CHEHALIS RIVER

Geographic Response Plan

(CHER GRP)

This page was intentionally left blank.

CHEHALIS RIVER

Geographic Response Plan

(CHER GRP)

October 2015

Spill Response Contact Sheet

Required Notifications for Oil Spills and Hazardous Substance Releases	
Federal Notification - National Response Center	**(800) 424-8802***
State Notification - Washington Emergency Management	**(800) 258-5990***

- Other Contact Numbers -

U.S. Environmental Protection Agency	
Region 10 - Spill Response	**(206) 553-1263***
- Washington Ops Office	(360) 753-9437
- Oregon Ops Office	(503) 326-3250
- RCRA/CERCLA Hotline	(800) 424-9346
- Public Affairs	(206) 553-1203

U.S. Coast Guard	
Sector Columbia River	
- Emergency / Watchstander	**(503) 861-2242***
- Command Center	**(503) 861-6211***
- Incident Management Division	(503) 861-6477
- Station Grays Harbor	**(360) 268-0121***
13th Coast Guard District	(800) 982-8813
National Strike Force	(252) 331-6000
- Pacific Strike Team	(415) 883-3311

National Oceanic Atmospheric Administration	
Scientific Support Coordinator	(206) 526-6829
Weather	(206) 526-6087

Other Federal Agencies	
U.S. Fish & Wildlife Service	**(360) 534-9313***
U.S. Department of Interior	(503) 326-2489
U.S. Navy Region Northwest	(360) 315-5410

Pipeline Companies & Railroads	
BNSF Railway	**(800) 832-5452***
BP Olympic Pipeline	**(888) 271-8880***
Puget Sound & Pacific (PSAP)	**(800) 800-2203***
Tacoma Rail	**(253) 396-3161***
Union Pacific Railroad	**(888) 877-7267***
Western Washington Railroad	(541) 912-1261

Response Contractors	
Cowlitz Clean Sweep (CCSPNE)	**(888) 423-6316***
Global Diving and Salvage	**(206) 623-0621***
Marine Spill Response	**(425) 252-1300***
NRC Environmental Services	**(800) 337-7455***

* Contact Numbers staffed 24-hours/day

Washington State	
Dept Archaeology & Hist Preserv	(360) 586-3065
Dept of Ecology	
- Headquarters (Lacey)	(360) 407-6000
- SW Regional Office (Lacey)	(360) 407-6300
Dept of Fish and Wildlife	(360) 902-2200
- Emergency HPA Assistance	**(360) 902-2537***
-Oil Spill Team	**(360) 534-8233***
Dept of Health (Drinking Water)	(800) 521-0323
- After normal business hours	(877) 481-4901
Dept of Natural Resources	(360) 902-1064
- After normal business hours	(360) 556-3921
Dept of Transportation	(360) 705-7000
State Parks & Rec Commission	**(360) 902-8544***
State Patrol - District 1	(253) 538-3240
State Patrol - District 5	(360) 449-7909
State Patrol - District 8	(360) 473-0172

Tribal Contacts	
Chehalis Confederated Tribes	(360) 273-5911
- Cultural Resources	Ext. 1304
- Natural Resources	Ext. 1606
- Public Safety	(360) 273-7051
Quinault Nation	(360) 276-8211
- Cultural Resources	Ext. 245, Ext. 520
- Natural Resources	Ext. 292
Squaxin Island Tribe	(360) 426-9781
- Cultural Resources	(360) 432-3850
- Natural Resources	(360) 432-3809

Local Government	
City of Centralia	(360) 330-7671
City of Chehalis	(360) 345-1042
City of Cosmopolis	(360) 532-9230
City of Elma	(360) 482-2212
City of Montesano	(360) 249-3021
City of Napavine	(360) 262-3547
City of Oakville	(360) 273-8916
City of Pe Ell	(360) 291-3543
Grays Harbor County	(360) 249-3711
Lewis County Sheriff	(360) 748-9286
Thurston County Sheriff	(360) 786-5500
Port of Chehalis	(360) 748-9365
Port of Grays Harbor	(360) 533-9528

Before you print this document

Chapter 4 with appendices (pages 31-292) and Appendix 6A (pages 307-308) of this document are provided in "landscape" page orientation; all other chapters and appendices are oriented in "portrait." The appendices in Chapter 4 (pages 97-292) have been designed for duplex printing (front and back side of paper), "open to top" configuration.

