

MOSES LAKE / CRAB CREEK

GEOGRAPHIC RESPONSE PLAN

(MLCC GRP)

CHAPTER 4

RESPONSE STRATEGIES AND PRIORITIES

October 2015

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 the proximity of sensitive resources to them. 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 movement of oil and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting implementation priorities. Response equipment type and location information can be found on the Western Response Resource List (WRRL). The WRRL is available online at <http://www.wrml.us>. 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. 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 lake or marine environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?

- Are emergency 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 \(WADOT\) guidelines](#) for work zone traffic control should be followed when working on or near a roadway.
 - Washington State Patrol (District 6 - Wenatchee): (509) 682-8090
 - Washington State Patrol (District 4 - Spokane): (509) 227-6566
 - Washington State Patrol (Moses Lake Detachment): (509) 765-6171
 - Grant County Sheriff (509) 762-1160
 - Lincoln County Sheriff: (509) 725-3501
 - Moses Lake Police Department (509) 762-1160

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 4-9). 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.

4.1.2 Historical River Streamflow Ranges:

Streamflow data from U.S. Geological Survey (USGS) was used to determine the mean monthly discharge for rivers and streams in the planning area. Stream discharge is recorded in cubic feet per second (cfs); velocities in miles per hour (mph) or nautical miles per hour (knots) are not available. Table 4.1 provides information that can be used to calculate local river velocities on-site, 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 for USGS gage stations in the planning area are provided below (hyperlinked column headers), and may include real-time or near real-time streamflow data. The USGS National Water System Mapper is useful for locating gage stations of interest, and is available online at <http://maps.waterdata.usgs.gov/mapper/index.html>.

Table 4-1: Water Speed Drift Measurement Table

Time to Drift 100 Feet (seconds)	Velocity (ft/sec)	Velocity (m/sec)	Velocity (knots)	Max Boom Deflection Angle (degrees)	Boom required for 100-foot Profile to Current (feet)	Anchors needed if Placed Every 50 feet (number)
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

Table 4-2: Historic Stream Flow for Crab Creek (USGS Gauge Stations)

	<i>Monthly average flow in Cubic Feet per Second (cfs)</i>	
	Crab Creek near Moses Lake USGS 12467000	Crab Creek at Irby USGS 12465000
Jan	52	93
Feb	103	197
Mar	132	184
Apr	71	98
May	46	48
Jun	46	33
Jul	56	19
Aug	65	12
Sep	68	8.3
Oct	58	7
Nov	35	7.1
Dec	23	16

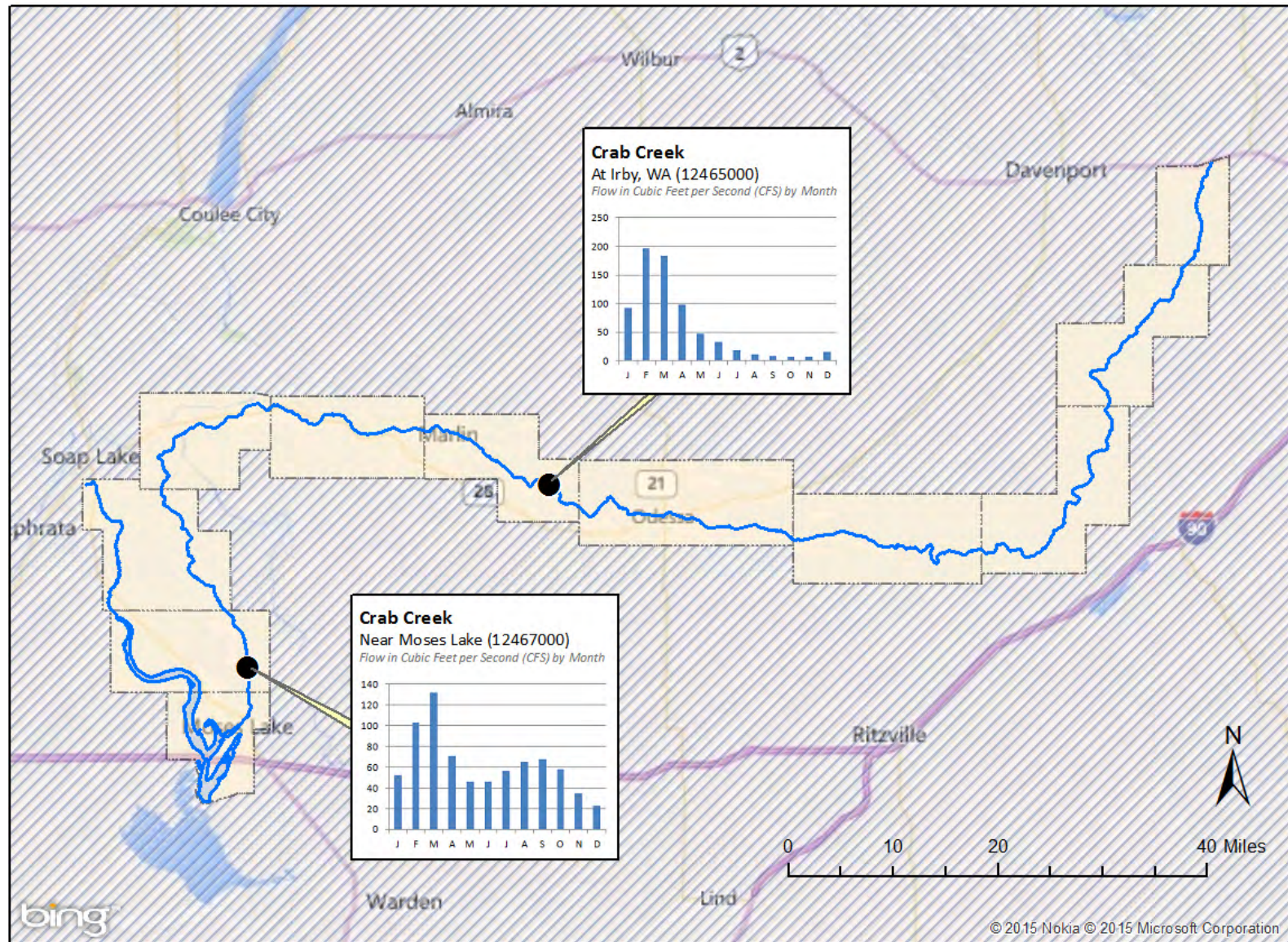


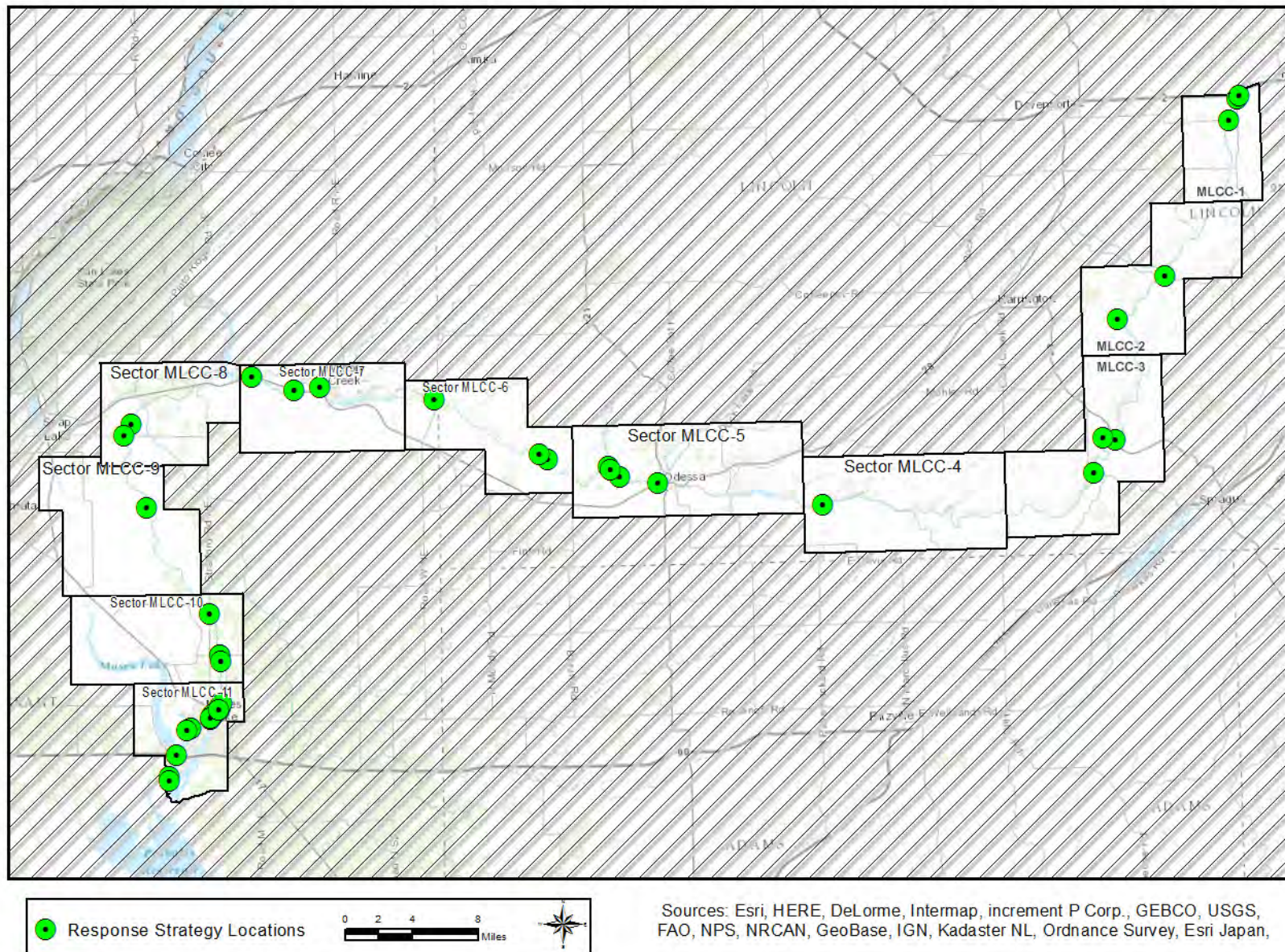
Figure 4-1: Historic streamflow for Crab Creek

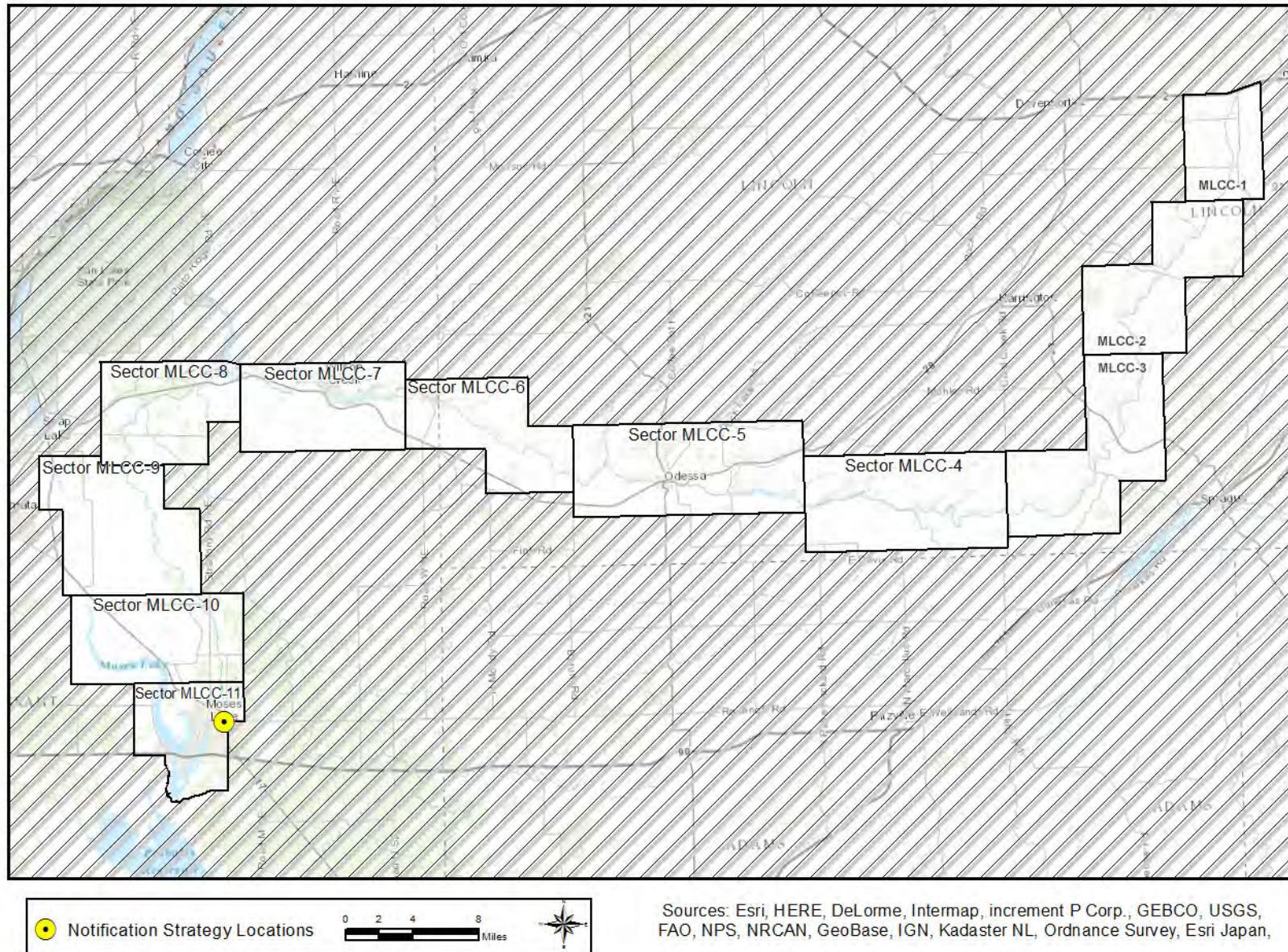
4.2 AREA OVERVIEW MAPS

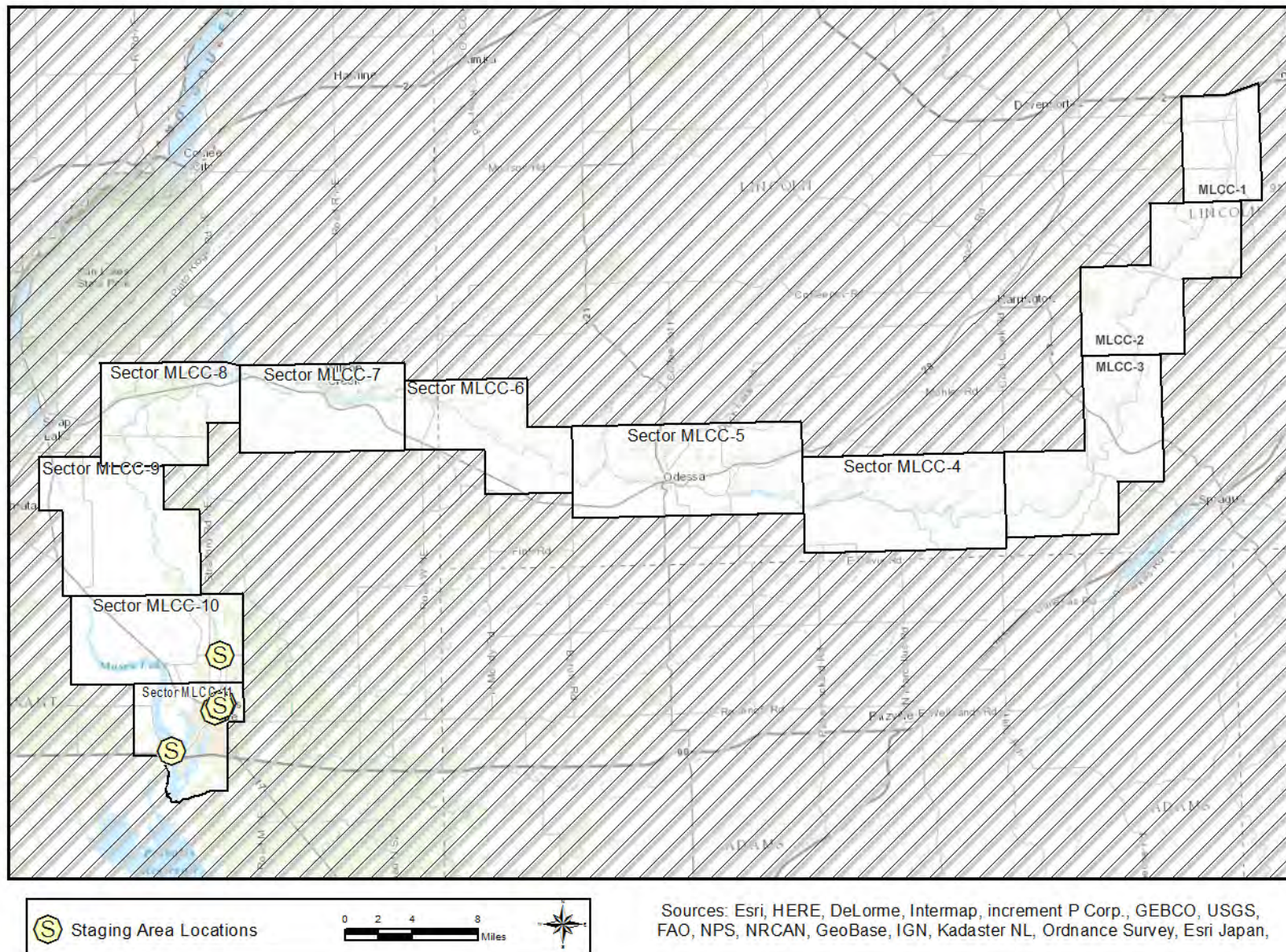
The following maps provide a geographic overview of the Moses Lake/Crab Creek GRP area. Sector maps in Section 4.4 of this chapter provide more detail on the location of response strategies, notification strategies, staging areas, boat launch locations, and potential oil spill origin points. Detailed 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.

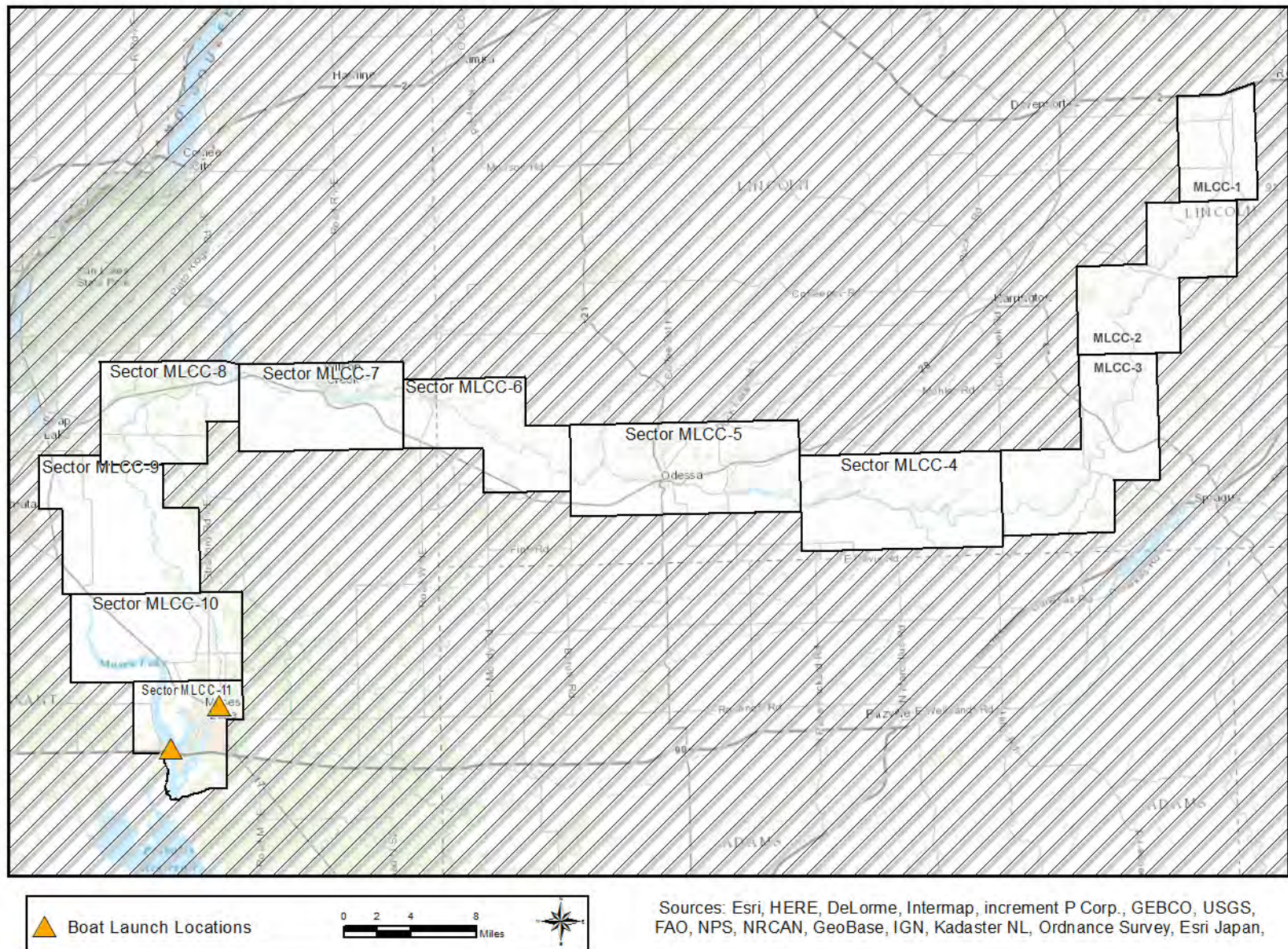
The following area maps are provided for reference:

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











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.

1. Safety is always the number one priority. Do not implement GRP strategies or take actions that will unduly jeopardize public, worker, or personal safety.
2. Notify local public health and safety personnel.
3. 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.
4. Determine the priority or order GRP strategies should be implemented based on the location of the spill or affected area. Priorities based on Potential Oil Spill Origin Points are included in this chapter and should be used unless the situation or circumstances dictate otherwise (see Section 4.3.2).
5. As response resources become available, implement the GRP Strategies in order of priority.
6. 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). Other permits may also be required; see the Northwest Area Contingency Plan (Section 9401) Permit Summary Table for information.

4.3.2 Strategy Priorities based on Potential Spill Origin Points

Potential Oil Spill Origin Points (POSOP) are geographic locations that have a defined list of response strategy implementation priorities in a matching table of 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 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. POSOPs are alphabetically designated.

The following tables provide the strategy implementation order for POSOPs in the Moses Lake/Crab Creek area; points MOLK-A, and CRAB-A through CRAB-E. These priority tables were determined 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 potential spill sources, and other considerations.

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

Table 4-3: Priority Table “MOLK-A” (Moses Lake at I 90 Bridge)

Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details	Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details
N - Winds from the NORTH					E - Winds from the EAST				
1	MOLK-39.0	58	74	165	1	MOLK-39.0	58	74	165
2	MOLK-39.3	58	74	167	2	MOLK-39.3	58	74	167
3	MOLK-42.9	58	75	169	3	MOLK-42.9	58	75	169
S - Winds from the SOUTH					W - Winds from the WEST				
1	MOLK-15.0a	58	73	161	1	MOLK-15.0a	58	73	161
2	MOLK-15.0b	58	74	163	2	MOLK-15.0b	58	74	163
3	CRABC-0.0a	59	61	81	3	CRABC-0.0a	59	61	81
4	MOLK-42.9	58	75	169	4	MOLK-42.9	58	75	169
NE - Winds from the NORTHEAST					NW - Winds from the NORTHWEST				
1	MOLK-39.0	58	74	165	1	MOLK-42.9	58	75	169
2	MOLK-39.3	58	74	167	SW - Winds from the SOUTHWEST				
3	MOLK-42.9	58	75	169	1	MOLK-15.0a	58	73	161
SE - Winds from the SOUTHEAST					2	MOLK-15.0b	58	74	163
1	MOLK-42.9	58	75	169	3	CRABC-0.0a	59	61	81
					4	MOLK-42.9	58	75	169

Table 4-4: Priority Table “CRABC-A” (Crab Creek in Moses Lake at Hwy 17 Bridge)

“CRABC-A” (Crab Creek in Moses Lake at Hwy 17 Bridge)				
Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details Page#
1	<u>CRABC-0.0a</u>	<u>59</u>	<u>61</u>	<u>81</u>
2	<u>CRABC-0.0b</u>	<u>59</u>	<u>61</u>	<u>83</u>
3	<u>CRABC-0.2</u>	<u>59</u>	<u>61</u>	<u>85</u>
4	<u>CRABC-0.3</u>	<u>59</u>	<u>61</u>	<u>87</u>
5	<u>CRABC-0.4</u>	<u>59</u>	<u>62</u>	<u>89</u>
6	<u>CRABC 0.5</u>	<u>59</u>	<u>62</u>	<u>91</u>
7	<u>MOLK-15.0a</u>	<u>58</u>	<u>73</u>	<u>161</u>
8	<u>MOLK-15.0b</u>	<u>58</u>	<u>74</u>	<u>163</u>

Table 4-5: Priority Table “CRABC-B” (Crab Creek in Moses Lake at Road 7 NE)

“CRABC-B” (Crab Creek in Moses Lake at Road 7 NE)				
Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details Page#
1	<u>CRABC-0.7a</u>	<u>59</u>	<u>62</u>	<u>93</u>
2	<u>CRABC-0.8</u>	<u>59</u>	<u>63</u>	<u>99</u>
3	<u>CRABC-1.1a</u>	<u>59</u>	<u>64</u>	<u>103</u>
4	<u>CRABC-1.1b</u>	<u>59</u>	<u>64</u>	<u>105</u>
5	<u>CRABC-1.2</u>	<u>59</u>	<u>65</u>	<u>107</u>
6	<u>CRABC-3.9</u>	<u>57</u>	<u>65</u>	<u>109</u>
7	<u>CRABC-1.0</u>	<u>59</u>	<u>64</u>	<u>101</u>
8	<u>CRABC-0.7c</u>	<u>59</u>	<u>63</u>	<u>97</u>
9	<u>CRABC-0.7b</u>	<u>59</u>	<u>63</u>	<u>95</u>

Table 4-6: Priority Table “CRABC-C” (Crab Creek in Odessa)

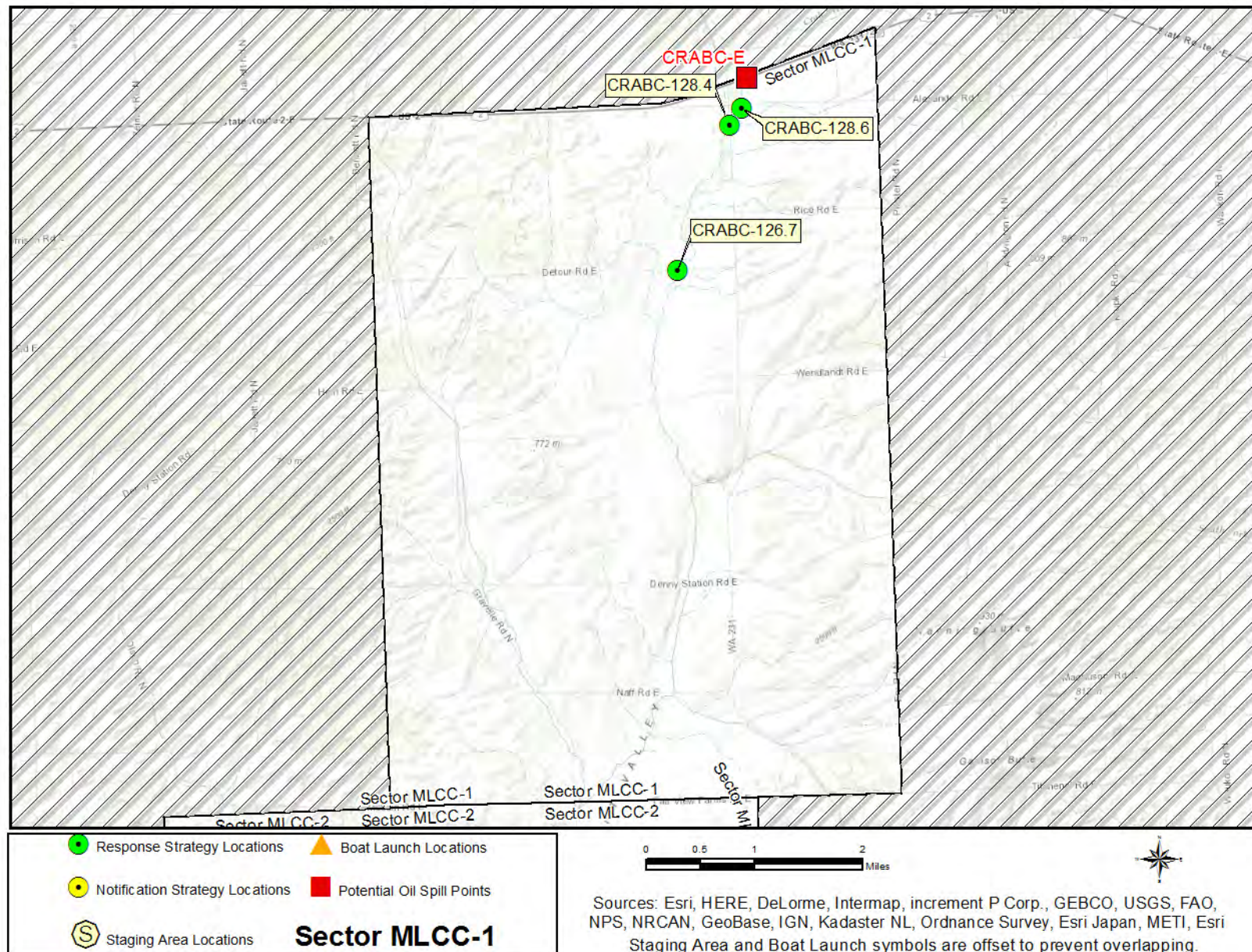
"CRABC-C" (<i>Crab Creek in Odessa</i>)					
Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details Page#	Remarks
1	<u>CRABC-60.2</u>	<u>52</u>	<u>69</u>	<u>135</u>	
2	<u>CRABC-60.4</u>	<u>52</u>	<u>70</u>	<u>137</u>	
3	<u>CRABC-61.1</u>	<u>52</u>	<u>70</u>	<u>139</u>	Intermittent Stream Flow
4	<u>CRABC-63.7</u>	<u>52</u>	<u>70</u>	<u>141</u>	
5	<u>CRABC-54.7</u>	<u>53</u>	<u>69</u>	<u>133</u>	
6	<u>CRABC-54.1</u>	<u>53</u>	<u>69</u>	<u>131</u>	

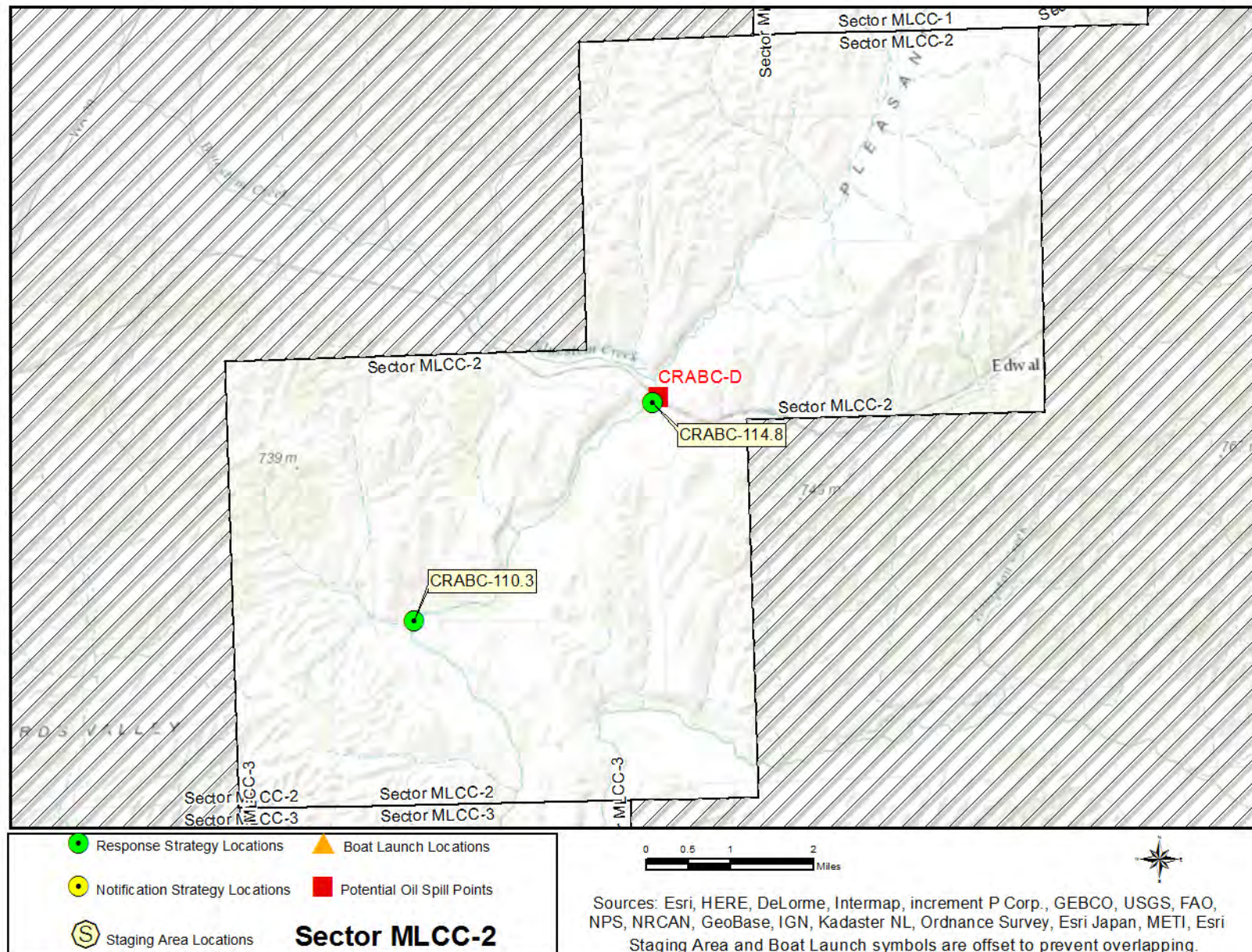
Table 4-7: Priority Table “CRABC-D” (Crab Creek near Edwall)

