1R	50	65	151
7	SIH-26.5L	50	65	149
8	SIH-25.5L	50	64	147
9	SIH-24.75L	50	64	145
10	SIH-23.1R	50	64	143

**Table 4-5: SIH-C (Northwest Granary ~SIH-29.0)**

SIH-C (Northwest Granary SIH-29.0)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	SIH-26.5L	50	65	149
2	SIH-27.1R	50	65	151
3	SIH-24.75L	50	64	145
4	SIH-25.5L	50	64	147
5	SIH-23.1R	50	64	143
6	SIH-22.7R	50	63	141
7	SIH-22.65L	50	63	139
8	SIH-22.1R	50	63	137

**Table 4-6: SIH-D (Emma Lake ~SIH-19.0)**

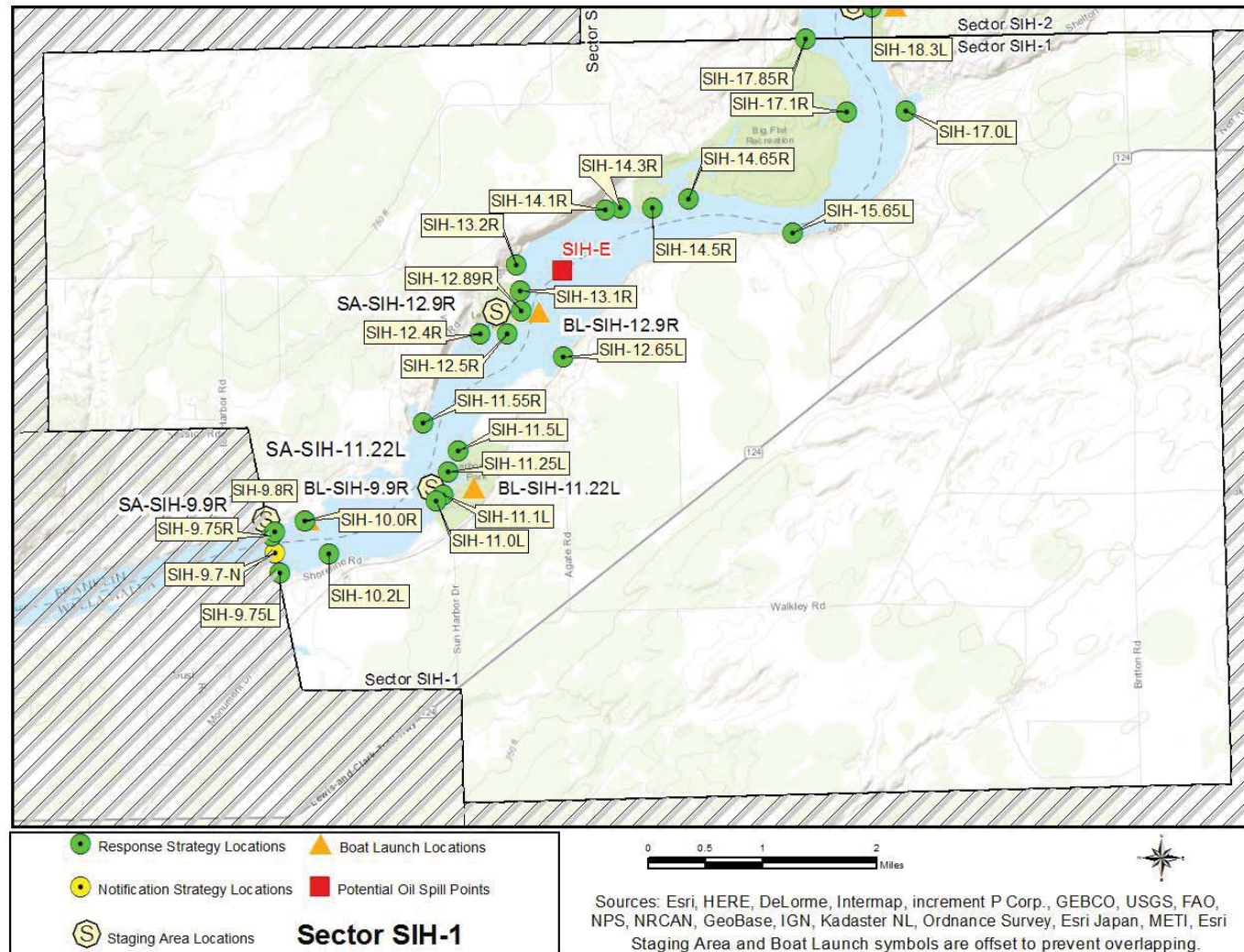
SIH-D (Emma Lake SIH-19.0)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	SIH-17.85R	49	61	127
2	SIH-15.65L	49	60	121
3	SIH-17.0L	49	60	123
4	SIH-17.1R	49	61	125
5	SIH-18.3L	49	61	129
6	SIH-18.5L	50	62	131
7	SIH-18.51L	50	62	133
8	SIH-18.8R	50	62	135
9	SIH-14.65R	49	60	119
10	SIH-14.5R	49	59	117

