

# **WARDEN WASHINGTON**

## **Geographic Response Plan**

**(WWA-GRP)**

### **CHAPTER 4**

#### **Response Strategies and Priorities**

**June 2017**

## **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 response strategies, notification strategies, staging areas, and boat launch locations in appendices 4A through 4D (pages [53-74](#)) 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 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 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.rrt10nwac.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. Control and containment of an oil spill is always a higher priority than the implementation of GRP response strategies. 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, Unified Command, or the Environmental Unit.

### 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? Control and containment of the spill at or near the source 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.
  - Grant County Sherriff (509) 754-2011
  - Washington State Patrol - District 6 (509) 765-6171

### ***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.
- 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. For information about non-floating oil spill response, refer to the *Non-Floating Oil Spill Response Tool* in the [Northwest Area Contingency Plan](#) (NWACP), Section 9412.

### ***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.

### ***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>
<b>6</b>	16.7	5.1	10.00	4.0	1,429	30
<b>8</b>	12.5	3.8	7.50	5.4	1,071	22
<b>10</b>	10.0	3.1	6.00	6.7	857	18
<b>12</b>	8.3	2.5	5.00	8.0	714	15
<b>14</b>	7.1	2.2	4.29	9.4	612	13
<b>17</b>	5.9	1.8	3.53	11.4	504	11
<b>20</b>	5.0	1.5	3.00	13.5	429	10
<b>24</b>	4.2	1.3	2.50	16.3	357	8
<b>30</b>	3.3	1.0	2.00	20.5	286	7
<b>40</b>	2.5	0.8	1.50	27.8	214	5
<b>60</b>	1.7	0.5	1.00	44.4	143	4
<b>&gt;86</b>	≤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**

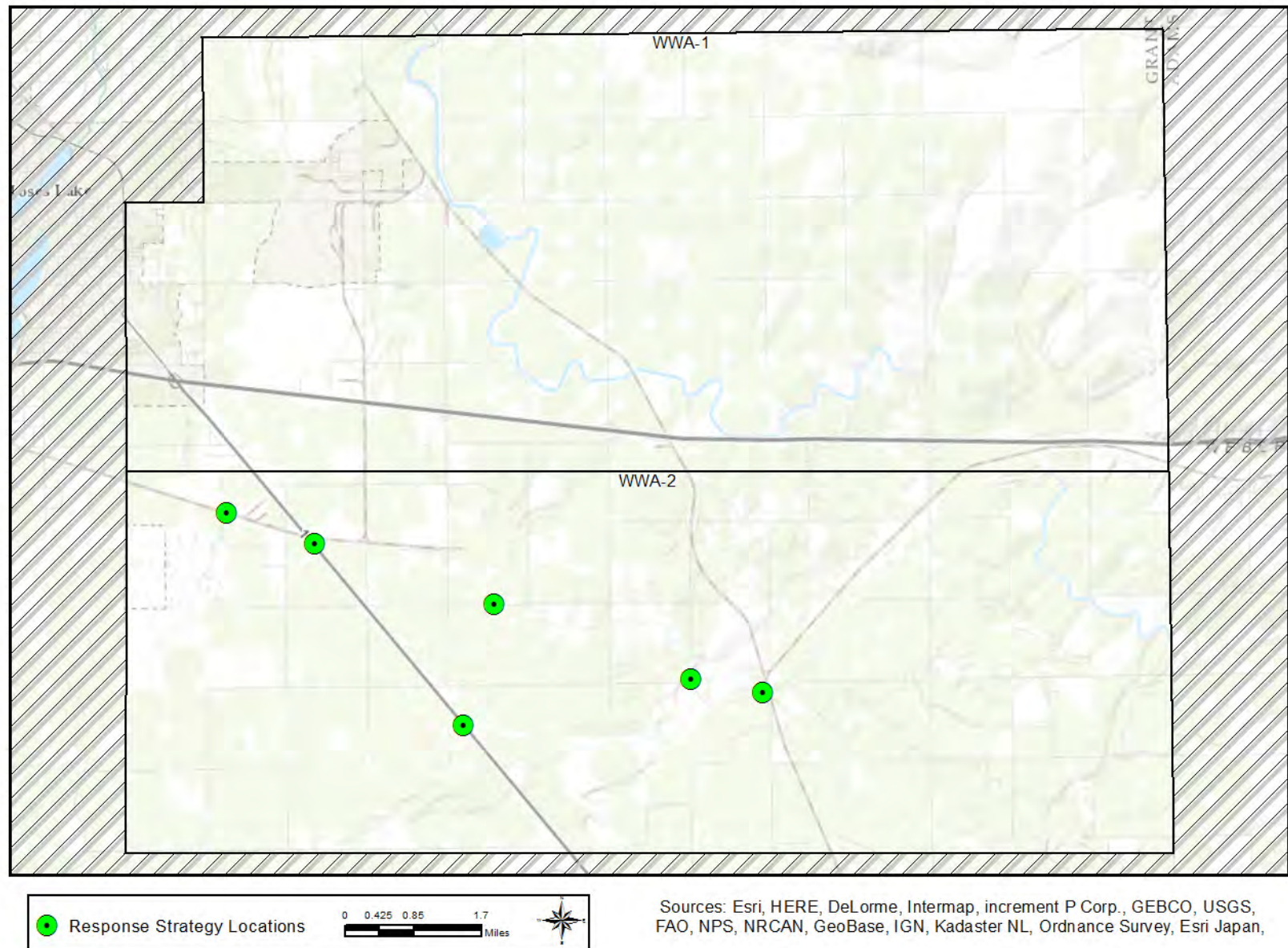
Historic river streamflow data from U.S. Geological Survey (USGS) isn't available for this area because no USGS gage stations are present. The USGS National Water System Mapper is used for locating gage stations of interest, and is available online at <http://maps.waterdata.usgs.gov/mapper/index.html>.