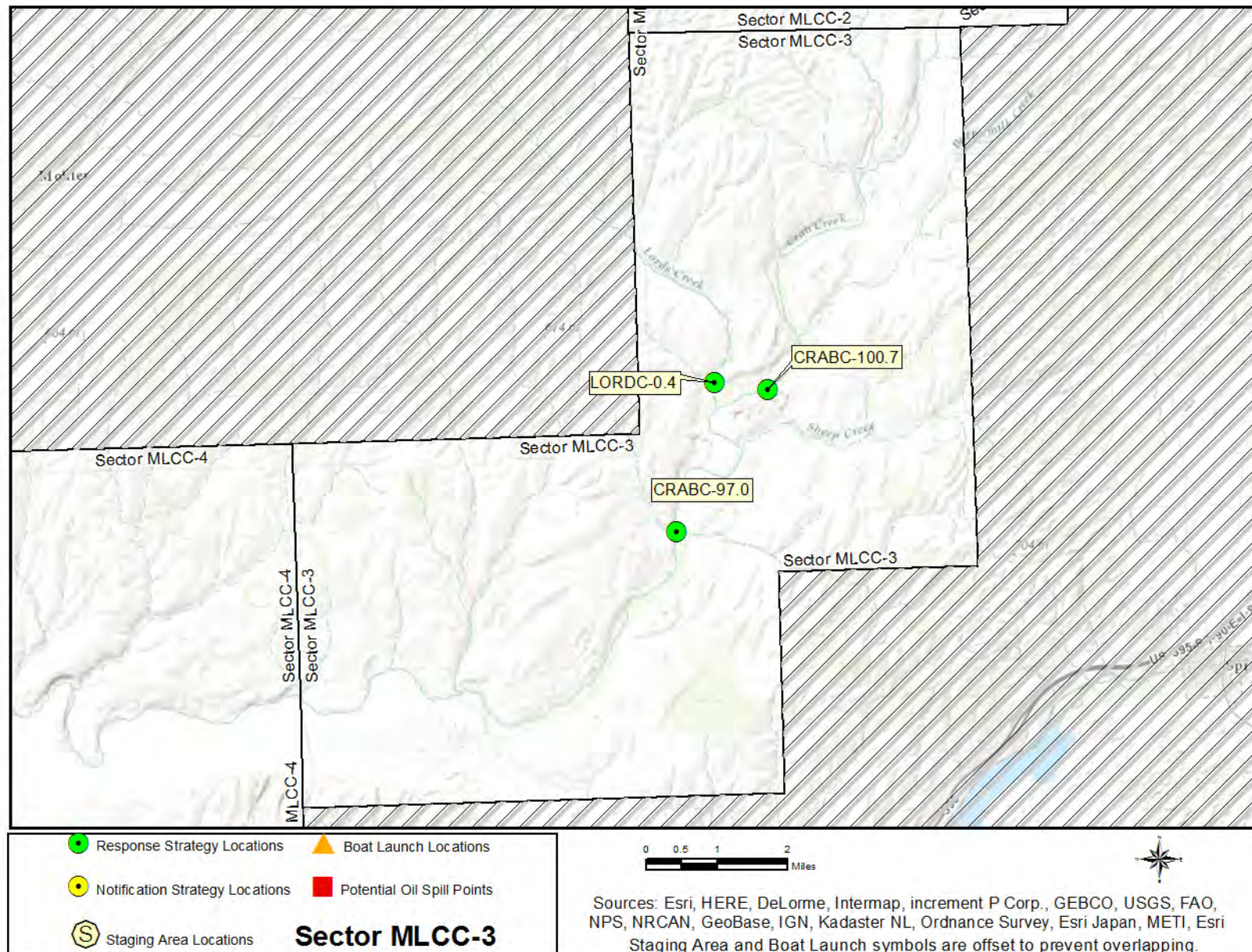
"CRABC-D" (Crab Creek near Edwall)				
Priority	Strategy Number	Sector Map	Strategy Matrix	Strategy Details
1	<u>CRABC-110.3</u>	<u>49</u>	<u>71</u>	<u>149</u>
2	<u>CRABC-114.8</u>	<u>49</u>	<u>72</u>	<u>151</u>

Table 4-8: Priority Table “CRABC-E” (Crab Creek near Reardan)

"CRABC-E" (Crab Creek near Reardan)					
Priority	Strategy Number	Sector Map Page#	Strategy Matrix Page#	Strategy Details Page#	Remarks
1	<u>CRABC-126.7</u>	<u>48</u>	<u>72</u>	<u>153</u>	Intermittent Stream Flow
2	<u>CRABC-128.4</u>	<u>48</u>	<u>72</u>	<u>155</u>	Intermittent Stream Flow
3	<u>CRABC-128.6</u>	<u>48</u>	<u>73</u>	<u>157</u>	Intermittent Stream Flow

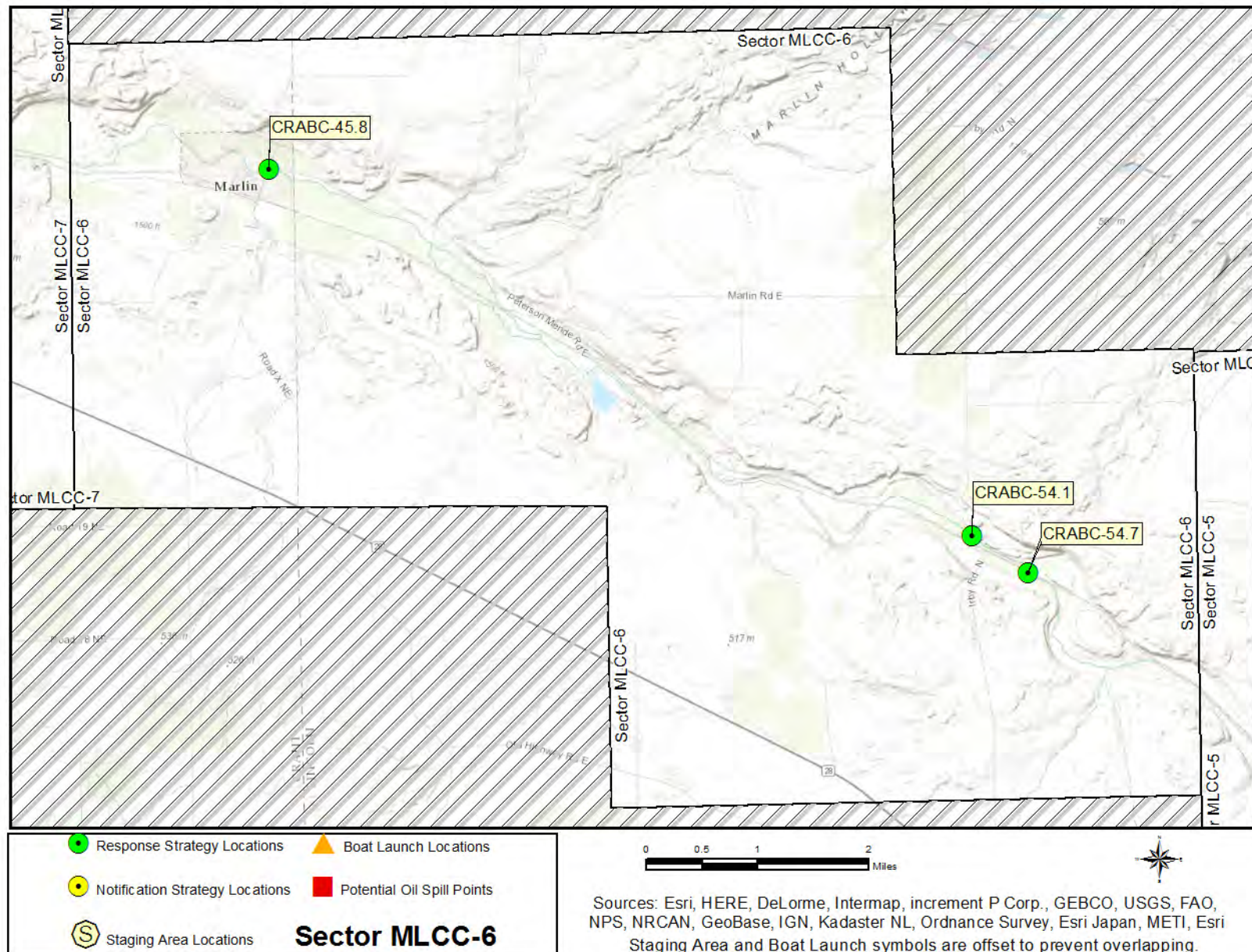


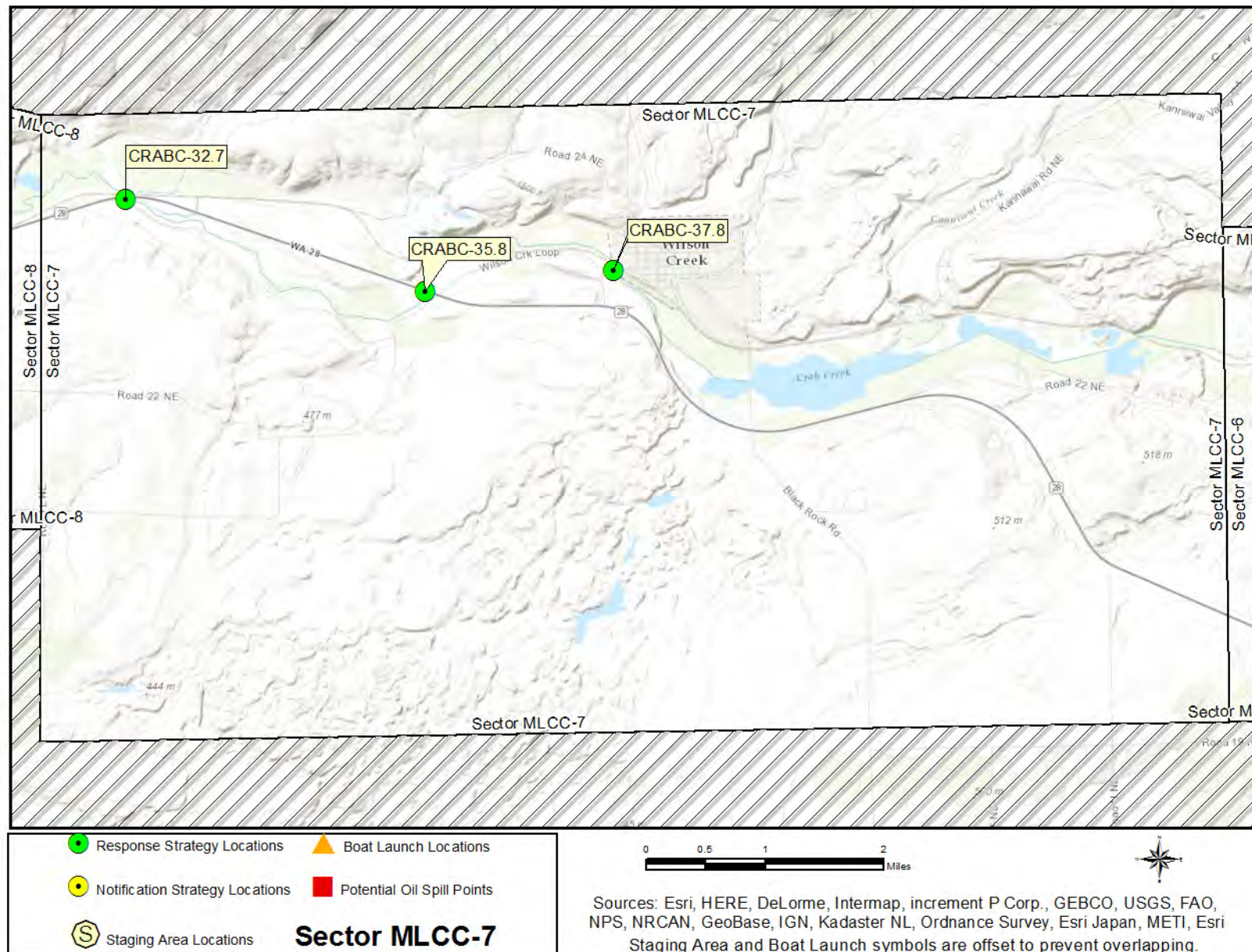


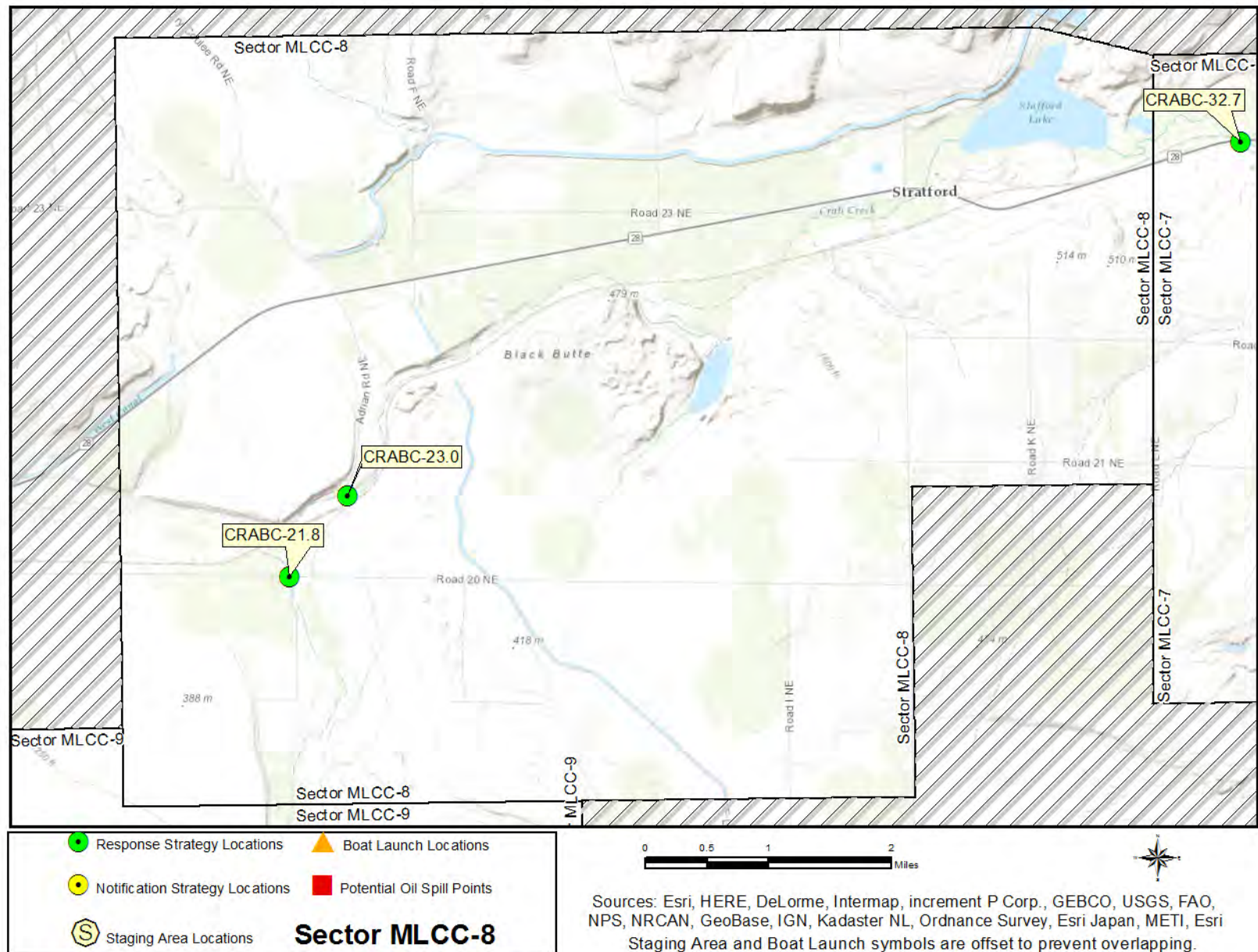


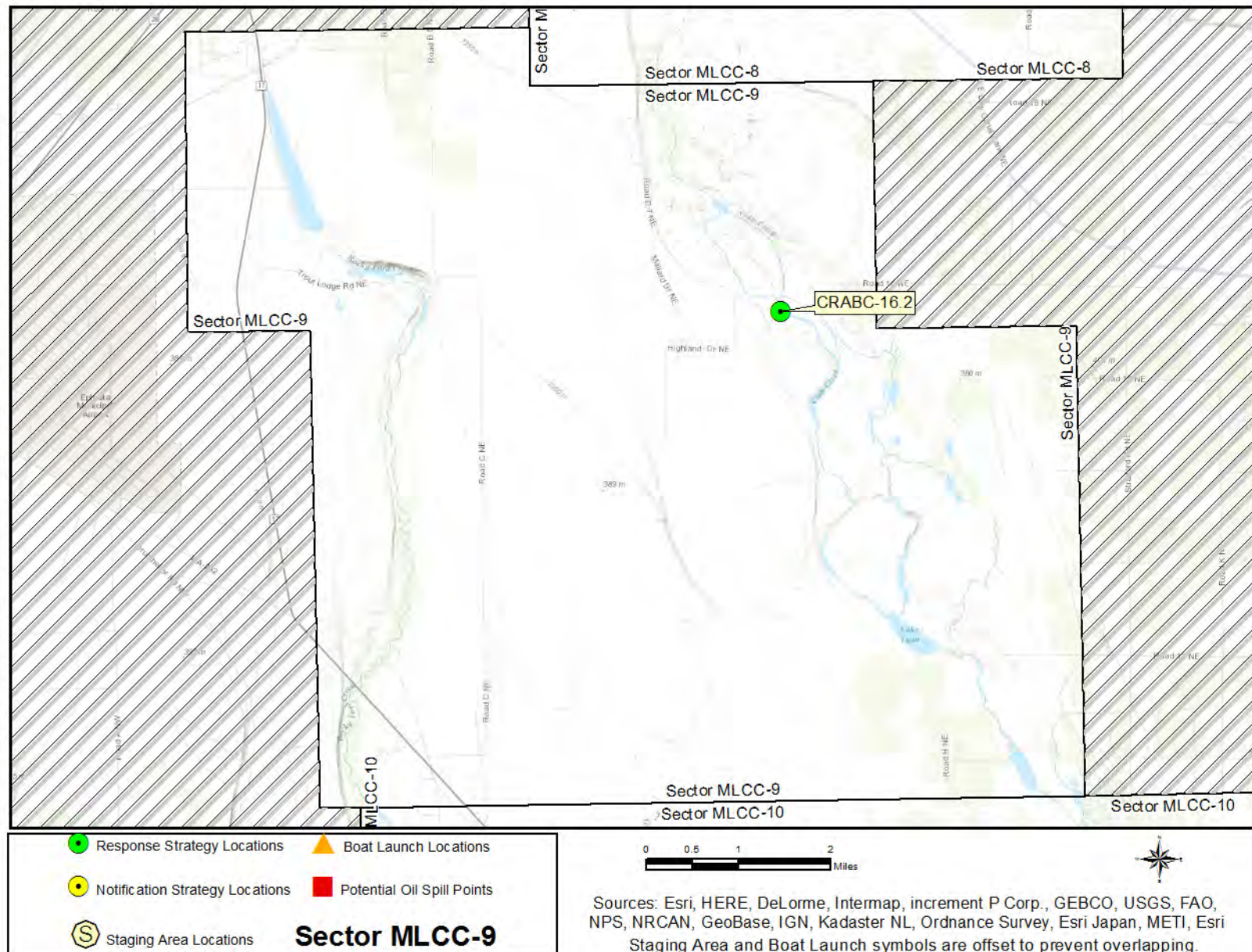


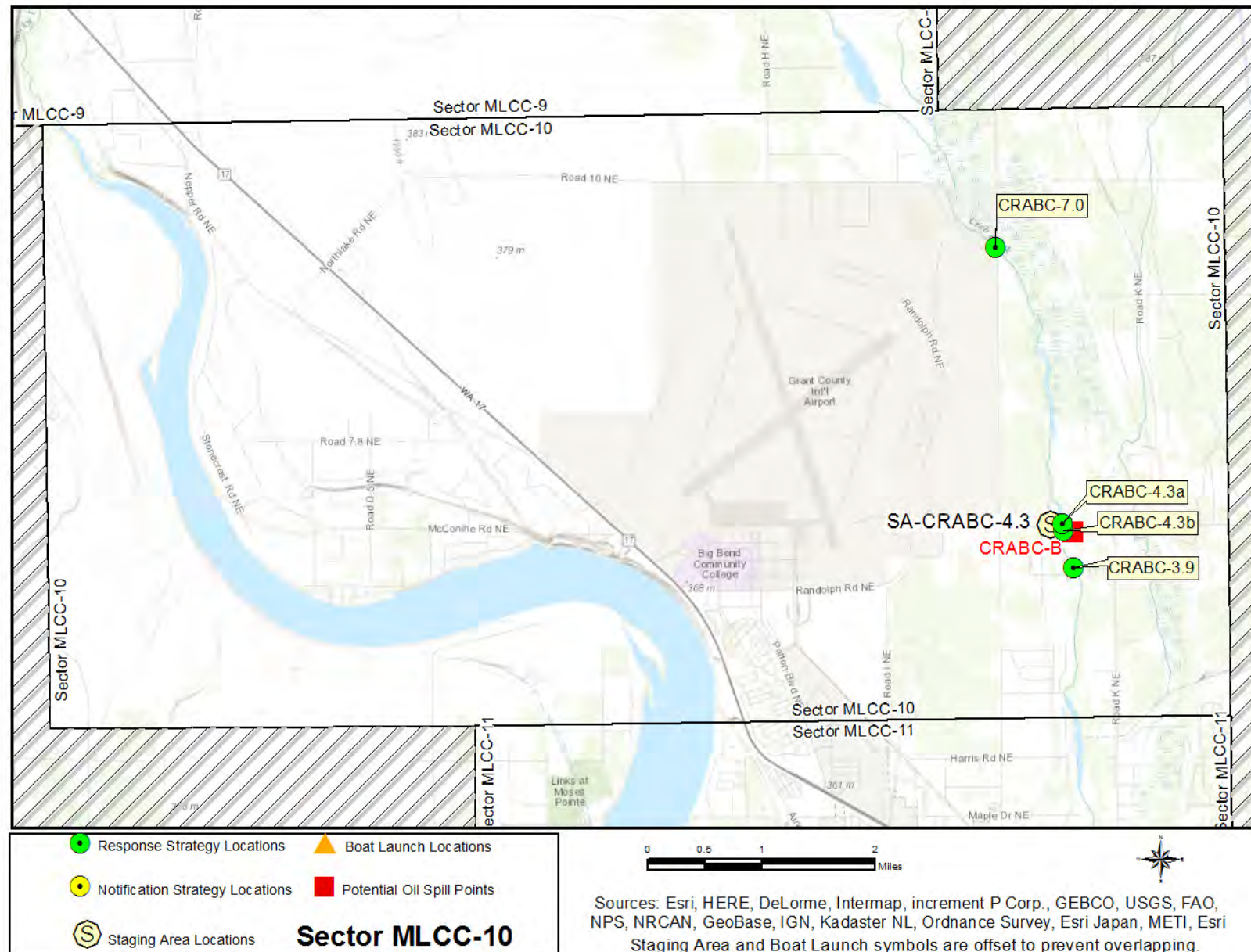


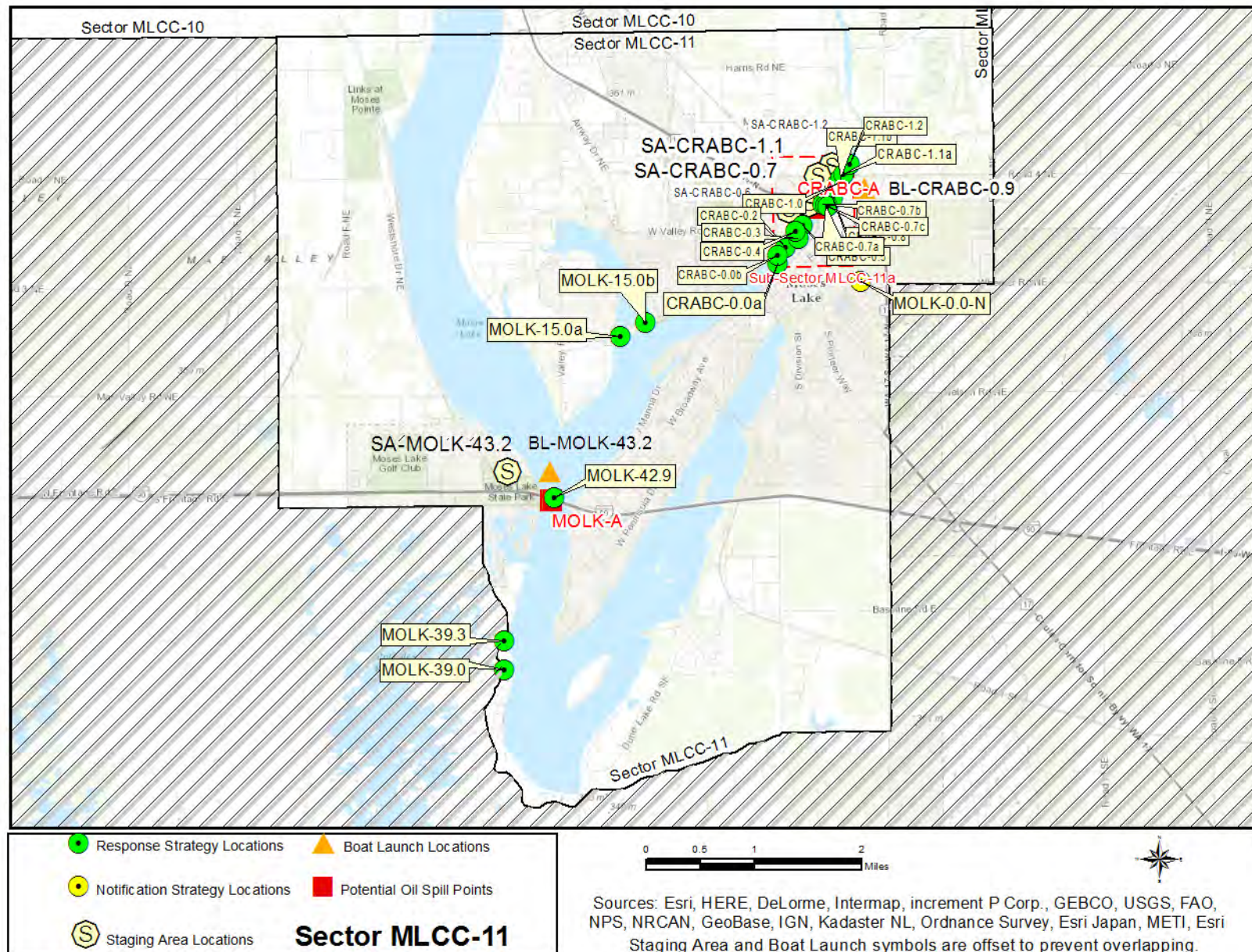


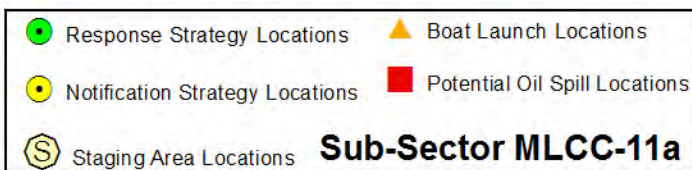
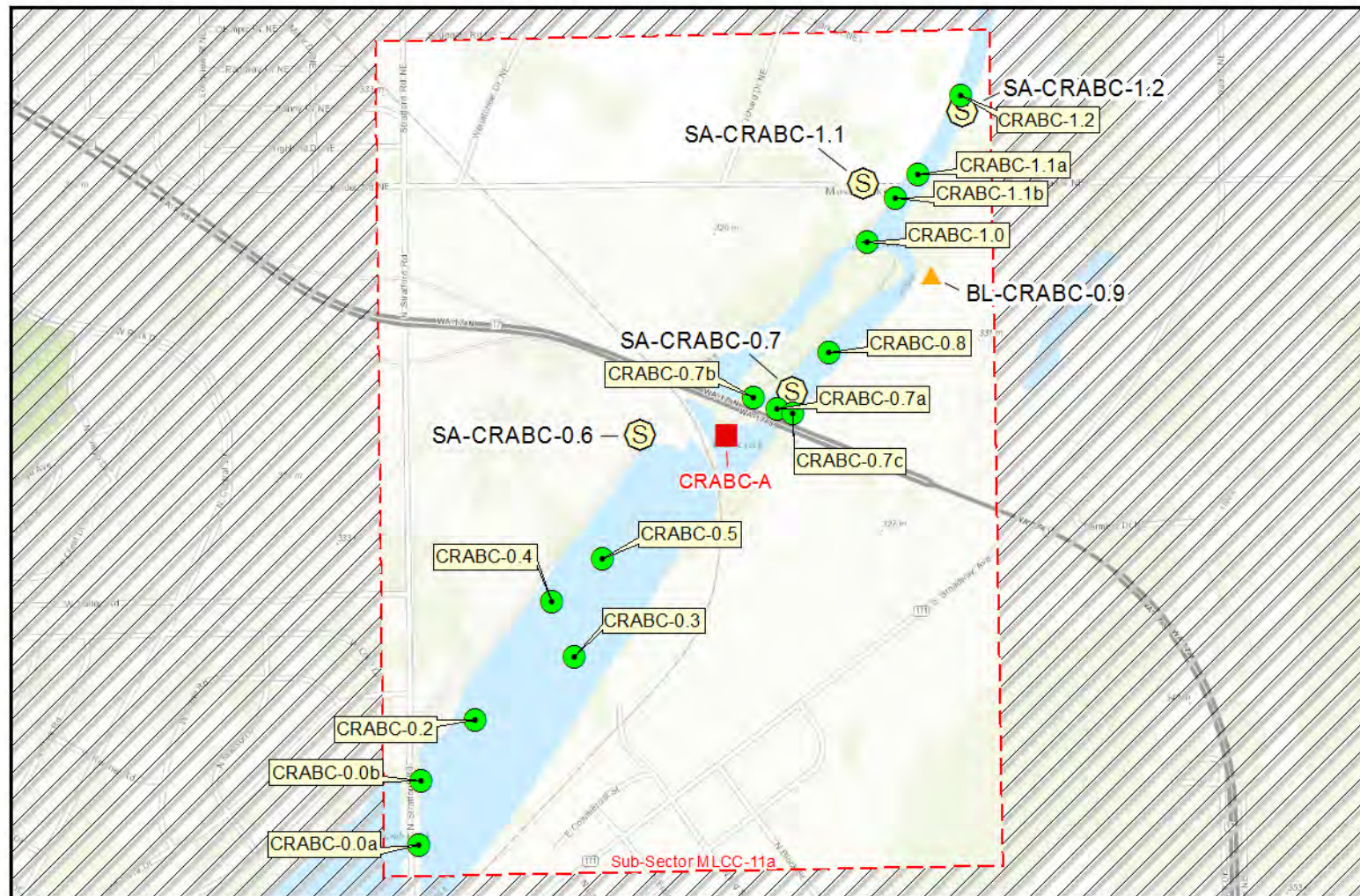












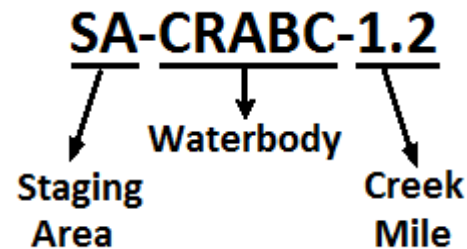
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

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

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 an “SA-” or “BL-” prefix.