**Table 4-7: SIH-E (Levey Park ~SIH-13.5)**

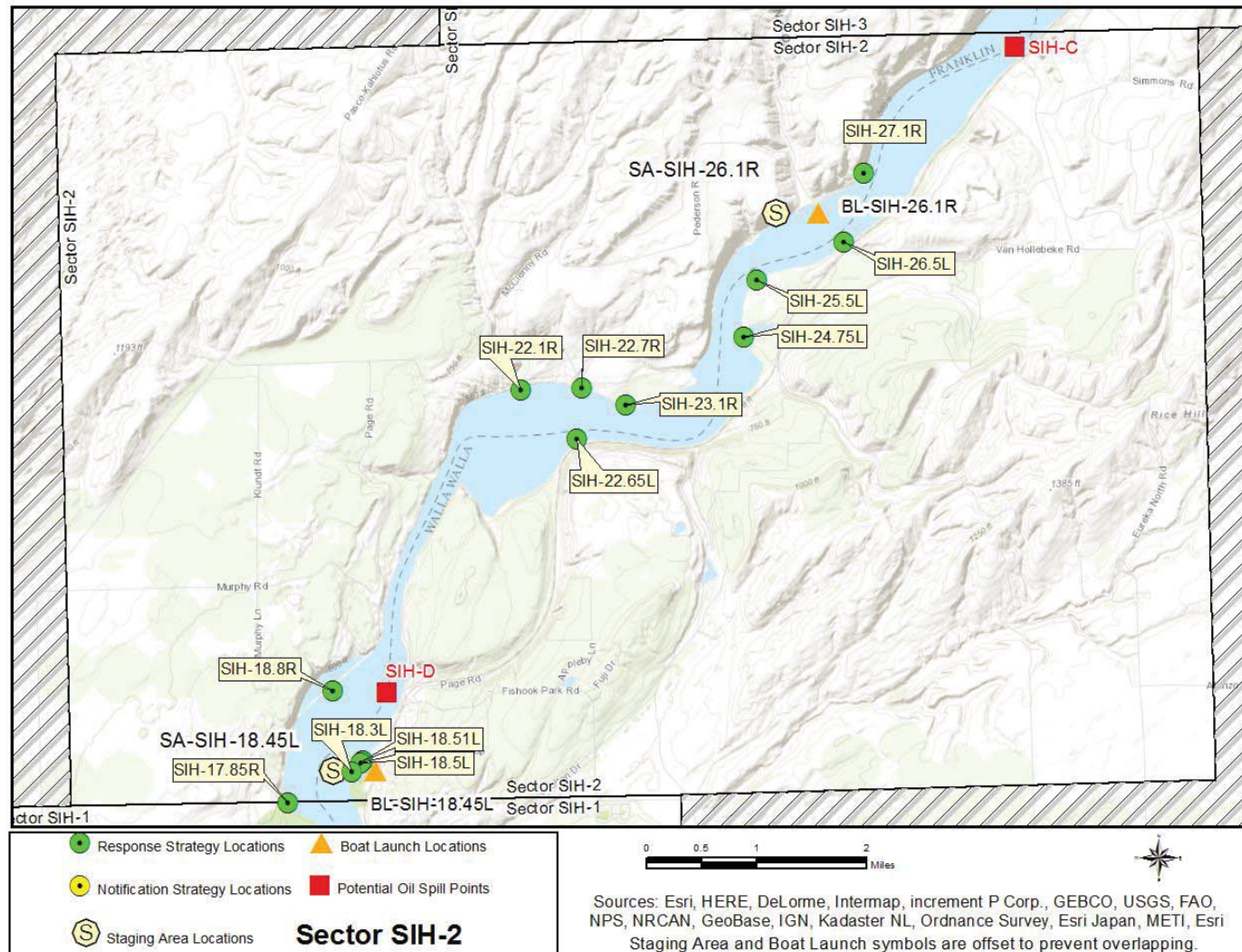
SIH-E (Levey Park SIH-13.5)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	SIH-11.25L	49	56	95
2	SIH-11.5L	49	56	97
3	SIH-11.55R	49	56	99
4	SIH-12.4R	49	57	101
5	SIH-12.5R	49	57	103
6	SIH-12.65L	49	57	105
7	SIH-12.89R	49	58	107
8	SIH-13.1R	49	58	109
9	SIH-13.2R	49	58	111
10	SIH-11.0L	49	55	91