## 4.2 AREA OVERVIEW MAPS

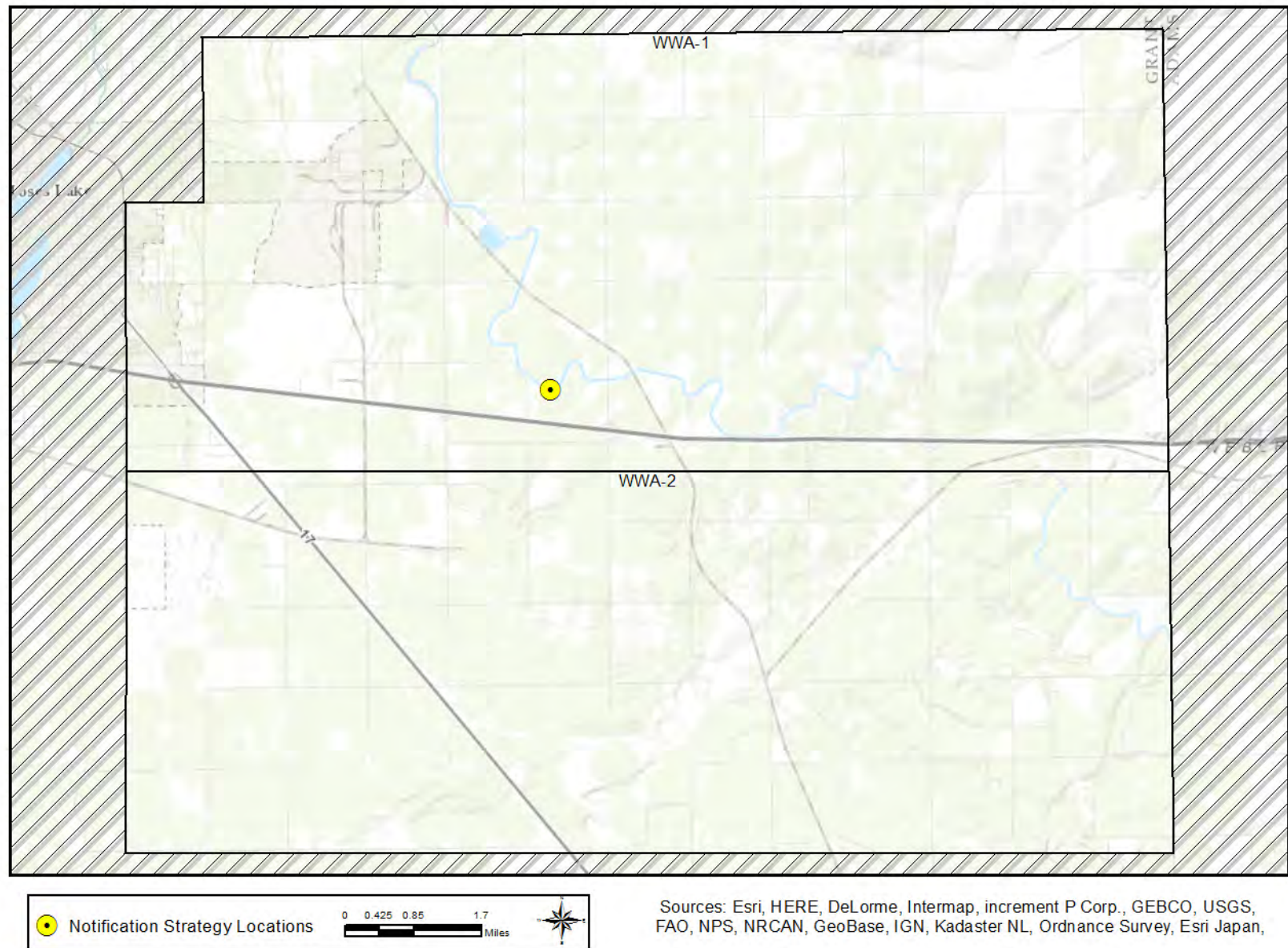
The following maps provide a geographic overview of the Warden Washington GRP. Sector maps in Section 4.4 of this chapter provide more detail on the location of response strategies, notification strategies, staging areas, boat launch locations, and Potential Oil Spill Origin Points (POSOPs). Detailed 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.

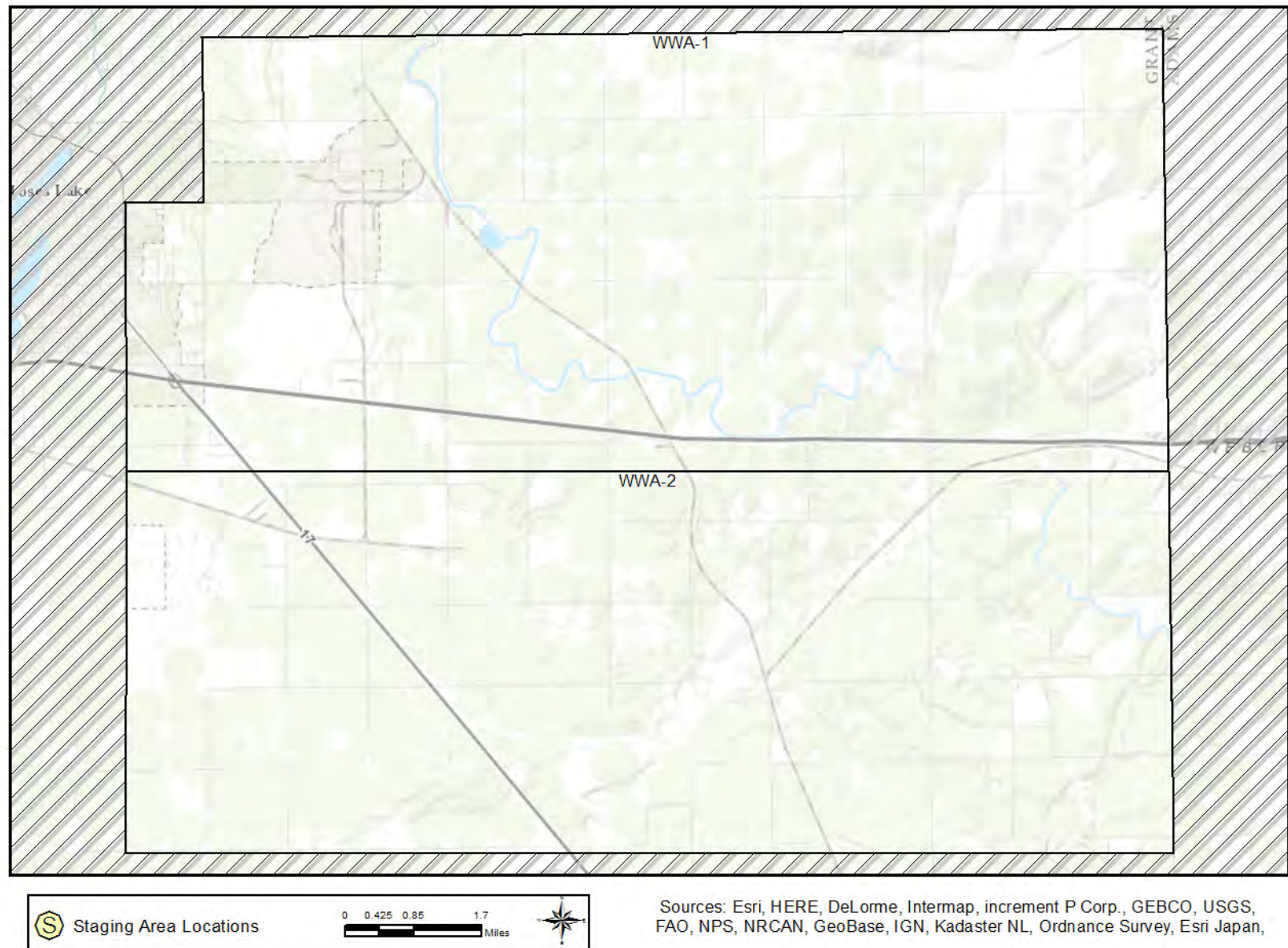
The following area maps are provided for reference:

- [Response Strategy Locations](#)
- [Notification Strategy Locations](#)
- [Staging Area Locations](#)
- [Boat Launch Locations](#)
- [Potential Oil Spill Origin Point Locations](#)

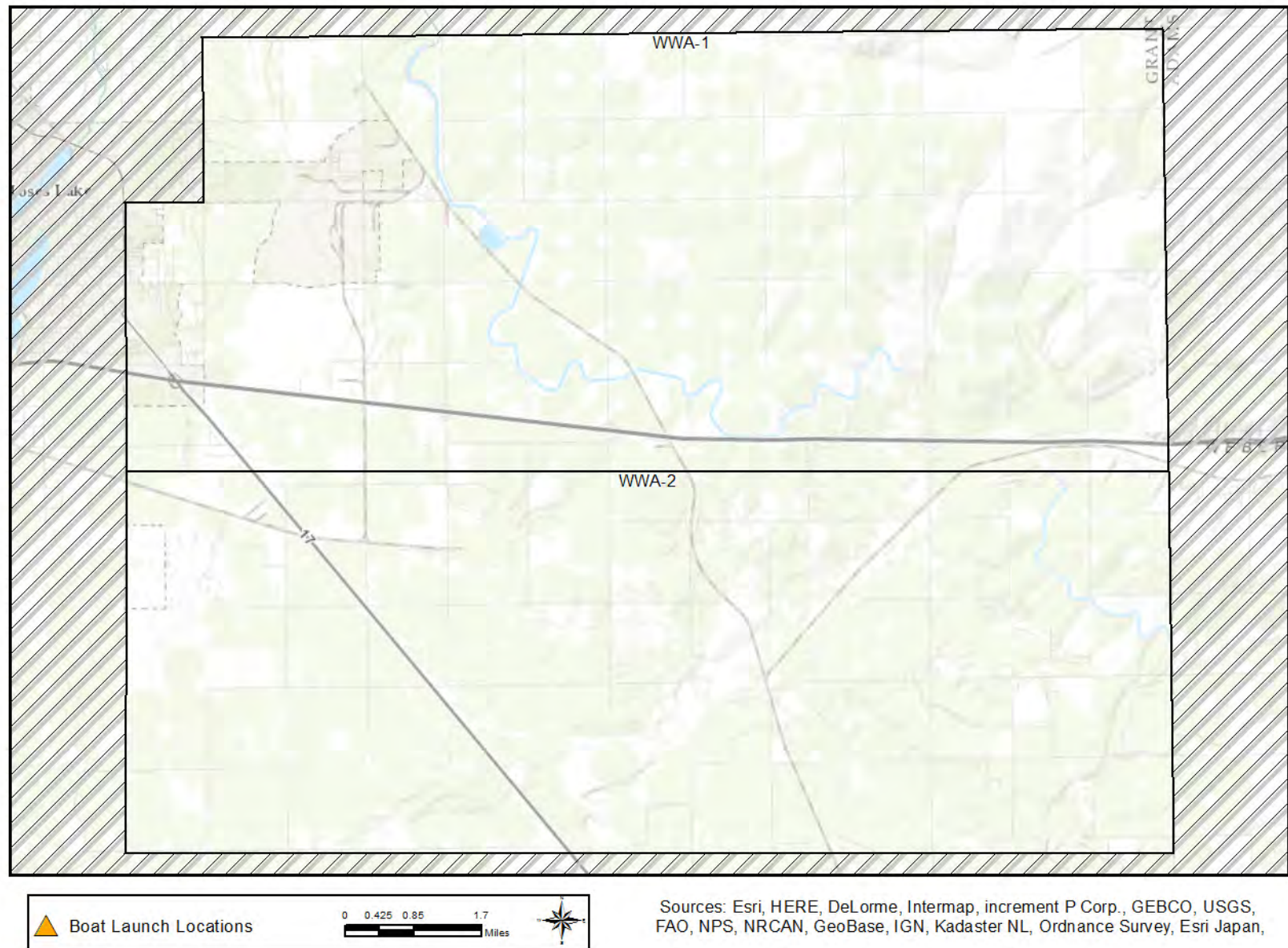
**Figure 4-1: Response Strategy Locations**