Associated short name designations used within this plan include:

CRABC = Crab Creek	N = Notification Strategy
LORDC = Lords Creek	SA = Staging Area
MOLK = Moses Lake	BL = Boat Launch

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#)
CRABC-0.0a	Crab Creek at N Stratford Road Bridge 47.13405 -119.27818	Exclusion	Boom 200ft	Yes	Remote Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.	59	81
CRABC-0.0b	Crab Creek at N Stratford Road (North Culvert) 47.13520 -119.27811	Exclusion	Boom 100ft	Yes	Remote Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	Culvert has large metal attachment that extends 6ft out into the lake and may be submerged during high water.	59	83
CRABC-0.2	Crab Creek - N Stratford Road (Collection 2) 47.13628 -119.27666	Collection	Boom 600ft	Yes	Onsite Stage equipment onsite; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	No Information	59	85
CRABC-0.3	Lower Crab Creek (Diversion 2) 47.13737 -119.27403	Diversion	Boom 700ft	Yes	Remote Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.	59	87

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-0.4	Lower Crab Creek (Collection 1) 47.13837 -119.27461	Collection	Boom 600ft	Yes	Remote Stage equipment at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.	59	89
CRABC-0.5	Lower Crab Creek (Diversion 1) 47.13912 -119.27325	Diversion	Boom 600ft	Yes	Remote Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl	Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.	59	91
CRABC-0.7a	Crab Creek at Hwy 17 Bridge 47.14175 -119.26862	Exclusion	Boom 200ft	Yes	Remote Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.	59	93

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-0.7b	Crab Creek - Hwy 17 (NW of Bridge) 47.14195 -119.26923	Exclusion	Boom 100ft	Yes	Remote Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.	Freshwater Wetlands, Freshwater Wildlife	Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.	59	95
CRABC-0.7c	Crab Creek - Hwy 17 (SE of Bridge) 47.14166 -119.26821	Exclusion	Boom 100ft, Sorbent 200ft	Yes	Remote Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.	Downstream Resources, Freshwater Wildlife	Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.	59	97
CRABC-0.8	Crab Creek upstream of Highway 17 (Collection) 47.14273 -119.26724	Collection	Boom 300ft	Yes	Onsite Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.	59	99

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-1.0	Crab Creek - Unnamed Island (North End) 47.14470 -119.26619	Exclusion	Boom 300ft, Sorbent 200ft	Yes	Remote Stage at SA-CRABC-1.1 about 0.1 miles upstream.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Hand-launch small workboat and transport boom/equipment to site from staging area (SA-CRABC-1.1) about 0.1 miles upstream. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek banks.	59	101
CRABC-1.1a	Crab Creek - Kinder Road (Collection) 47.14589 -119.26484	Collection	Boom 300ft	Yes	Onsite Staging Area SA-CRABC-1.1 is onsite; stage equipment on dirt trail/road.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Must use hand-launch workboat from this location to implement strategy.	59	103
CRABC-1.1b	Crab Creek - Kinder Road NE (Deflection) 47.14548 -119.26544	Deflection	Boom 200ft	Yes	Onsite Staging Area SA-CRABC-1.1 is onsite; stage equipment on dirt trail/road.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Must use hand-launch workboat from this location to implement strategy.	59	105

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-1.2	Crab Creek - Millerville Worksite (Cherokee Road) 47.14729 -119.26369	Collection	Boom 600ft	Yes	Onsite Staging Area SA- CRABC-1.2 is onsite.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Notify Property Owner before arrival; call 509-765-8709 (Millerville Rentals). Must use hand-launch workboat from this location to implement strategy.	59	107
CRABC-3.9	Crab Creek - Chapparral Drive NE 47.18447 -119.26434	Collection	Boom 400ft	Yes	Onsite Stage on site after notifying Property Owner.	Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds	Modify strategy as needed, based on stream flow conditions. Work with private property owner on creek right for access.	57	109
CRABC-4.3a	Crab Creek - 7NE Bridge Site #2 (Upstream) 47.19009 -119.26615	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote Stage at SA-CRABC-4.3, gravel lot ~350ft east of bridge on north side of road.	Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds	Modify strategy as needed, based on stream flow conditions.	57	111

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-4.3b	Crab Creek - 7NE Bridge Site #2 (Downstream) 47.18925 -119.26604	Collection	Boom 400ft, Sorbent 400ft	Yes	Remote Stage at SA-CRABC-4.3, gravel lot ~350ft east of bridge on north side of road.	Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds	Modify strategy as needed, based on stream flow conditions. Work with private property owner on creek left for access.	57	113
CRABC-7.0	Crab Creek - Moses Lake-Stratford Road 47.22542 -119.27786	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage in dirt/gravel lot to left/west before bridge (~220ft before south end of bridge)	Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds	Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near roadway. Use plywood sheets to safely access river left.	57	115
CRABC-16.2	Crab Creek - Road 16 NE (Moses Lake) 47.31997 -119.35699	Collection	Boom 200ft, Sorbent 200ft	No	Onsite Stage on shoulder or behind guard rail near NW corner of bridge (upstream side of roadway on creek right)	Bald Eagle, Freshwater Wetlands, Grebes - Concentrations, Habitat and Waterfowl, Resident Fish	Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines for working on/near roadway.	56	117

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-21.8	Crab Creek - Road 20 NE (Soap Lake) 47.38289 -119.38483	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage off roadway at/near SW corner of bridge.	Downstream Habitat, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby	Intermittent flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.	55	119
CRABC-23.0	Crab Creek - Adrian Road NE (Soap Lake) 47.39231 -119.37453	Collection	Boom 300ft, Sorbent 300ft	No	Onsite Stage on dirt/gravel pull-out trail on SE corner of roadway before guard rail.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near roadway.	55	121
CRABC-32.7	Crab Creek - Highway 28 - Site 2 47.43248 -119.21860	Collection	Boom 200ft	No	Onsite Stage off shoulder of Hwy 28 on small pull-off about 200ft west of bridge	Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Migratory Waterfowl, Shorebirds	Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near Hwy.	54	123

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-35.8	Crab Creek - Highway 28 - Site 1 47.42061 -119.16495	Collection	Boom 200ft, Sorbent 300ft	No	Onsite Very limited. Stage on shoulder of highway behind guardrail (if possible)	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines.	54	125
CRABC-37.8	Crab Creek - Railroad Street (Wilson Creek) 47.42275 -119.13108	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage in dirt/gravel lot near NE corner of bridge near BNSF rail line.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Resident Fish	Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines.	54	127
CRABC-45.8	Crab Creek - Urquhart Avenue (Marlin) 47.40988 -118.98356	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish	Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near road/bridge.	53	129

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-54.1	Crab Creek - N Irby Road Bridge 47.36048 -118.85033	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish	Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.	53	131
CRABC-54.7	Crab Creek - Beyond East End of Ott Road (Irby) 47.35539 -118.83977	Collection	Boom 200ft	No	Onsite Stage on or near roadway on creek left before RR bridge. Follow WSDOT work zone traffic control guidelines.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish	Before deployment, notify BNSF; call 800-832-5452. Inform them that you'll be temporarily working near tracks between rail milepost 1561 & 1562 on the Columbia River sub in Irby, WA.	53	133
CRABC-60.2	Crab Creek - Cemetery Road - Site 2 47.34782 -118.76128	Collection	Boom 200ft	Yes	Onsite Stage on or near roadway. Follow WSDOT work zone traffic control guidelines.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish	Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines for working on roadway (as needed).	52	135

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-60.4	Crab Creek - Cemetery Road - Site 1 47.34534 -118.75873	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish	Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.	52	137
CRABC-61.1	Crab Creek - Napier Road 47.33863 -118.74779	Collection	Boom 100ft, Sorbent 100ft	Yes	Onsite Stage off Napier Road on dirt driveway/path into old ranch.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Sensitive Resources	Intermittent stream flow at this location. Modify strategy as needed, based on stream flow conditions.	52	139
CRABC-63.7	Crab Creek - Highway 28 (Odessa) 47.33277 -118.69856	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage off NE corner of Hwy 28 bridge behind guardrail (between guardrail and tracks). 4x4 vehicle recommended.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Listed IBA	Follow WSDOT work zone traffic control guidelines if staging on shoulder of roadway. Modify strategy as needed, based on stream flow conditions.	52	141

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-74.6	Crab Creek - Laney Brothers Road N 47.31058 -118.48678	Collection	Boom 300ft, Sorbent 300ft	No	Onsite Stage on shoulder of roadway or in gravel pullout located ~400ft north of bridge.	Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Herons, Resident Fish	Follow WSDOT work zone traffic control guidelines if staging on shoulder of roadway. Modify strategy as needed, based on stream flow conditions.	51	143
CRABC-97.0	Crab Creek - Doerschlag Road 47.33174 -118.13697	Underflow Dam	Boom 100ft, Sorbent 200ft	No	Onsite Stage off Doerschlag Road; gravel pull-out located on west side of bridge.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Modify strategy as needed, based on stream flow conditions. Install Underflow Dam on downstream side of bridge if time allows.	50	145
CRABC-100.7	Crab Creek - Highway 23 near Harding Road 47.36038 -118.10824	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on shoulder of Hwy 23 (NE corner of roadway after guardrail)	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Staging on shoulder of Hwy 23 is very limited; follow WSDOT work zone traffic control guidelines. Modify strategy as needed, based on stream flow conditions.	50	147
CRABC-110.3	Crab Creek - Canby Bridge Road (Harrington) 47.46572 -118.10074	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on shoulder of roadway or on roadway near bridge; follow WSDOT work zone traffic control guidelines.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Modify strategy as needed, based on stream flow conditions.	49	149

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-114.8	Crab Creek - Bluestem Road (Edwall) 47.50232 -118.03804	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on shoulder of roadway; follow WSDOT work zone traffic control guidelines.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Modify strategy as needed, based on stream flow conditions.	49	151
CRABC-126.7	Crab Creek - Detour Road 47.63614 -117.94911	Collection	Boom 100ft, Sorbent 200ft	No	Onsite Stage on roadway shoulder; follow WSDOT work zone traffic control guidelines.	Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby	Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions.	48	153
CRABC-128.4	Crab Creek - Hwy 231 (Reardan) 47.65534 -117.93789	Underflow Dam	Boom 100ft, Sorbent 200ft	No	Onsite Stage at WSDOT SR 231 Stockpile Site adjacent to creek right; call WSDOT at 509-999- 1712 in advance.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install Underflow Dam if time allows.	48	155

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
CRABC-128.6	Crab Creek - Alexander Road (Reardan) 47.65760 -117.93529	Culvert Block	Boom 100ft, Sorbent 200ft	No	Onsite Stage on roadway; follow WSDOT work zone traffic control guidelines.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install culvert block if time allows.	48	157
LORDC-0.4	Lords Creek - Harding Road E 47.36216 -118.12418	Underflow Dam	Boom 100ft, Sorbent 200ft	No	Onsite Stage on shoulder of roadway.	Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife	Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install Underflow Dam if time allows.	50	159
MOLK-15.0a	Moses Lake - Crest Island (West) 47.12461 -119.30948	Exclusion	Boom 700ft	Yes	Remote Stage at Blue Heron Park (SA-MOLK-43.2)	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Waterfowl Concentrations	Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; call 509-764-3805. Strategy site is 1.6 miles NW of ramp.	58	161

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
MOLK-15.0b	Moses Lake - Crest Island (East Side) 47.12642 -119.30434	Exclusion	Boom 800ft	Yes	Remote Stage at Blue Heron Park (SA-MOLK-43.2)	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby, Waterfowl	Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; call 509-764-3805. Strategy site is 1.8 miles NW of ramp.	58	163
MOLK-39.0	Moses Lake - Sand Dune Road (South Outlet) 47.07997 -119.33335	Exclusion	Boom 300ft, Sorbent 200ft	No	Onsite Stage in parking area at south side of outlet channel off Dune Road.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Listed IBA, Waterfowl Concentrations	Ensure Moses Lake Irrigation District has been notified before implementing this strategy; call 509-765-8716. Gates/Outlet Structure leads to Potholes Reservoir.	58	165
MOLK-39.3	Sand Dune Road (North Outlet) 47.08386 -119.33318	Exclusion	Boom 300ft, Sorbent 200ft	No	Onsite Stage in parking area at south side of outlet channel off Dune Road.	Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Listed IBA, Waterfowl Concentrations	Ensure Moses Lake Irrigation District has been notified before implementing this strategy; call 509-765-8716. Gates/Outlet Structure leads to Potholes Reservoir.	58	167

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
MOLK-42.9	Moses Lake - Interstate 90 Bridge 47.10311 -119.32295	Exclusion	Boom 400ft	Yes	Remote Stage at Blue Heron Park (SA-MOLK-34.2) near Boat Ramp	Freshwater Wetlands, Freshwater Wildlife	Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; Call 509-764-3805. Strategy site is 0.3 miles SSE of ramp.	58	169

4.5.3 Notification Strategy Matrices

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page#)	Strategy Details (Page#)
MOLK-0.0-N	Moses Lake Irrigation District 47.13146 -119.26190	Notification	Economic Resource, Other, Water Intakes	Call 509-765-8716. Moses Lake Irrigation District email is mlird@mlird.org	Notify Moses Lake Irrigation District about oil impacting or potentially impacting the lake	58	173

4.5.4 Staging Area Matrices

Number	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page#)	Strategy Details (Page#)
SA-CRABC-0.6	Lower Crab Creek Staging Area	47.14131 -119.27159	1005 N Stratford Rd Moses Lake, WA 98837	No Information	CRABC-0.3, CRABC-0.0a, CRABC-0.4, CRABC-0.5, CRABC-0.0b	Small gravel/dirt lot that can be used to stage equipment and possibly hand-launch a small work boat. Hwy 17 southbound, turnoff immediately before bridge and railroad tracks.	59	177
SA-CRABC-0.7	Crab Creek - Moses Lake Trucking Staging Area	47.14204 -119.26759	3644 East Broadway Avenue Moses Lake, WA 98837	Moses Lake Trucking Property Owner 3644 East Broadway Avenue Moses Lake, WA 98837 509-765-1387	CRABC-0.7a, CRABC-0.7c, CRABC-0.8, CRABC-0.7b	Site located on Moses Lake Trucking property adjacent to Crab Creek (creek left); call 509-765-1387 for access.	59	179
SA-CRABC-1.1	Crab Creek - Kinder Road Staging Area	47.14574 -119.26563	10288 Kinder Rd NE Moses Lake, WA 98837	No Information	CRABC-1.1b, CRABC-1.0, CRABC-1.1a	Dirt/grass road from east end of Kinder Road NE leads to creek. Stage equipment on road/trail near creek.	59	181
SA-CRABC-1.2	Millerville Worksite Staging Area	47.14700 -119.26302	10804 Road 4 NE Moses Lake, WA 98837	Millerville Rentals Moses Lake, WA 98837 509-765-8709	CRABC-1.2	Dirt/Grass field on creek left off Cherokee Road	59	183
SA-CRABC-4.3	Crab Creek - 7NE Road	47.18998 -119.26434	10715 Road 7 NE Moses Lake, WA 98837	No Information	CRABC-4.3a, CRABC-4.3b	Gravel lot on north side of road about 350ft east of bridge over creek.	57	185
SA-MOLK-43.2	Moses Lake Blue Heron Park	47.10659 -119.32768	111 Westshore Drive Moses Lake, WA 98837	City of Moses Lake Parks and Recreation 411 S Balsam Street Moses Lake, WA 98837 509-764-3805	MOLK-15.0a, MOLK-15.0b, MOLK-42.9	Contact City of Moses lake Parks and Recreation at 509-764-3805. See: http://www.cityofml.com/index.aspx?NID=538	58	187

4.5.5 Boat Launch Matrices

Number	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page#)	Strategy Details (Page#)
BL-CRABC-0.9	Crab Creek Moses Lake Trucking Boat Launch	47.14410 -119.26502	3644 East Broadway Ave Moses Lake, WA 98837	Moses Lake Trucking Property Owner 3644 East Broadway Ave Moses Lake, WA 98837 509-765-1387	CRABC-0.7a, CRABC-0.7c, CRABC-0.8, CRABC-0.7b	Site located on Moses Lake Trucking property; call 509-765-1387 for access. May be able to launch <19ft workboat during periods of high water. At low water, hand-launch workboat recommended.	59	191
BL-MOLK-43.2	Moses Lake Blue Heron Park	47.10659 -119.32768	111 Westshore Drive Moses Lake, WA 98837	City of Moses Lake Parks and Recreation 411 S Balsam Street Moses Lake, WA 98837 509-764-3805	CRABC-0.3, CRABC-0.0a, MOLK-15.0a, CRABC-0.2, MOLK-15.0b, CRABC-0.4, MOLK-42.9, CRABC-0.5, CRABC-0.0b	Boat Launch provides good access to most areas of Moses Lake north of Interstate 5. Contact City of Moses lake Parks and Recreation at 509-764-3805. See: http://www.cityofml.com/index.aspx?NID=538	58	193

Appendix 4A

Response Strategy 2-Pagers

RESPONSE STRATEGIES – LIST

<u>CRABC-0.0a</u>	<u>CRABC-0.0b</u>	<u>CRABC-0.2</u>	<u>CRABC-0.3</u>	<u>CRABC-0.4</u>
<u>CRABC-0.5</u>	<u>CRABC-0.7a</u>	<u>CRABC-0.7b</u>	<u>CRABC-0.7c</u>	<u>CRABC-0.8</u>
<u>CRABC-1.0</u>	<u>CRABC-1.1a</u>	<u>CRABC-1.1b</u>	<u>CRABC-1.2</u>	<u>CRABC-3.9</u>
<u>CRABC-4.3a</u>	<u>CRABC-4.3b</u>	<u>CRABC-7.0</u>	<u>CRABC-16.2</u>	<u>CRABC-21.8</u>
<u>CRABC-23.0</u>	<u>CRABC-32.7</u>	<u>CRABC-35.8</u>	<u>CRABC-37.8</u>	<u>CRABC-45.8</u>
<u>CRABC-54.1</u>	<u>CRABC-54.7</u>	<u>CRABC-60.2</u>	<u>CRABC-60.4</u>	<u>CRABC-61.1</u>
<u>CRABC-63.7</u>	<u>CRABC-74.6</u>	<u>CRABC-97.0</u>	<u>CRABC-100.7</u>	<u>CRABC-110.3</u>
<u>CRABC-114.8</u>	<u>CRABC-126.7</u>	<u>CRABC-128.4</u>	<u>CRABC-128.6</u>	<u>LORDC-0.4</u>
<u>MOLK-15.0a</u>	<u>MOLK-15.0b</u>	<u>MOLK-39.0</u>	<u>MOLK-39.3</u>	<u>MOLK-42.9</u>

Crab Creek at N Stratford Road Bridge**CRABC-0.0a**

Position - Location: 47° 8.043', -119° 16.691' 47° 8' 2.6", -119° 16' 41.4" 47.13405, -119.27818 Moses Lake

Strategy Objective: Exclusion : Keep oil out of Moses Lake

Implementation: Using workboat from Blue Heron Park (BL-MOLK-43.2) transport 200ft boom to site from SA-CRABC-0.6. Secure one end of boom to bank near NE corner of N Stratford Rd Bridge at Point A (47.13421, -119.27828). Then extend boom south 130ft, securing the remaining boom end to bank near the SE corner of the bridge at Point C (47.13382, -119.27824). Pull center point of boom east, about 80ft east of bridge, and anchor near Point B forming chevron. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring system to keep boom apex secure in water.

Staging Area: Remote: Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).

Site Safety: Slips, Trips, Falls; Slips, Trips, Falls; Water Hazard; Low Clearance for Workboats under Bridge.

Field Notes: Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
200	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (jet drive)

Recommended Personnel

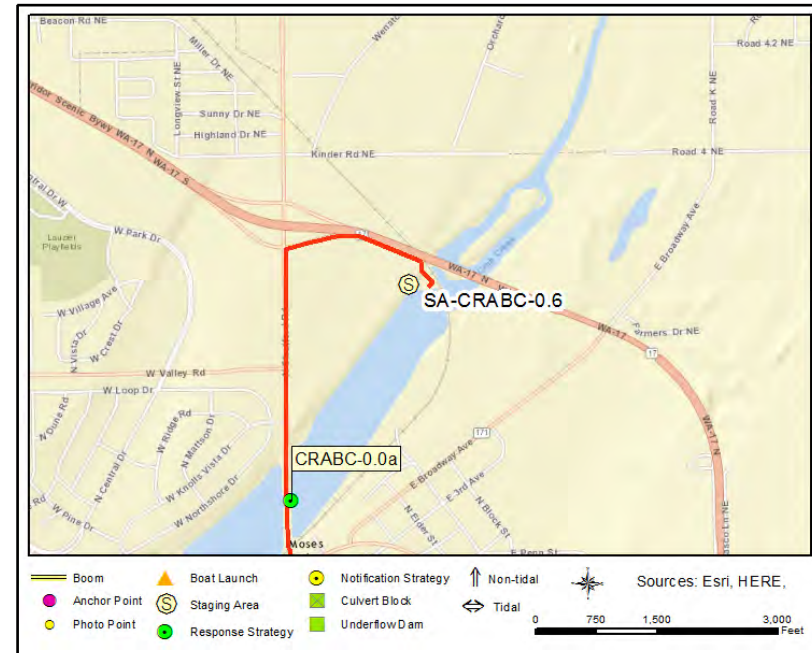
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek at N Stratford Road Bridge

CRABC-0.0a



CRABC-0.0a Photo: Aerial view of strategy location with boom configuration depicted on photograph.



Site Contact

No Information

Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-0.6)

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90 BUS/Moses Lake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Crab Creek at N Stratford Road (North Culvert)**CRABC-0.0b**

Position - Location: 47° 8.112', -119° 16.687' 47° 8' 6.7", -119° 16' 41.2" 47.13520, -119.27811 Moses Lake

Strategy Objective: Exclusion : Keep oil away from north culvert

Implementation: Using workboat from Blue Heron Park (BL-MOLK-43.2) transport 100ft boom to site from SA-CRABC-0.6. Secure end of boom to shore on east side of N Stratford Rd about 25ft north of the north culvert near Point A (47.13525, -119.2782). Extend boom south 50ft, securing the remaining boom end to shore about 25ft south of the culvert. Pull center point of boom out from shore about 40ft to the east until a chevron boom configuration is formed, then anchor in place. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring system to keep boom secure in water.

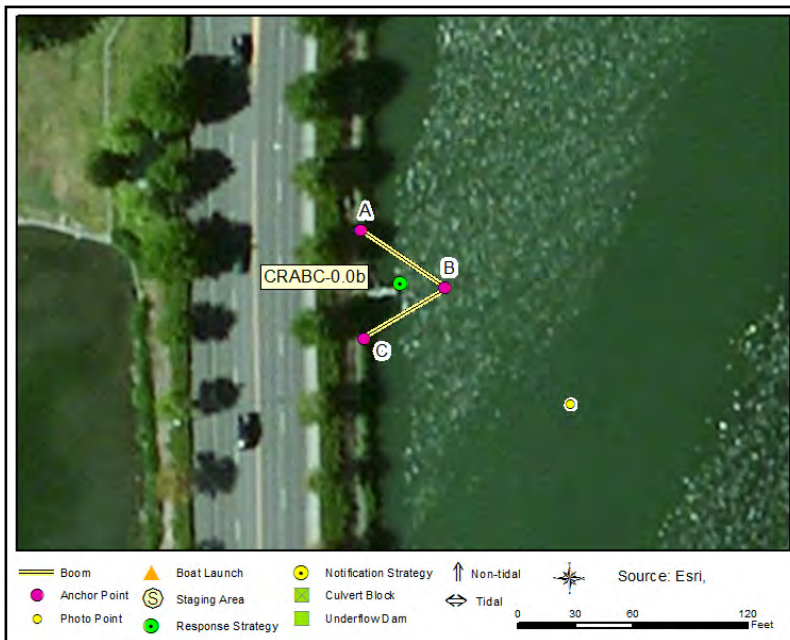
Staging Area: Remote: Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).

Site Safety: Slips, Trips, Falls; Slips, Trips, Falls; Water Hazard; Low Clearance for Workboats under Bridge.

Field Notes: Culvert has large metal attachment that extends 6 ft out into the lake and may be submerged during high water.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
100	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (jet drive)

Recommended Personnel

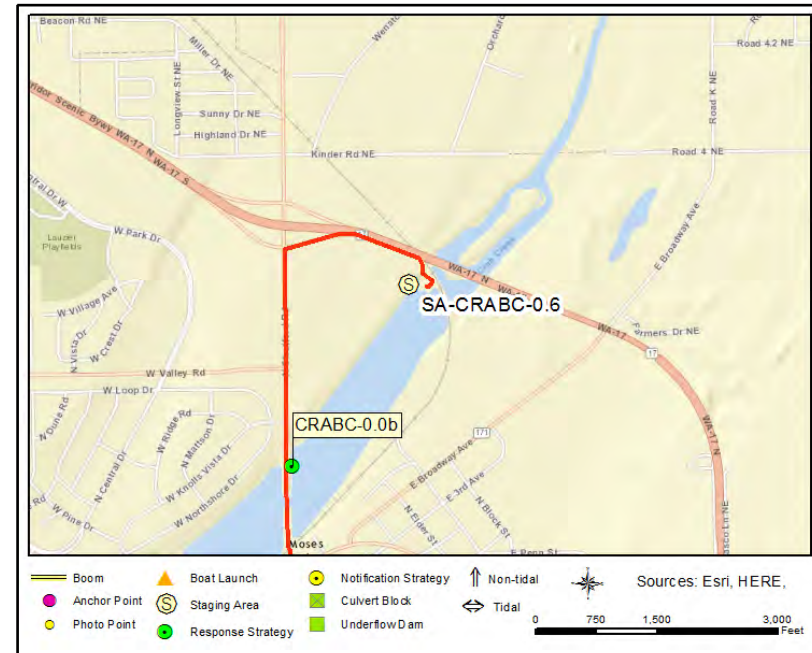
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek at N Stratford Road (North Culvert)

CRABC-0.0b



CRABC-0.0b Photo: Aerial view of strategy location with boom configuration depicted on photograph.



Site Contact

No Information

Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-0.6)

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90 BUS/Moses Lake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Crab Creek - N Stratford Road (Collection 2)

CRABC-0.2

Position - Location: 47° 8.177', -119° 16.600' 47° 8' 10.6", -119° 16' 36.0" 47.13628, -119.27666 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 600ft length of boom to bank on creek right at/near Point B (47.13598,-119.27771). Using workboat set anchor at/near Point A (47.13662, -119.27557, about 400ft upstream from Point B and 350ft out from creek right). Then extend boom from shore using workboat and secure remaining end to anchoring system at Point A. Use additional anchoring systems (as needed) to keep boom secure in water. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek bank. Vac-truck or skimmer collection.

Staging Area: Onsite: Stage equipment onsite; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).

Site Safety: Slips, Trips, Falls; Water Hazard; Low Clearance for Workboats under Bridge.

Field Notes: No Information

Watercourse: Creek - Crab Creek

Resources at Risk: Raptors, Waterfowl, Wetlands



● Response Strategy ● Anchor Point
● Photo Point — Boom

0 125 250 500 Feet
World Imagery: Maxar

Recommended Equipment

1	Each	Anchoring Post Driver(s)
2	Each	Anchoring Post(s) - (shoreside)
6	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	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (jet drive)

Recommended Personnel

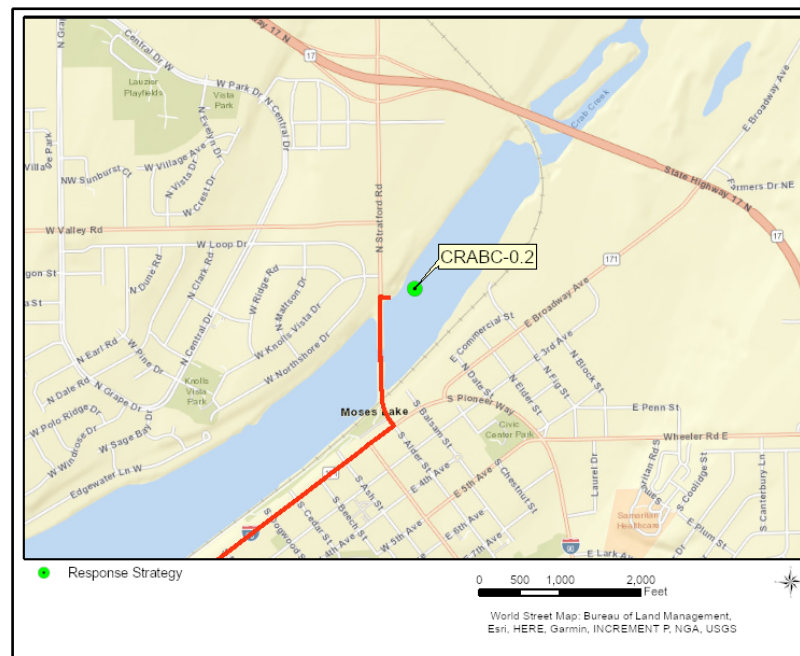
1	Boat Operator
3	Laborer
1	Supervisor

Crab Creek - N Stratford Road (Collection 2)

CRABC-0.2



CRABC-0.2 Photo: View of boom deployment from shore.



Site Contact

No Information

Not Determined :

Nearest Address

515 N Stratford Rd
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 176
2. At end of exit turn left onto Lakeshore Drive (I-90BUS/WA-171)
3. After 2.9mi turn left onto N Stratford Road
4. After 0.3 miles (immediately after passing over Crab Creek) turn right into vacant lot adjacent to creek, next to 515 N Stratford Road.

CRABC-0.3

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl

1	Boat Operator
3	Laborer
1	Supervisor



Lower Crab Creek (Diversion 2)

CRABC-0.3



CRABC-0.3 Photo: Aerial view of strategy location with partial boom line depicted on photograph.

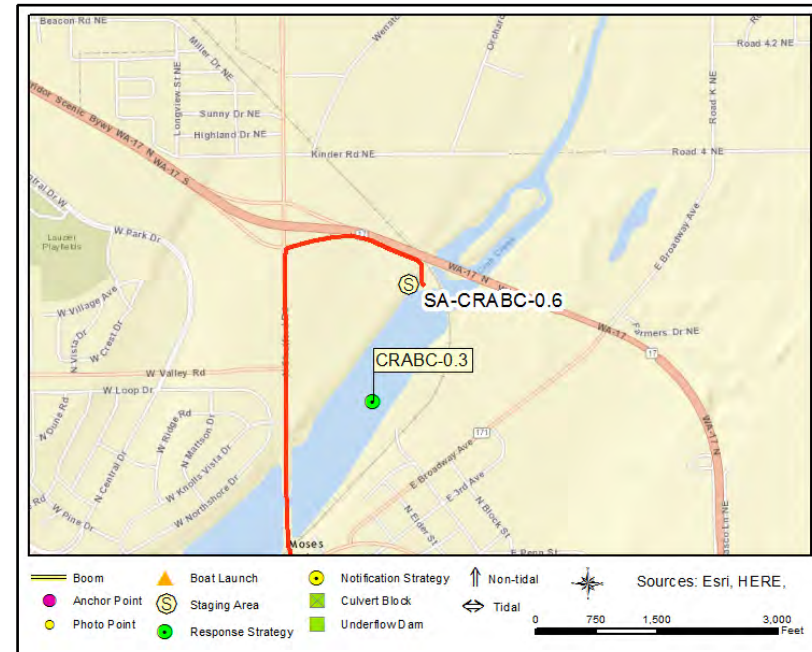
Site Contact

No Information

Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-0.6)

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90 BUS/Moses Lake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Lower Crab Creek (Collection 1)

CRABC-0.4

Position - Location: 47° 8.302', -119° 16.477' 47° 8' 18.1", -119° 16' 28.6" 47.13837, -119.27461 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Twin strategy, deploy with CRABC-0.5. Secure end of 600ft length of boom to bank on creek right at/near Point B (47.13871, -119.27335). Using workboat set anchor at/near Point A (47.13871, -119.27335, about 480ft upstream from Point B and 300ft out from creek right). Then extend boom from shore using workboat and secure remaining end to anchoring system at Point A. Use additional anchoring systems (as needed) to keep boom secure in water. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek bank. Vac-truck or skimmer collection.

Staging Area: Remote: Stage equipment at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).

Site Safety: Slips, Trips, Falls; Water Hazard; Low Clearance for Workboats under Bridge.

Field Notes: Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Raptors, Waterfowl, Wetlands



● Response Strategy ● Anchor Point
● Photo Point — Boom

0 130 260 520 Feet
World Imagery: Maxar

Recommended Equipment

2 Each	Anchoring Post(s) - (shoreside)
6 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	Heaving Line(s)
1 Each	Vac Truck or Skimmer and Storage
1 Each	Workboat(s) - (jet drive)

Recommended Personnel

1 Boat Operator
3 Laborer
1 Supervisor

Lower Crab Creek (Collection 1)

CRABC-0.4



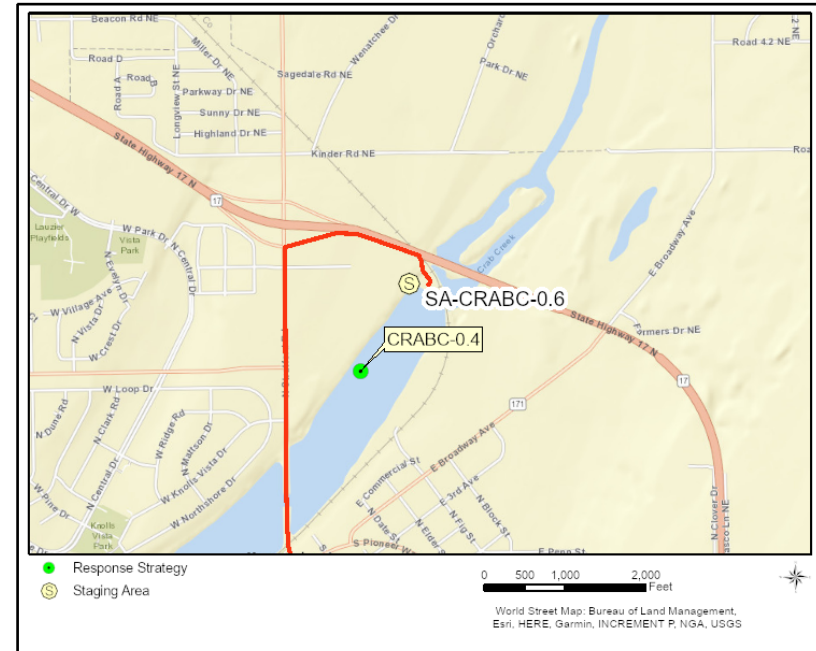
CRABC-0.4 Photo: Aerial view of strategy location on creek right with boom depicted on photograph.

Site Contact

No Information
Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-0.6)

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90 BUS/Moses Lake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Lower Crab Creek (Diversion 1)

CRABC-0.5

Position - Location:	47° 8.347', -119° 16.395'	47° 8' 20.8", -119° 16' 23.7"	47.13912, -119.27325	Moses Lake
Strategy Objective:	Diversion : Divert oil moving downstream to collection strategy on creek right			
Implementation:	Twin strategy, deploy with CRABC-0.4. Secure end of 600ft length of boom to bank on creek left at/near Point A (47.13943, -119.27095). Using workboat set anchor system at/near Point B (47.13914, -119.27325, about 400ft downstream from Point A and 400ft out from creek left). Then extend boom from shore using workboat and secure remaining end to anchoring system at Point B. Use additional anchoring systems (as needed) to keep boom secure in water. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek bank.			
Staging Area:	Remote: Stage at SA-CRABC-0.6; Use Boat Launch at Blue Heron Park (BL-MOLK-43.2).			
Site Safety:	Slips, Trips, Falls; Water Hazard; Low Clearance for Workboats under Bridge.			
Field Notes:	Transport boom/equipment to site from staging area (SA-CRABC-0.6) using workboat from Blue Heron Park (BL-MOLK-43.2). Modify strategy as needed based on stream flow conditions.			
Watercourse:	Creek - Crab Creek			
Resources at Risk:	Raptors, Waterfowl, Wetlands			



Recommended Equipment

2 Each	Anchoring Post(s) - (shoreside)
6 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	Heaving Line(s)
1 Each	Workboat(s) - (jet drive)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lower Crab Creek (Diversion 1)

CRABC-0.5



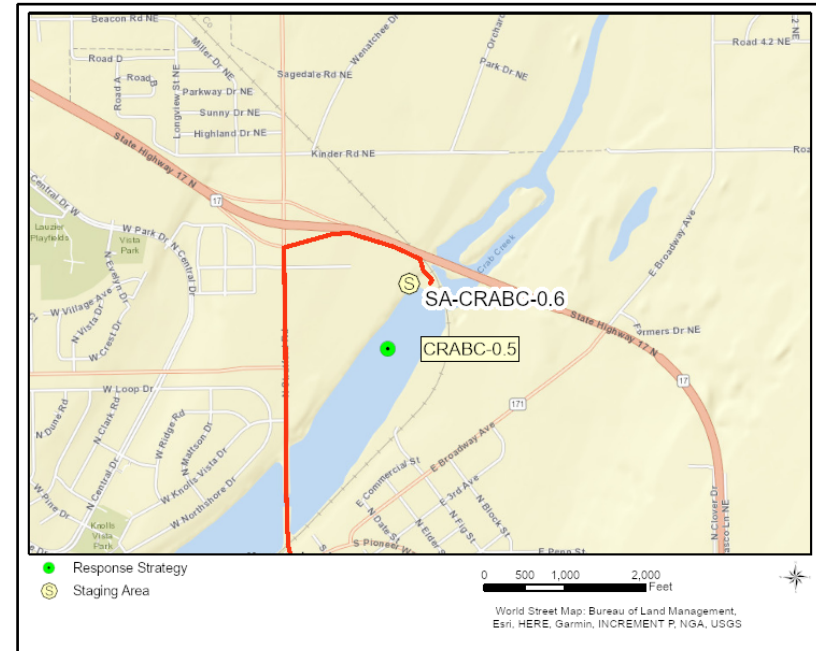
CRABC-0.5 Photo: Aerial view of strategy location with partial boom line depicted on photograph.