#### 4.4 SECTOR MAPS (STRATEGY LOCATIONS)

##### Sector map 1 SIH-01

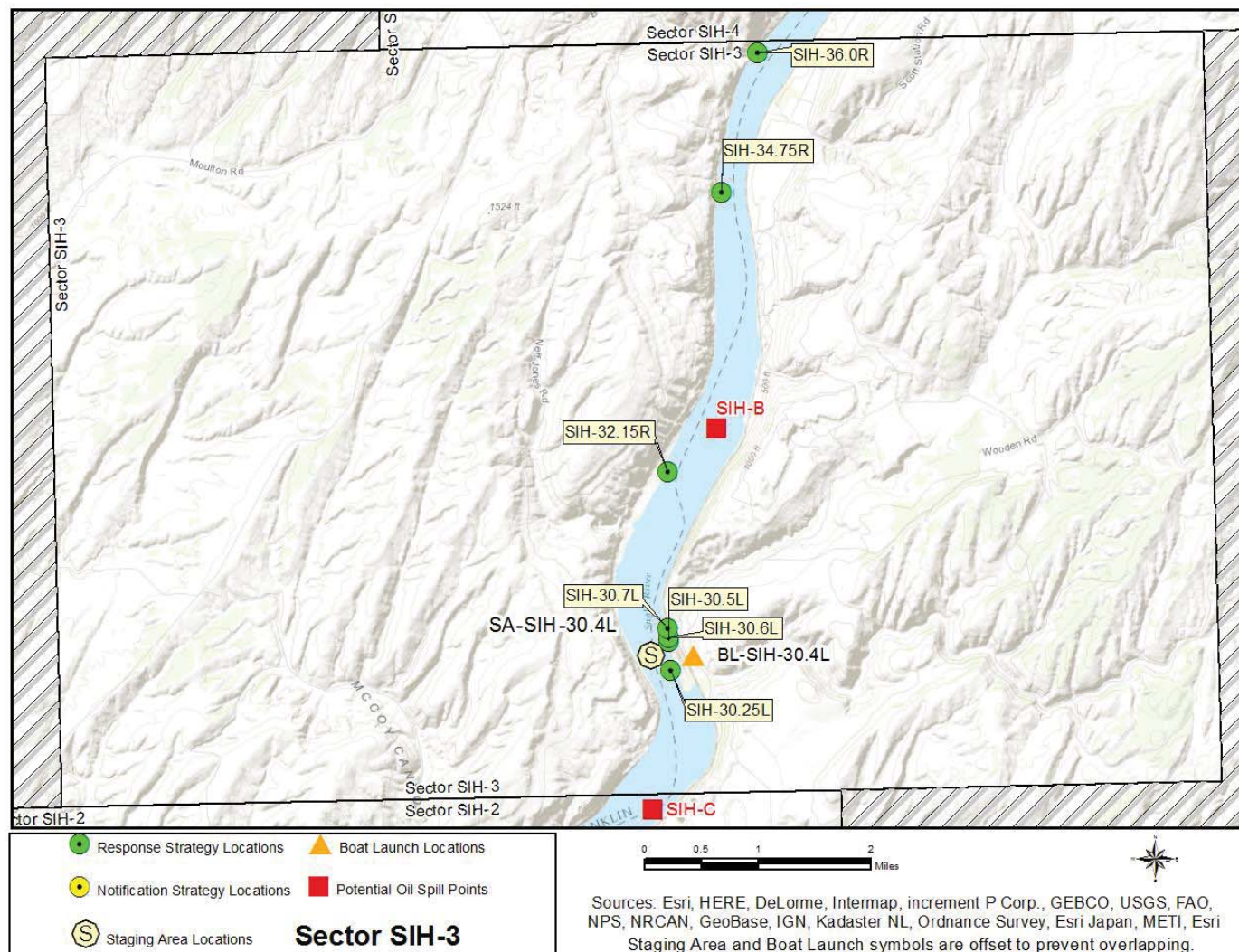


## Sector map 2 SIH-02

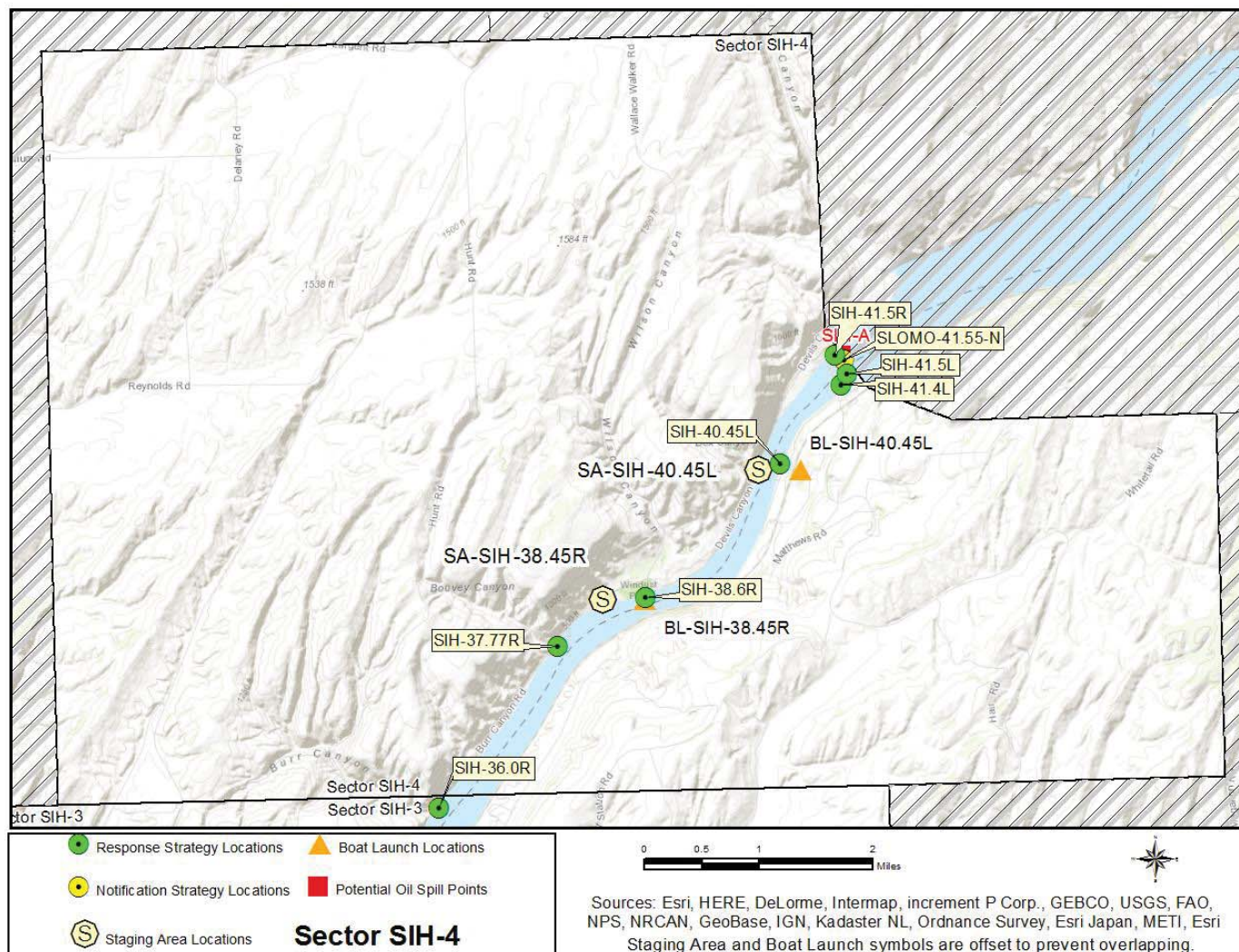




## Sector map 3 SIH-03



## Sector map 4 SIH-04

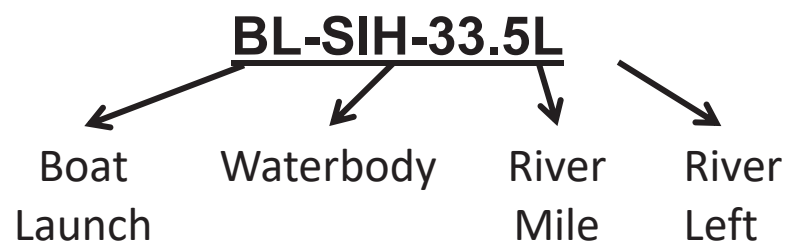




## 4.5 MATRICES

### 4.5.1 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. On lakes, the numbers indicate the location by shoreline mile, typically starting at the northernmost point and increasing clockwise around the lake. In marine areas, the numbers do not have a geographic meaning. 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 Snake include: SIH=/Ice Harbor Pool, and SLOMO = /Lower Monumental Pool

## 4.5.2 Response Strategy Matrices

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-9.75R</b>	Ice Harbor upstream Fishladder on river L, S shore 46.24632 -118.87874	Exclusion	Boom 200ft	No	Onsite Stage at the Ice Harbor Lock and Dam, must contact the Ice Harbor Dam for access and instructions.	Fish Ladder(s)	Contact Ice Harbor Dam for access and instructions.	49	81
<b>SIH-9.75R</b>	Ice Harbor upstream Fishladder on river R, N shore 46.25107 -118.88010	Exclusion	Boom 100ft	No	Onsite Stage at the Ice Harbor Lock and Dam, must contact the Ice Harbor Dam for access and instructions.	Fish Ladder(s)	Contact Ice Harbor Dam for access and instructions.	49	83
<b>SIH-9.8R</b>	Ice Harbor Navigation Lock on the upstream side 46.25152 -118.87950	Collection	Boom 200ft	Yes	Onsite Stage at SA-SIH-9.9R or stage on-site at the Ice Harbor Lock and Dam. Must contact the Ice Harbor Dam for access	Downstream Resources, Lock and Dam	Launch at BL-SIH-9.9R unless this can be deployed using a line throwing devise. Contact Ice Harbor Dam for access and instructions.	49	85