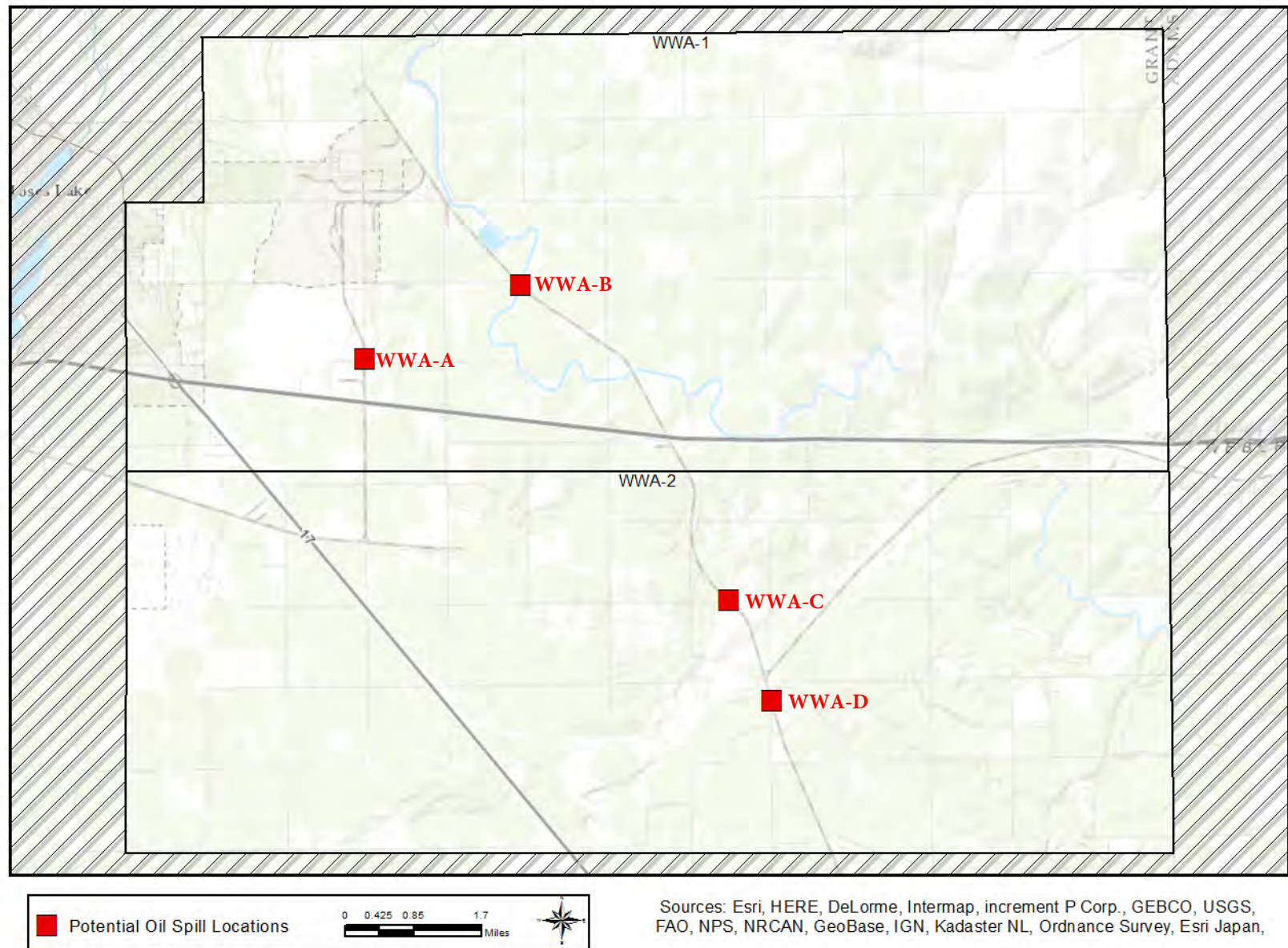


**Figure 4-2: Notification Strategy Locations**

**Figure 4-3: Staging Area Locations**



**Figure 4-4: Boat Launch Locations**

**Figure 4-5: Potential Oil Spill Origin Point 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 occurs 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 or as necessary based on the scenario, trajectory, or conditions of the day.
- Permits may be required. Consult the Northwest Area Contingency Plan Permit Summary Table ([NWACP Section 9401](#)) for information.

### 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. 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 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, 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 the Warden Washington GRP; points WWA-A through WWA-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, 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***

**Table 4-2: WWA-A (Road N NE)**

WWA-A (Road N NE)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	WWA-1	44	46	55
2	WWA-2	44	46	57
3	WWA-3	44	47	59

**Table 4-3: WWA-B (Road 2 NE)**

WWA-B (Road 2 NE)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	WWA-4	44	47	61



**Table 4-4: WWA-C (Road 2 SE)**

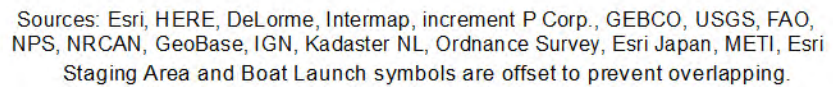
WWA-C (Road 2 SE)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	WWA-5	44	48	63

**Table 4-5: WWA-D (Road S SE)**

WWA-D (Road S SE)				
Implementation Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	WWA-6	44	48	65
2	WWA-5	44	48	63





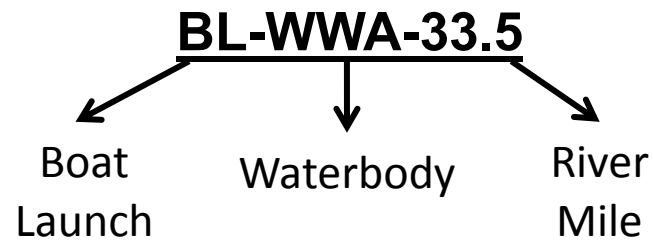


**Figure 4-7: Sector Map WWA-2**

## 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”.



Other than “WWA” for Warden Washington, there are no other associated waterbody short name designations within the planning area.