Site Contact

No Information
Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-0.6)

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90 BUS/Moses Lake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Crab Creek at Hwy 17 Bridge**CRABC-0.7a**

Position - Location: 47° 8.505', -119° 16.117' 47° 8' 30.3", -119° 16' 7.0" 47.14175, -119.26862 Moses Lake

Strategy Objective: Exclusion : Keep oil out of area downstream of Hwy 17 Bridge

Implementation: Hand-launch small workboat from staging area (SA-CRABC-0.7) and transport 200ft of boom to site. Secure one end of boom to shore near NW corner of Hwy 17 Bridge at Point A (47.14173, -119.26888). Then extend boom across creek about 80ft to opposite side of span and secure remaining boom end to shore near SE corner of bridge at Point C (47.14161, -119.26851). Pull center point of boom upstream, about 90ft NE of bridge, and anchor near Point B forming chevron. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water.

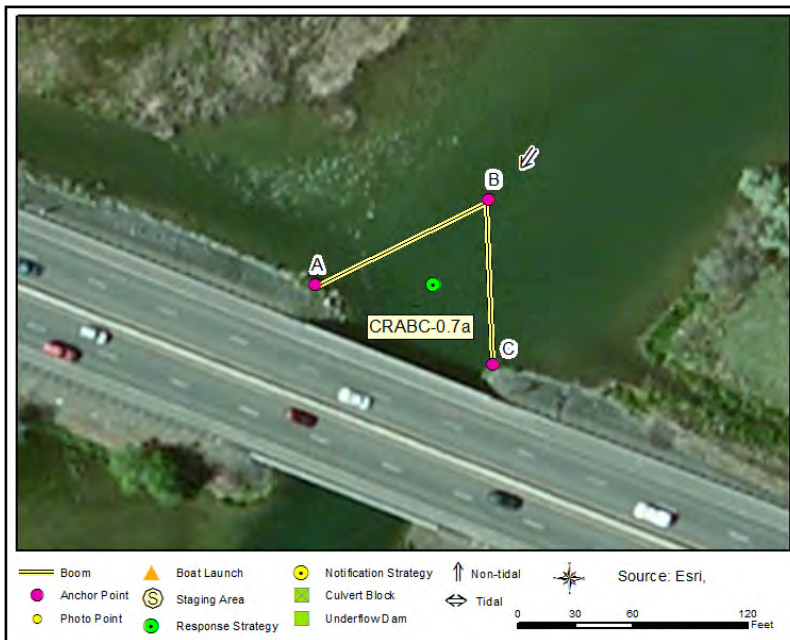
Staging Area: Remote: Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.

Site Safety: Slips, Trips, Falls; Water Hazard; Low Bridge/Overhead Hazard

Field Notes: Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
3	Each	Anchoring System(s) - (anchor, lines, floats)
200	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek at Hwy 17 Bridge

CRABC-0.7a



CRABC-0.7a Photo: Aerial view of strategy location with boom depicted on photograph.

Site Contact

No Information

Not Determined :

Nearest Address

3644 East Broadway Avenue
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-0.7) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft). Stage Equipment adjacent to creek.

Crab Creek - Hwy 17 (NW of Bridge)**CRABC-0.7b**

Position - Location: 47° 8.517', -119° 16.154' 47° 8' 31.0", -119° 16' 9.2" 47.14195, -119.26923 Moses Lake

Strategy Objective: Exclusion : Keep oil out of area NW of bridge

Implementation: Hand-launch small workboat from staging area (SA-CRABC-0.7) and transport 100ft boom to site. Secure one end of boom to shore near SE corner of unnamed island (in creek) at Point A (47.142008, -119.2691, ~130ft NW from NW corner of Hwy 17 Bridge). Then extend boom across creek channel about 80ft, and anchor to shore near Point B (47.14187, -119.26937), adjacent to Hwy 17 (northbound). Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.

Staging Area: Remote: Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.

Site Safety: Slips, Trips, Falls; Water Hazard; Shallow Water.

Field Notes: Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

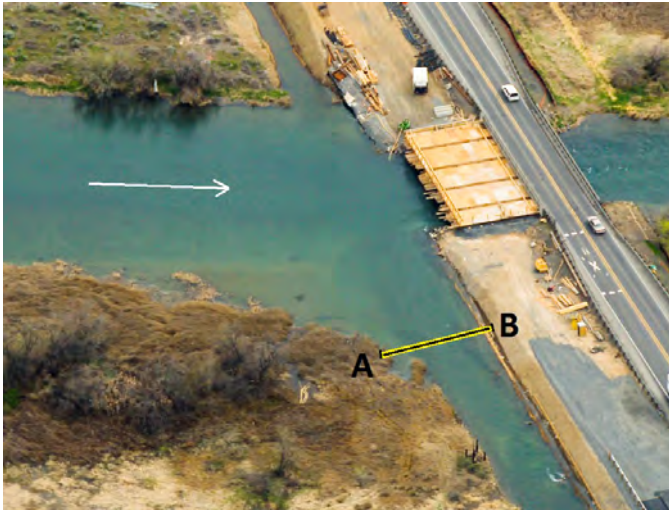
1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
100	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

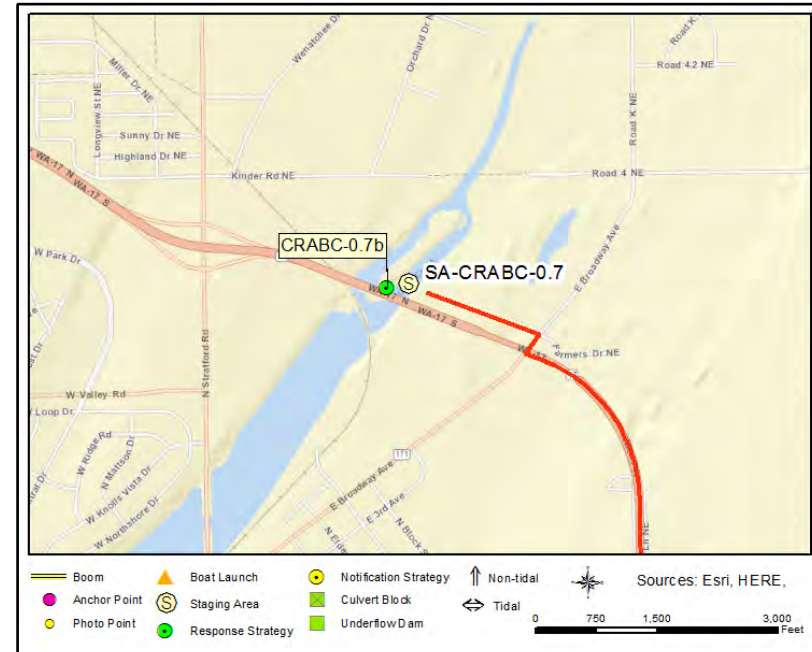
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Hwy 17 (NW of Bridge)

CRABC-0.7b



CRABC-0.7b Photo: Aerial view of strategy location with boom depicted on photograph.



Site Contact

No Information

Not Determined :

Nearest Address

3644 East Broadway Avenue
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-0.7) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft). Stage Equipment adjacent to creek.

Crab Creek - Hwy 17 (SE of Bridge)**CRABC-0.7c**

Position - Location: 47° 8.499', -119° 16.093' 47° 8' 30.0", -119° 16' 5.6" 47.14166, -119.26821 Moses Lake

Strategy Objective: Exclusion : Keep oil in ditch out of Crab Creek, and oil in creek out of ditch.

Implementation: Hand-launch small workboat from staging area (SA-CRABC-0.7) and transport 100ft boom to site. Secure one end of boom to shore on creek left about 100ft NE of Hwy 17 roadway (northbound shoulder) at Point A (47.14174, -119.26811). Extend boom southeastward towards Hwy 17 about 40ft and secure to creek bank near Point B. Finally, extend remaining over outflow from ditch to creek bank adjacent to Hwy 17, about 70ft SE of bridge. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek banks.

Staging Area: Remote: Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable Banks; Heavy Vegetation; Busy Roadway Nearby.

Field Notes: Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Resources, Freshwater Wildlife

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
100	Feet	Boom - B3 (Contractor Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Hwy 17 (SE of Bridge)

CRABC-0.7c



CRABC-0.7c Photo: Aerial view of strategy location with boom depicted on photograph.

Site Contact

Moses Lake Trucking
Land/Property Contact : Property Owner
509-765-1387

Nearest Address

3644 East Broadway Avenue
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-0.7) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft). Stage Equipment adjacent to creek.

Crab Creek upstream of Highway 17 (Collection)**CRABC-0.8**

Position - Location: 47° 8.564', -119° 16.035' 47° 8' 33.8", -119° 16' 2.1" 47.14273, -119.26724 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Hand-launch workboat from staging area (SA-CRABC-0.7) and secure end of 300ft boom to shore on east side of unnamed island at/near Point A (47.14309, -119.26717), about 650ft upstream of Hwy 17 bridge. From Point A, extend boom SE, across creek and downstream, securing remaining boom end to bank on creek left at/near Point B (47.14232, -119.26734). Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems as boom is being deployed to keep it secure in water.

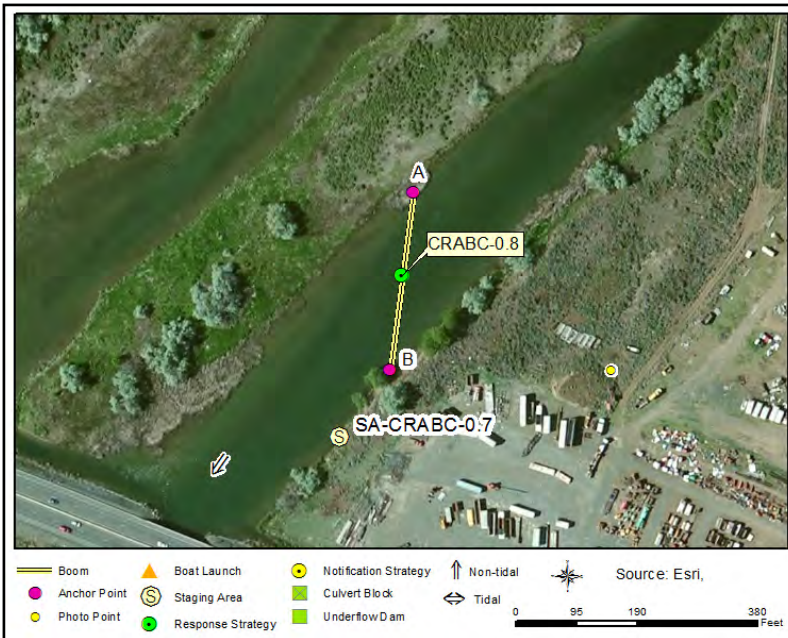
Staging Area: Onsite: Stage at SA-CRABC-0.7 (Moses Lake Trucking Yard) on creek left near strategy location.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable Banks; Heavy Vegetation Possible; Mud/Muddy Banks.

Field Notes: Call Moses Lake Trucking for Access; 509-765-1387. May be able to launch larger workboat during periods of high water from BL-CRABC-0.9 just upstream on creek left.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

2	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
3	Each	Anchoring System(s) - (anchor, lines, floats)
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

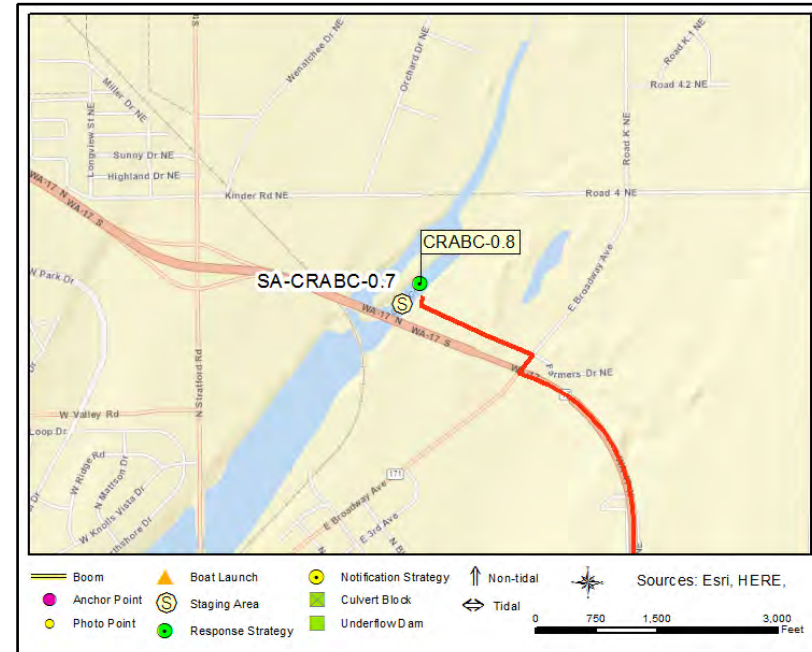
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek upstream of Highway 17 (Collection)

CRABC-0.8



CRABC-0.8 Photo: Aerial view of strategy location with boom depicted on photograph.



Site Contact

Moses Lake Trucking
 Land/Property Contact : Property Owner
 3644 East Broadway Avenue
 Moses Lake, WA 98837
 509-765-1387

Nearest Address

3644 East Broadway Avenue
 Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-0.7) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft). Stage Equipment adjacent to creek.

Crab Creek - Unnamed Island (North End)**CRABC-1.0**

Position - Location: 47° 8.682', -119° 15.971' 47° 8' 40.9", -119° 15' 58.3" 47.14470, -119.26619 Moses Lake

Strategy Objective: Exclusion : Keep oil out of side channel on creek right.

Implementation: Hand-launch small workboat from staging area (SA-CRABC-1.1) and transport 300ft boom to site (about 450ft downstream from staging area). Secure end of boom to bank on creek right near small channel at Point A (47.1448, -119.26658). Extend boom SE across channel about 60ft to east side of unnamed island, securing boom near Point B. Continue to deploy boom SE ~60ft along contour of island, securing it near Point C and then ENE about 170ft to Point D (47.14463, -119.26572). Deploy remaining boom around north/upstream end of island and slightly downstream, securing to shore near Point E.

Staging Area: Remote: Stage at SA-CRABC-1.1 about 0.1 miles upstream.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Shallow Water; Heavy Vegetation; Partially Submerged Obstruction.

Field Notes: Hand-launch small workboat and transport boom/equipment to site from staging area (SA-CRABC-1.1) about 0.1 miles upstream. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek banks.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

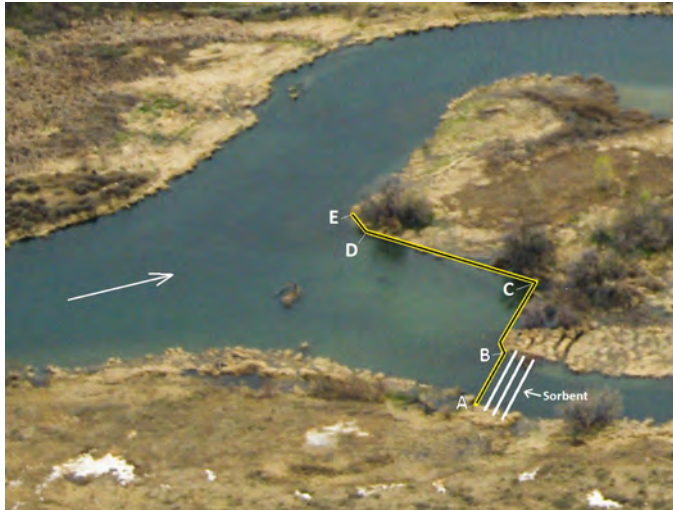
1	Each	Anchoring Post Driver(s)
12	Each	Anchoring Post(s) - (shoreside)
300	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

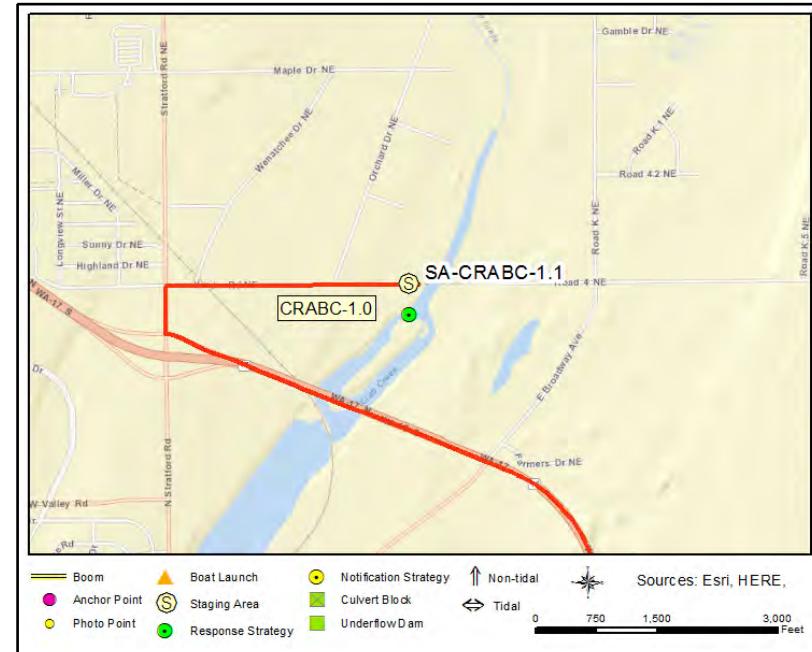
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Unnamed Island (North End)

CRABC-1.0



CRABC-1.0 Photo: Aerial view of strategy location with boom depicted on photograph.



Site Contact

No Information

Not Determined :

Nearest Address

10288 Kinder Rd NE
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-1.1)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 0.1mi turn right onto Kinder Road NE
7. After 0.4mi continue straight on Kinder Road NE (pavement will turn to dirt/grass)
6. Follow road ~0.2mi to water. Stage trucks and equipment on dirt/grass road/trail; hand-launch small workboat from shore.

Crab Creek - Kinder Road (Collection)**CRABC-1.1a**

Position - Location: 47° 8.753', -119° 15.890' 47° 8' 45.2", -119° 15' 53.4" 47.14589, -119.26484 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Using workboat, secure end of 300ft length of boom to bank on creek left near Point A (47.1461, -119.26437, ~200ft upstream from staging on creek left). From Point A, extend boom downstream and across to Point C (47.1457, -119.26538) and secure to bank. At Point B (~50ft from boom end at Point C) attach line and secured to shore upstream so collection pocket between Points B & C can be adjusted; use anchoring system if needed. Use shoreside anchoring posts, trees, or existing structures to secure boom to banks. Use additional anchoring system between Points A & B to keep boom secure in water.

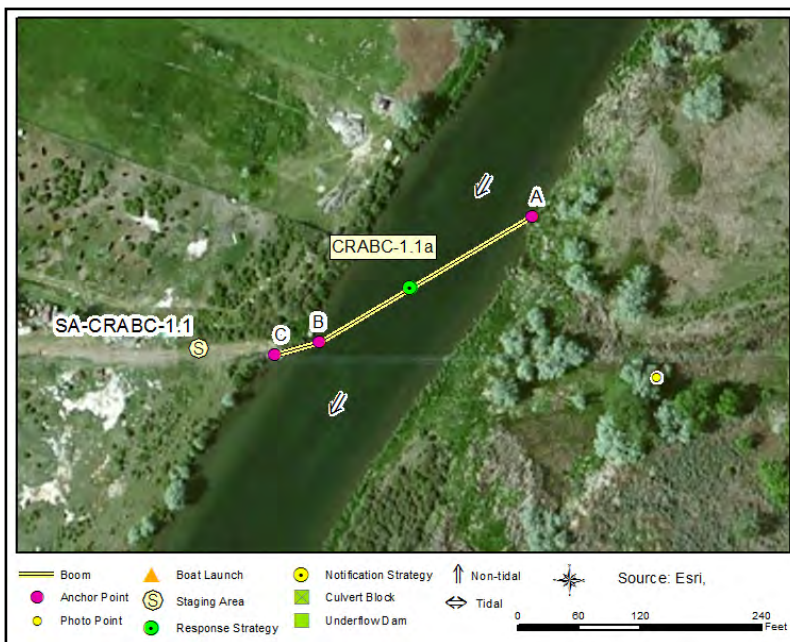
Staging Area: Onsite: Staging Area SA-CRABC-1.1 is onsite; stage equipment on dirt trail/road.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation.

Field Notes: Must use hand-launch workboat from this location to implement strategy.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

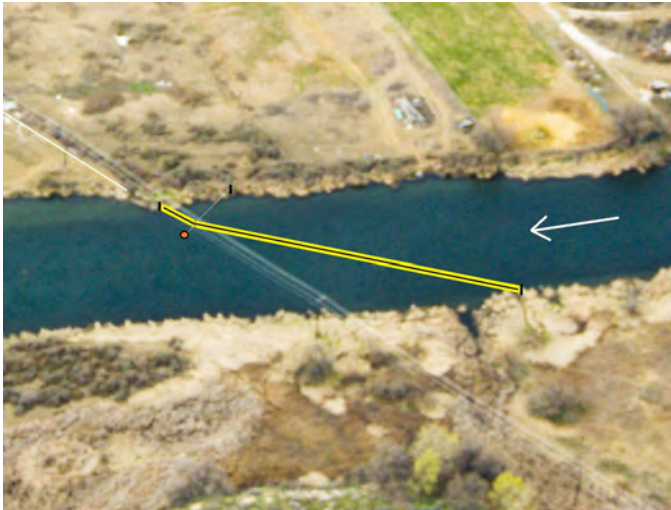
1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
2	Each	Anchoring System(s) - (anchor, lines, floats)
300	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Kinder Road (Collection)

CRABC-1.1a



CRABC-1.1a Photo: Aerial view of strategy location with boom depicted on photograph.

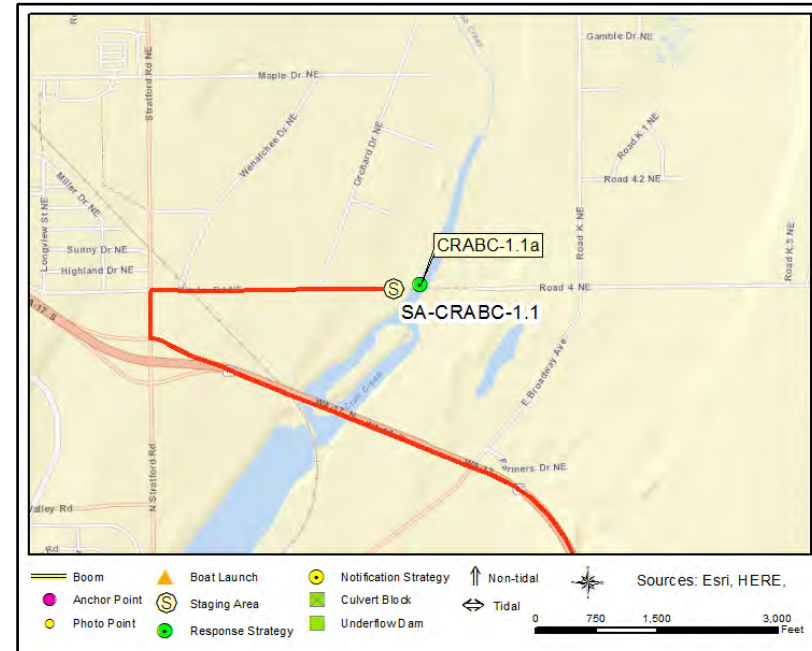
Site Contact

No Information

Not Determined :

Nearest Address

10288 Kinder Rd NE
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-CRABC-1.1)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 0.1mi turn right onto Kinder Road NE
7. After 0.4mi continue straight on Kinder Road NE (pavement will turn to dirt/grass)
8. Follow road ~0.2mi to water. Stage trucks and equipment on dirt/grass road/trail; hand-launch small workboat from shore.

Crab Creek - Kinder Road NE (Deflection)**CRABC-1.1b**

Position - Location: 47° 8.729', -119° 15.926' 47° 8' 43.7", -119° 15' 55.6" 47.14548, -119.26544 Moses Lake

Strategy Objective: Deflection : Deflect oil towards creek left

Implementation: Secure 200ft length of boom to shore on creek right at Point A (47.14571, -119.26541). Using workboat, tow remaining end of boom southward ~200ft and anchor in place near center of creek at Point B (47.14516, -119.26546). Use shoreside anchoring posts, trees, or existing structures to secure boom to creek banks. Use additional anchoring system (as needed) to keep boom secure in creek.

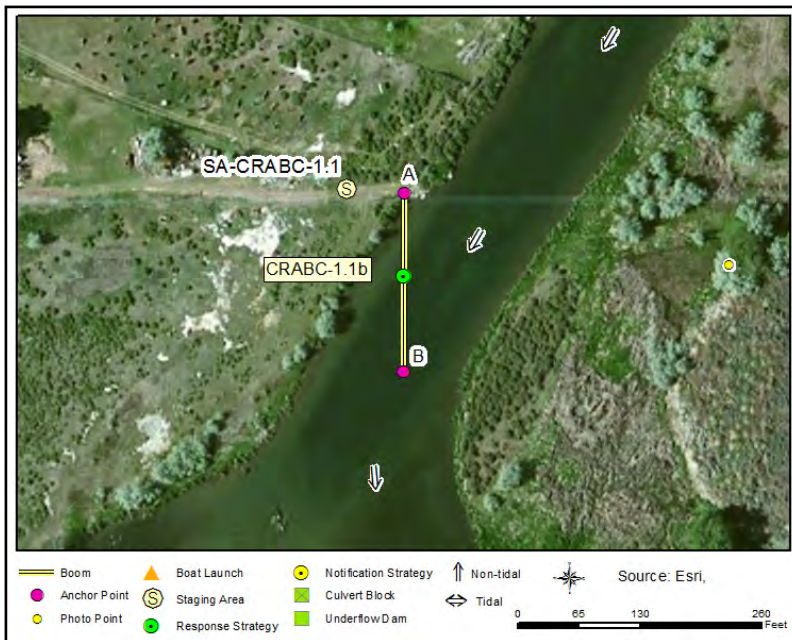
Staging Area: Onsite: Staging Area SA-CRABC-1.1 is onsite; stage equipment on dirt trail/road.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation.

Field Notes: Must use hand-launch workboat from this location to implement strategy.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

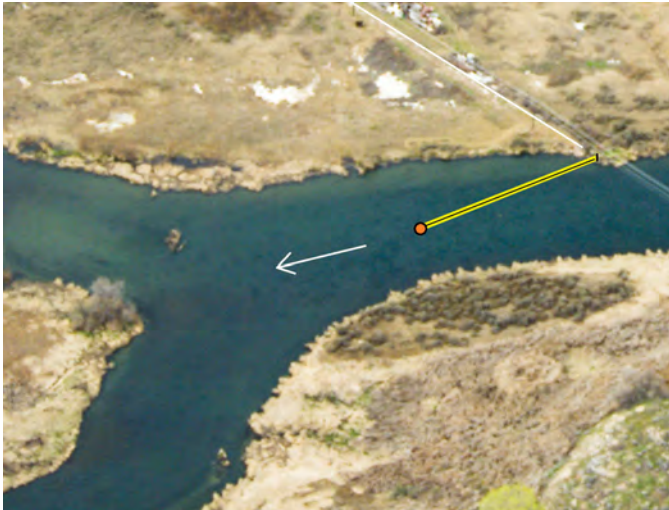
2	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
2	Each	Anchoring System(s) - (anchor, lines, floats)
200	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

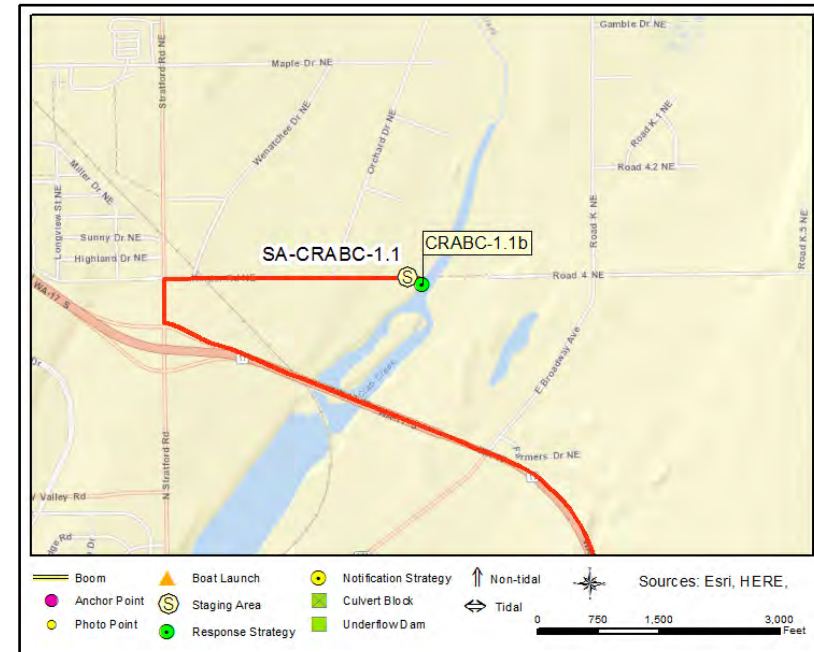
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Kinder Road NE (Deflection)

CRABC-1.1b



CRABC-1.1b Photo: Aerial view of strategy location with boom depicted on photograph.



Site Contact

No Information

Not Determined :

Nearest Address

10288 Kinder Rd NE
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC-1.1)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 0.1mi turn right onto Kinder Road NE
7. After 0.4mi continue straight on Kinder Road NE (pavement will turn to dirt/grass)
6. Follow road ~0.2mi to water. Stage trucks and equipment on dirt/grass road/trail; hand-launch small workboat from shore.

Crab Creek - Millerville Worksite (Cherokee Road)**CRABC-1.2**

Position - Location: 47° 8.837', -119° 15.821' 47° 8' 50.2", -119° 15' 49.3" 47.14729, -119.26369 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Using hand-launch workboat, secure end of 300ft length of boom to bank on creek right at Point A (47.14757, -119.26388). Then extend boom SE ~215ft securing it to bank on creek left at Point B (47.147075, -119.26346). From Point B, extend boom upstream on creek left ~40ft to Point C, allowing collection pocket to be formed. Deploy second 300ft segment of boom between Points D & E in same manner as Points A & B, with ~30ft separation between boom segments. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water.

Staging Area: Onsite: Staging Area SA-CRABC-1.2 is onsite.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Notify Property Owner before arrival; call 509-765-8709 (Millerville Rentals). Must use hand-launch workboat from this location to implement strategy.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

2	Each	Anchoring Post Driver(s)
10	Each	Anchoring Post(s) - (shoreside)
4	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	Heaving Line(s)
2	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

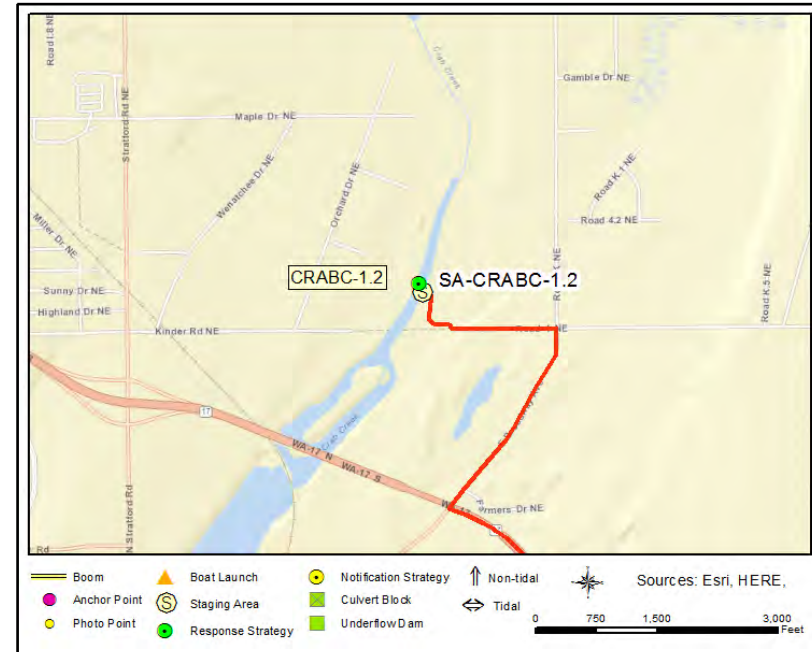
1	Boat Operator
4	Laborer
1	Supervisor

Crab Creek - Millerville Worksite (Cherokee Road)

CRABC-1.2



CRABC-1.2 Photo: At strategy location on creek left looking west towards creek right with strategy being deployed.



Site Contact

No Information

Not Determined :

Nearest Address

10804 Road 4 NE
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.0mi, take slight right onto WA-17N (signs for Ephrata/Soap Lake)
4. After 2.2mi, turn right onto E Broadway Ave/Broadway Extended NE
5. After 0.5mi, turn left onto Rd 4NE/Cherokee Rd
6. After 0.2mi, within the curve of the road to the right, turn left onto unnamed road.
7. After 125ft, there is a gate that leads to the field where staging can be established adjacent to creek.
8. Check with property owner in advance; call 509-765-7809.