Purpose and Use of this Plan

This Geographic Response Plan (GRP) constitutes the federal and state on-scene coordinators' orders during the initial phase of an oil spill: from the time a spill occurs until a Unified Command is established. Its main focus is sensitive resource protection. The plan prioritizes tactical response strategies based on locations where spills might occur and the proximity of those locations to natural, cultural, and economic resources at risk of injury. By using this document it's hoped that immediate and proper action can be taken to reduce spilled oil's impact on sensitive resources within the planning area.

After a spill occurs, control and containment at or near the spill source are top priorities. Beyond those efforts, the tactical response strategies provided in this plan should be implemented using the priority tables in Chapter 4, unless overflight observations, spill trajectory models, or unique circumstances dictate otherwise.

This plan also provides specific information about the type and location of natural and economic resources in the area. Specific information about the location of cultural sites were taken into consideration in the development of this plan but such information cannot be provided in this document due to the confidential nature of the resources.

RECORD OF CHANGES

Date	Change Number	Summary of Changes	Name of Person Making Change
6/30/15	Original Release		
10/1/15	CHER-001	Update of Purpose and Use, Chapter 1, Chapter 3, Chapter 4, and Chapter 6. Removal of Protection Techniques and GRP Contributors from Appendices. Moved Appendix C to 1A.	Wendy Buffett

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

.

This page was intentionally left blank.

CHAPTER 1

Introduction

This plan focuses on sensitive resource protection after an oil spill occurs. It serves as the federal and state on-scene-coordinators' orders during the initial phase of an oil spill response in the Chehalis River area. It has been approved by Regional Response Team 10 and the Chairs and Co-Chairs of the Northwest Area Committee. Changes to this document are expected as more testing is conducted through drills, site visits, and actual use in spill situations. We value your input and hope that you'll let us know how the plan might be improved. Please submit comments online at http://www.rrt10nwac.com/Comment. Comments may also be emailed to GRPs@ecy.wa.gov or submitted by mail using the forms and information provided in Appendix 1A of this document.

The Chehalis River GRP planning area covers the river from Cosmopolis, picking up where the Grays Harbor GRP ends, and follows the river southeast to Chehalis, and then west to Pe Ell. The Chehalis River GRP has four distinct areas: (1) the tidally influenced area between Montesano and the mouth, (2) the middle section of river between Montesano and the mouth of the Skookumchuck River in Centralia, (3) the Chehalis Reach between the Skookumchuck and Newaukum Rivers, and (4) the upper section of river between the Newaukum River and Pe Ell. The communities of Cosmopolis, Central Park, Montesano, Satsop, Fuller, Elma, Malone, Porter, Oakville, Rochester, Grand Mound, Littlerock, Maytown, Tenino, Fords Prairie, Centralia, Chehalis, Adna, Curtis, Doty and Pe Ell are included in this area. Additional information about the planning area, including physical features, hydrology, climate and winds, tides and currents, and spill risks, can be found in Chapter 2 (Site Description). Information about potential response options in the planning area can be found in Chapter 3 (Response Options and Considerations).

The bulk of this plan is contained in Chapter 4. It provides information on tactical response strategies and the order they should be implemented, based on potential spill origin points and their proximity to sensitive resources. Area and sector maps and information on staging areas and boat launch locations are also provided in that chapter.

Control and Containment of an Oil Spill are a Higher Priority than the Implementation of GRP Response Strategies

If in the responder's best judgment, control and containment of an oil spill at or near the source of a spill isn't feasible, or if the source is controlled and contained but oil has spread out beyond initial containment, then the priorities laid out in Section 4.3 of this plan should take precedence until a Unified Command is formed. It's important to note that spill response priorities, beyond those described in this plan, should rely on aerial observations and spill trajectory modeling. A booming strategy listed as a high priority in Section 4.3 would not necessarily be implemented if a spill trajectory didn't warrant action in that area; however, the priority tables should be followed until spill trajectory information becomes available. During an incident, modifications to the deployment priorities provided in Section 4.3 of this plan may be made if approved by the Incident Commander or Unified Command.

The downstream movement of oil and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting strategy implementation priorities. The strategies discussed in this plan have been designed for use with persistent oils that float on water and may not be suitable for other petroleum products or hazardous substances. For hazardous substance spills, refer to the Northwest Area Contingency Plan (NWACP), Chapter 7000.

Information meant to support initial Environmental Unit functions can be found in Chapter 6 (Resources at Risk). That chapter and its appendix provide specific information about the type and location of natural and economic resources in the area. Specific information about the location of cultural sites in the GRP area were taken into consideration in the development of this plan but such information cannot be provided in this document due to the confidential nature of the resources.