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-10.0R</b>	Devil's Bench boat basin 46.25296 -118.87395	Deflection	Boom 800ft	Yes	Remote SA-SIH-9.9R	Boat Launch/Ramp, Economic Resource, Riparian Habitat	Launch at BL-SIH-9.9R Devil's Bench	<a href="#">49</a>	<a href="#">87</a>
<b>SIH-10.2L</b>	Shoreline Drive Parking upstream of Ice Harbor Dam 46.24860 -118.86977	Collection	Boom 1000ft	Yes	Onsite Stage on-site at the Shoreline Drive parking area just upstream of the dam. Large gravel lot available.	Downstream Resources, Recreational Use Area	Launch at BL-SIH-9.9R	<a href="#">49</a>	<a href="#">89</a>
<b>SIH-11.0L</b>	Charbonneau Park South Shoreline 46.25504 -118.84979	Deflection	Boom 600ft	Yes	Remote Stage at SA-SIH-11.22L the Charbonneau Boat Launch/Staging Area	Public Recreation Site/Area, Recreational Shoreline Area, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-11.22L the Charbonneau Boat Launch/Staging Area	<a href="#">49</a>	<a href="#">91</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-11.1L</b>	Charbonneau Park Beaches 46.25584 -118.84846	Exclusion	Boom 900ft	Yes	Remote Stage at SA-SIH-11.22L the Charbonneau Boat Launch/Staging Area	Recreational Swimming Area	Launch at BL-SIH-11.22L the Charbonneau Boat Launch/Staging Area	<a href="#">49</a>	<a href="#">93</a>
<b>SIH-11.25L</b>	Charbonneau Recreation Area (Old Name SIH-18) 46.25873 -118.84757	Deflection	Boom 400ft	Yes	Remote Stage at SA-SIH-11.22L the Charbonneau Boat Launch/Staging Area	Marina, Public Recreation Site/Area	Launch at BL-SIH-11.22L the Charbonneau Boat Launch/Staging Area	<a href="#">49</a>	<a href="#">95</a>
<b>SIH-11.5L</b>	Charbonneau Park N Shore 46.26139 -118.84565	Deflection	Boom 700ft	Yes	Remote Stage at SA-SIH-11.22L the Charbonneau Boat Launch/Staging Area	Recreational Shoreline Area, Sensitive Resources Nearby, Waterfowl Concentrations and Habitat	Launch at BL-SIH-11.22L the Charbonneau Boat Launch/Staging Area	<a href="#">49</a>	<a href="#">97</a>
<b>SIH-11.55R</b>	(SIH-19) Entrance to Lake Charlene HMU 46.26514 -118.85193	Exclusion	Boom 100ft	Yes	Remote Stage at SA-SIH-11.22L the Charbonneau Boat Launch/Staging Area	Public Lands/Facilities, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-11.22L the Charbonneau Boat Launch/Staging Area	<a href="#">49</a>	<a href="#">99</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-12.4R</b>	Levey Park South Shore 46.27632 -118.84117	Exclusion	Boom 600ft	Yes	Onsite Stage on site or at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Recreational Shoreline Area, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">101</a>
<b>SIH-12.5R</b>	Levy Park Swim Area 46.27620 -118.83617	Exclusion	Boom 300ft	Yes	Onsite Stage on site or at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Recreational Swimming Area, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">103</a>
<b>SIH-12.65L</b>	Just upstream of Anchor Bay 46.27312 -118.82595	Deflection	Boom 1000ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Recreational Boating, Sensitive Resources Nearby, Water Intakes, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">105</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-12.89R</b>	Levey Park Shoreline E of boat launch 46.27913 -118.83348	Deflection	Boom 800ft	Yes	Onsite Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Recreational Shoreline Area, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	49	107
<b>SIH-13.1R</b>	N Shore of Levey Park 46.28161 -118.83364	Deflection	Boom 1000ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Recreational Shoreline Area, Waterfowl and Shorebird Concentrations	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	49	109
<b>SIH-13.2R</b>	Collection Point 1/3 mile upriver from Levey Park 46.28502 -118.83421	Collection	Boom 1000ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Downstream Resources	Launch at BL-SIH-12.9R Levey Park boat launch and staging area.	49	111

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SIH-14.1R</b>	Big Flat HMU westernmost inlet (old name SIH-15) 46.29177 -118.81755	Exclusion	Boom 700ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Riparian Habitat, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">113</a>
<b>SIH-14.3R</b>	Inlet on the S shore at Big Flat HMU 46.29199 -118.81482	Exclusion	Boom 500ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Riparian Habitat, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">115</a>
<b>SIH-14.5R</b>	SW of Dalton Lake at Big Flat HMU 46.29186 -118.80897	Deflection	Boom 800ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Riparian Habitat, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">117</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-14.65R</a>	Inlet to Dalton Lake at Big Flat HMU 46.29293 -118.80235	Deflection	Boom 800ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Lake Habitat, Waterfowl and Salmonid Concentrations and Habitat, Wetlands	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">119</a>
<a href="#">SIH-15.65L</a>	Across from Big Flat Habitat Management Unit 46.28834 -118.78326	Collection	Boom 1000ft	Yes	Remote Stage at SA-SIH-12.9R Levey Park: boat ramp, docks, bathrooms, shelters	Downstream Resources, Habitat Management Unit	Launch at BL-SIH-12.9R Levey Park boat launch and staging area	<a href="#">49</a>	<a href="#">121</a>
<a href="#">SIH-17.0L</a>	South Pond, Fishhook Habitat Management Unit 46.30360 -118.76211	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Habitat Management Unit, Public Lands/Facilities, Riparian Habitat	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">49</a>	<a href="#">123</a>



Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-17.1R</a>	Side channel Big Flat HMU (old name SIH-12) 46.30363 -118.77287	Exclusion	Boom 500ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Habitat Management Unit, Riparian Habitat, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">49</a>	<a href="#">125</a>
<a href="#">SIH-17.85R</a>	N end of Big Flat HMU 46.31300 -118.78014	Collection	Boom 1000ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Habitat Management Unit, Recreational Use Area, Sensitive Resources Nearby, Waterfowl Concentrations	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">49</a>	<a href="#">127</a>
<a href="#">SIH-18.3L</a>	Fishhook Park Parking Lot, SW corner 46.31687 -118.76790	Deflection	Boom 600ft	Yes	Onsite Stage onsite at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Recreational Shoreline Area, Waterfowl Concentrations	Launch onsite at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">49</a>	<a href="#">129</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-18.5L</a>	Fishhook Park Launch and Beach (old name SIH-10) 46.31800 -118.76615	Deflection	Boom 500ft	Yes	Onsite Stage onsite at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Boat Launch/Ramp, Public Recreation Site/Area, Sensitive Shoreline and Back-Beach	Launch on site at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">131</a>
<a href="#">SIH-18.51L</a>	Fishhook Park N shoreline 46.31832 -118.76564	Collection	Boom 600ft	Yes	Onsite Stage onsite at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Downstream Resources, Recreational Use Area	Launch onsite at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">133</a>
<a href="#">SIH-18.8R</a>	Lake Emma culverts (old name SIH-9) 46.32767 -118.77120	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Public Lands/Facilities	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">135</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-22.1R</a>	Lost Island HMU - downstream end (old name SIH-7) 46.36683 -118.73402	Exclusion	Boom 300ft, Sorbent 100ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Riparian Habitat	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">137</a>
<a href="#">SIH-22.65L</a>	Across the river from Lost Island Recreation Area 46.36012 -118.72363	Deflection	Boom 1000ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Recreational Boating, Sensitive Resources Nearby, Waterfowl Concentrations	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">139</a>
<a href="#">SIH-22.7R</a>	Lost Island HMU (old name SIH-6) 46.36687 -118.72244	Exclusion	Boom 300ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Recreational Use Area, Riparian Habitat, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">141</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-23.1R</a>	Lost Island HMU (old name SIH-5) 46.36456 -118.71406	Exclusion	Boom 1000ft	Yes	Remote Stage at SA-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	Deer Habitat, Habitat Management Unit, Riparian Habitat, Sensitive Resources Nearby, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-18.45L Fishhook Park - camping, shelters, boat launch, parking	<a href="#">50</a>	<a href="#">143</a>
<a href="#">SIH-24.75L</a>	Hollebeke Habitat Management Unit (old name SIH-3) 46.37317 -118.69124	Deflection	Boom 1000ft	Yes	Remote Stage at SA-SIH-26.1R, Junction – primitive launch with parking and bathrooms	Habitat Management Unit, Public Lands/Facilities, Raptors, Sensitive Resources, Waterfowl and Salmonid Concentrations and Habitat, Wetland Habitat	Launch at BL-SIH-26.1R, Junction – primitive launch with parking and bathrooms	<a href="#">50</a>	<a href="#">145</a>
<a href="#">SIH-25.5L</a>	Hollebeke Habitat Management Unit (old name SIH-2) 46.38065 -118.68865	Deflection	Boom 1000ft	Yes	Remote Stage at SA-SIH-26.1R, Junction – primitive launch with parking and bathrooms	Habitat Management Unit, Raptors, Sensitive Resources Nearby, Waterfowl Concentrations	Launch at BL-SIH-26.1R, Junction – primitive launch with parking and bathrooms	<a href="#">50</a>	<a href="#">147</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-26.5L</a>	Across the river from Junction 46.38532 -118.67185	Collection	Boom 1000ft	Yes	Remote Stage at SA-SIH-26.1R, Junction – primitive launch with parking and bathrooms	Downstream Resources, Habitat Management Unit, Raptors	Launch at BL-SIH-26.1R, Junction – primitive launch with parking and bathrooms	<a href="#">50</a>	<a href="#">149</a>
<a href="#">SIH-27.1R</a>	One Mile upstream from Junction 46.39435 -118.66765	Deflection	Boom 700ft	Yes	Remote Stage at SA-SIH-26.1R, Junction – primitive launch with parking. More parking and bathrooms nearby	Raptors, Sensitive Resources Nearby	Launch at BL-SIH-26.1R, Junction – primitive launch with parking. More parking and bathrooms nearby	<a href="#">50</a>	<a href="#">151</a>
<a href="#">SIH-30.25L</a>	Walker Pit Habitat Management Unit (old name SIH-1) 46.42830 -118.63433	Deflection	Boom 800ft	Yes	Onsite Stage at SA-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	Habitat Management Unit, Public Lands/Facilities, Raptors, Waterfowl Concentrations	Launch at BL-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	<a href="#">51</a>	<a href="#">153</a>
<a href="#">SIH-30.5L</a>	Walker Pit HMU N Shoreline 46.43208 -118.63471	Deflection	Boom 700ft	Yes	Onsite Stage onsite or at SA-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	Boat Launch/Ramp, Habitat Management Unit, Raptors, Waterfowl and Salmonid Concentrations and Habitat	Launch at BL-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	<a href="#">51</a>	<a href="#">155</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-30.6L</a>	Northernmost shoreline at Walker Pit HMU 46.43262 -118.63454	Collection	Boom 900ft	Yes	Onsite Stage onsite or at SA-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	Downstream Resources, Habitat Management Unit, Public Lands/Facilities, Raptors	Launch at BL-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	<a href="#">51</a>	<a href="#">157</a>
<a href="#">SIH-30.7L</a>	Culvert to N wetland at Walker Pit HMU 46.43377 -118.63481	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote Stage at SA-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	Habitat Management Unit, Waterfowl and Salmonid Concentrations and Habitat, Wetland Habitat	Launch at BL-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	<a href="#">51</a>	<a href="#">159</a>
<a href="#">SIH-32.15R</a>	Columbia Plateau Trail river mile 32.15R 46.45379 -118.63407	Deflection	Boom 800ft	Yes	Remote Stage at SA-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	Recreational Shoreline Area, Waterfowl Concentrations	Launch at BL-SIH-30.4L Walk Pit HMU Boat Launch, primitive launch and gravel staging area	<a href="#">51</a>	<a href="#">161</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-34.75R</a>	1.25 miles S of Burr Canyon 46.48937 -118.62282	Deflection	Boom 700ft	Yes	Remote Stage at SA-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked	Sensitive Resources Nearby, Waterfowl Concentrations	Launch at BL-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked gate off season)	<a href="#">51</a>	<a href="#">163</a>
<a href="#">SIH-36.0R</a>	Burr Canyon Road 46.50719 -118.61550	Deflection	Boom 1000ft, Sorbent 100ft	Yes	Remote Stage at SA-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked	Sensitive Resources, Waterfowl Concentrations	Launch at BL-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked gate off season)	<a href="#">51</a>	<a href="#">165</a>
<a href="#">SIH-37.77R</a>	Bouvey Canyon 46.52734 -118.59304	Collection	Boom 1000ft	Yes	Onsite Gravel parking, or at SA-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area	Downstream Resources, Waterfowl Concentrations	Launch at BL-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked gate off season)	<a href="#">52</a>	<a href="#">167</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-38.6R</a>	Windust Park 46.53334 -118.57651	Collection	Boom 1000ft	Yes	Onsite Stage onsite at SA-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities	Deer Habitat, Recreational Use Area, Sensitive Resources Nearby, Waterfowl Concentrations	Launch onsite at BL-SIH-38.45R Windust Park Boat Launch, double ramps, paved, well lit staging area with facilities (locked gate off season)	<a href="#">52</a>	<a href="#">169</a>
<a href="#">SIH-40.45L</a>	Matthews Boat Ramp 46.54990 -118.55115	Collection	Boom 1000ft, Sorbent 100ft	Yes	Onsite Stage on site at SA-SIH-40.5L, Matthews boat launch, lights, parking, and bathrooms	Boat Launch/Ramp, Downstream Resources, Waterfowl Concentrations	Launch on site at BL-SIH-40.5L, Matthews boat launch, lights, parking, and bathrooms	<a href="#">52</a>	<a href="#">171</a>
<a href="#">SIH-41.4L</a>	Downstream Lower Monumental Lock (old name SLOMO-23) 46.55975 -118.53959	Collection	Boom 100ft	Unknown	Onsite Stage onsite or at SA-SIH-40.45L Matthews boat launch - lights, parking, bathroom	Downstream Resources, Lock and Dam	May be able to deploy by hand but if using boat, launch from SIH-40.45L Matthews boat launch - lights, parking, bathroom	<a href="#">52</a>	<a href="#">173</a>



Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">SIH-41.5L</a>	Lower Monumental Dam S Fish Ladder 46.56114 -118.53848	Exclusion	Boom 100ft, Sorbent 100ft	No	Onsite Stage onsite or use SA-SIH-40.45L if allowed to access the site by boat.	Fish Ladder(s), Salmon Concentrations	Deploy boom by hand, use line throwing devise if needed. If allowed to access by boat, launch at BL-SIH-40.45L Matthews boat launch	<a href="#">52</a>	<a href="#">175</a>
<a href="#">SIH-41.5R</a>	Lower Monumental Dam N Fish Ladder 46.56350 -118.54046	Exclusion	Boom 100ft, Sorbent 100ft	No	Onsite Stage onsite or use SA-SIH-40.45L if allowed to access the site by boat.	Fish Ladder(s), Salmon Concentrations	Deploy boom by hand, use line throwing devise if needed. If allowed to access by boat, launch at BL-SIH-40.45L Matthews boat launch	<a href="#">52</a>	<a href="#">177</a>

### 4.5.3 Notification Strategy Matrices

Notification Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page#)
SIH-9.7-N	Ice Harbor Lock and Dam Notification 45.93603 -119.29659	Notification	Lock and Dam	Notify project management and take action to protect USACE property and resources, including the deployment, by USACE staff or response contractors, of GRP strategies. Strategies in the Ice Harbor pool include: SIH-9.75R and SIH-9.75L exclusion strategies to protect the fish ladders on the upstream side of the dam, and SIH-9.8R, a collection strategy for the E end of the lock; strategies on the downstream side of the dam, in the McNary pool, include: MSN-9.5R, a collection strategy at the W end of the lock.	Protection of fish ladders, lock and/or spillway closure, deployment of GRP strategies	49	181

Notification Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SLOMO-41.55-N</b>	Lower Monumental Lock and Dam Notification 46.56294 -118.53900	Notification	Downstream Resources, Fish Ladder(s), Lock and Dam	Notify project management and take action to protect USACE property and resources, including the deployment, by USACE staff or response contractors, of GRP strategies. Strategies on the upstream side of the dam will be included in the SLOMO-GRP. On the downstream side of the dam is a collection strategy, SIH-41.4L, at the end of the lock, and two exclusion strategies for the fish ladders SIH-41.5R and SIH-41.5L - all three are listed in the SIH-GRP.	Protection of fish ladders, lock &/or spillway closure, deployment of GRP strategies	52	183

## 4.5.4 Staging Area Matrices

Staging Area Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
Error! Reference source not found.	Ice Harbor North Shore Recreation Area boat launch	46.25312 -118.87723	1240 Ice Harbor Rd Pasco, WA 99301	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	MSN-9.5R, SIH-10.0R, SIH-9.8R, SIH-10.2L	Paved staging area with two 7 degree concrete boat ramps	49	187
Error! Reference source not found.	Charbonneau Marina	46.25670 -118.84671	642 Campground Rd Burbank, WA 99323	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-11.25L, SIH-11.0L, SIH-11.55R, SIH-11.5L, SIH-11.1L	Paved lighted double ramp with most facilities	49	189

Staging Area Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SA-SIH-12.9R</b>	Levey Park Boat Launch	46.27905 -118.83409	1701 Levey Rd Pasco, WA 99301	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-16.1R, SIH-14.3R, SIH-13.1R, SIH-12.5L, SIH-12.5R, SIH-12.4R, SIH-14.65R, SIH-12.65L, SIH-13.2R, SIH-12.9R, SIH-12.89R, SIH-14.5R, SIH-14.1R, SIH-15.65L	Paved staging area	<a href="#">49</a>	<a href="#">191</a>
<b>SA-SIH-18.45L</b>	Fishhook Park Boat Launch	46.31702 -118.76724	3170 Fishhook Park Rd Prescott, WA 99348	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-17.85R, SIH-17.1R, SIH-18.51L, SIH-23.1R, SIH-22.7R, SIH-23.25R, SIH-23.4R, SIH-17.0L, SIH-18.5L , SIH-18.8R, SIH-22.65L	Seasonal, paved, lighted, staging area (bring bolt cutters in off-season)	<a href="#">50</a>	<a href="#">193</a>