## 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#)
<a href="#">WWA-1</a>	Road 1 SE 47.07478 -119.23083	Collection	Boom 100ft	No	Onsite Stage on road shoulder south of Road 1 SE bridge (12430 Rd 1 SE, Moses Lake, WA 98837).	Downstream Resources	Strategy location is next to Road 1 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. Nearby track belongs to Columbia Basin Railroad.	<a href="#">44</a>	<a href="#">55</a>
<a href="#">WWA-2</a>	State Route 17 RM 48 47.06904 -119.20784	Collection	Boom 100ft	No	Onsite Stage on road shoulder next to SR-17 bridge (1574 SR-17 S, Moses Lake, WA 98837).	Downstream Resources	Strategy location is next to SR-17 bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. WSDOT-North Central Region maintains the highway. The canal may be dry in the summer.	<a href="#">44</a>	<a href="#">57</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">WWA-3</a>	State Route 17 RM 45 47.03572 -119.16922	Collection	Boom 100ft, Sorbent 100ft	No	Onsite Stage on road shoulder next to SR-17 bridge (15149 Road 3.5 SE, Moses Lake, WA 98837).	Downstream Resources	Strategy location is next to SR-17 bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. WSDOT-North Central Region maintains the highway.	<a href="#">44</a>	<a href="#">59</a>
<a href="#">WWA-4</a>	Road 2 SE 47.05754 -119.16057	Collection	Boom 100ft, Sorbent 100ft	No	Onsite Stage on road shoulder next to Road 2 SE bridge (15950 Rd 2 SE, Moses Lake, WA 98837).	Downstream Resources	Strategy location is next to Road 2 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598.	<a href="#">44</a>	<a href="#">61</a>

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
<a href="#">WWA-5</a>	Road 3 SE 47.04345 -119.10879	Collection	Boom 100ft	No	Onsite Stage on road shoulder next to Road 3 SE bridge (17867 Rd 3 SE, Moses Lake, WA 98837).	Downstream Resources	Strategy location is next to the Road 3 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598.	<a href="#">44</a>	<a href="#">63</a>
<a href="#">WWA-6</a>	Weber Coulee 47.04069 -119.08987	Collection	Boom 100ft	No	Onsite Stage on road shoulder next to Road 3 SE bridge (19075 Rd 3 SE, Warden, WA 98857).	Downstream Resources	Strategy location is next to Road 3 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598.	<a href="#">44</a>	<a href="#">65</a>



#### 4.5.3 Notification Strategy Matrices

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page#)
WWA-1-N	East Columbia Basin Irrigation District 47.09613 -119.14465	Notification	Water Intakes	During Normal Business Hours call ECBID office at 509-488-9671. Inform them of any significant oil spill or potential spill that impacts or threatens the water resources of the Columbia Basin Project.	Notify East Columbia Basin Irrigation District (ECBID) so that staff can protect the resources under their control.	43	69

#### 4.5.4 Staging Area Matrices

***No GRP Staging Areas Currently Exist for this Planning Area***

#### 4.5.5 Boat Launch Matrices

***No GRP Boat Launch Locations Currently Exist for this Planning Area***

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## **APPENDIX 4A**

### **Response Strategy 2-Pagers**

## RESPONSE STRATEGIES - LIST

WWA-1

WWA-2

WWA-3

WWA-4

WWA-5

WWA-6

## Road 1 SE

# WWA-1

<b>Position - Location:</b>	47° 4.487', -119° 13.850'	47° 4' 29.2", -119° 13' 51.0"	47.07478, -119.23083	Moses Lake
<b>Strategy Objective:</b>	Collection : Collect oil moving downstream on canal.			
<b>Implementation:</b>	Transport 100ft boom to site using vehicle. Secure one end to right bank at Point A (47.07486, -119.23085). Extend remaining boom SSE across canal and anchor at Point B (47.07468, -119.23081). Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.			
<b>Staging Area:</b>	Onsite : Stage on road shoulder south of Road 1 SE bridge (12430 Rd 1 SE, Moses Lake, WA 98837).			
<b>Site Safety:</b>	Slips, Trips, Falls; Roadway Hazard			
<b>Field Notes:</b>	Strategy location is next to Road 1 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509 -237-2598. Follow WSDOT guidelines for work zone traffic control. Nearby track belongs to Columbia Basin Railroad.			
<b>Watercourse:</b>	Canal - Irrigation Spillway			
<b>Resources at Risk:</b>	Downstream Resources			



### 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	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

### Recommended Personnel

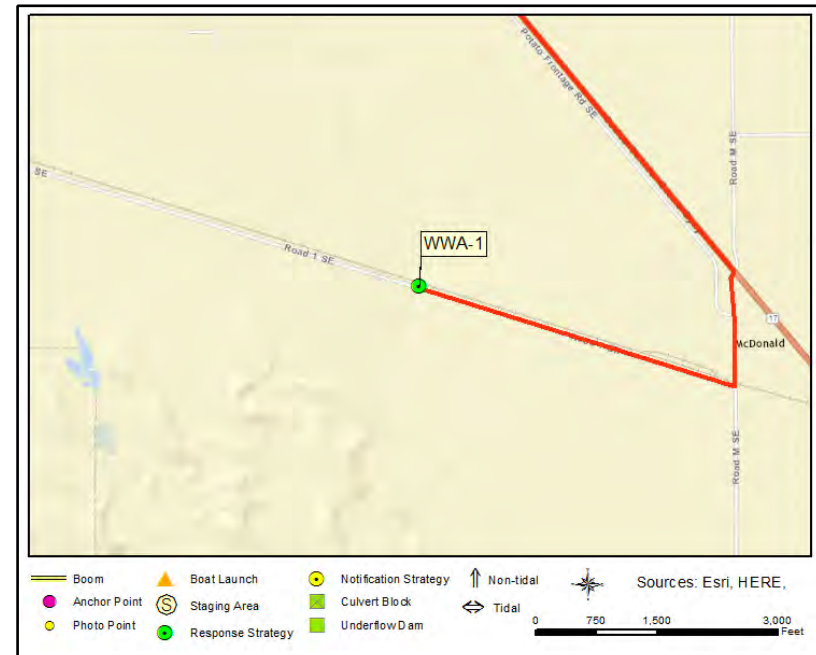
2	Laborer
1	Supervisor

## Road 1 SE

## WWA-1



WWA-1 Photo: Looking NNW toward anchor point B. Water flows from right to left.



## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer  
509-237-2598

**Columbia Basin Railroad**

Land/Property Contact : Emergency Contact  
800-333-8582

## Nearest Address

12430 Road 1 SE  
Moses Lake, WA 98837

## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (3.2 miles)
6. Turn right on Road M SE (0.28 miles)
7. Turn right on Road 1 SE (0.78 miles)
8. Finish at 12430 Road 1 SE, 98837, on the right



## State Route 17 RM 48

## WWA-2

**Position - Location:** 47° 4.142', -119° 12.470' 47° 4' 8.5", -119° 12' 28.2" 47.06904, -119.20784 Moses Lake

**Strategy Objective:** Collection : Collect oil moving downstream on canal.

**Implementation:** Transport 100ft boom to site using vehicle. Secure one end to right bank at Point A (47.06913, -119.20782). Extend remaining boom SSW across canal and anchor at Point B (47.06893, -119.20784). Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite : Stage on road shoulder next to SR-17 bridge (1574 SR-17 S, Moses Lake, WA 98837).

**Site Safety:** Slips, Trips, Falls; Roadway Hazard; Steep Bank

**Field Notes:** Strategy location is next to SR-17 bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. Follow WSDOT guidelines for work zone traffic control. The canal may be dry in the summer.

**Watercourse:** Canal - Irrigation Spillway

**Resources at Risk:** Downstream Resources



## 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	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

## Recommended Personnel

2	Laborer
1	Supervisor

## State Route 17 RM 48

## WWA-2



WWA-2 Photo: Looking north toward anchor point B. Water flows from right to left.



## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer  
509-237-2598

**WSDOT - North Central Region**

Land/Property Contact :  
509-667-3000

## Nearest Address

1574 State Highway 17 S  
Moses Lake, WA 98837

## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (3.63 miles)
6. Finish at 1574 State Highway 17 S, 98837, on the right

**State Route 17 RM 45****WWA-3**

**Position - Location:** 47° 2.143', -119° 10.153' 47° 2' 8.6", -119° 10' 9.2" 47.03572, -119.16922 Moses Lake

**Strategy Objective:** Collection : Collect oil moving downstream on canal.

**Implementation:** Transport 100ft boom to site using vehicle. Install boom back and forth across the canal and then back it with sorbent boom. Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite : Stage on road shoulder next to SR-17 bridge (15149 Road 3.5 SE, Moses Lake, WA 98837).

**Site Safety:** Slips, Trips, Falls; Roadway Hazard; Steep Bank

**Field Notes:** Strategy location is next to SR-17 bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509- 237-2598. Follow WSDOT guidelines for work zone traffic control.

**Watercourse:** Canal - Irrigation Spillway

**Resources at Risk:** Downstream Resources

**Recommended Equipment**

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

**Recommended Personnel**

2	Laborer
1	Supervisor

## State Route 17 RM 45

## WWA-3



WWA-3 Photo: Looking WNW toward anchor point B. Water flows from left to right.



## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer  
509-237-2598

**WSDOT - North Central Region**

Land/Property Contact :  
509-667-3000

## Nearest Address

15149 Road 3.5 SE  
Moses Lake, WA 98837

## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (6.7 miles)
6. Finish at 15149 Road 3.5 SE, 98837, on the right



**Road 2 SE****WWA-4**

**Position - Location:** 47° 3.452', -119° 9.634' 47° 3' 27.1", -119° 9' 38.1" 47.05754, -119.16057 Moses Lake

**Strategy Objective:** Collection : Collect oil moving downstream on canal.

**Implementation:** Transport 100ft boom to site using vehicle. Install boom back and forth across the canal and then back it with sorbent boom. Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite : Stage on road shoulder next to Road 2 SE bridge (15950 Rd 2 SE, Moses Lake, WA 98837).

**Site Safety:** Slips, Trips, Falls; Roadway Hazard

**Field Notes:** Strategy location is next to Road 2 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. Follow WSDOT guidelines for work zone traffic control.

**Watercourse:** Canal - Irrigation Spillway

**Resources at Risk:** Downstream Resources

**Recommended Equipment**

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

**Recommended Personnel**

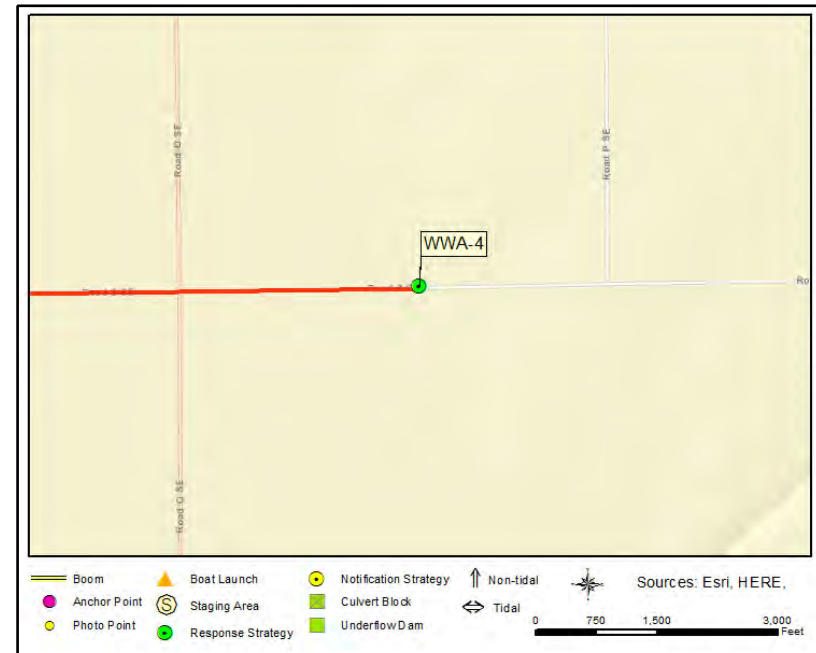
2	Laborer
1	Supervisor

## Road 2 SE

## WWA-4



WWA-4 Photo: Looking NW toward anchor point B. Water flows toward bridge.



## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer

Moses Lake, WA 98837  
509-237-2598

## Nearest Address

15950 Road 2 SE  
Moses Lake, WA 98837

## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (4.74 miles)
6. Turn left on Road N SE (0.03 miles)
7. Bear right on Road 2 SE (1.59 miles)
8. Finish at 15950 Road 2 SE, 98837, on the left

**Road 3 SE****WWA-5**

**Position - Location:** 47° 2.607', -119° 6.527' 47° 2' 36.4", -119° 6' 31.6" 47.04345, -119.10879 Moses Lake

**Strategy Objective:** Collection : Collect oil moving downstream on Weber Coulee.

**Implementation:** Transport 100ft boom to site using vehicle. Deploy boom on downstream/west side of bridge. Install boom back and forth across the canal and then back it with sorbent boom. Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite : Stage on road shoulder next to Road 3 SE bridge (17867 Rd 3 SE, Moses Lake, WA 98837).