1. 1 GRP CHAPTERS AND APPENDICES

CHAPTER 1	Introduction
APPENDIX 1A	GRP Comment Form
CHAPTER 2	Site Descriptions
CHAPTER 3	Response Options and Considerations
CHAPTER 4	Response Strategies and Priorities
APPENDIX 4A	Response Strategies
APPENDIX 4B	Notification Strategies
APPENDIX 4C	Staging Area
APPENDIX 4D	Boat Launch Locations
CHAPTER 5	Reserved
CHAPTER 6	Resources at Risk
APPENDIX 6A	List of Economic Resources

1. 2 GEOGRAPHIC RESPONSE PLAN DEVELOPMENT PROCESS

GRPs are considered part of the NWACP, although revised and distributed separately. They've been developed for the marine and inland waters of Washington, Oregon, and Idaho. The plans are prepared through the efforts of, and in cooperation with, Washington Department of Ecology, Oregon Department of Environmental Quality, Idaho State Emergency Response Commission, U.S. Coast Guard, U.S. Environmental Protection Agency, as well as other state and federal agencies, tribal and local governments, response organizations, emergency responders, and communities. GRPs are developed through workshops and meetings with representatives of these organizations as well as local oil spill emergency response experts, industry, environmental and conservation organizations, ports, and pilots, among others. Participants identify resources that may be at risk of injury from spills and attempt to develop oil spill response or notification strategies to reduce the chance of injury to those resources.

After compiling information on sensitive resources in the area, site visits are conducted to gather data and determine if spill response strategies near those resources should be added, modified, or deleted. In this, the anticipated effectiveness of existing strategies are reviewed, modifications made as determine necessary, potentially unsafe or ineffective strategies removed, and new strategies added to the plan. Unfortunately, the dynamics of marine and inland water environments and the present limitations of response technology make the development of strategies for all resource locations impracticable. A draft plan is produced after site visits are completed, and made available for public review and comment before a final version of the GRP is produced and published. A responsiveness summary is also published that addresses public comments received during the GRP update process.

1. 3 STANDARDIZED RESPONSE LANGUAGE

In order to avoid confusion in response terminology, this plan uses standard National Interagency Incident Management System, Incident Command System (NIIMS ICS) terminology.

1. 4 TERMINOLOGY AND DEFINITIONS

The glossary provided in Section 1910 of the NWACP and other sections of the area plan with glossaries independent of Section 1910 should be used when seeking the meaning of terms used in this plan.

This page was intentionally left blank.

APPENDIX 1A

Comments, Corrections, or Suggestions

We value your input and hope that you'll submit comments on how this plan might be improved. If you have any questions or comments, suggestions for improvement, or find errors in this document please submit comments online at http://www.rrt10nwac.com/Comment, email them to us at GRPs@ecy.wa.gov, or forward them via U.S. Mail to the following agencies:

United States Environmental Protection Agency
Region 10
Office of Environmental Cleanup
1200 Sixth Avenue
Room ECL-116
Seattle, WA 98101

Washington State Department of Ecology
Spill Prevention, Preparedness, and Response (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

The form on the following page of this attachment can be used to submit comments by mail. Contact information is requested so that we can give you a call if more information or comment clarification is needed.

Please use the GRP Field Report Form for providing information on GRP strategy field visits or the testing of response strategies. The form is available online at http://www.ecy.wa.gov/programs/spills/preparedness/GRP/Form-GRPFieldReport.pdf. Additional information on Geographic Response Plans is available at http://www.rrt10nwac.com/GRP.

GRP Comment Form

Mail Completed Form to:

US Environmental Protection Agency
Region 10
Office of Environmental Cleanup
1200 Sixth Avenue Room ECL-116
Seattle, WA 98101

Washington State Department of Ecology
Spills Program (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

Today's Date: _____

Your Name: _____

Title: _____

Company/Agency: _____

Address: _____

City: _____

State/Province: _____ Zip: _____

Email: _____ Ph: _____

GRP Page Number: _____ Section or Paragraph: _____

Comment(s): _____

CHAPTER 2

Site Description

2. 1 CHAPTER INTRODUCTION

This chapter provides a description of the area's physical features, hydrology, climate and winds, and includes an overview of oil spill risks in the Chehalis River area. The planning area begins on the Chehalis River, upstream of Cosmopolis at River Mile (RM) 4. It follows the river southeast to the city of Chehalis (RM 70), and then west to Pe Ell (RM 110). The plan also covers the lower few miles of tributaries, including the South Fork Chehalis River, Newaukum River, Skookumchuck River, Black River, Satsop River and Wynoochee River, and many other creeks and streams. The lower 4 miles of the Chehalis River, from Cosmopolis to the river mouth, is included in the Grays Harbor GRP.