Crab Creek - Chapparral Drive NE**CRABC-3.9**

Position - Location: 47° 11.068', -119° 15.860' 47° 11' 4.1", -119° 15' 51.6" 47.18447, -119.26434 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Using hand-launch workboat, secure 200ft boom segment to bank on creek left at/near Point A (47.18479, -119.26412). Extend boom SW ~200ft securing it to bank on creek right at/near Point B (47.18442, -119.26458). Deploy second 200ft boom segment between Points C & D in same manner, about 80ft downstream of first boom segment. Secure boom to banks using anchoring posts, trees, or existing structures. Use anchors & lines to keep boom secure in water (as needed).

Staging Area: Onsite: Stage on site after notifying Property Owner.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions. Work with private property owner on creek right for access.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds

**Recommended Equipment**

2	Each	Anchoring Post Driver(s)
10	Each	Anchoring Post(s) - (shoreside)
2	Each	Anchoring System(s) - (anchor, lines, floats)
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Heaving Line(s)
300	Feet	Line - 3/8" poly line
2	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Crab Creek - Chapparral Drive NE

CRABC-3.9



CRABC-3.9 Photo: View of strategy location on creek right with boom deployed.

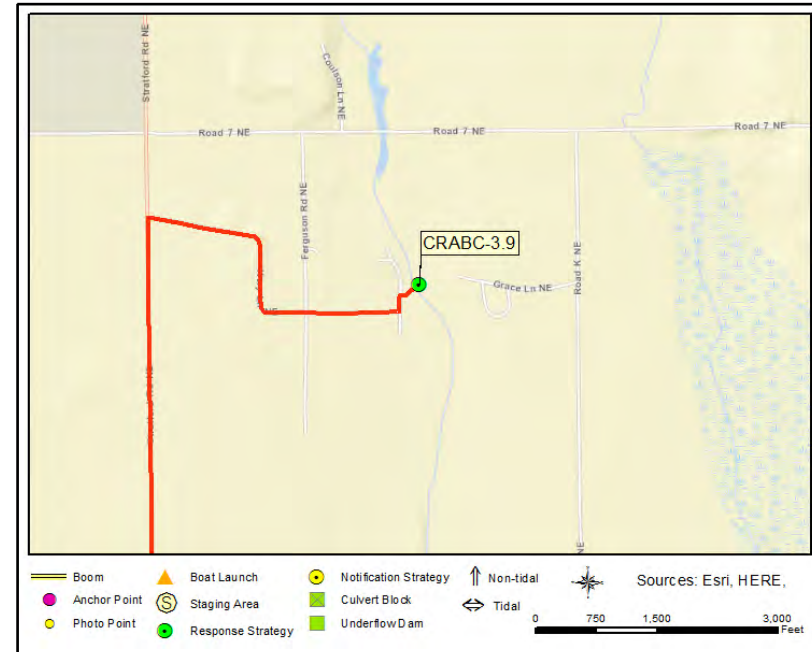
Site Contact

No Information

Not Determined :

Nearest Address

6549 Chapparral Dr NE
Moses Lake, WA 98837



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 3.0mi, turn right onto Kory Ln NE
7. After 0.5mi continue straight onto Walker Rd
8. After 0.2mi turn left onto Chapparral Dr NE
9. After 270ft, strategy location will be on the right. Stage in field near creek. Locate and notify property owner.

Crab Creek - 7NE Bridge Site #2 (Upstream)**CRABC-4.3a**

Position - Location: 47° 11.405', -119° 15.969' 47° 11' 24.3", -119° 15' 58.1" 47.19009, -119.26615 Moses Lake

Strategy Objective: Exclusion : Keep wind driven oil out of upstream areas.

Implementation: Hand launch workboat on north/upstream side of Road 7NE Bridge. Secure end of 100ft length of boom to bank on creek right at/near Point A (47.19007, -119.26637), located about 130ft upstream from the bridge. Using workboat transport remaining end of boom strait across to creek left, securing it to the bank at/near Point B (47.1901, -119.266). Use anchoring system (if needed) to keep boom secure in creek. Use shoreside anchoring posts, trees, or existing structures to secure boom to creek banks. Line downstream side of hard boom with 100ft sorbent boom.

Staging Area: Remote: Stage at SA-CRABC-4.3, gravel lot ~350ft east of bridge on north side of road.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
4	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

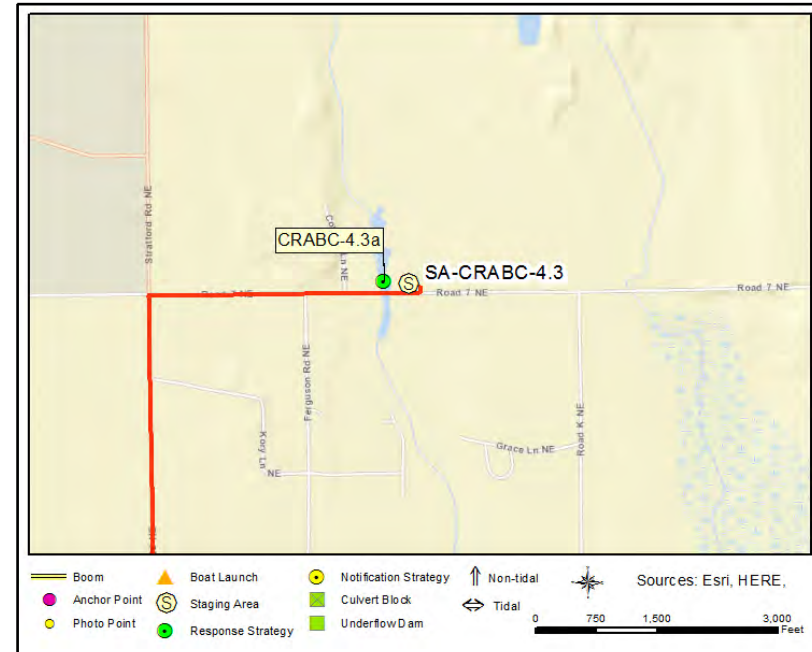
1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - 7NE Bridge Site #2 (Upstream)

CRABC-4.3a

No Photograph Available

CRABC-4.3a Photo: No photograph available.



Site Contact

No Information

Not Determined :

Nearest Address

10715 Road 7 NE
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC4.3)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 3.1mi turn right onto Road 7 NE
7. After 0.6mi turn left into gravel parking lot (~350ft east of bridge over Crab Creek); stage equipment in parking lot.

Crab Creek - 7NE Bridge Site #2 (Downstream)**CRABC-4.3b**

Position - Location: 47° 11.355', -119° 15.963' 47° 11' 21.3", -119° 15' 57.8" 47.18925, -119.26604 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Using hand-launch workboat, secure 200ft boom segment to bank on creek right at/near Point A (47.18946, -119.26622), ~70ft downstream from bridge. Extend boom SE ~115ft securing it to bank on creek left at/near Point B (47.18923, -119.26591), ~150ft downstream from bridge. Extend remaining boom upstream on creek left to form collection pocket. Deploy second 200ft boom segment between Points C & D, ~40ft downstream of first boom segment. Back both segments with sorbent boom. Secure boom to banks using anchoring posts or existing structures. Use anchors & lines to secure boom in water.

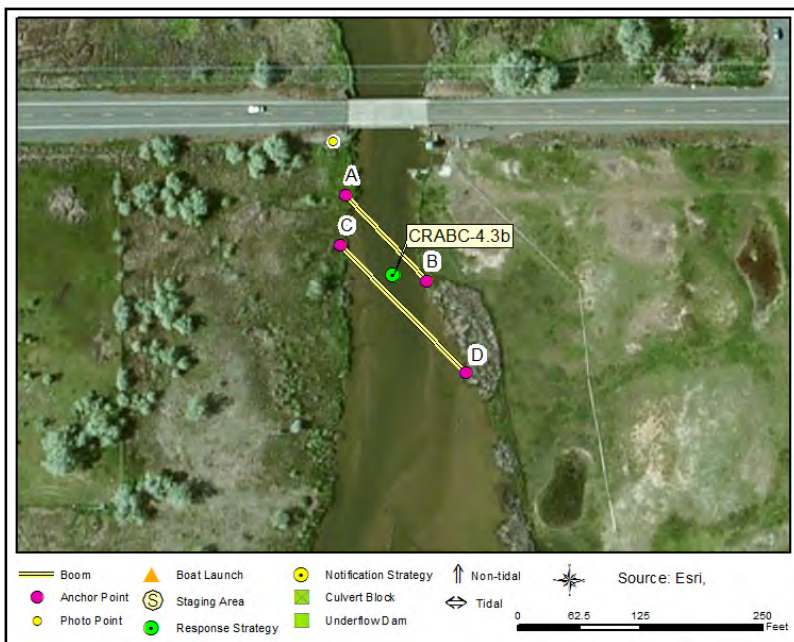
Staging Area: Remote: Stage at SA-CRABC-4.3, gravel lot ~350ft east of bridge on north side of road.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions. Work with private property owner on creek left for access.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds

**Recommended Equipment**

2 Each	Anchoring System(s) - (anchor, lines, floats)
4 Each	Anchoring System(s)- Shoreside
400 Feet	Boom - B3 (River Boom) or equivalent
400 Feet	Boom - Sorbent
1 Each	Bridle(s) - Towing (appropriately sized for boom)
2 Each	Heaving Line(s)
300 Feet	Line - 3/8" poly line
2 Each	Vac Truck or Skimmer and Storage
1 Each	Workboat(s) - (hand-launch)

Recommended Personnel

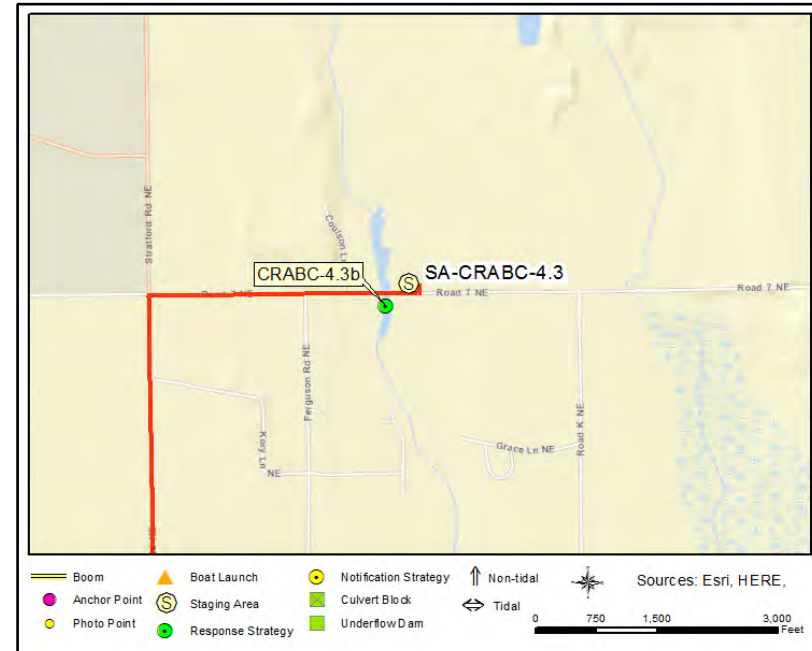
1 Boat Operator
3 Laborer
1 Supervisor

Crab Creek - 7NE Bridge Site #2 (Downstream)

CRABC-4.3b



CRABC-4.3b Photo: On river right on downstream side of Road 7NE bridge over Crab Creek looking east to creek left.



Site Contact

No Information

Not Determined :

Nearest Address

10715 Road 7 NE
Moses Lake, WA 98837

Driving Directions

To Staging Area (SA-CRABC4.3)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 3.1mi turn right onto Road 7 NE
7. After 0.6mi turn left into gravel parking lot (~350ft east of bridge over Crab Creek); stage equipment in parking lot.

Crab Creek - Moses Lake-Stratford Road**CRABC-7.0**

Position - Location: 47° 13.525', -119° 16.672' 47° 13' 31.5", -119° 16' 40.3" 47.22542, -119.27786 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft length of hard boom to bank on creek right at Point B (47.22529, -119.27781; about ~65ft upstream from bridge). Fasten line to remaining boom end and transport to creek left using bridge. Use line to pull boom tightly into place and secure at/near Point A (47.22551, -119.27796, ~130ft upstream of bridge). Back downstream side of hard boom with multiple lengths of sorbent boom. Use shoreside anchoring posts or existing structures to secure boom to banks. Vac-truck or skimmer collection near Point B if site encountering oil.

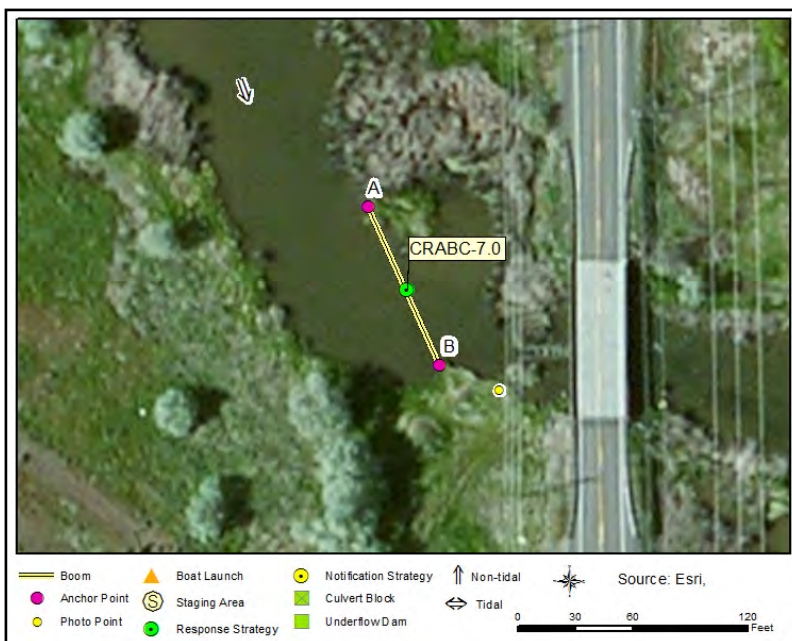
Staging Area: Onsite: Stage in dirt/gravel lot to left/west before bridge (~220ft before south end of bridge)

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Power Lines; Muddy/Unstable Banks; Wildlife.

Field Notes: Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near roadway. Use plywood sheets to safely access river left.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Habitat and Waterfowl, Shorebirds

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
8	Each	Plywood sheets (4ft x 2ft)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

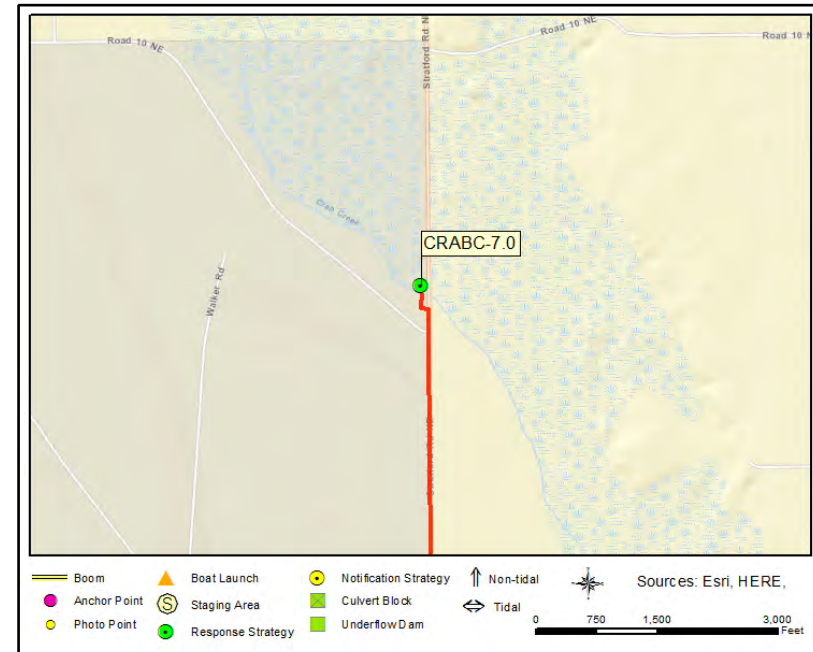
2	Laborer
1	Supervisor

Crab Creek - Moses Lake-Stratford Road

CRABC-7.0



CRABC-7.0 Photo: At strategy location on Crab Creek, looking upstream towards creek right from creek left.



Site Contact

No Information

Not Determined :

Nearest Address

8357 Stratford Rd NE
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 5.6mi turn left/west into dirt/gravel parking area located about 220ft before south end of small bridge over Crab Creek. Stage as close to creek as possible.

Crab Creek - Road 16 NE (Moses Lake)**CRABC-16.2**

Position - Location: 47° 19.198', -119° 21.419' 47° 19' 11.9", -119° 21' 25.2" 47.31997, -119.35699 Moses Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 200ft length of boom to bank on creek left at Point C (47.31994, -119.35679) on upstream side of culvert system. Walk remaining boom end upstream and secure to creek left near Point A (47.32009, -119.35714; ~120ft upstream of roadway). Fasten line to boom ~80ft from boom end at Point C. Transport line to creek right using roadway and pull boom tightly into position; securing at Point B (47.31986, -119.35709). Use shoreside anchoring posts or existing structures to secure boom to banks. Place lines of sorbent between roadway/culverts and hard boom. Vac-truck or skimmer collection.

Staging Area: Onsite: Stage on shoulder or behind guard rail near NW corner of bridge (upstream side of roadway on creek right)

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable Banks; Wildlife.

Field Notes: Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines for working on/near roadway.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Grebes - Concentrations, Habitat and Waterfowl, Resident Fish

**Recommended Equipment**

5 Each	Anchoring System(s)- Shoreside
200 Feet	Boom - B3 (River Boom) or equivalent
200 Feet	Boom - Sorbent
1 Each	Bridle(s) - Hand (appropriately sized for boom)
1 Each	Heaving Line(s)
200 Feet	Line - 1/2" poly line
1 Each	Vac Truck or Skimmer and Storage (if collection)
1 Each	Winch - Come-A-Long

Recommended Personnel

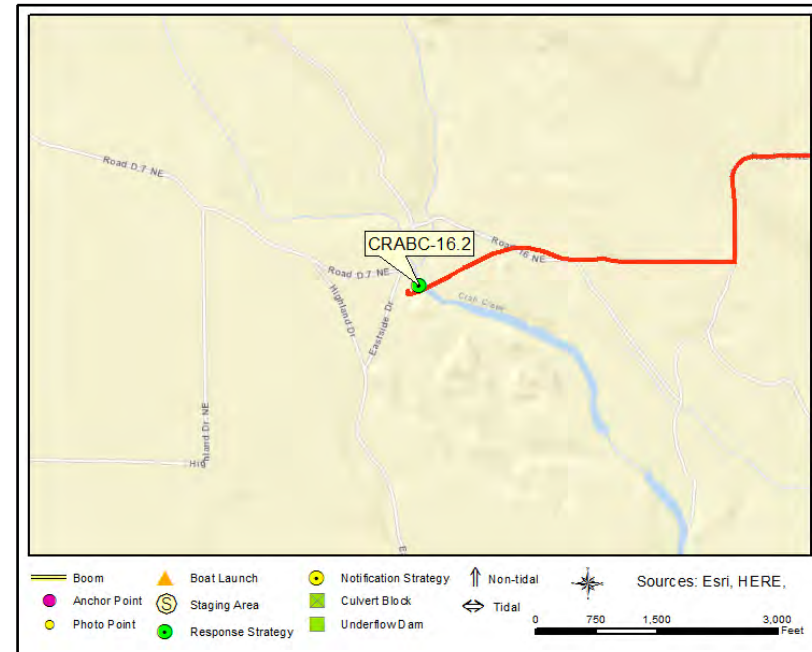
2	Laborer
1	Supervisor

Crab Creek - Road 16 NE (Moses Lake)

CRABC-16.2



CRABC-16.2 Photo: At strategy location looking upstream/north on Crab Creek from Road 16 NE.



Site Contact

No Information

Not Determined :

Nearest Address

6751 Road 16 NE
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 12.4mi, turn left onto Road 16 NE
7. After 4.0mi you have reached the strategy location. Stage equipment off roadway on flat dirt area on right/north side of roadway behind guardrail, immediately after crossing over Crab Creek.

Crab Creek - Road 20 NE (Soap Lake)**CRABC-21.8**

Position - Location: 47° 22.973', -119° 23.090' 47° 22' 58.4", -119° 23' 5.4" 47.38289, -119.38483 Soap Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft hard boom to shore near NE corner of bridge (creek left; upstream side of bridge) at/near Point A. Fasten line to remaining end of boom and use bridge to walk line across to creek right (upstream side of bridge). From creek right, pull boom tight across creek and secure at/near Point B (47.38293, -119.38509). In same manner, place multiple lines of sorbent boom across creek on upstream side of hard boom. Secure boom to shore using anchor posts, trees, or existing structures. Use vac-truck or skimmer from bridge if oil is collecting at site.

Staging Area: Onsite: Stage off roadway at/near SW corner of bridge.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Power Lines; Wildlife.

Field Notes: Intermittent flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby

**Recommended Equipment**

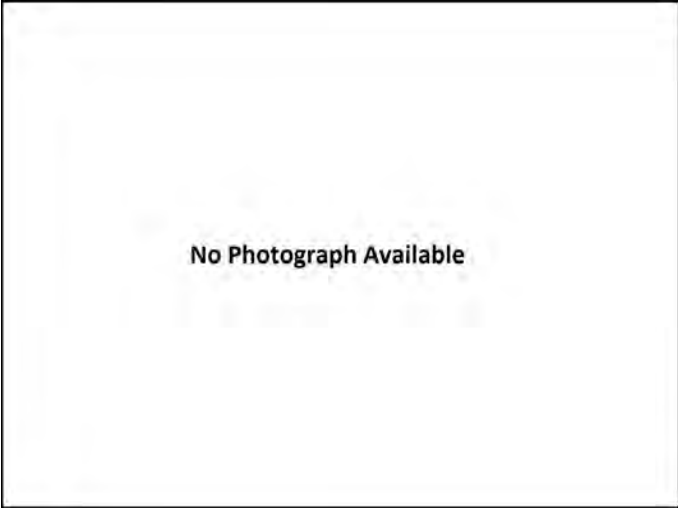
4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Road 20 NE (Soap Lake)

CRABC-21.8



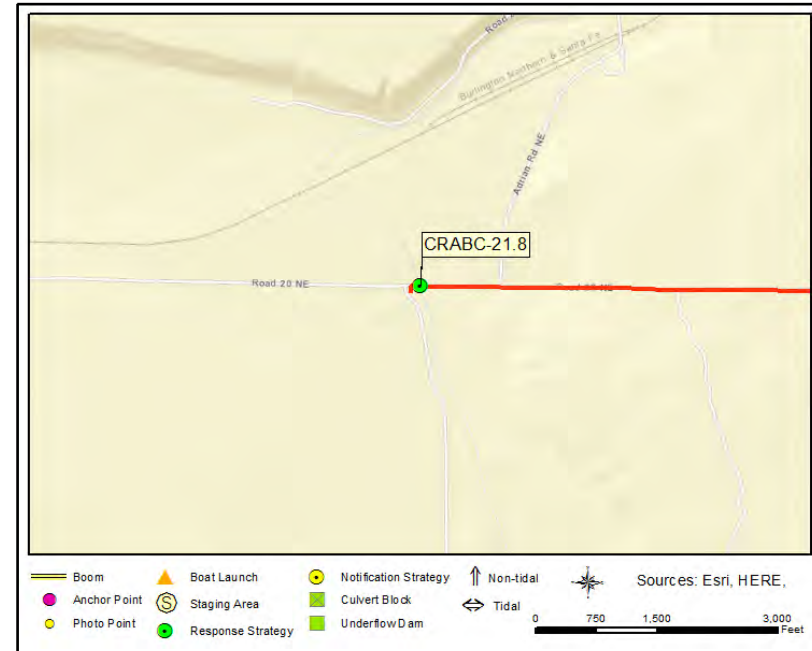
No Photograph Available

CRABC-21.8 Photo: No photograph is currently available for this location.

Site Contact

Nearest Address

4718 Road 20 NE
Soap Lake, WA 98851



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 16.3mi, turn left onto Road 20 NE
7. After 5.0mi you have reached the strategy location. Stage equipment off roadway on flat dirt area on left/south side of roadway behind guardrail, immediately after crossing bridge over Crab Creek.

Crab Creek - Adrian Road NE (Soap Lake)**CRABC-23.0**

Position - Location: 47° 23.539', -119° 22.472' 47° 23' 32.3", -119° 22' 28.3" 47.39231, -119.37453 Soap Lake

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 300ft length of boom to bank on creek right at Point C (47.39238, -119.3747; ~25ft upstream of guardrail). Secure remaining boom end to bank on creek right near Point A (47.39241, -119.37423; ~140ft from guardrail). Fasten line to boom ~150ft from boom end at Point C. Transport line to creek left using roadway and pull boom into position, securing it at Point B (47.39207, -119.37468). Use shoreside anchoring posts or existing structures to secure boom to banks. Place lines of sorbent between roadway/culverts and hard boom near Points B to C. Vac-truck or skimmer collection.

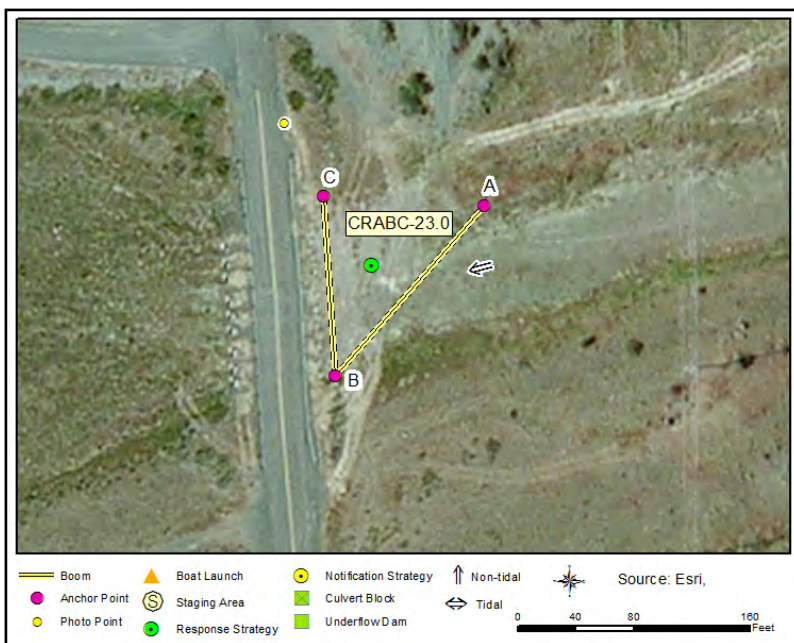
Staging Area: Onsite: Stage on dirt/gravel pull-out trail on SE corner of roadway before guard rail.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable Banks; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near roadway.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

5	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
300	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Winch - Come-A-Long

Recommended Personnel

	Laborer
1	Supervisor

Crab Creek - Adrian Road NE (Soap Lake)

CRABC-23.0



CRABC-23.0 Photo: At strategy location on creek right at Adrian Road NE, looking south across to creek left. Flow is intermittent at this location.

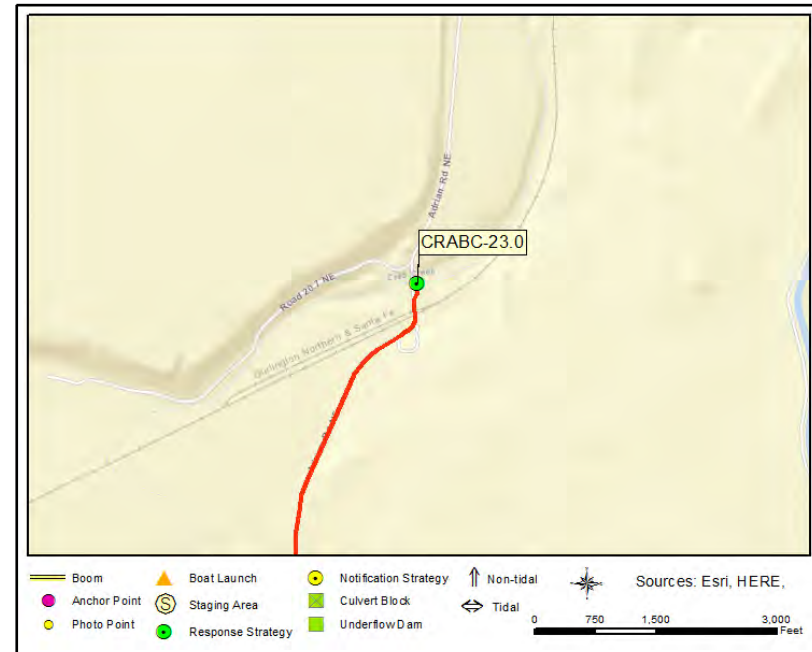
Site Contact

No Information

Not Determined :

Nearest Address

20535 Adrian Rd NE
Soap Lake, WA 98851



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 16.3mi, turn left onto Road 20 NE
7. After 4.9mi, turn right onto Adrian Rd NE
8. After 0.8 miles, about 200ft beyond RR tracks, you have reached the strategy location. Stage equipment off roadway on small pulloff/dirt trail before guardrail on upstream side of Crab Creek (creek left).

Crab Creek - Highway 28 - Site 2**CRABC-32.7**

Position - Location: 47° 25.949', -119° 13.116' 47° 25' 56.9", -119° 13' 7.0" 47.43248, -119.21860 Wilson Creek

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 200ft length of boom to bank on creek left near Point A (47.43245, -119.21876, ~35ft downstream from Hwy 28 bridge over creek). From Point A, extend boom downstream (towards bridge) about 30ft and secure to bank at/near Point B (47.43252, -119.21883). From Point B, attach line to remaining end of boom and use bridge to walk line over to creek right. On creek right about 70ft upstream of bridge, use line to pull boom tight across creek and secure at/near Point C (47.43239, -119.21822). Use shoreside anchoring posts, trees, or existing structures to secure boom to banks.

Staging Area: Onsite: Stage off shoulder of Hwy 28 on small pull-off about 200ft west of bridge

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near Hwy.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Migratory Waterfowl, Shorebirds

**Recommended Equipment**

3	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Highway 28 - Site 2

CRABC-32.7

No Photograph Available

CRABC-32.7 Photo: No photograph is currently available for this location.

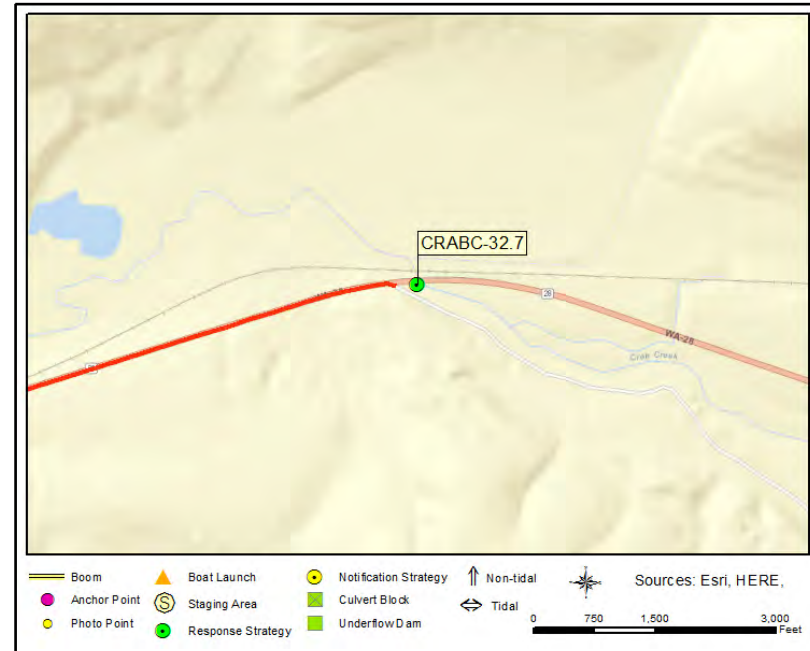
Site Contact

No Information

Not Determined :

Nearest Address

12166 Washington 28
Wilson Creek, WA 98860



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 20.4mi, turn right onto Hwy 28
7. After 2.4mi you have reached the strategy location. Stage equipment on small pulloff about 200ft before west side of bridge.

Crab Creek - Highway 28 - Site 1**CRABC-35.8**

Position - Location: 47° 25.236', -119° 9.897' 47° 25' 14.2", -119° 9' 53.8" 47.42061, -119.16495 Wilson Creek

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 200ft hard boom to shore near SE corner of bridge (creek left; downstream side of bridge) at/near Point A. Fasten line to remaining boom end and use bridge to walk line across to creek right (downstream side of bridge – SW corner). From creek right, pull boom tight across creek and secure at/near Point B (47.42055, -119.16518). In same manner, place multiple lines of sorbent boom across creek on downstream side of hard boom. Secure boom to shore using anchor posts, trees, or existing structures. Use vac-truck or skimmer from bridge if oil is collecting at site.

Staging Area: Onsite: Very limited. Stage on shoulder of highway behind guardrail (if possible)

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
300	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Highway 28 - Site 1

CRABC-35.8



CRABC-35.8 Photo: At strategy location, looking downstream at dry creek bed from Hwy 28 bridge over Crab Creek. Intermittent stream flow at this location.