**Site Safety:** Slips, Trips, Falls; Water Hazard; Steep Bank; Soft Soil

**Field Notes:** Strategy location is next to the Road 3 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. Follow WSDOT guidelines for work zone traffic control.

**Watercourse:** Canal - Weber Coulee

**Resources at Risk:** Downstream Resources

**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	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

**Recommended Personnel**

2	Laborer
1	Supervisor

## Road 3 SE

## WWA-5



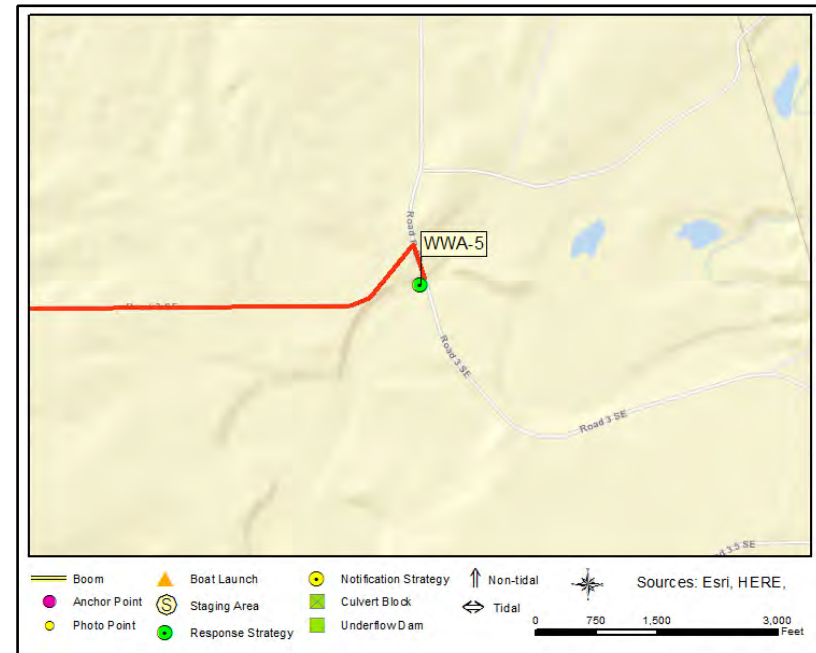
WWA-5 Photo: Looking north toward anchor point B. Stream flows from right to left.

## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer  
509-237-2598

## Nearest Address

17867 Road 3 SE  
Moses Lake, WA 98837



## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (6.04 miles)
6. Turn left on Road 3 SE (3.26 miles)
7. Turn right on Road 3 SE
8. Finish at 17867 Road 3 SE, 98837, on the right



**Weber Coulee****WWA-6**

**Position - Location:** 47° 2.441', -119° 5.392' 47° 2' 26.5", -119° 5' 23.5" 47.04069, -119.08987 Warden

**Strategy Objective:** Collection : Collect oil moving downstream on Weber Coulee.

**Implementation:** Transport 100ft boom to site using vehicle. Deploy boom on upstream/south side of bridge. Use shoreside anchoring posts or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite : Stage on road shoulder next to Road 3 SE bridge (19075 Rd 3 SE, Warden, WA 98857).

**Site Safety:** Slips, Trips, Falls; Steep Bank; Water Hazard

**Field Notes:** Strategy location is next to Road 3 SE bridge. Notify Grant County Department of Emergency Management prior to deployment; call 509-237-2598. Follow WSDOT guidelines for work zone traffic control.

**Watercourse:** Canal - Weber Coulee

**Resources at Risk:** Downstream Resources

**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	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage

**Recommended Personnel**

2	Laborer
1	Supervisor

## Weber Coulee

## WWA-6



WWA-6 Photo: Looking south toward anchor point B. Water flows from left to right.

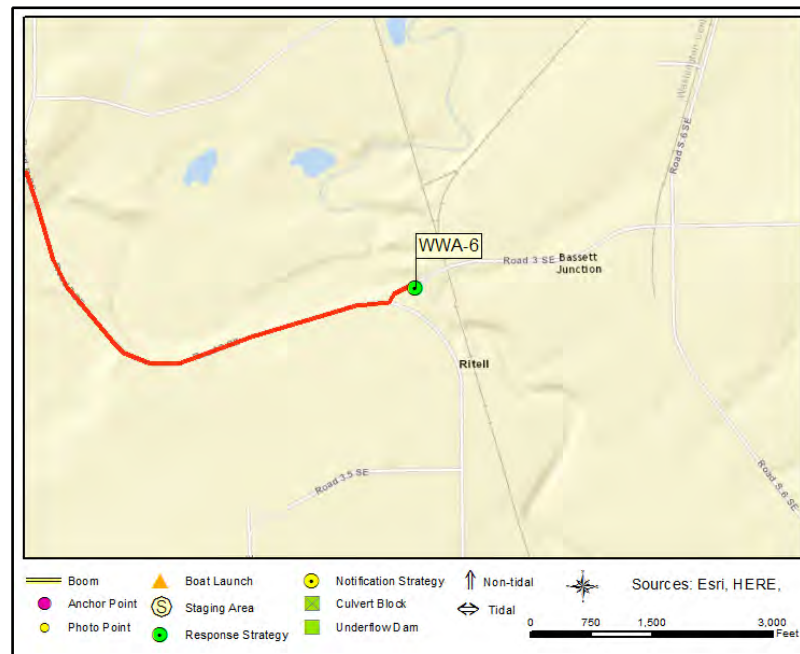
## Site Contact

**Grant County Department of Emergency Management**  
Emergency Contact : 24-Hour Duty Officer

Moses Lake, WA 98837  
509-237-2598

## Nearest Address

19075 Road 3 SE  
Warden, WA 98857



## Driving Directions

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (6.04 miles)
6. Turn left on Road 3 SE (3.3 miles)
7. Turn right on Road R SE (0.22 miles)
8. Continue on Road 3 SE (0.93 miles)
9. Turn left at Road S SE to stay on Road 3 SE (0.07 miles)
10. Finish at 19075 Road 3 SE, 98857, on the right

## **APPENDIX 4B**

### **Notification Strategy 2-Pagers**

# NOTIFICATION STRATEGIES - LIST

WWA-1-N

## East Columbia Basin Irrigation District

WWA-1-N

**Position - Location:** 47° 5.768', -119° 8.679' 47° 5' 46.1", -119° 8' 40.7" 47.09613, -119.14465 Othello

**Strategy Objective:** Notification : Notify East Columbia Basin Irrigation District (ECBID) so that staff can protect the resources under their control.