Along the river, in order from the mouth to the headwaters, the Chehalis passes by the communities of Cosmopolis, Central Park, Montesano, Satsop, Fuller, Elma, Malone, Porter, Oakville, Rochester, Gate, Grand Mound, Littlerock, Maytown, Tenino, Fords Prairie, Centralia, Chehalis, Adna, Curtis, Dryad, Doty and Pe Ell. The planning area fully resides within the limits of Grays Harbor, Lewis, Thurston, and Pacific counties. Portions of Water Resource Inventory Area 14 (Kennedy-Goldsborough), WRIA-22 (Lower Chehalis), WRIA-23 (Upper Chehalis), WRIA-24 (Willapa), and WRIA-26 (Cowlitz) are included within the boundaries of the planning area.

2. 2 PHYSICAL FEATURES

The upstream boundary of the GRP planning area is near the river's source in the Doty Hills, northeast of Willapa Bay, and along the South Fork of the Chehalis in the Boistfort Prairie, west of Winlock. This area is a mix of forested hills and agricultural valleys, from 99% forest cover along Elk Creek near Doty, to 17% agriculture between Curtis and the Newaukum[1]. Throughout the watershed, "principal crops include hay and silage, with some vegetables and small grains. Land is also used for pasture".[2] The area upstream of Pe Ell is covered by large swaths of forest, most of it owned by Weyerhaeuser and harvested for lumber.

The major population center in the planning area is spread between the cities of Chehalis (population 7,345) and Centralia (pop. 16,670), along the Interstate 5 corridor.[3] This area includes the lower sections of the Newaukum and Skookumchuck Rivers and their many tributaries. Forest cover here drops to 69%, with approximately 25% of the land devoted to farming and the

[1] (Chehalis Basin Partnership, pp. III-8)
[2] (Chehalis Basin Partnership, pp. III-6)
[3] http://www.ofm.wa.gov/pop/april1/ofm_april1_population_final.pdf

remaining 6% used by industry and cities.[4] Several miles outside of the planning area, the Skookumchuck Dam provides water to a steam power plant and some flood control for the city of Centralia.

North of Centralia, along I-5, is a valley of large creek complexes, including Beaver Creek and Scatter Creek. These creeks flow through protected prairies that are unique to this part of Washington and home to many endangered species, including butterflies, gophers, toads and birds. Salmon also use these areas for spawning and rearing.

The area around Grand Mound, where Highway 12 splits west from I-5, is a wide, flat valley filled with a mix of farming and small communities along the river. The Black River passes along the northwest edge of this valley and is fed by a mix of creeks, as well as Black Lake in Olympia. Bordering the Black and then Chehalis River to the northeast is the Capitol State Forest, a state-protected area with no development, used for hiking and camping. The Black River also has large wetland complexes near Rochester, with large buffers of dense riparian vegetation between agricultural fields and the river channel.

The Black River crosses under Highway 12 and empties into the Chehalis River downstream of Rochester, cutting through the middle of the Chehalis Indian Reservation. The valley downstream of Oakville becomes narrower, with the Chehalis River edging close to the steep slopes of the Capitol Forest to the east, while the western side of the floodplain is covered in farms. The river in this area has changed course over the years, with side channels, oxbows and other wetlands scattered along its banks.

In Elma, Highway 12 meets Highway 8, running east to west between Olympia and Aberdeen. The river also changes course here, from northwest to due west. Cloquallum Creek, fed by Wildcat Creek and other streams that crisscross under Highway 8 to drain the Black Hills and Olympic foothills, passes through Elma to meet the Chehalis in a series of wetlands and oxbows. From here to Cosmopolis, a buffer of farms and wetlands separates the main highway from the river.

A few miles west of Elma is the Satsop River, a major tributary that drains the Olympic mountains. Past the Satsop is the city of Montesano and the Wynoochee River, another large watershed flowing from the Olympics. From Montesano downstream the river has noticeable tidal influence.

Between river mile 10 near Montesano and the edge of the planning area in Cosmopolis lies the Chehalis River Surge Plain, a complex of sloughs, islands and wetlands that is prime salmon and waterfowl habitat. The majority of the land here is managed by the Washington Department of Natural Resources, although the northern riverbank includes homes, farms and railroad properties.

The planning area ends just upstream of Cosmopolis, where the Grays Harbor GRP begins. The Chehalis River empties into Grays Harbor at the city of Aberdeen, and from there to the Pacific Ocean.