Staging Area Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
<b>SA-SIH-26.1R</b>	Junction	46.38933 -118.68041	3198 Pederson Rd Pasco, WA 99301	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-26.5L, SIH-25.5L, SIH-27.1R, SIH-24.75L	Gravel staging area, bathrooms available at Columbia Plateau Trail 600 ft away	<a href="#">50</a>	<a href="#">195</a>
<b>SA-SIH-30.4L</b>	Walk Pit HMU Boat Launch	46.43029 -118.63401	Walker Pit Road Prescott, WA 99348	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-30.25L, SIH-30.7L, SIH-32.15R	Gravel staging area	<a href="#">51</a>	<a href="#">197</a>
<b>SA-SIH-38.45R</b>	Windust Park Boat Launch	46.53311 -118.58045	5252 Burr Canyon Road Pasco, WA 99301	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-38.6R, SIH-36.0R, SIH-39.2R, SIH-39.3L, SIH-34.75R	Paved, marked, well lit staging area with facilities (locked gate off season)	<a href="#">52</a>	<a href="#">199</a>

Staging Area Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
SA-SIH-40.45L	Matthews Boat Launch	46.54909 -118.55117	16721 Lower Monumental Rd Prescott, WA 99348	USACE Ice Harbor pool  Tri-Rivers Natural Resources Management Office  Ice Harbor Dam, WA 509-547-2048	SIH-40.45L	Paved lighted staging area	52	201

## 4.5.5 Boat Launch Matrices

Boat Launch Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">BL-SIH-9.9R</a>	Ice Harbor North Shore Recreation Area boat launch	46.25312 - 118.87723	1240 Ice Harbor Rd Pasco, WA 99301	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	MSN-9.5R, SIH-10.2L, SIH-9.8R, SIH-10.0R	Paved staging area with two 7 degree concrete boat ramps	<a href="#">49</a>	<a href="#">207</a>
<a href="#">BL-SIH-11.22L</a>	Charbonneau Marina	46.25670 - 118.84671	642 Campground Rd Burbank, WA 99323	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-11.5L, SIH-11.1L, SIH-11.0L, SIH-11.55R, SIH-11.25L	Paved lighted double ramp with most facilities	<a href="#">49</a>	<a href="#">209</a>
<a href="#">BL-SIH-12.9R</a>	Levey Park Boat Launch	46.27905 - 118.83409	1701 Levey Rd Pasco, WA 99301	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-14.1R, SIH-14.5R, SIH-12.65L, SIH-15.65L, SIH-12.9R, SIH-12.5R, SIH-13.1R, SIH-12.5L, SIH-14.3R, SIH-16.1R, SIH-12.89R, SIH-14.65R, SIH-12.4R, SIH-13.2R	Paved single ramp 7 degree grade	<a href="#">49</a>	<a href="#">211</a>



Boat Launch Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">BL-SIH-18.45L</a>	Fishhook Park Boat Launch	46.31702 - 118.76724	3170 Fishhook Park Rd Prescott, WA 99348	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-22.65L, SIH-18.5L, SIH-17.0L, SIH-17.85R, SIH-18.51L, SIH-18.8R, SIH-23.25R, SIH-22.7R, SIH-23.1R, SIH-23.4R, SIH-17.1R	Seasonal, paved, lighted double boat ramps with 8 degree grade (bring bolt cutters in off-season)	<a href="#">50</a>	<a href="#">213</a>
<a href="#">BL-SIH-26.1R</a>	Junction	46.38933 - 118.68041	3198 Pederson Rd Pasco, WA 99301	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-24.75L, SIH-25.5L, SIH-27.1R, SIH-26.5L	Single primitive boat launch	<a href="#">50</a>	<a href="#">215</a>
<a href="#">BL-SIH-30.4L</a>	Walk Pit HMU Boat Launch	3.64098 18.96233	Walker Pit Road Prescott, WA 99348	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-30.25L, SIH-30.7L, SIH-30.6L, SIH-32.15R, SIH-30.5L	Primitive gravel launch ok for medium to small boats and small vac truck	<a href="#">51</a>	<a href="#">217</a>

Boat Launch Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">BL-SIH-38.45R</a>	Windust Park Boat Launch	46.53311 - 118.58045	5252 Burr Canyon Road Pasco, WA 99301	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-39.3L, SIH-36.0R, SIH-39.2R, SIH-38.6R, SIH-37.77R, SIH-34.75R	Paved double ramp (may be closed off season)	<a href="#">52</a>	<a href="#">219</a>
<a href="#">BL-SIH-40.45L</a>	Matthews Boat Launch	46.54909 - 118.55117	16721 Lower Monumental Rd Prescott, WA 99348	USACE Ice Harbor pool Tri-Rivers Natural Resources Management Office Ice Harbor Dam, WA 509-547-2048	SIH-40.45L, SIH-41.4L	Paved single ramp 9 degree grade	<a href="#">52</a>	<a href="#">221</a>