**Implementation:** During Normal Business Hours call ECBID office at 509-488-9671. Inform them of any significant oil spill or potential spill that impacts or threatens the water resources of the Columbia Basin Project.

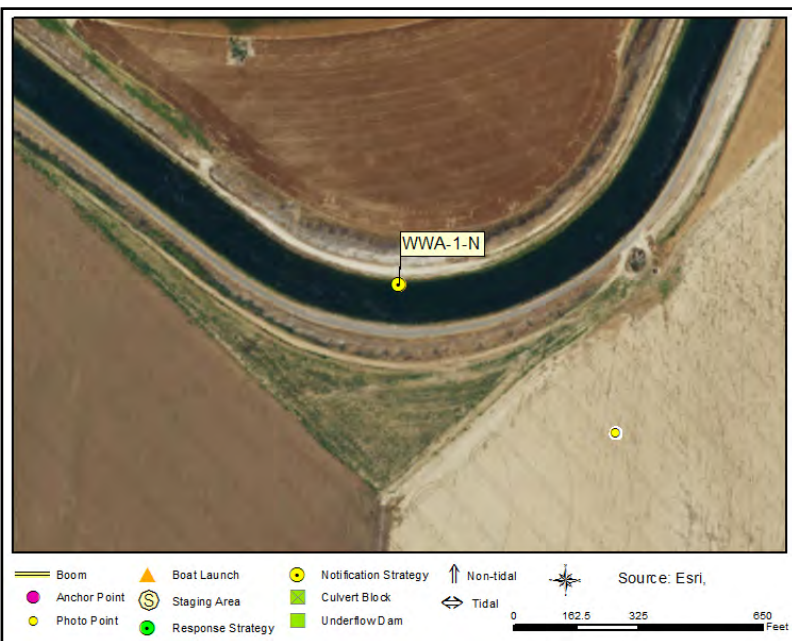
**Field Notes:** The ECBID draws irrigation water through surface water intakes in the Warden Washington area and beyond. The District Supervisor can shut off those water intakes.

**Watercourse:** Canal - Irrigation Spillways

**Resources at Risk:** Water Intakes

**Communication Process and Action:**

During Normal Business Hours call ECBID office at 509-488-9671. Inform them of any significant oil spill or potential spill that impacts or threatens the water resources of the Columbia Basin Project. Once notified, the ECBID staff will determine what action(s) they need to take in order to protect the resources under their control. Actions by the district may include shutting down intakes and closing intake valves.

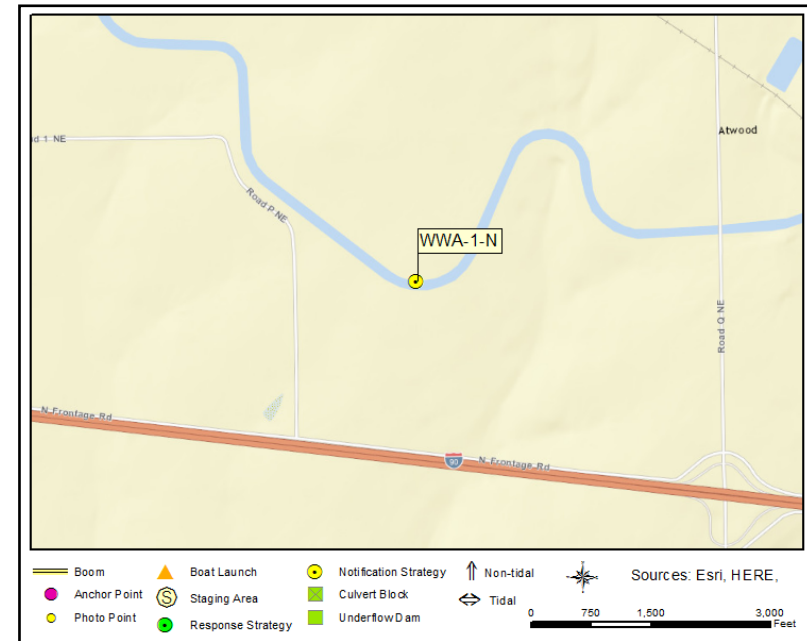


## East Columbia Basin Irrigation District

## WWA-1-N

No Photograph Available

WWA-1-N Photo: Photo Not Available



## Site Contact

**East Columbia Basin Irrigation District**

Primary Contact : Manager  
509-488-9671

**U.S. Bureau of Reclamation**

Secondary Contact : Irrigation Operations  
509-754-0240

## Nearest Address

55 North 8th Avenue  
Othello, WA 99344

## Driving Directions

TO EAST COLUMBIA BASIN IRRIGATION DISTRICT OFFICE:

1. Start at Moses Lake, WA
2. Go southeast on S Division St toward W 4th Ave / E 4th Ave (0.65 miles)
3. Turn left on E Hill Ave (0.32 miles)
4. Turn right on I-90-BL (S Pioneer Way) (0.85 miles)
5. Bear right on WA-17 (I-90-BL) (22.45 miles)
6. Turn right on W Cunningham Rd (WA-24) (0.5 miles)
7. Continue on E Main St (WA-24) (0.93 miles)
8. Turn right on N 8th Ave (0.04 miles)
9. Finish at 55 North 8th Avenue, 99344, on the left

## **APPENDIX 4C**

### **Staging Area 2-Pagers**

## **STAGING AREAS - LIST**

***No GRP Staging Areas Currently Exist for this Planning Area***



**APPENDIX 4D**  
**Boat Launch 2-Pagers**

## **BOAT LAUNCHES - LIST**

***No GRP Boat Launch Locations Currently Exist for this Planning Area***