[4] (Chehalis Basin Partnership, pp. III-8)

2. 3 HYDROLOGY

The majority of the watershed is rain-dependent, with only the Wynoochee and Satsop Rivers having some summer impact from delayed snowmelt in the Olympic mountains. As with the rest of Western Washington, summer is considered the 'dry season' with precipitation dropping close to zero and flows averaging less than 2,000 cubic feet per second (cfs) at Montesano from June through October. The rainy season usually begins in November, increasing average flow to 8,000 cfs, and increasing to 13,000 cfs from December through February. Spring flows steadily drop through May.[5]

Rainfall is lowest in the prairies near Centralia, with a minimum of 40 inches annually, and highest in the Olympic Mountains, at up to 220 inches annually. Streams draining the central prairies vary considerably in width and flow depending on rainfall, sometimes running dry, other times flooding their banks into the fields beyond.

Since there are no dams on the Chehalis River, and very few of its tributaries, some flooding is common and very large floods have occurred historically. The most recent was December 2007, which washed away a number of bridges in the upper portion of the watershed and flooded cities along the river. Some of the bridges have not been rebuilt, and there have been proposals of building a dam near the headwaters to reduce the risk of catastrophic flooding. However there is significant resistance to a dam, due to expected negative impacts on salmon and wildlife habitat.

2.3.1 Water Resource Inventory Areas

The majority of the planning area is split between Water Resource Inventory Area 22 (WRIA-22), Lower Chehalis, and WRIA 23, Upper Chehalis. Most of the precipitation arrives during the winter months when water demands are the lowest. During the summer, there is little rain so low stream flows are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest. The amount of permitted water rights in the summer often exceeds the flow of the river; though the river never runs dry, the levels can drop significantly, creating poor conditions for salmon.

> WRIA 14 (Kennedy-Goldsborough): This watershed consists of the Kennedy, Skookum, Mill/Gosnell, Goldsborough, Johns creeks and other creeks and streams. Annual precipitation in the Kennedy-Goldsborough Watershed ranges from 40 to 80 inches per year with highest water demand and lowest water availability in the summer months[6].
>
> WRIA 22 and WRIA 23 (Lower Chehalis and Upper Chehalis): These watersheds include the Chehalis, Newaukum, Skookumchuck, Satsop, Wynoochee, and Wishkah rivers, and numerous tributary creeks and streams. Annual precipitation in the Lower and Upper Chehalis Watersheds ranges from 40 inches in the lowland valleys to over 100 inches in the Cascade and Willapa foothills[7].

[5] (Chehalis Basin Partnership, pp. III-36)

[6] (WA Dept of Ecology. *Focus on Water Availability: Kennedy-Goldsborough Watershed*)

[7] (WA Dept of Ecology. *Focus on Water Availability: Lower Chehalis & Upper Chehalis*)

WRIA 24 (Willapa): The Willapa Watershed is located on Washington's south coast and includes the Johns, Elk, North, Nemah, Naselle, and Bear River drainages. Annual precipitation in the Willapa Watershed ranges from 60 inches per year along the coastal lowlands to 140 inches per year in the Willapa Hills. The highest water demand and lowest water availability occurs in the summer months[8].

WRIA 26 (Cowlitz): The Cowlitz Watershed includes the Cowlitz River and numerous tributary creeks and streams, several of which originate in the Cascade Mountains and Willapa Hills. The annual precipitation in the Cowlitz Watershed ranges from 40 inches in the lower Cowlitz Valley to over 120 inches in the Cascade Mountains. The highest water demand and lowest water availability occurs in the summer months[9].

2. 4 CLIMATE AND WINDS

The Chehalis area, as with most of western Washington, enjoys mild weather:

> "During January average temperatures range from 38° to 40° F; in July temperatures range from 59° to 64° F. As a result of these temperatures, except for mountainous locations, the frost-free season varies from 163 to more than 190 days and snow rarely accumulates over any prolonged period of time".[10]

Prevailing winds near the coast are from the west in April through September, and east in October through March.[11] Average wind speed at the Hoquiam Airport is 9.3 mph. The lightest winds are usually in September, with the lowest monthly average of 7.5 mph. Winds are typically strongest in January and December, at 11 mph.[12]

Winds in the rest of the basin are much calmer than the areas near the coast. The Chehalis-Centralia airport, located in the north-south valley between the Cascade and Olympic ranges, records winds usually from the south and averaging between 3 and 6 mph. In summer, the wind often blows from the north.[13]

2. 5 TIDES AND CURRENTS

The lower fifteen miles of the Chehalis are tidally influenced, but during extreme ("king") tides there is anecdotal evidence of tidal variation as far as Porter, 30 miles upstream of the mouth. On incoming tides with eastern winds, the surface water can reverse course and head upstream,