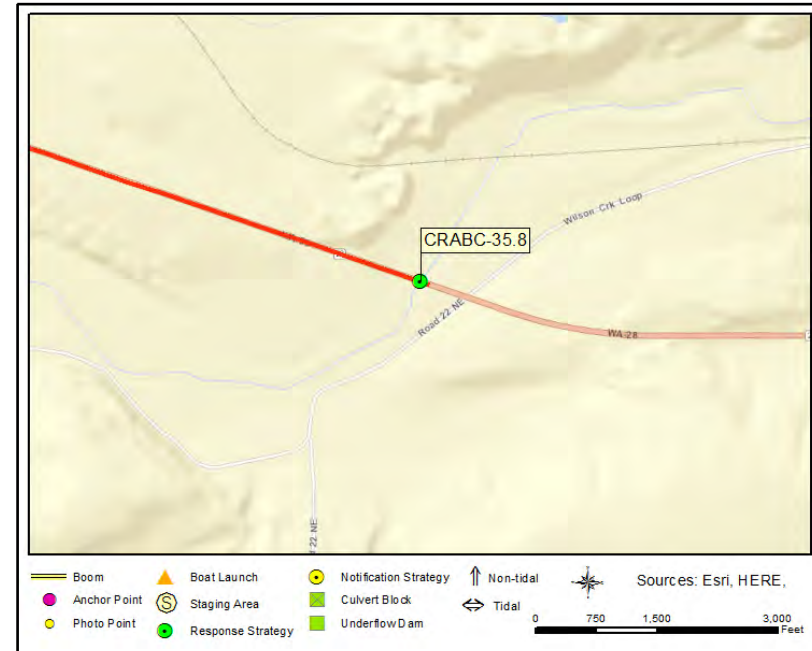
Site Contact

No Information

Not Determined :

Nearest Address

12166 Washington 28
Wilson Creek, WA 98860



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 20.4mi, turn right onto Hwy 28
7. After 5.2mi, at bridge over Crab Creek, you have reached the strategy location. Limited Staging on shoulder behind guardrail after bridge

Crab Creek - Railroad Street (Wilson Creek)**CRABC-37.8**

Position - Location: 47° 25.365', -119° 7.865' 47° 25' 21.9", -119° 7' 51.9" 47.42275, -119.13108 Wilson Creek

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft hard boom to shore near NE corner of bridge (creek right; downstream side of bridge) at/near Point A. Fasten line to remaining boom end and use bridge to walk line across to creek left (downstream side of bridge – NW corner). From creek left, pull boom tight across creek and secure at/near Point B (47.42281, -119.13118). In same manner, place multiple lines of sorbent boom across creek on downstream side of hard boom. Secure boom to shore using anchor posts, trees, or existing structures. Use vac-truck or skimmer from bridge if oil is collecting at site.

Staging Area: Onsite: Stage in dirt/gravel lot near NE corner of bridge near BNSF rail line.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway & Rail Hazards; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Resident Fish

**Recommended Equipment**

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Railroad Street (Wilson Creek)

CRABC-37.8



CRABC-37.8 Photo: At strategy location, looking downstream at dry creek bed from bridge over Crab Creek on Railroad Street. Intermittent stream flow at this location.

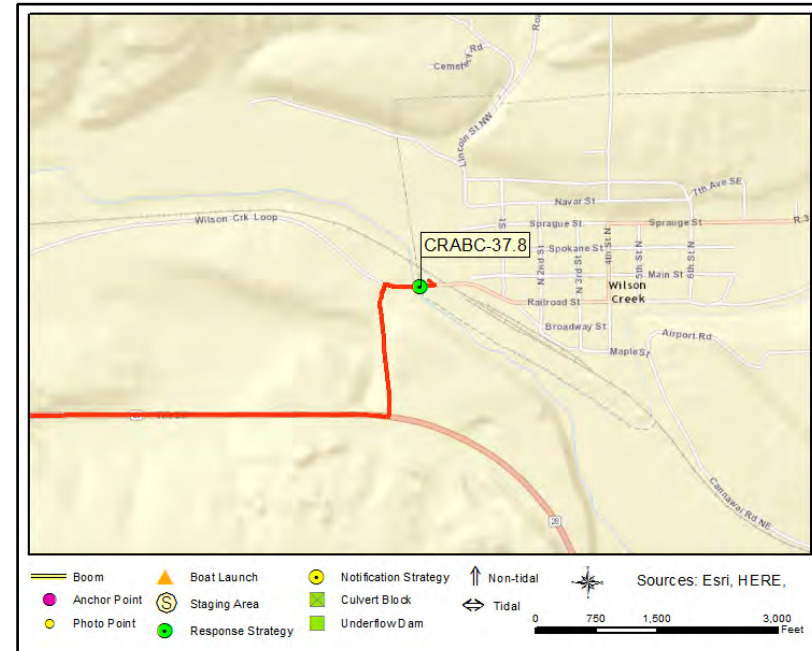
Site Contact

No Information

Not Determined :

Nearest Address

213 Railroad St
Wilson Creek, WA 98860



Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 20.4mi, turn right onto Hwy 28
7. After 6.7mi, turn left onto Kappel Rd
8. After 0.3mi, turn right onto Railroad Street; strategy location is about 400ft ahead. Stage in dirt/gravel lot on left immediately after crossing bridge over Crab Creek.

Crab Creek - Urquhart Avenue (Marlin)**CRABC-45.8**

Position - Location: 47° 24.593', -118° 59.014' 47° 24' 35.6", -118° 59' .8" 47.40988, -118.98356 Marlin

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft hard boom to shore near SW corner of bridge (creek left; downstream side of bridge) at/near Point A. Fasten line to remaining end of boom and use bridge to walk line across to creek right (downstream side of bridge). From creek right, pull boom tight across creek and secure at/near Point B (47.41, -118.98364). In same manner, place multiple lines of sorbent boom across creek on downstream side of hard boom. Secure boom to shore using anchor posts, trees, or existing structures. Use vac-truck or skimmer from bridge if oil is collecting at site.

Staging Area: Onsite: Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines if working on/near road/bridge.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish

**Recommended Equipment**

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

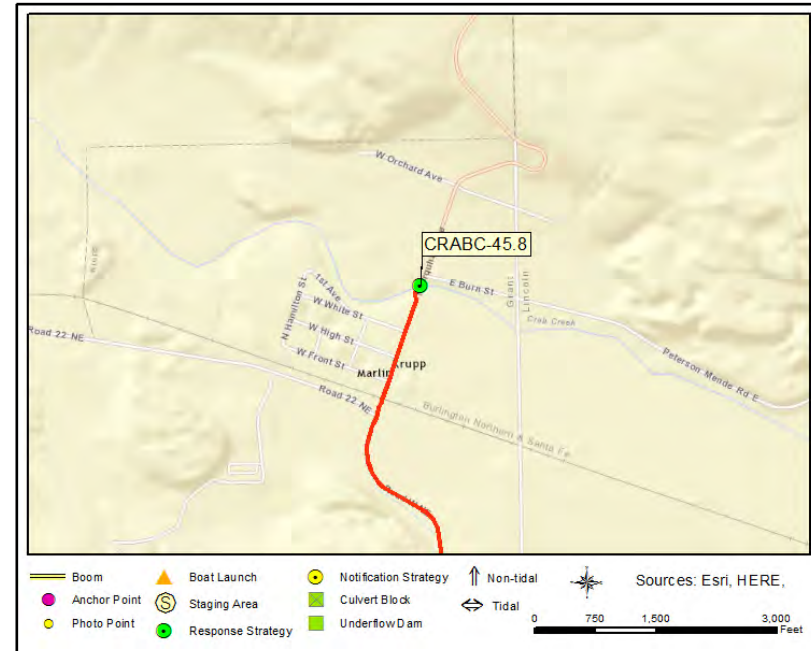
	Laborer
1	Supervisor

Crab Creek - Urquhart Avenue (Marlin)

CRABC-45.8



CRABC-45.8 Photo: At strategy location, looking downstream at dry creek bed from bridge over Crab Creek on Urquhart Avenue. Intermittent stream flow at this location.



Site Contact

No Information

Not Determined :

Nearest Address

299 Urquhart Ave
Marlin, WA 98832

Driving Directions

1. Go east on I-90 and take exit 188 (Warden/U Rd NE)
2. At end of ramp turn left onto U Rd SE
3. After 3.2mi, turn right onto Rd 3 NE
4. After 2.0mi, turn left onto Rd W NE
5. After 19.3mi, continue onto Urquhart Avenue
6. After 0.3mi, you have reached the strategy location (at bridge). Stage equipment on or near roadway, or off roadway on left side of road before bridge.

Crab Creek - N Irby Road Bridge**CRABC-54.1**

Position - Location: 47° 21.629', -118° 51.020' 47° 21' 37.7", -118° 51' 1.2" 47.36048, -118.85033 Odessa

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft hard boom to shore near SW corner of bridge (creek left; downstream side of bridge) at/near Point A. Fasten line to remaining end of boom and use bridge to walk line across to creek right (downstream side of bridge). From creek right, pull boom tight across creek and secure at/near Point B (47.3606, -118.85024). In same manner, place multiple lines of sorbent boom across creek on downstream side of hard boom. Secure boom to shore using anchor posts, trees, or existing structures. Use vac-truck or skimmer from bridge if oil is collecting at site.

Staging Area: Onsite: Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish

**Recommended Equipment**

2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

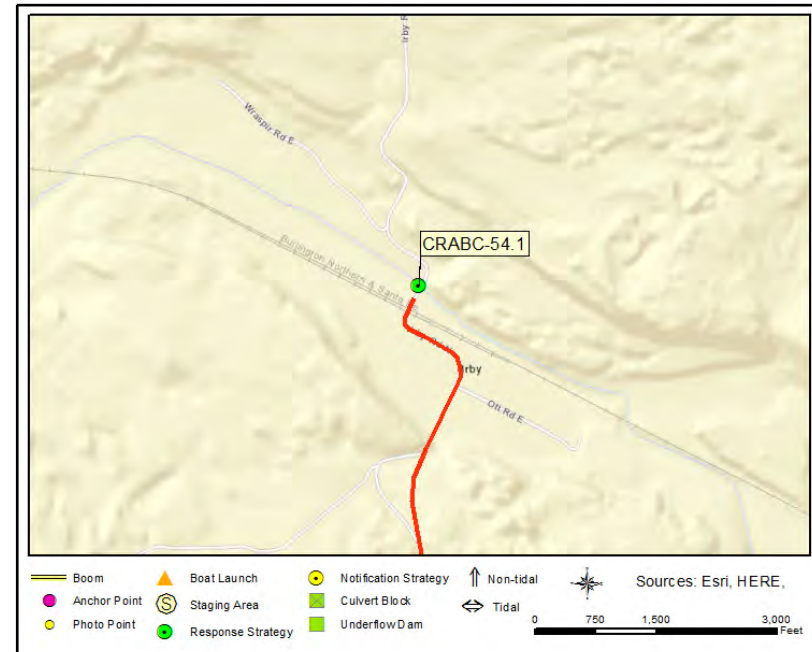
2	Laborer
1	Supervisor

Crab Creek - N Irby Road Bridge

CRABC-54.1



CRABC-54.1 Photo: View from bridge over Crab Creek at N Irby Road, looking downstream.



Site Contact

No Information

Not Determined :

Nearest Address

5655 Wraspir Rd E
Odessa, WA 99159

Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 7.6mi, turn right onto Irby Road N
5. After 2.3mi continue straight to stay on Irby Road N
6. After 0.7mi, you have reached the strategy location (at bridge). Stage equipment on or near roadway, or off roadway at edge of field near left-hand side of road before bridge behind guardrail.

Crab Creek - Beyond East End of Ott Road (Irby)**CRABC-54.7**

Position - Location: 47° 21.324', -118° 50.386' 47° 21' 19.4", -118° 50' 23.2" 47.35539, -118.83977 Odessa

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: From creek left, secure line to boom end. Walk line upstream on creek right using flooded roadway and tracks; hip waders recommended for road. Using line, pull boom upstream and across creek, securing boom below rail ballast on creek right at/near Point A (47.35537, -118.83945, ~100ft upstream of rail bridge). From Point B (47.35537, -118.83993), pull boom tight and secure to bank on creek left. Using line, extend ~60ft of remaining boom from Point B to creek left. Secure boom below rail ballast at/near Point C (47.35548, -118.83973; near SE corner of bridge). Vac-truck or skimmer collection.

Staging Area: Onsite: Stage on or near roadway on creek left before RR bridge. Follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Rail Line; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Before deployment, notify BNSF; call 800-832-5452. Inform them that you'll be temporarily working near tracks between rail milepost 1561 & 1562 on the Columbia River sub in Irby, WA.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish

**Recommended Equipment**

3	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage

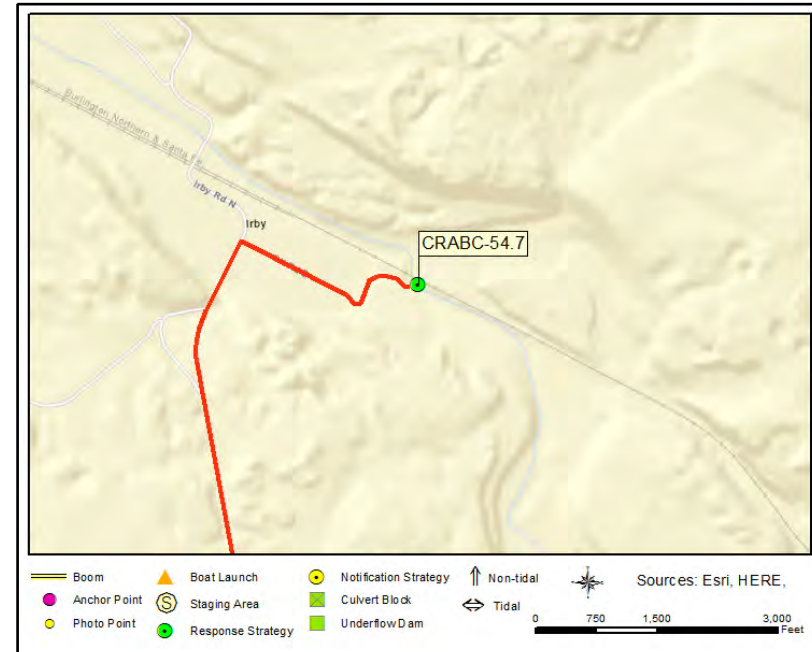
Recommended Personnel

Crab Creek - Beyond East End of Ott Road (Irby)

CRABC-54.7



CRABC-54.7 Photo: From roadway on creek left, immediately downstream of strategy location, looking across roadway to creek right and Railroad Bridge in background.



Site Contact

No Information

Not Determined :

Nearest Address

5655 Wraspir Rd E
Odessa, WA 99159

Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 7.6mi, turn right onto Irby Road N
5. After 2.3mi continue straight to stay on Irby Road N
6. After 0.4mi, turn right onto Ott Road
7. Follow Ott Road for 0.5mi (through what might appear as private property but is still Ott Road) to creek before railroad underpass. Stage on or near roadway (as needed).

CRABC-60.2

<i>Recommended Equipment</i>		
3	Each	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

<i>Recommended Personnel</i>		
1	Boat Operator	
2	Laborer	
1	Supervisor	

Crab Creek - Cemetary Road - Site 2

CRABC-60.2



CRABC-60.2 Photo: At strategy location on Crab Creek (creek right) just downstream of Railroad Bridge.

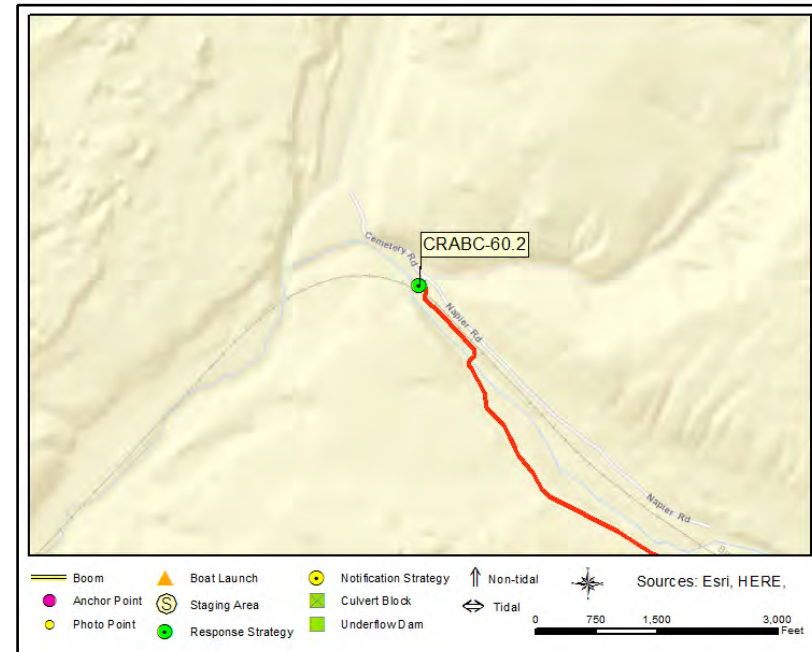
Site Contact

No Information

Not Determined :

Nearest Address

108 Napier Rd
Odessa, WA 99159



Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 0.8mi, turn right onto Cemetery Road
5. After 1.7mi, Cemetery Road becomes Napier Road.
6. Stay on Napier Road for 1.5mi (about 0.2mi past bridge over creek & 150ft beyond RR underpass). Stage equipment on or near roadway. Follow WSDOT work zone traffic control guidelines (as needed).

Crab Creek - Cemetary Road - Site 1**CRABC-60.4**

Position - Location: 47° 20.720', -118° 45.524' 47° 20' 43.2", -118° 45' 31.4" 47.34534, -118.75873 Odessa

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft boom to upstream side of bridge at/near Point A (47.34527, -118.75885). Extend boom across upstream side of bridge (about ~65ft) securing it to the NE end of bridge at/near Point B (47.34541, -118.75868). Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use vac-truck or skimmer/storage to collect oil near Point B. Use multiple lengths of sorbent boom along downstream side of bridge for secondary collection and sheen reduction.

Staging Area: Onsite: Stage on or near roadway. Work from bridge. Follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Rail Line; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on conditions. Follow WSDOT work zone traffic control guidelines when working on/near road/bridge.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Resident Fish

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
2	Each	Bridle(s) - Hand (appropriately sized for boom)
200	Feet	Line - 3/8" poly line

Recommended Personnel

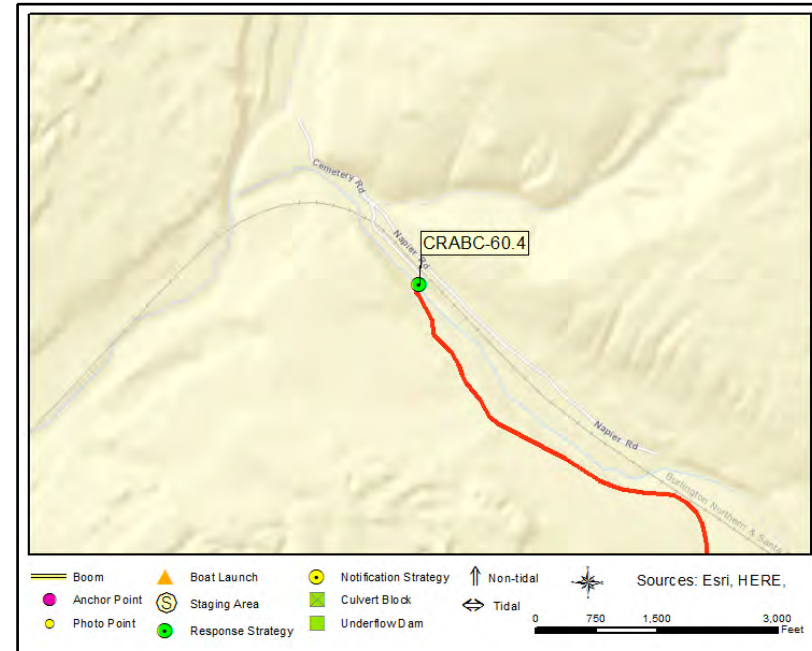
2	Laborer
1	Supervisor

Crab Creek - Cemetary Road - Site 1

CRABC-60.4



CRABC-60.4 Photo: At strategy location on bridge over Crab Creek on Napier Road looking upstream.



Site Contact

No Information

Not Determined :

Nearest Address

108 Napier Rd
Odessa, WA 99159

Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 0.8mi, turn right onto Cemetery Road
5. After 1.7mi, Cemetery Road becomes Napier Road.
6. Stay on Napier Road for 1.3mi to bridge over Crab Creek. Stage equipment on or near bridge/roadway as needed. Follow WSDOT work zone traffic control guidelines (as needed).

Crab Creek - Napier Road**CRABC-61.1**

Position - Location: 47° 20.318', -118° 44.867' 47° 20' 19.1", -118° 44' 52.0" 47.33863, -118.74779 Odessa

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft boom to bank on creek left at/near Point B (47.338543, -118.747913; ~130ft downstream of RR Bridge). Secure line to remaining boom end and transport to creek right using kayak/hand-launch work boat. Using line, pull boom upstream and across to creek right and secure near base of RR Bridge earthen support at Point A (47.33873, -118.74768). Avoid using anchoring posts on creek right other than at Point A; sensitive resources along creek right could be injured. Back hard boom with multiple lengths of sorbent boom. Vac-truck or skimmer collection at Point B if needed.

Staging Area: Onsite: Stage off Napier Road on dirt driveway/path into old ranch.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Rail Line; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Intermittent stream flow at this location. Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Listed IBA, Sensitive Resources

**Recommended Equipment**

5	Each	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
200	Feet	Line - 3/8" poly line
2	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage (if collection)
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Crab Creek - Napier Road

CRABC-61.1



CRABC-61.1 Photo: On creek left looking down (north) towards strategy location from Napier Road.

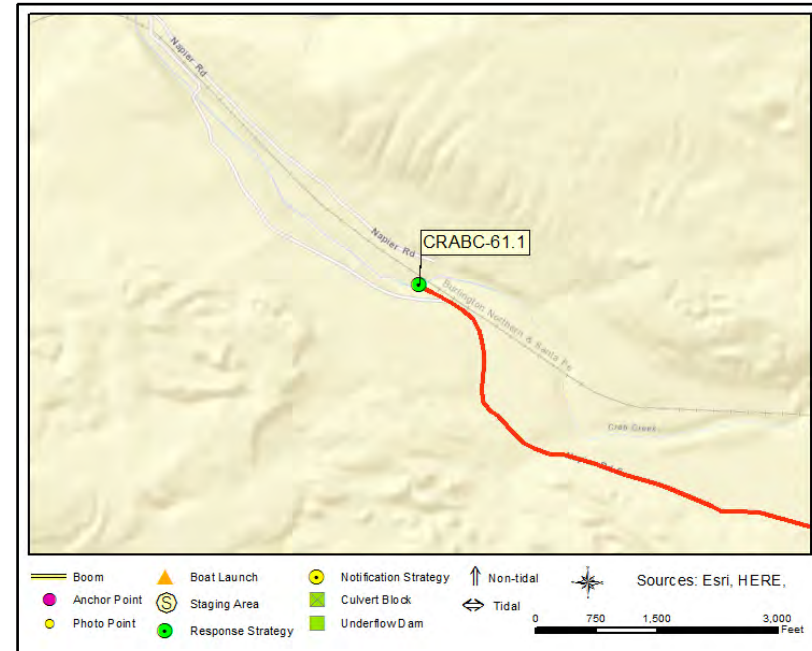
Site Contact

No Information

Not Determined :

Nearest Address

100 Cemetery Rd
Odessa, WA 99159



Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 0.8mi, turn right onto Cemetery Road
5. After 1.7mi, Cemetery Road becomes Napier Road.
6. Stay on Napier Road for 0.5mi. Pull off road onto dirt road of old ranch and follow through gate to creek left (~380ft from Napier Road) . Attempt to notify unknown property owner and stage equipment near creek.

Crab Creek - Highway 28 (Odessa)**CRABC-63.7**

Position - Location: 47° 19.966', -118° 41.913' 47° 19' 58.0", -118° 41' 54.8" 47.33277, -118.69856 Odessa

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of 100ft boom to bank on creek right at/near Point B (47.33287, -118.698680). From creek left at or near Point A (47.33265, -118.69849), float line under bridge and over to Point B; hip waders may be needed. Attach line to remaining boom end and pull upstream to creek left, securing it to bank at/near Point A. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use vac-truck or skimmer/storage to collect oil near Point B. Back hard boom with multiple lengths of sorbent boom for secondary collection and sheen reduction.

Staging Area: Onsite: Stage off NE corner of Hwy 28 bridge behind guardrail (between guardrail and tracks). 4x4 vehicle recommended.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Rail Line; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Follow WSDOT work zone traffic control guidelines if staging on shoulder of roadway. Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Listed IBA

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
2	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Highway 28 (Odessa)

CRABC-63.7



CRABC-63.7 Photo: On creek left of Crab Creek looking downstream towards railroad bridge and across to strategy location on creek right, slightly obscured by tall grass.

Site Contact

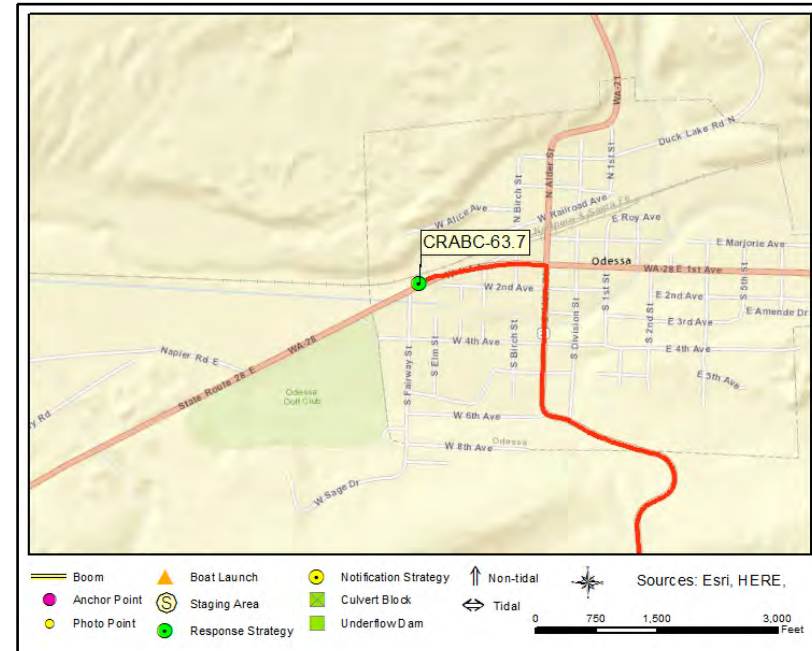
Burlington Northern Santa Fe Railroad

Land/Property Contact :

WA
800-832-5452

Nearest Address

215 W 1st Ave
Odessa, WA 99159



Driving Directions

1. Go east on I-90 and take exit 206 (WA-21 towards Lind/Odessa)
2. At end of ramp turn left onto WA-21
3. After 18.1mi, turn left on W 1st Ave/Hwy 28
4. After 0.3mi, before bridge over creek, pull off Hwy 28 to the right (behind guardrail) and follow level ground ~180ft to creek right. Stage off roadway at this location.

Crab Creek - Laney Brothers Road N**CRABC-74.6**

Position - Location: 47° 18.635', -118° 29.207' 47° 18' 38.1", -118° 29' 12.4" 47.31058, -118.48678 Ritzville

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure one end of boom to bank near NE corner of bridge over Crab Creek on creek right at/near Point A (47.31071, -118.48694) on upstream side of bridge. Extend boom upstream about ~125ft, along bank on creek right, and secure remaining end to bank at/near Point C (47.31068, -118.48643). Secure line to boom (at point about 105ft from end at Point A) and pull into position from bank on river left near bridge; secure at/near Point B (47.31042, -118.48697). Use skimmer with portabl storage for collection. Use lines of sorbent boom on downstream side of bridge for secondary collection.

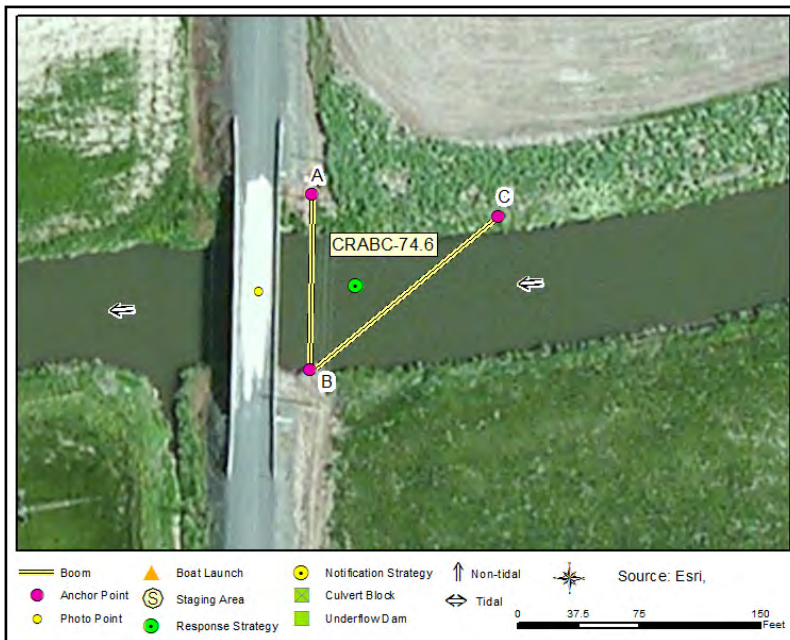
Staging Area: Onsite: Stage on shoulder of roadway or in gravel pullout located ~400ft north of bridge.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife; Power Lines.

Field Notes: Follow WSDOT work zone traffic control guidelines if staging on shoulder of roadway. Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Herons, Resident Fish

**Recommended Equipment**

5 Each	Anchoring System(s)- Shoreside
300 Feet	Boom - B3 (River Boom) or equivalent
300 Feet	Boom - Sorbent
1 Each	Bridle(s) - Hand (appropriately sized for boom)
2 Each	Heaving Line(s)
300 Feet	Line - 3/8" poly line
1 Each	Skimmer (appropriately sized) with Portable Storage
1 Each	Winch - Power Winch

Recommended Personnel

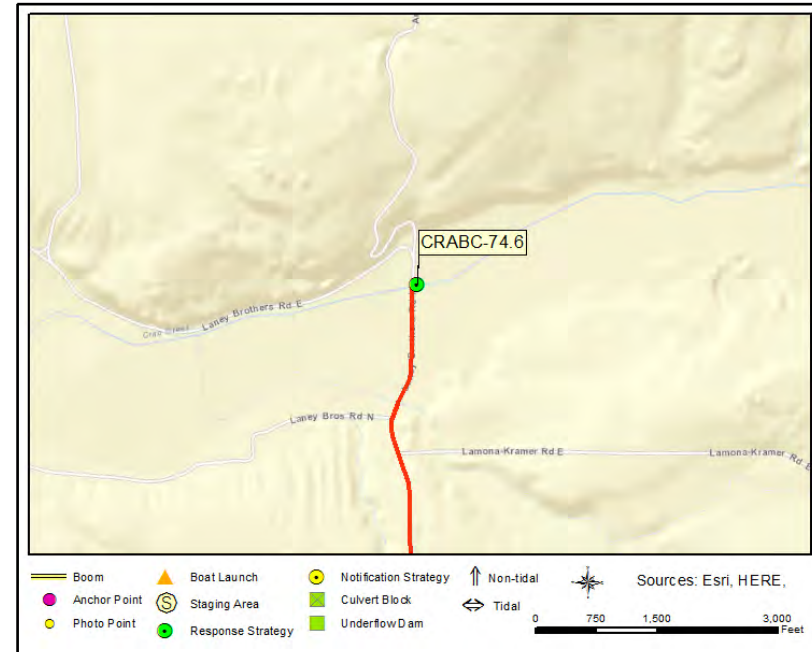
3	Laborer
1	Supervisor

Crab Creek - Laney Brothers Road N

CRABC-74.6



CRABC-74.6 Photo: At strategy location looking east/upstream on Crab Creek from bridge on Laney Brothers Road.



Site Contact

No Information

Not Determined :

Nearest Address

3136 Laney Brothers Rd N
Ritzville, WA 99169

Driving Directions

1. Go east on I-90 and take exit 215 (N Paha Packard Rd)
2. At end of ramp turn left onto N Paha Packard Rd
3. After 10.4mi, turn right onto E Davis Rd
4. After 0.3mi, turn left onto Laney Brothers Rd
5. After ~3.4mi you have reached the strategy location. Stage on shoulder of roadway or in gravel pullout located about ~400ft north of bridge.

Crab Creek - Doerschlag Road**CRABC-97.0**

Position - Location: 47° 19.904', -118° 8.218' 47° 19' 54.3", -118° 8' 13.1" 47.33174, -118.13697 Sprague

Strategy Objective: Underflow Dam : Install Underflow Dam to Collect Oil and Prevent Downstream Movement of Product

Implementation: If time allows, build underflow dam at this location on south/downstream side of roadway. If not, deploy one length of river boom (hard boom) on downstream side of bridge. Then deploy multiple lines of sorbent boom across creek, upstream of the river boom. Secure hard boom and sorbent to banks using anchoring posts, trees, or existing structures. Use lines to keep boom secure in water (as needed). Use vac-truck or skimmer & storage for collection (if site is collecting oil).

Staging Area: Onsite: Stage off Doerschlag Road; gravel pull-out located on west side of bridge.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions. Install Underflow Dam on downstream side of bridge if time allows.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
1	Assort	Fill material (sand, earth, gravel, sandbags)
200	Feet	Line - 3/8" poly line
10	Each	Pipe(s), PVC (8 inch x 8ft)
1	Roll	Plastic Sheetting
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

3	Laborer
1	Supervisor

Crab Creek - Doerschlag Road

CRABC-97.0



CRABC-97.0 Photo: At strategy location looking south/downstream on Crab Creek from roadway bridge.