[8] (WA Dept of Ecology. *Focus on Water Availability: Willapa Watershed*)
[9] (WA Dept of Ecology. *Focus on Water Availability: Cowlitz Watershed*)
[10] (Chehalis Basin Partnership, pp. III-3)
[11] http://www.wrcc.dri.edu/htmlfiles/westwinddir.html.
[12] http://www.wrcc.dri.edu/climatedata/climtables/westwind.
[13] https://weatherspark.com/averages/29924/Chehalis-Washington-United-States

particularly when the river is low in the summer. Tidal variations at Montesano range from lows of -2.4 feet in June and July to highs of 10.6 in January.[14]

The overall river current is controlled by the natural slope of the river from the foothills and input from tributaries, especially during heavy instances of precipitation. The area between the Newaukum and Skookumchuck rivers, known as "the Chehalis Reach", has a nearly flat slope and water movement is significantly slower than in the rest of the watershed. On the main Chehalis river, flows in the upper watershed near Doty range from lows of under 100 cfs between July and September to highs of 1300 cfs in December and January. The Newaukum has similar patterns and capacity, while the Skookumchuck varies between 120 cfs in the dry season to 800 cfs in the winter. By the time the Chehalis River reaches Grand Mound, the flow is five or six times higher than it was in Doty. In Porter, with the additional waters of the Black River added, flows vary from 419 in August up to 9,500 cfs in January. The Satsop carries volumes between 330 and 4300 cfs, and the Wynoochee contributes an additional 240 to 2700 cfs. By the time the Chehalis reaches Aberdeen it has a volume of at least 1000 cfs in August up to 16,300 cfs in January.[15] The seasonal variation of the river is intense and will have a significant impact on spill response.

2. 6 RISK ASSESSMENT

The Chehalis River area is plentiful in natural, cultural, and economic resources, all at risk of injury from oil spills. Potential oil spill risks include, but aren't limited to, road transportation, rail transportation, facilities and oil pipelines, aircraft, and recreational boating,. This section briefly discusses these risks and how they could impact the Chehalis River GRP planning area.

Road Transportation

Vehicle traffic on roadways pose an oil spill risk throughout the area. Commercial trucks can contain hundreds to thousands of gallons of fuel and oil, and almost any kind of hazardous waste or material. An accident involving a fully loaded tank truck on the various roads and highways that border the river and its tributary creeks could result in a substantial oil spill. Smaller vehicle accidents pose a similar risk, commensurate to the volume of fuel and oil they carry. Spills from vehicles onto roadways could cause fuel or oil to flow from ditches or pavement into streams, creeks, wasteways, or stormwater systems, ultimately impacting the Chehalis or other tributaries in the area.

Highway bridges, such as those on Interstate 5 in Centralia/Chehalis and Highway 12 from Aberdeen to Centralia, pose the greatest risk of road spills due to the quantity of vehicles and speed of travel. However, accidents can also occur on smaller roads, particularly during extreme weather. In the upper watershed, logging and tanker truck accidents are the most likely source of a significant spill.

[14] http://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=TWC0959
[15] http://waterdata.usgs.gov/WA/nwis/current/?type=flow

Rail Transportation and Facilities

The Port of Chehalis owns tracks that run from city of Chehalis, near the Newaukum Confluence, west along the river, crossing just past the South Fork and then slightly south into Curtis. Although historically this line ran to South Bend near Willapa Bay, and was the most productive lumber rail spur in the country, the decline of the logging industry has vastly reduced rail traffic in the area.[16] Much of the old rail grade is now the Willapa Hills Trail, maintained by the Washington State Parks and Recreation Commission. The active rails between Curtis and Chehalis has been most popular as the route for a recreational passenger steam train, but the Western Washington Railroad recently began using the tracks to load freight in the Boistfort Valley and transfer it to major rail yards in Chehalis. These freight locomotives pose the greatest spill risk in this area, as they typically hold several thousand gallons of diesel fuel.

BNSF owns tracks that enter the planning area from the south in Napavine, following the Newaukum River to Chehalis. The tracks pass through Centralia, then veer east, following the Skookumchuck River up to Bucoda, north through Tenino and out of the planning area. This area is a section of a larger rail transportation corridor, which stretches between Canada to the north and Oregon to the south, generally parallel to Interstate 5. This area is at risk from trains carrying crude oil, refined oil and other hazardous materials.

Trains loaded with crude from the Bakken Formation in South Dakota or Alberta Oil Sands in Canada travel west from Spokane, along the Columbia River to Vancouver at the Oregon border before heading north along I-5 to refineries in Tacoma, Anacortes, Ferndale and Blaine. Trains carrying Alberta Oil Sands oils can also cross the Canadian border in Blaine and travel south to Tacoma or beyond. Each loaded tanker car typically contains 30,000 gallons of crude oil. Unit trains typically carry 100 or more of these tanker cars of crude. Therefore, each full unit train poses a spill risk of 3 million gallons of crude oil, plus up to 10,000 gallons of diesel fuel in the locomotives. Tanker cars carrying crude oil are also transported in smaller numbers, mixed among boxcars and tankers of other products. In September 2014 BNSF reported 11-16 trains carrying one million gallons or more of Bakken crude traversing Thurston and Lewis counties each week.[17] Union Pacific and other railroads often have track-sharing rights and also run their trains along this length of track. In June 2014 Union Pacific reported that they do not run unit trains of crude in Washington State.[18]

Tacoma Mountain Railway (a division of Tacoma Rail) operates a line between Chehalis and Olympia that closely parallels Interstate 5. In June 2014 Tacoma Rail reported that it did not move unit trains of crude within the Chehalis planning area.[19]

Puget Sound and Pacific Railroad (PSAP), purchased by Genesee and Wyoming in 2012, operates a line between Centralia and Hoquiam that closely parallels Highway 12. Currently this line moves biodiesel to and from Imperium Renewables, a biodiesel facility in Hoquiam, along with other

[16] (Chehalis Basin Partnership, pp. III-10)
[17] http://mil.wa.gov/static/123/state-emergency-response-commission-serc
[18] Ibid.
[19] Ibid.

freight goods and chemicals. At the time of this writing, there are three proposed projects in the Grays Harbor area for crude oil terminals that, if approved, could result in daily unit trains of crude oil running between Centralia and Hoquiam.

PSAP also operates a spur that splits off from the main Chehalis-Hoquiam line at Elma and follows Highways 8 and 108 northeast to Shelton, and then on to the Kitsap Naval Base in Bremerton and Bangor. There are no plans for this spur to haul bulk oil, so diesel from locomotives and small quantities of tanker cars in mixed load trains create the largest risk in this area.

Oil Pipelines

The Olympic Pipeline does not directly cross the Chehalis River. It does cross several tributaries, specifically the Newaukum River, Berwick Creek, Dillenbaugh Creek, Salzer Creek, Hanaford Creek and the Skookumchuck River, in addition to smaller creeks and streams. This pipeline transports refined petroleum products, mainly diesel, gasoline, and jet fuel. If the pipeline were to leak or rupture, impact to sensitive resources in the area could be significant due to the volume of product.

Aircraft

The Chehalis-Centralia Airport handles 48,000 annual operations and is bordered by the Chehalis River on two sides, with a gap of less than a half-mile between the runway and the water.[20] Elma Municipal Airport handles 12,000 annual operations and is also within a half-mile of the river, and less than 1,000 feet from a tributary.[21] There is always a potential for aircraft failures during inbound and outbound flights that could result in fuel releases to water.

Recreational Boating

Accidents involving recreational watercraft on the Chehalis could result in spills between a few gallons to several dozen gallons of fuel oil. Accidents could include a vessel grounding, fire, sinking, or explosion. Bilge discharges and refueling operations could also occur (and are most common) and also have the potential to impact sensitive resources on the river. The majority of commercial boat traffic ends downstream of the planning area, but commercial barges can travel upstream to at least RM 15, past Montesano. The Chehalis is considered a navigable waterway up to mile 68 in Centralia.[22] Recreational vessels upstream of the Newaukum River confluence tend to be hand-launched rafts, canoes, or kayaks.

[20] http://www.wsdot.wa.gov/NR/rdonlyres/BC282B76-6C84-4B4A-A177-C987084894E8/0/2012ChehalisCentralia.pdf
[21] http://www.wsdot.wa.gov/NR/rdonlyres/4B8ACEBD-CEE7-4841-8FA9-15978CD75BD4/0/2012Elma.pdf
[22] https://www.uscg.mil/d13/docs/CG_Navigable_Waterways.pdf

Other Spill Risks

Other potential oil spill risks in the area include road run-off during rain events, on-shore or near shore construction activities where heavy equipment is being operated, and the migration of spilled oil through soil on lands adjacent to the river or along creek/stream banks.