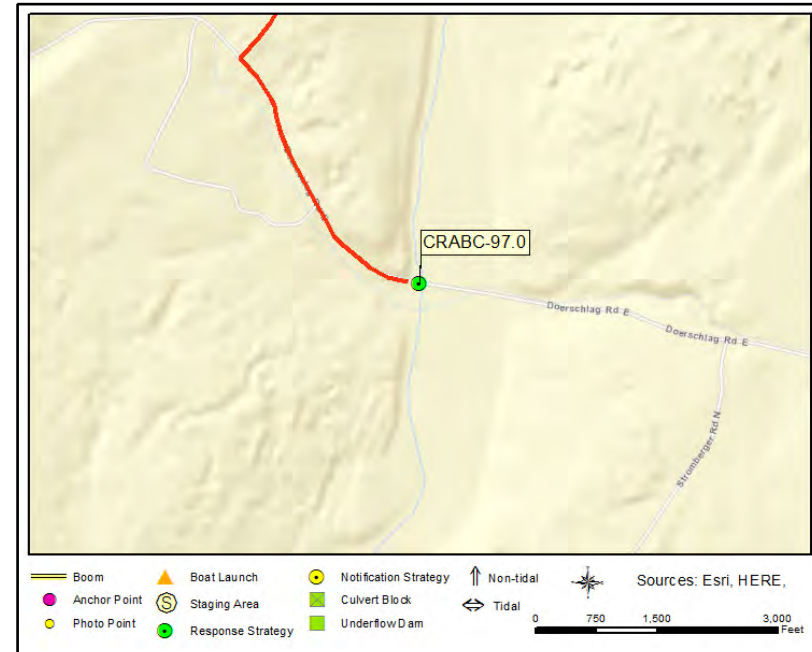
Site Contact

No Information

Not Determined :

Nearest Address

39322 Doerschlag Rd E
Sprague, WA 99032



Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 9.3mi, turn left onto Harding Rd E
4. After 1.7mi, turn left onto Platter Rd N
5. After 1.6mi, turn left onto Doerschlag Rd E
6. After 0.7mi (before bridge) pull off roadway onto small gravel pull-out/field road. Stage equipment at this location, about 150ft west of bridge.

Crab Creek - Highway 23 near Harding Road**CRABC-100.7**

Position - Location: 47° 21.623', -118° 6.494' 47° 21' 37.4", -118° 6' 29.7" 47.36038, -118.10824 Sprague

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek using Sorbent

Implementation: Secure end of boom to bank near NE corner of bridge (upstream side) on creek right at/near Point A (47.36052, -118.10825). Use line to pull boom across to creek left, securing boom tight at/near Point B (47.36034, -118.1081). Deploy multiple lines of sorbent boom upstream of hard boom in same manner.

Staging Area: Onsite: Stage on shoulder of Hwy 23 (NE corner of roadway after guardrail)

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Staging on shoulder of Hwy 23 is very limited; follow WSDOT work zone traffic control guidelines. Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line

Recommended Personnel

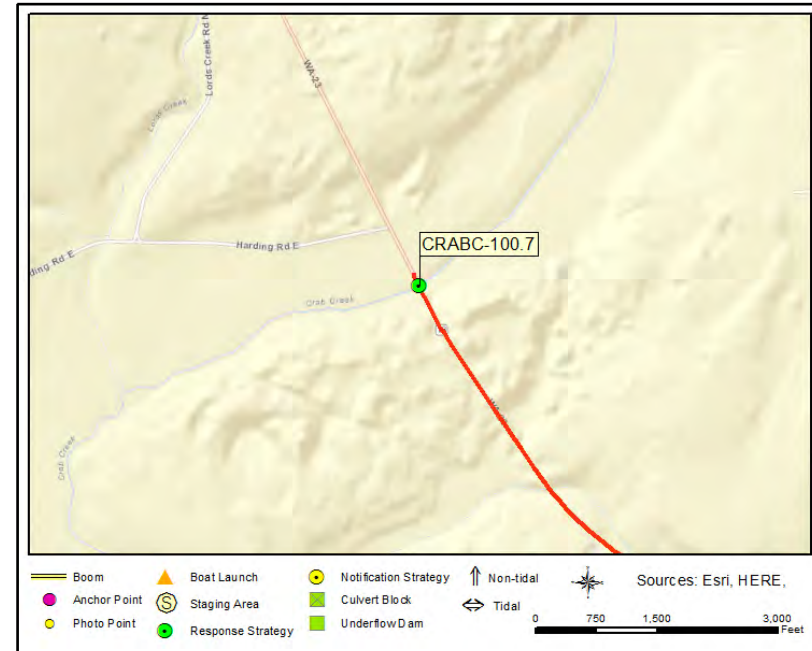
2	Laborer
1	Supervisor

Crab Creek - Highway 23 near Harding Road

CRABC-100.7



CRABC-100.7 Photo: At strategy location on creek right, looking at Crab Creek (upstream) from north side of Hwy 23 bridge.



Site Contact

No Information

Not Determined :

Nearest Address

40114 Harding Rd E
Sprague, WA 99032

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 9.1mi, you have reached the strategy location (at small bridge over creek); stage on shoulder of roadway after bridge beyond guardrail. Follow WSDOT work zone traffic control guidelines.

Crab Creek - Canby Bridge Road (Harrington)**CRABC-110.3**

Position - Location: 47° 27.943', -118° 6.045' 47° 27' 56.6", -118° 6' 2.7" 47.46572, -118.10074 Davenport

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure end of boom to bank near NE corner/upstream side of bridge on creek left at/near Point A (47.46567, -118.10068). Extend boom upstream about ~60ft, along bank on creek left and secure remaining end to shore at/near Point C (47.46584, -118.10068). Secure line to boom (at point ~40ft from end at Point A) and pull into position from bank on river right on upstream side of bridge; secure at/near Point B (47.46569, -118.10082). Use vac-truck or skimmer from bridge for collection. Use lines of sorbent boom on downstream side of bridge for secondary collection.

Staging Area: Onsite: Stage on shoulder of roadway or on roadway near bridge; follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

1	Each	Anchoring Post Driver(s)
10	Each	Anchoring Post(s) - (shoreside)
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

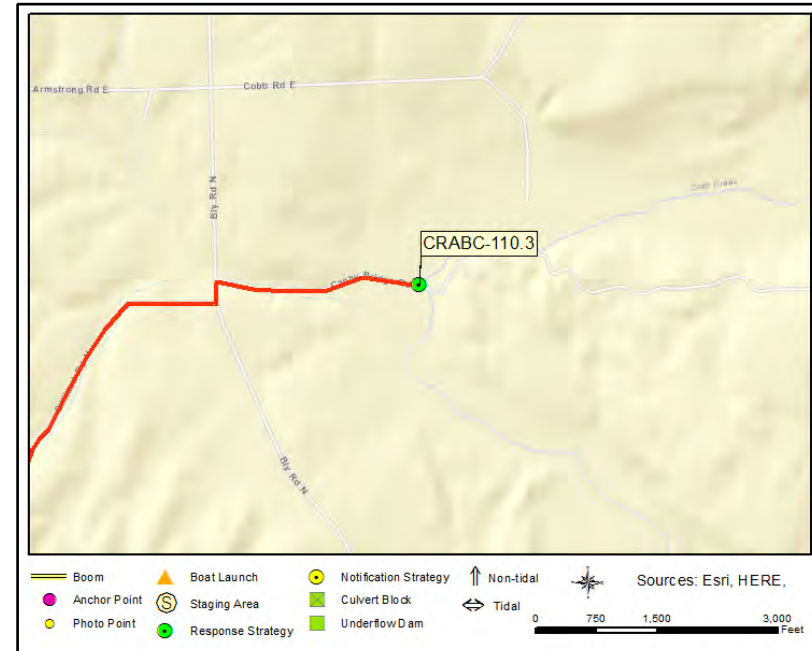
2	Laborer
1	Supervisor

Crab Creek - Canby Bridge Road (Harrington)

CRABC-110.3



CRABC-110.3 Photo: At strategy location looking upstream from small bridge over Crab Creek on Canby Bridge Road E.



Site Contact

No Information

Not Determined :

Nearest Address

11603 Bly Rd N
Davenport, WA 99122

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 12.2mi, turn right onto Oestreich Rd N
4. After 3.2mi, turn right onto Gilliland Rd E
5. After 2.9mi, turn left onto Bly Rd
6. After 300ft, turn right onto Canby Bridge Rd E
7. After 0.5mi, you have reached the strategy location (at small bridge); stage on or near roadway. Follow WSDOT work zone traffic control guidelines.

Crab Creek - Bluestem Road (Edwall)**CRABC-114.8**

Position - Location: 47° 30.139', -118° 2.282' 47° 30' 8.4", -118° 2' 16.9" 47.50232, -118.03804 Edwall

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure one end of boom to bank near NW corner of small bridge over Crab Creek on creek right at/near Point A (47.50231, -118.03827) on upstream side of bridge. Extend boom upstream about ~80ft, along bank on creek right, and secure remaining end to bank at/near Point C (47.50237, -118.03797). Secure line to boom (at point about 40ft from end at Point A) and pull into position from bank on river left near bridge; secure at/near Point B (47.50227, -118.0381). Use vac-truck or skimmer for collection. Use lines of sorbent boom on downstream side of bridge for secondary collection.

Staging Area: Onsite: Stage on shoulder of roadway; follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

5	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

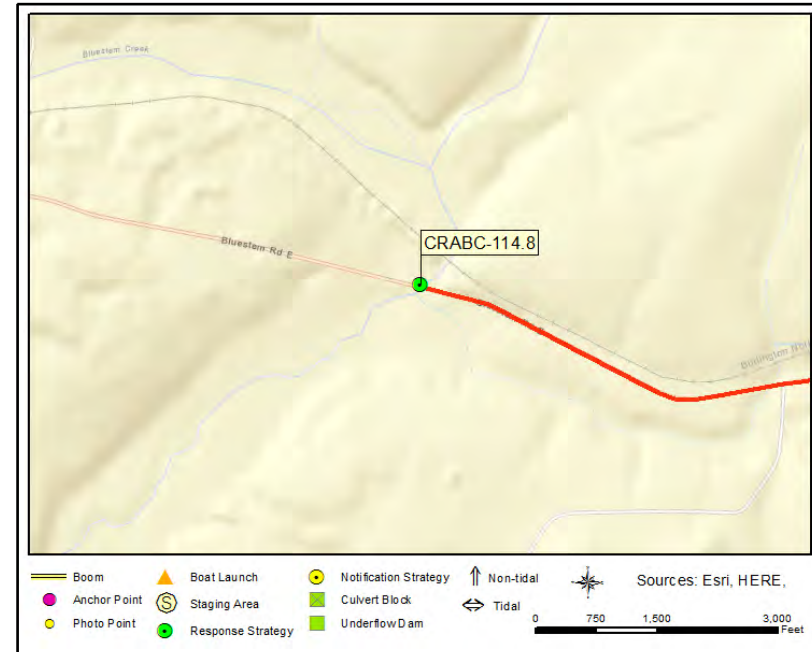
2	Laborer
1	Supervisor

Crab Creek - Bluestem Road (Edwall)

CRABC-114.8



CRABC-114.8 Photo: At strategy location looking upstream on Crab Creek from bridge on Bluestem Rd. Railroad bridge in background.



Site Contact

No Information

Not Determined :

Nearest Address

43998 Bluestem Rd E
Edwall, WA 99008

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 0.6mi, turn right onto WA-231 N
4. After 15.9mi, turn left onto Hall Avenue
5. After 0.2mi, road becomes "Westerberg St N" (after curve to the left)
6. After 0.1mi, road becomes "Bluestem Rd E" (after curve to the right)
7. Continue on Bluestem Rd E for 4.1 miles. Strategy location will be on your right before bridge over Crab Creek. Stage in field off roadway or on shoulder. Follow WSDOT work zone traffic control guidelines if staging on or near roadway.

Crab Creek - Detour Road**CRABC-126.7**

Position - Location: 47° 38.168', -117° 56.947' 47° 38' 10.1", -117° 56' 56.8" 47.63614, -117.94911 Edwall

Strategy Objective: Collection : Collect oil moving downstream on Crab Creek

Implementation: Secure one end of boom to bank near NW corner of small bridge over Crab Creek on creek right at/near Point A (47.63618, -117.94924) on upstream side of bridge. Extend center point of boom across creek to opposite side of bridge, securing it to bank on creek left at/near Point B (NE corner of bridge). Secure remaining boom end back at/near Point A. Place multiple lines of sorbent boom on upstream side of bridge, on upstream side of hard/river boom. Replace sorbents as needed. Use vac-truck or skimmer/portable storage for collection (if needed).

Staging Area: Onsite: Stage on roadway shoulder; follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Crab Creek - Detour Road

CRABC-126.7

No Photograph Available

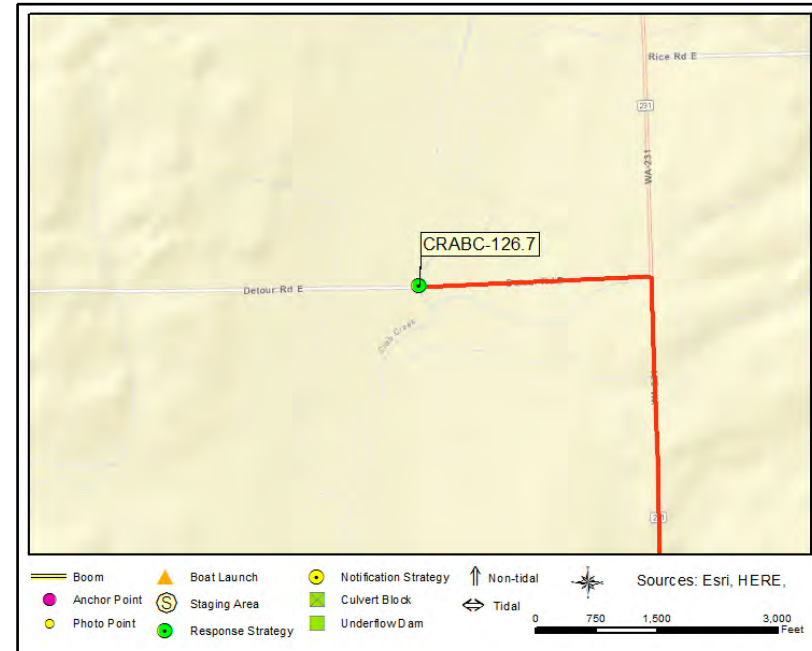
CRABC-126.7 Photo: No photograph available.

Site Contact

No Information

Not Determined :

Nearest Address

47215 Detour Rd E
Edwall, WA 99008

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 0.6mi, turn right onto WA-231 N
4. After 26.3mi turn left onto Detour Rd E
5. After 0.5mi, the strategy location will be on your left. Stage on shoulder of road and follow WSDOT work zone traffic control guidelines.

Crab Creek - Hwy 231 (Reardan)**CRABC-128.4**

Position - Location: 47° 39.320', -117° 56.273' 47° 39' 19.2", -117° 56' 16.4" 47.65534, -117.93789 Edwall

Strategy Objective: Underflow Dam : Install Underflow Dam to Collect Oil and Prevent Downstream Movement of Product

Implementation: If time allows, build underflow dam at this location on west/downstream side of roadway. If not, deploy one length of river boom (hard boom) on west/downstream side of Hwy 231, and multiple lines of sorbent boom across creek, upstream of the river boom. Secure hard boom and sorbent to banks using anchoring posts, trees, or existing structures. Use lines to keep boom secure in water (as needed). Use vac-truck or skimmer & storage for collection (if site is collecting oil).

Staging Area: Onsite: Stage at WSDOT SR 231 Stockpile Site adjacent to creek right; call WSDOT at 509-999-1712 in advance.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife; Barb Wire.

Field Notes: Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install Underflow Dam if time allows.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
1	Assort	Fill material (sand, earth, gravel, sandbags)
8	Each	Pipe(s), PVC (8 inch x 8ft)
1	Roll	Plastic Sheetting
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

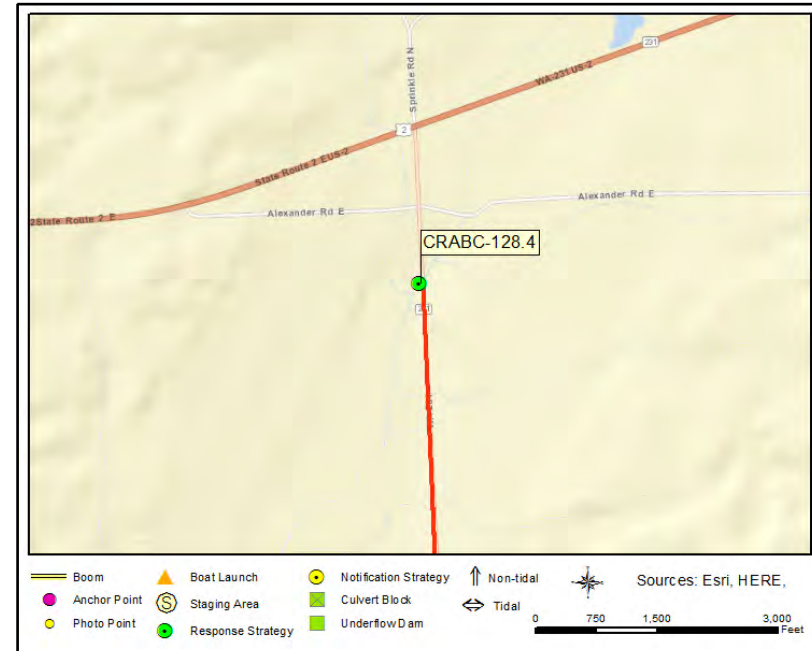
3	Laborer
1	Supervisor

Crab Creek - Hwy 231 (Reardan)

CRABC-128.4



CRABC-128.4 Photo: At strategy location looking west from shoulder of Hwy 231 near Reardan.



Site Contact

WSDOT Hazmat (Spokane)
 Primary Contact : Property Owner
 2714 North Mayfair St
 Spokane, WA 99207-2090
 509-999-1712

Nearest Address

25541 Washington 231
 Edwall, WA 99008

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 0.6mi, turn right onto WA-231 N
4. After 27.6mi (about 0.35mi south of Hwy 2) the strategy location will be on your left. Stage on shoulder of road or south end of gravel pit. Follow WSDOT work zone traffic control guidelines if staging on roadway shoulder.

Crab Creek - Alexander Road (Reardan)**CRABC-128.6**

Position - Location: 47° 39.456', -117° 56.117' 47° 39' 27.4", -117° 56' 7.0" 47.65760, -117.93529 Reardan

Strategy Objective: Culvert Block : Install Culvert Block to Collect Oil and Prevent Downstream Movement of Product

Implementation: If time allows, install culvert block at this location on north/upstream side of roadway. If not, deploy one length of river boom (hard boom) on upstream side of culvert (blocking the culvert). Then place multiple lines of sorbent boom immediately upstream of the hard boom. Secure boom (including sorbent boom) to banks using anchoring posts, trees, or existing structures. Use lines to keep boom secure in water (as needed). Use vac-truck or skimmer & storage for collection (if site is collecting oil).

Staging Area: Onsite: Stage on roadway; follow WSDOT work zone traffic control guidelines.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install culvert block if time allows.

Watercourse: Creek - Crab Creek

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
1	Assort	Fill material (sand, earth, gravel, sandbags)
200	Feet	Line - 3/8" poly line
1	Roll	Plastic Sheetting
4	Each	Plywood sheets (4ft x 4ft)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

	Laborer
1	Supervisor

Crab Creek - Alexander Road (Reardan)

CRABC-128.6



CRABC-128.6 Photo: At strategy location looking north/upstream on Crab Creek from roadway. Culvert runs under roadway.

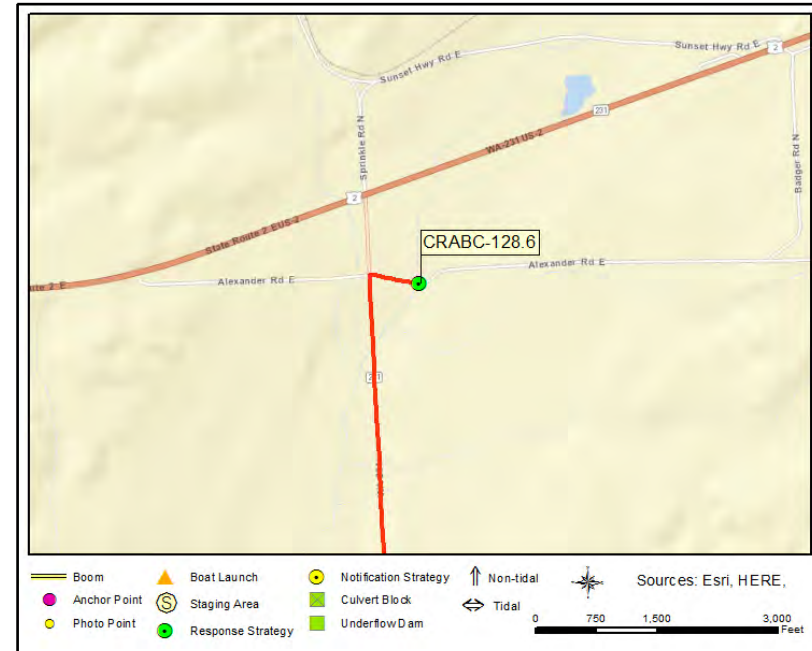
Site Contact

No Information

Not Determined :

Nearest Address

49282 Alexander Rd E
Reardan, WA 99029



Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 0.6mi, turn right onto WA-231 N
4. After 27.8mi, turn right onto Alexander Rd E
5. After 0.1mi Alexander Rd E, you have reached the strategy location. Stage on roadway; follow WSDOT work zone traffic control guidelines.

Lords Creek - Harding Road E**LORDC-0.4**

Position - Location: 47° 21.730', -118° 7.451' 47° 21' 43.8", -118° 7' 27.0" 47.36216, -118.12418 Sprague

Strategy Objective: Underflow Dam : Install Underflow Dam to Collect Oil and Prevent Downstream Movement of Product

Implementation: If time allows, build underflow dam at this location on north/upstream side of roadway. If not, deploy one length of river boom (hard boom) on north/upstream side of bridge. Then deploy multiple lines of sorbent boom across creek, upstream of the river boom. Secure hard boom and sorbent to banks using anchoring posts, trees, or existing structures. Use lines to keep boom secure in water (as needed). Use vac-truck or skimmer & storage for collection (if site is collecting oil).

Staging Area: Onsite: Stage on shoulder of roadway.

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable/Muddy Banks; Heavy Vegetation; Wildlife.

Field Notes: Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install Underflow Dam if time allows.

Watercourse: Creek - Lords Creek (Tributary to Crab Creek)

Resources at Risk: Downstream Habitat, Downstream Resources, Freshwater Wetlands, Freshwater Wildlife

**Recommended Equipment**

4	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
1	Assort	Fill material (sand, earth, gravel, sandbags)
200	Feet	Line - 3/8" poly line
8	Each	Pipe(s), PVC (8 inch x 8ft)
1	Roll	Plastic Sheetting
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

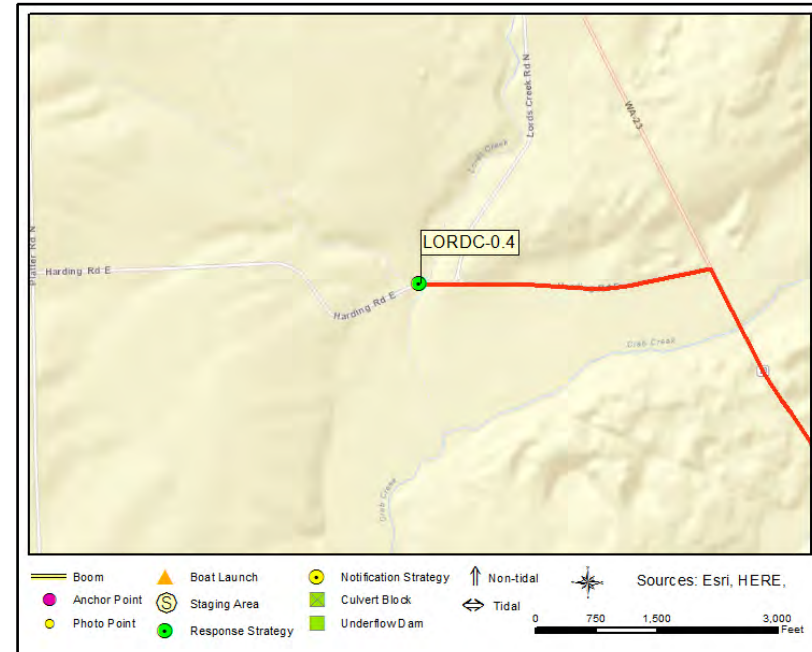
3	Laborer
1	Supervisor

Lords Creek - Harding Road E

LORDC-0.4



LORDC-0.4 Photo: At strategy location, looking SSW and downstream on Lords Creek from roadway bridge.



Site Contact

No Information

Not Determined :

Nearest Address

40114 Harding Rd E
Sprague, WA 99032

Driving Directions

1. Head east on I-90 and take exit 245 for WA-23 toward Sprague/Harrington
2. At end of ramp, turn left onto WA-23 N (signs for Edwall/Harrington)
3. After 9.3mi, turn left onto Harding Rd E
4. After ~0.8mi, Lords Creek runs under roadway; stage on shoulder of roadway near bridge.

Moses Lake - Crest Island (West)**MOLK-15.0a**

Position - Location: 47° 7.477', -119° 18.569' 47° 7' 28.6", -119° 18' 34.1" 47.12461, -119.30948 Moses Lake

Strategy Objective: Exclusion : Keep oil out of Lewis Horn

Implementation: Using workboat secure one end of 700ft length of boom to shore in Moses Lake near west entrance to Lewis Horn at Point A (~47.124596, -119.31089). Then extend boom eastward 700ft, securing the remaining boom end to shore near SW corner of Crest Island at Point B (~47.12461, -119.30813). Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems (as needed) to keep boom secure in water.

Staging Area: Remote: Stage at Blue Heron Park (SA-MOLK-43.2)

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable Banks; Heavy Vegetation near shore.

Field Notes: Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; Call 509-764-3805. Strategy site is 1.6 miles NW of ramp.

Watercourse: Lake - Moses Lake

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Waterfowl Concentrations

**Recommended Equipment**

3	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
700	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Moses Lake - Crest Island (West)

MOLK-15.0a



MOLK-15.0a Photo: Aerial view of strategy location and west end of Crest Island.

Site Contact

No Information

Unknown :

Nearest Address

111 Westshore Drive
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-MOLK43.2)

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/Hansen Rd
3. Turn right towards S Frontage Rd NW
4. After 0.1mi, take right onto S Frontage Rd
5. After 0.1mi, take right onto Hansen Rd
6. After 0.2mi, take right onto Westlake Rd
7. After 0.7mi, turn left onto Westshore Dr NE; Park will be on your right-hand side.
8. After 0.1mi, turn right into the park and travel 0.3mi east to boat ramp. Stage in parking area. Notify Moses Lake Parks Department; call 509-764-3805.

Moses Lake - Crest Island (East Side)**MOLK-15.0b**

Position - Location: 47° 7.585', -119° 18.260' 47° 7' 35.1", -119° 18' 15.6" 47.12642, -119.30434 Moses Lake

Strategy Objective: Exclusion : Keep oil out of Lewis Horn

Implementation: Using workboat, secure one end of 800ft length of boom to shore in Moses Lake near east end of Crest Island near Point A (47.12579, -119.30562). Then extend boom ~800ft NE (north of small unnamed island) and secure remaining boom end to private dock north of east entrance to Lewis Horn at/near Point B (47.12701, -119.30316). Sensitive resources exist near Point B so don't use anchoring posts. Use shoreside anchoring posts (Point A only), trees, or existing structures to secure boom to shore. Use anchoring systems (as needed) to keep boom secure in water.

Staging Area: Remote: Stage at Blue Heron Park (SA-MOLK-43.2)

Site Safety: Slips, Trips, Falls; Water Hazard; Unstable Banks; Heavy Vegetation near shore.

Field Notes: Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; Call 509-764-3805. Strategy site is 1.8 miles NW of ramp.

Watercourse: Lake - Moses Lake

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Sensitive Resources Nearby, Waterfowl

**Recommended Equipment**

4	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Moses Lake - Crest Island (East Side)

MOLK-15.0b

No Photograph Available

MOLK-15.0b Photo: No photograph currently available for this strategy location.

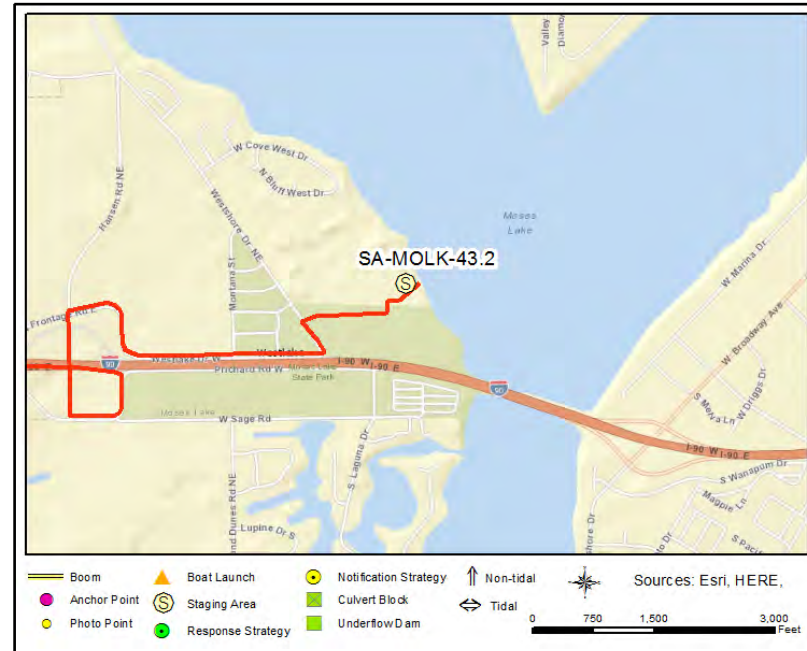
Site Contact

No Information

Unknown :

Nearest Address

111 Westshore Drive
Moses Lake, WA 98837



Driving Directions

To Staging Area (SA-MOLK-43.2)

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/Hansen Rd
3. Turn right towards S Frontage Rd NW
4. After 0.1mi, take right onto S Frontage Rd
5. After 0.1mi, take right onto Hansen Rd
6. After 0.2mi, take right onto Westlake Rd
7. After 0.7mi, turn left onto Westshore Dr NE; Park will be on your right-hand side.
8. After 0.1mi, turn right into the park and travel 0.3mi east to boat ramp. Stage in parking area. Notify Moses Lake Parks Department; call 509-764-3805

Moses Lake - Sand Dune Road (South Outlet)

MOLK-39.0

Position - Location: 47° 4.819', -119° 19.903' 47° 4' 49.2", -119° 19' 54.2" 47.08032, -119.33172 Moses Lake

Strategy Objective: Exclusion : Keep oil away from lake outlet gates.

Implementation: Secure boom to shore on south side of outlet channel near Point A (~47.07976, -119.33351). Connect line to remaining boom end and use Roadway Bridge to transport line across channel. Pull boom across channel and secure to shore around boom's mid-point (150ft) at Point B. Use line again to transport remaining boom across channel from Point B to Point C. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Deploy sorbent boom as needed to reduce small concentrations of product or sheen.

Staging Area: Onsite: Stage in parking area at south side of outlet channel off Dune Road.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Wildlife Hazard; Unstable Banks; Vegetation.

Field Notes: Ensure Moses Lake Irrigation District has been notified before implementing this strategy; call 509-765-8716. Gates/Outlet Structure leads to Potholes Reservoir.

Watercourse: Lake - Moses Lake

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Listed IBA, Waterfowl Concentrations



Recommended Equipment

2	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (Contractor Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Bridle(s) - Hand (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line

Recommended Personnel

3	Laborer
1	Supervisor

Moses Lake - Sand Dune Road (South Outlet)

MOLK-39.0



MOLK-39.0 Photo: At strategy location on south side of outlet channel, looking NW toward gates and Sand Dune Road.

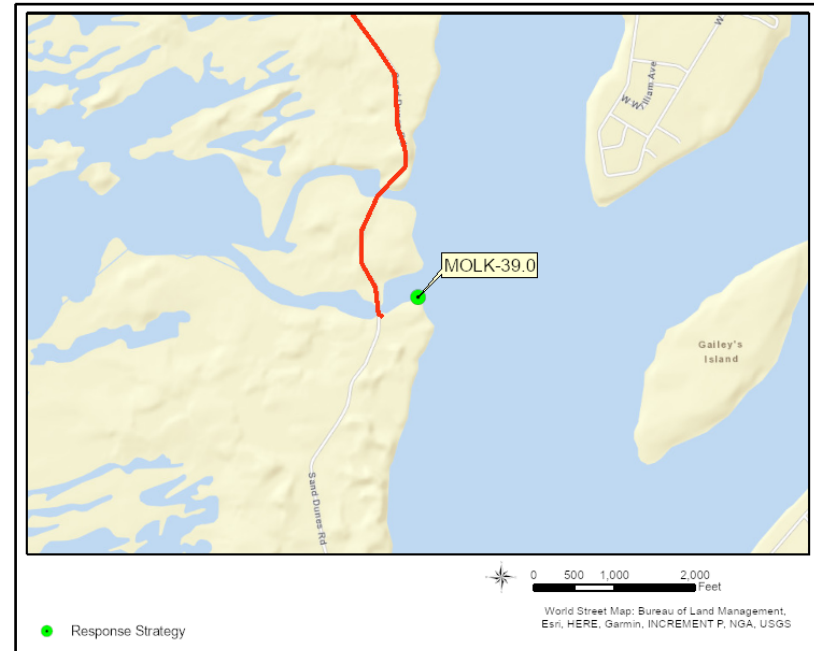
Site Contact

Moses Lake Irrigation District

Primary Contact :
932 E. Wheeler Road
Moses Lake, WA 98837
509-765-8716

Nearest Address

911 Sand Dune Road
Moses Lake, WA 98837



Driving Directions

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/ Hansen Rd
2. Turn right towards S Frontage Rd NW
3. After 0.1mi, take a sharp left onto S Frontage Rd NW.
4. After 0.3mi, turn right onto Sand Dune Road
5. After 1.6 miles parking area at strategy is on left. Stage in parking area. Notify Moses Lake Irrigation District; Call 509-765-8716.

Sand Dune Road (North Outlet)

MOLK-39.3

Position - Location: 47° 5.026', -119° 19.966' 47° 5' 1.6", -119° 19' 58.0" 47.08377, -119.33277 Moses Lake

Strategy Objective: Exclusion : Keep oil away from lake outlet gates. Collect oil at site as needed.

Implementation: Secure 300 feet of boom to dock piling at A and use shallow boat to extend north. Secure at B. Secure 200 feet of boom 50 feet west and secure to south shore at D, then extend north and secure to opposite bank at C. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Collect with vac truck or skimmer at A. Use sorbent boom for collection is acceptable for small concentrations of product and sheen. Adjust placement as needed for conditions.

Staging Area: Onsite: Stage in parking area at south side of outlet channel off Dune Road.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Wildlife Hazard; Unstable Banks; Vegetation.

Field Notes: Ensure Moses Lake Irrigation District has been notified before implementing this strategy; call 509-765-8716. Gates/Outlet Structure leads to Potholes Reservoir.

Watercourse: Lake - Moses Lake

Resources at Risk: Bald Eagle, Freshwater Wetlands, Freshwater Wildlife, Grebes - Concentrations, Listed IBA, Waterfowl Concentrations



Recommended Equipment

4 Each	Anchoring System(s)- Shoreside
500 Feet	Boom - B3 (Contractor Boom) or equivalent
150 Feet	Boom - Sorbent
200 Feet	Line - 3/8" poly line
1 Each	Vac Truck or Skimmer and Storage
1 Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Sand Dune Road (North Outlet)

MOLK-39.3



MOLK-39.3 Photo: From south side of channel, looking northeast. Photo was taken in May.

Site Contact

Moses Lake Irrigation District

Primary Contact :
932 E. Wheeler Road
Moses Lake, WA 98837
509-765-8716

Nearest Address

911 Sand Dune Road
Moses Lake, WA 98837



Driving Directions

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/ Hansen Rd
2. Turn right towards S Frontage Rd NW
3. After 0.1mi, take a sharp left onto S Frontage Rd NW.
4. After 0.3mi, turn right onto Sand Dune Road
5. After 1.3 miles parking area at strategy is on left. Stage in parking area. Notify Moses Lake Irrigation District; Call 509-765-8716.

Moses Lake - Interstate 90 Bridge

MOLK-42.9

Position - Location: 47° 6.186', -119° 19.377' 47° 6' 11.2", -119° 19' 22.6" 47.10311, -119.32295 Moses Lake

Strategy Objective: Exclusion : Keep oil out of southern end of lake

Implementation: Use workboat to transport 400ft boom to site. Secure boom to shore along trail near NW corner of I-90 bridge over Moses Lake at Point A (~47.10307, -119.32359). Secure remaining end to shore along trail on eastern part of bridge at Point C. Near boom midpoint, use workboat to pull boom north into the lake creating a chevron (north pointing apex) after anchoring near Point B (~47.1033, -119.32282 ~150ft north of trail bridge over Moses Lake). Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.

Staging Area: Remote: Stage at Blue Heron Park (SA-MOLK-34.2) near Boat Ramp

Site Safety: Slips, Trips, Falls; Water Hazard; Pedestrian Trail; Bank Condition Unknown.

Field Notes: Stage at Blue Heron Park (SA-MOLK-43.2) near boat launch. Contact Moses Lake Parks and Recreation to coordinate the staging of response equipment near boat launch; Call 509-764-3805. Strategy site is 0.3 miles SSE of ramp.

Watercourse: Lake - Moses Lake

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife



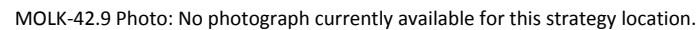
Recommended Equipment

1	Each	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (Contractor Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
2	Each	Heaving Line(s)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

MOLK-42.9



To Staging Area (SA-MOLK-43.2)

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/Hansen Rd
3. Turn right towards S Frontage Rd NW
4. After 0.1mi, take right onto S Frontage Rd
5. After 0.1mi, take right onto Hansen Rd
6. After 0.2mi, take right onto Westlake Rd
7. After 0.7mi, turn left onto Westshore Dr NE; Park will be on your right-hand side.
8. After 0.1mi, turn right into the park and travel 0.3mi east to boat ramp. Stage in parking area. Notify Moses Lake Parks Department; call 509-764-3805.

No Information

Unknown :

111 Westshore Drive
Moses Lake, WA 98837

Appendix 4B

Notification Strategy 2-Pagers

NOTIFICATION STRATEGIES – LIST

[MOLK-0.0-N](#)

Moses Lake Irrigation District

MOLK-0.0-N

Position - Location: 47° 7.888', -119° 15.714' 47° 7' 53.3", -119° 15' 42.8" 47.13146, -119.26190 Moses lake

Strategy Objective: Notification : Notify Moses Lake Irrigation District about oil impacting or potentially impacting the lake

Implementation: Call 509-765-8716. Moses Lake Irrigation District email is mlird@mlird.org

Field Notes: No Information

Watercourse: Lake - Moses Lake

Resources at Risk: Economic Resource, Other, Water Intakes



Communication Process and Action:

Moses Lake Irrigation District (MLIRD) controls the gates/outlet structures to the Potholes Reservoir, located on sw end of the lake south of the I-90 Bridge. Other project responsibilities include the Parker Horn Pump Station, Moses Lake North Dam, aquatic weed treatment, and dredging on Moses Lake.

In the event of a spill, contact MLIRD by calling Call 509-765-8716 and/or email mlird@mlird.org so information about the incident can be distributed, and actions taken to reduce impact to the resources they control.

Moses Lake Irrigation District

MOLK-0.0-N

No Photograph Available

MOLK-0.0-N Photo: No photograph is currently available for this location.

Site Contact

Moses Lake Irrigation District

Primary Contact :
932 E. Wheeler Road
Moses Lake, WA 98837
509-765-8716

Nearest Address

932 E Wheeler Road
Moses lake, WA 98837



Driving Directions

To Moses Lake Irrigation District Office

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi, turn right onto WA-17 N
4. After 1.5mi, turn left onto E Wheeler Rd
5. After 0.3mi, the office for Moses Lake Irrigation District will be on your right at 932 E Wheeler Road (brown single story brick structure with arched entryways).

Appendix 4C

Staging Area 2-Pagers

STAGING AREAS – LIST

[SA-CRABC-0.6](#)

[SA-CRABC-0.7](#)

[SA-CRABC-1.1](#)

[SA-CRABC-1.2](#)

[SA-CRABC-4.3](#)

[SA-MOLK-43.2](#)

Lower Crab Creek Staging Area

SA-CRABC-0.6

Staging Area

Position - Location: 47° 8.479', -119° 16.295' 47° 8' 28.7", -119° 16' 17.7" 47.14131, -119.27159 Moses Lake

Comments: Small gravel/dirt lot that can be used to stage equipment and possibly hand-launch a small work boat. Hwy 17 southbound, turnoff immediately before bridge and railroad tracks.



GRP Response Strategies Served:

CRABC-0.3, CRABC-0.0b, CRABC-0.0a, CRABC-0.4, CRABC-0.5

Location Information

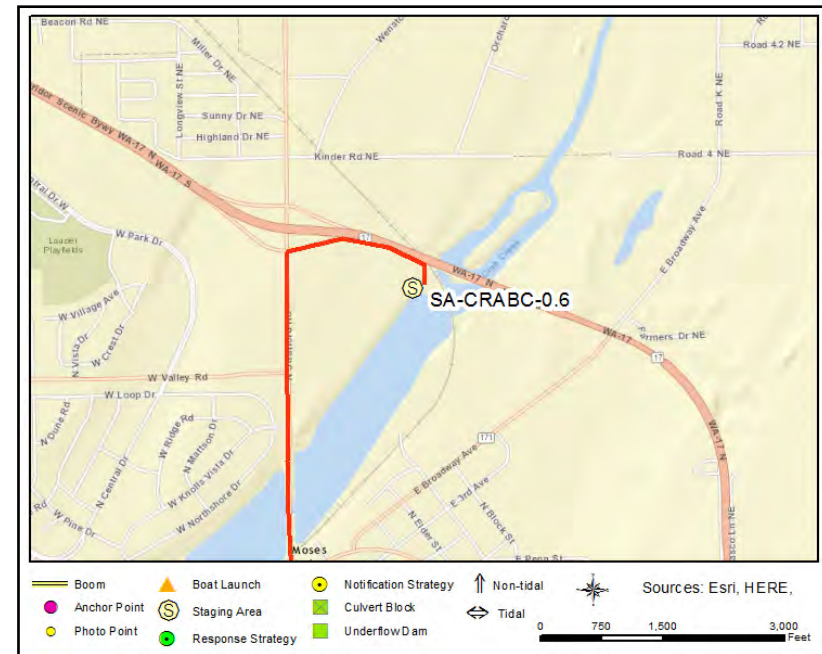
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	None Available
Boat Ramp(s)	None	None Available
Boathouse	No	
Cell Phone Coverage	Unknown	
Estimated Lot Size		12,000 SqFt
Lot Cover (Primary)	Dirt/Gravel	Dirt/Gravel
Parking - Car	Gravel	6
Parking - Trailer	Gravel	2
Power	No	None Available
Restroom	None	
Telephone	No	None Available
User Fee	Unknown	
Waste Disposal	None	None Available
Water (potable)	No	None Available

Lower Crab Creek Staging Area

SA-CRABC-0.6



SA-CRABC-0.6 Photo: Aerial view of Staging Area location off of Hwy 17 in Moses Lake.



Site Contact

No Information
Not Determined :

Nearest Address

1005 N Stratford Rd
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 176 (WA-171 N toward I-90BUS/MosesLake)
2. At end of exit ramp, turn left onto Lakeshore Dr/Hwy 171
3. After 2.9mi turn left onto N Stratford Rd
4. After 0.8mi turn right to merge onto WA-17 S toward Othello Pasco (stay in right lane)
5. After 0.3mi turn off hwy onto gravel/dirt roadway before railroad tracks and bridge over Crab Creek.
6. Follow road to water. Stage trucks and equipment on gravel/dirt roadway.

Crab Creek - Moses Lake Trucking Staging Area

SA-CRABC-0.7

Staging Area

Position - Location: 47° 8.522', -119° 16.055' 47° 8' 31.3", -119° 16' 3.3" 47.14204, -119.26759 Moses Lake

Comments: Site located on Moses Lake Trucking property adjacent to Crab Creek (on creek left); call 509-765-1387 for access.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	Not Available
Boat Ramp(s)	None	Not Available
Cell Phone Coverage	Unknown	
Estimated Lot Size		30,000SqFt
Lot Cover (Primary)	Grass	Dirt/Grass (50%)
Parking - Car	Other	20 Asphalt, Grass, Dirt
Parking - Trailer	Other	5 Asphalt, Grass, Dirt
Power	No	Not Available
Restroom	None	Not Available
Telephone	No	Not Available
User Fee	No	
Waste Disposal	None	Not Available
Water (potable)	No	Not Available

GRP Response Strategies Served:

CRABC-0.7a, CRABC-0.7c, CRABC-0.8, CRABC-0.7b

Crab Creek - Moses Lake Trucking Staging Area

SA-CRABC-0.7



SA-CRABC-0.7 Photo: Staging Area on Moses Lake Trucking property. On river left at location, looking downstream towards Hwy 17 bridge. Crab Creek at low water.



Site Contact

Moses Lake Trucking
Land/Property Contact : Property Owner
3644 East Broadway Avenue
Moses Lake, WA 98837
509-765-1387

Nearest Address

3644 East Broadway Avenue
Moses Lake, WA 98837

Driving Directions

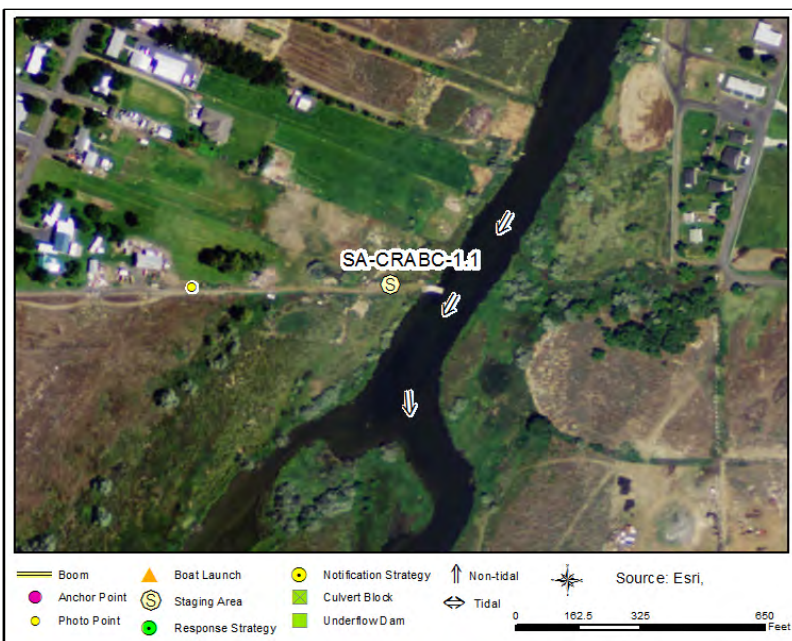
To Staging Area (SA-CRABC-0.7) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft). Stage Equipment adjacent to creek.

Crab Creek - Kinder Road Staging Area**SA-CRABC-1.1****Staging Area**

Position - Location: 47° 8.744', -119° 15.938' 47° 8' 44.6", -119° 15' 56.3" 47.14574, -119.26563 Moses Lake

Comments: Dirt/grass road from east end of Kinder Road NE leads to creek. Stage equipment on road/trail near creek.

**GRP Response Strategies Served:**

CRABC-1.1b, CRABC-1.0, CRABC-1.1a

Location Information

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	No	None Available
Boat Ramp(s)	None	None Available
Cell Phone Coverage	Unknown	
Estimated Lot Size		4500 SqFt
Lot Cover (Primary)	Grass	Grass 95%
Parking - Car	Other	6 Dirt/Grass
Parking - Trailer	Other	2 Dirt/Grass
Power	No	None Available
Restroom	None	None Available
Telephone	No	None Available
User Fee	Unknown	
Water (potable)	No	None Available

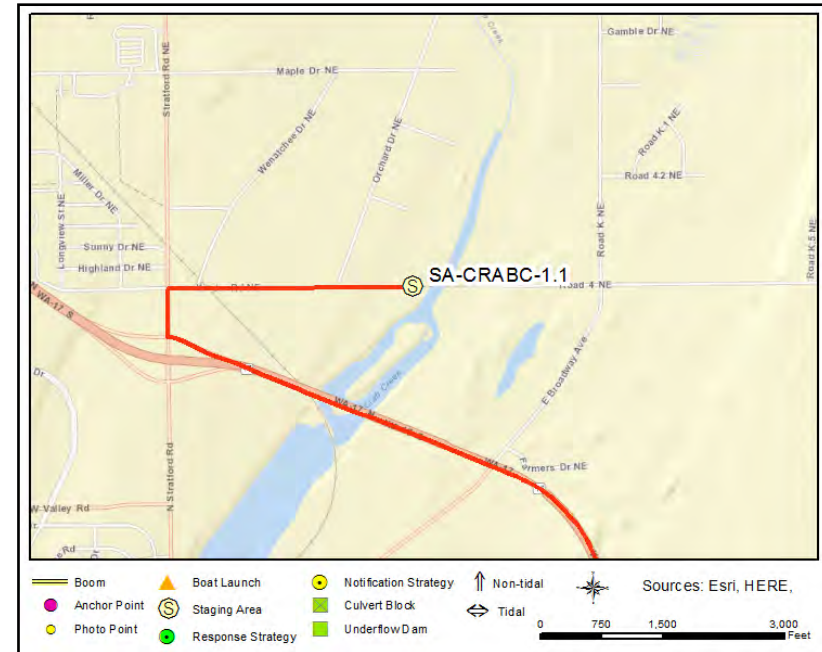
SA-CRABC-1.1



Site Contact

Nearest Address

10288 Kinder Rd NE
Moses Lake, WA 98837



To Staging Area (SA-CRABC-1.1)

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.2 mi turn right onto WA-17 N
4. After 2.7 mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 0.1 mi turn right onto Kinder Road NE
7. After 0.4 mi continue straight on Kinder Road NE (pavement will turn to dirt/grass)
6. Follow road ~0.2 mi to water. Stage trucks and equipment on dirt/grass road/trail; hand-launch small workboat from shore.

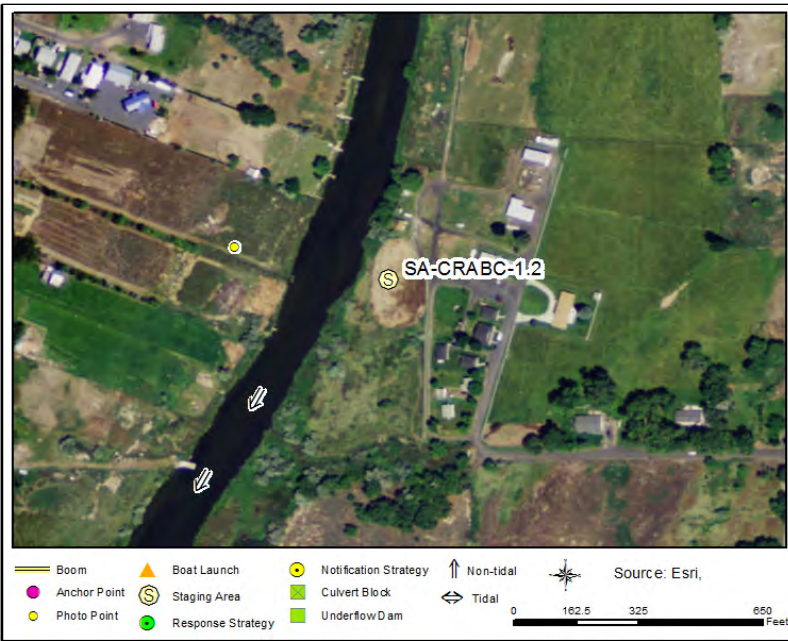
Millerville Worksite Staging Area

SA-CRABC-1.2

Staging Area

Position - Location: 47° 8.820', -119° 15.781' 47° 8' 49.2", -119° 15' 46.9" 47.14700, -119.26302 Moses Lake

Comments: Dirt/Grass field on creek left off Cherokee Road



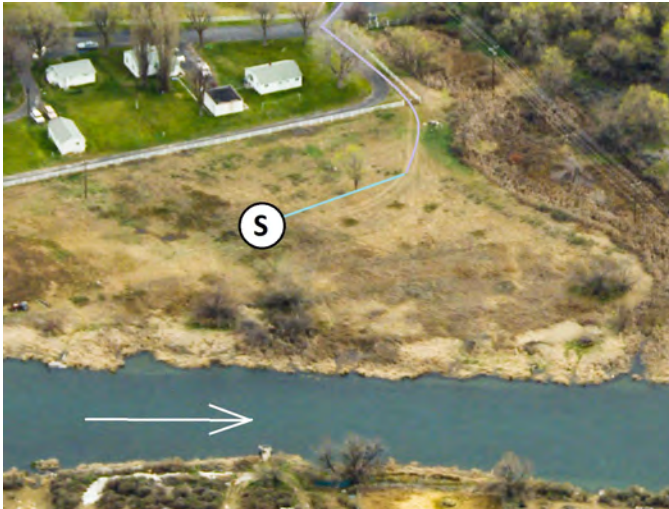
GRP Response Strategies Served:

CRABC-1.2

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	None Available
Boat Ramp(s)	None	None Available
Cell Phone Coverage	Unknown	
Covered Spaces	No	None Available
Estimated Lot Size		25000 Open Field (25,000sqft)
Lot Cover (Primary)	Dirt/Gravel	Grass/Dirt (100%)
Parking - Car	Other	10 Open Field
Parking - Trailer	Other	10 Open Field
Power	No	None Available
Restroom	None	None Available
Telephone	No	None Available
User Fee	Unknown	Private Property
Waste Disposal	None	None Available
Water (potable)	No	None Available

SA-CRABC-1.2

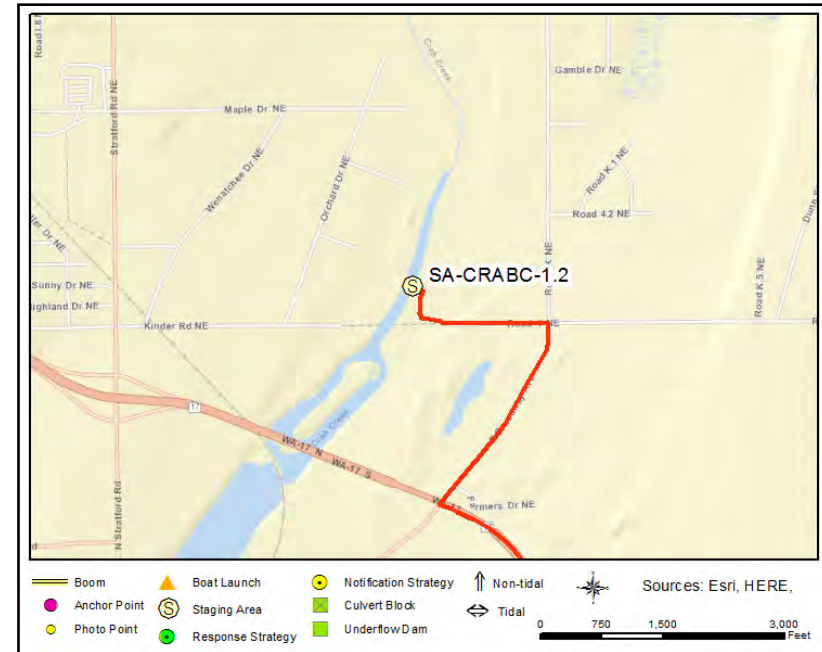


Site Contact

Land/Property Contact : Property Owner

Nearest Address

10804 Road 4 NE
Moses Lake, WA 98837



1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.0 mi, take slight right onto WA-17 N (signs for Ephrata/Soap Lake)
4. After 2.2 mi, turn right onto E Broadway Ave/Broadway Extended NE
5. After 0.5 mi, turn left onto Rd 4 NE/Cherokee Rd
6. After 0.2 mi, within the curve of the road to the right, turn left onto unnamed road.
7. After 125 ft, there is a gate that leads to the field where staging can be established adjacent to creek.
8. Check with property owner in advance; call 509-765-7809.

Crab Creek - 7NE Road**SA-CRABC-4.3****Staging Area**

Position - Location: 47° 11.399', -119° 15.861' 47° 11' 23.9", -119° 15' 51.6" 47.18998, -119.26434 Moses Lake

Comments: Gravel lot on north side of road about 350ft east of bridge over creek.

**Location Information**

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	No	None Available
Boat Ramp(s)	None	None Available
Cell Phone Coverage	Unknown	
Estimated Lot Size		10,000SqFt
Lot Cover (Primary)	Gravel	Gravel (90%)
Parking - Car	Gravel	10
Parking - Trailer	Gravel	6
Power	No	None Available
Restroom	None	None Available
Telephone	No	None Available
User Fee	Unknown	
Waste Disposal	None	None Available

GRP Response Strategies Served:

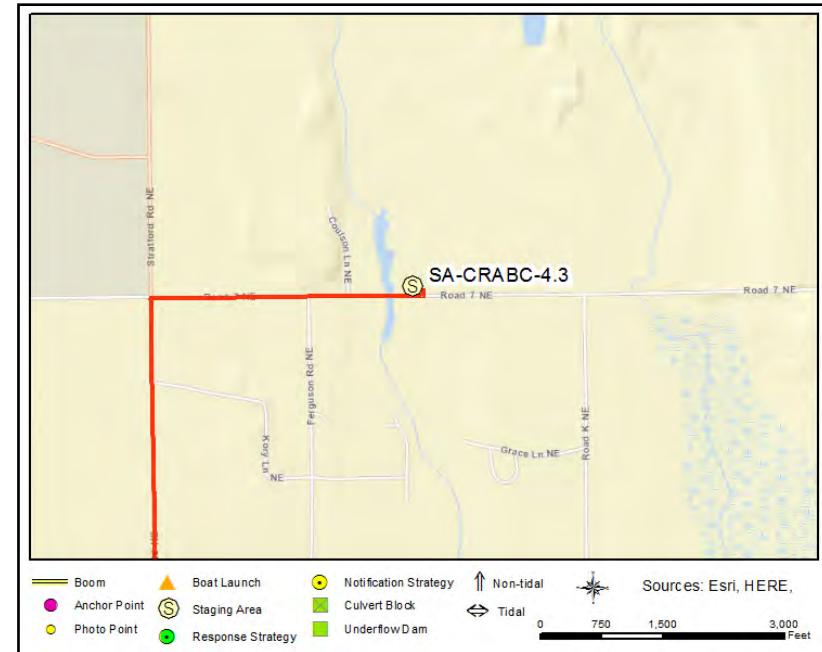
CRABC-4.3a, CRABC-4.3b

Crab Creek - 7NE Road

SA-CRABC-4.3

No Photograph Available

SA-CRABC-4.3 Photo: No photograph available.



Site Contact

No Information
Not Determined :

Nearest Address

10715 Road 7 NE
Moses Lake, WA 98837

Driving Directions

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90 BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.7mi take the Stratford Rd exit toward Moses Lake
5. At end of exit ramp, turn right onto N Stratford Rd
6. After 3.1mi turn right onto Road 7 NE
7. After 0.6mi turn left into gravel parking lot (~350ft east of bridge over Crab Creek); stage equipment in parking lot.

Moses Lake - Blue Heron Park

SA-MOLK-43.2

Staging Area

Position - Location: 47° 6.395', -119° 19.661' 47° 6' 23.7", -119° 19' 39.6" 47.10659, -119.32768 Moses Lake

Comments: Contact City of Moses lake Parks and Recreation at 509-764-3805. See: <http://www.cityofml.com/index.aspx?NID=538>



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Asphalt	2
Cell Phone Coverage	Yes	
Estimated Lot Size		123000 SqFt
Lot Cover (Primary)	Asphalt	Asphalt
Parking - Car	Other	250
Parking - Trailer	Other	25
Power	Yes	
Restroom	Restroom - Flush	1
Telephone	No	
User Fee	No	
Water (potable)	Yes	

GRP Response Strategies Served:

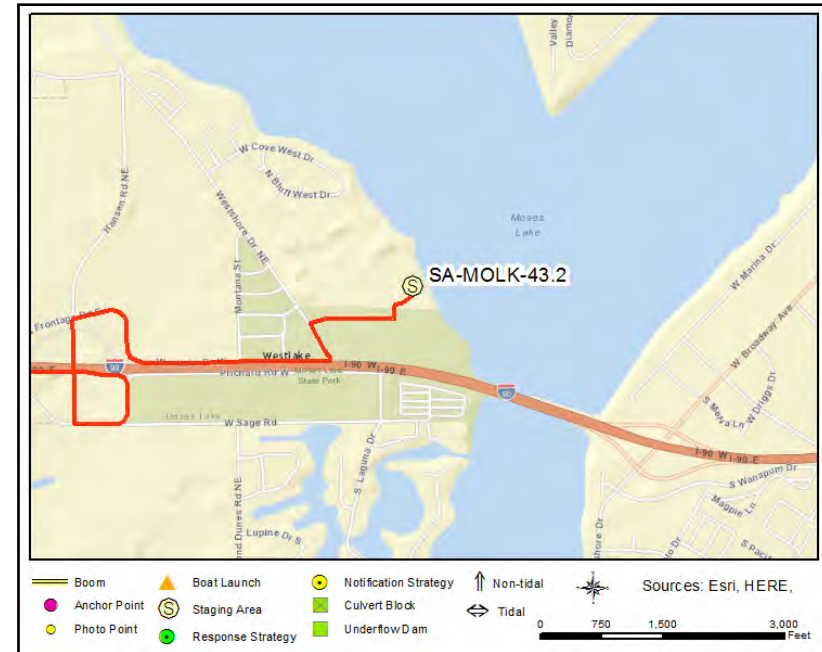
MOLK-15.0a, MOLK-15.0b, MOLK-42.9

Moses Lake - Blue Heron Park

SA-MOLK-43.2

No Photograph Available

SA-MOLK-43.2 Photo: No photograph currently available.



Site Contact

City of Moses Lake Parks and Recreation

Land/Property Owner :
 411 S Balsam Street
 Moses Lake, WA 98837
 509-764-3805

Nearest Address

111 Westshore Drive
 Moses Lake, WA 98837

Driving Directions

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/Hansen Rd
3. Turn right towards S Frontage Rd NW
4. After 0.1mi, take slight right onto S Frontage Rd
5. After 0.1mi, take right onto Hansen Rd
6. After 0.2mi, take right onto Westlake Rd
7. After 0.7mi, turn left onto Westshore Dr NE; Park will be on your right-hand side.
8. After 0.1mi, turn right into the park and travel 0.3mi east to boat ramp. Stage in parking area. Notify Moses Lake Parks Department; call 509-764-3805.

Appendix 4D

Boat Launch 2-Pagers

BOAT LAUNCHES – LIST

[BL-CRABC-0.9](#)

[BL-MOLK-43.2](#)

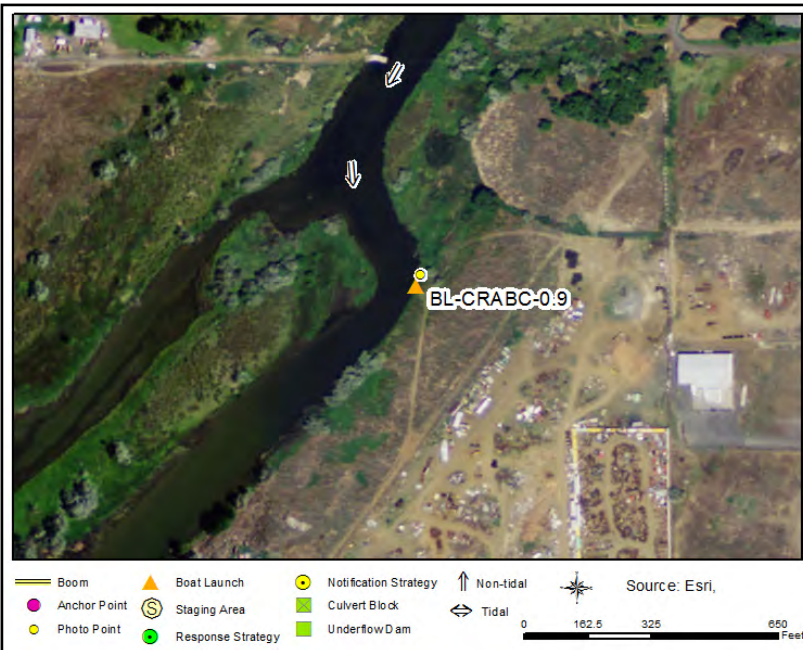
Crab Creek - Moses Lake Trucking Boat Launch

BL-CRABC-0.9

Boat Launch Location

Position - Location: 47° 8.646', -119° 15.901' 47° 8' 38.7", -119° 15' 54.1" 47.14410, -119.26502 Moses Lake

Comments: Site located on Moses Lake Trucking property; call 509-765-1387 for access. May be able to launch <19ft workboat during periods of high water. At low water, hand-launch workboat recommended.



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	None Available
Boat Ramp(s)	Natural (Grass/Dirt)	1
Cell Phone Coverage	Unknown	
Estimated Lot Size		1000SqFt
Lot Cover (Primary)	Grass	Grass/Dirt (100%)
Parking - Car	Other	3 Dirt Trail
Parking - Trailer	Other	1 Dirt Trail
Power	No	None Available
Restroom	None	None Available
Telephone	No	None Available
User Fee	No	
Waste Disposal	None	None Available
Water (potable)	No	None Available

GRP Response Strategies Served:

CRABC-0.7a, CRABC-0.7c, CRABC-0.8, CRABC-0.7b

Crab Creek - Moses Lake Trucking Boat Launch

BL-CRABC-0.9



Photo: Natural boat launch on Moses Lake Trucking property. On river left at location, looking downstream towards Hwy 17 bridge. Crab Creek at low water.

Site Contact

Moses Lake Trucking

Land/Property Contact : Property Owner
3644 East Broadway Avenue
Moses Lake, WA 98837
509-765-1387

Nearest Address

3644 East Broadway Avenue
Moses Lake, WA 98837



Driving Directions

To Boat Launch (BL-CRABC-1.0) at Moses Lake Trucking

1. Head east on I-90 and take exit 179 (State Route 17 toward Moses Lake/Othello)
2. At end of exit ramp, turn left onto I-90BUS/WA-17 N
3. After 1.2mi turn right onto WA-17 N
4. After 2.2mi turn right onto East Broadway Avenue. Moses Lake Trucking is on the left.
5. Gain Entry into yard at Moses Lake Trucking; Call 509-765-1387.
6. From gate, follow yard road back towards Crab Creek (NW about ~1200ft), then turn north and follow dirt/grass trail (adjacent to creek) ~1000ft to boat launch at bend in creek.

Moses Lake - Blue Heron Park

BL-MOLK-43.2

Boat Launch Location

Position - Location: 47° 6.395', -119° 19.661' 47° 6' 23.7", -119° 19' 39.6" 47.10659, -119.32768 Moses Lake

Comments: Boat Launch provides good access to most areas of Moses Lake north of Interstate 5. Contact City of Moses lake Parks and Recreation at 509-764-3805. See: <http://www.cityofml.com/index.aspx?NID=538>



Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1
Boat Ramp(s)	Asphalt	2
Cell Phone Coverage	Yes	
Estimated Lot Size		123000 SqFt
Lot Cover (Primary)	Asphalt	Asphalt
Parking - Car	Other	250
Parking - Trailer	Other	25
Power	Yes	
Restroom	Restroom - Flush	1
Telephone	No	
User Fee	No	
Water (potable)	Yes	

GRP Response Strategies Served:

CRABC-0.3, CRABC-0.0b, CRABC-0.0a, MOLK-15.0a, CRABC-0.2, MOLK-15.0b, CRABC-0.4, MOLK-42.9, CRABC-0.5

Moses Lake - Blue Heron Park

BL-MOLK-43.2

No Photograph Available

SA-MOLK-43.2 Photo: No photograph currently available.

Site Contact

City of Moses Lake Parks and Recreation

Land/Property Owner :
411 S Balsam Street
Moses Lake, WA 98837
509-764-3805

Nearest Address

111 Westshore Drive
Moses Lake, WA 98837



Driving Directions

1. Head East on Interstate 90
2. Take exit 174 toward Mae Valley/Hansen Rd
3. Turn right towards S Frontage Rd NW
4. After 0.1mi, take slight right onto S Frontage Rd
5. After 0.1mi, take right onto Hansen Rd
6. After 0.2mi, take right onto Westlake Rd
7. After 0.7mi, turn left onto Westshore Dr NE; Park will be on your right-hand side.
8. After 0.1mi, turn right into the park and travel 0.3mi east to boat ramp. Stage in parking area. Notify Moses Lake Parks Department; call 509-764-3805.