2. 7 REFERENCES

Chehalis Basin Partnership. (2004). CBP Watershed Management Plan. Retrieved March 17, 2015, from Chehalis Basin Watershed Management Plan: http://www.chehalisbasinpartnership.org/watershed_plan/watershed_plan.html

NOAA. (2015). *Montesano, Chehalis River, Station Id: TWC0959*. Retrieved March 17, 2015, from Tides and Currents: http://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=TWC0959

State Emergency Response Commission. Washington Military Department, Emergency Management Division, Response Section. (2014). *US DOT Emergency Order Re: Bakken Crude Oil by Rail*. Retrieved from website: http://mil.wa.gov/static/123/state-emergency-response-commission-serc

US Army Corps of Engineers, Thirteenth District Waterways Management Branch. (2014). *Navigability determinations for the thirteenth district* (Exhibit 11-K-1). Retrieved from website: https://www.uscg.mil/d13/docs/CG_Navigable_Waterways.pdf

USGS Water Resources: National Water Information System. *Current Conditions for Washington: Streamflow*. Retrieved March 17, 2015 from http://waterdata.usgs.gov/WA/nwis/current/?type=flow

Washington Office of Financial Management. (2014, April 1). *Population of Cities, Towns and Counties.* Retrieved March 20, 2015, from http://www.ofm.wa.gov/pop/april1/ofm_april1_population_final.pdf

Washington State Department of Ecology. (2012). *Focus on Water Availability: Cowlitz Watershed, WRIA 26* (Publication No. 11-11-030). Retrieved May 29, 2015, from https://fortress.wa.gov/ecy/publications/documents/1111030.pdf.

Washington State Department of Ecology. (2012). *Focus on Water Availability: Kennedy-Goldsborough Watershed, WRIA 14* (Publication No. 11-11-019). Retrieved May 29, 2015, from https://fortress.wa.gov/ecy/publications/documents/1111019.pdf.

Washington State Department of Ecology. (2012). *Focus on Water Availability: Lower Chehalis & Upper Chehalis Watersheds, WRIAs 22 & 23* (Publication No. 11-11-027). Retrieved May 29, 2015, from https://fortress.wa.gov/ecy/publications/documents/1111027.pdf.

Washington State Department of Ecology. (2012). *Focus on Water Availability: Willapa Watershed, WRIA 24* (Publication No. 11-11-028). Retrieved May 29, 2015, from https://fortress.wa.gov/ecy/publications/documents/1111028.pdf.

Washington State Department of Transportation. (2012). *Chehalis-Centralia Airport Economic Profile.* Retrieved March 17, 2015, from: http://www.wsdot.wa.gov/aviation/AllStateAirports/Chehalis_ChehalisCentralia.htm

Washington State Department of Transportation. (2012). *Elma Municipal Airport Economic Profile.* Retrieved March 17, 2015, from: http://www.wsdot.wa.gov/aviation/AllStateAirports/Elma_ElmaMunicipal.htm

WeatherSpark. (2012). *Average Weather for Chehalis, Washington, USA*. Retrieved March 17, 2015, from: https://weatherspark.com/averages/29924/Chehalis-Washington-United-States

Western Region Climate Center. *Average Wind Direction (Seattle Boeing Field, Seattle-Tacoma,* Renton, WA (KMWH)). Retrieved from http://www.wrcc.dri.edu/htmlfiles/westwinddir.html

Western Region Climate Center. *Average Wind Speeds - MPH (Seattle Boeing, SeaTac, Renton).* Retrieved from http://www.wrcc.dri.edu/climatedata/climtables/westwind

This page was intentionally left blank.

CHAPTER 3
CHEHALIS RIVER
Spill Response Options and Considerations

		Location							
		Sloughs	Satsop	Elma	Oakville	Prairies	Centralia	Newaukum	Pe Ell
Waterbody	Rivers	●	●	●	●	●	●	●	●
	Creeks	●	●	●	●	●	●	●	●
	Lakes	●							
	Pool Area formed by Dam								
	Tidally Influenced Areas	●	●						
	Wetland Area(s)	●	●	●	●	●	●	●	●
	Intermittent Streams (Seasonal Flow)	●	●	●	●	●	●	●	●
Potential Response Options	Source Control and Containment Activities	●	●	●	●	●	●	●	●
	Aerial / Vessel Surveillance Activities	●	●	●	●	●	●	●	●
	Wildlife Rescue and Rehabilitation Activities	●	●	●	●	●	●	●	●
	Air Boat Use (Areas Recommended)	●	●	●	●	●	●	●	●
	Collection for Skimming Operations *(Note:1)*								
	Vessel Based Skimming Operations *(Note:2)*	●							
	Shore Based Skimming Operations *(Note:3)*	●	●	●	●	●	●	●	●
	Shoreside Protection Booming *(Note:4)*	●			●				
	Shoreside Cleanup Activities *(Note: 5)*	●	●	●	●	●	●	●	●
	In-Situ Burning								
	Dispersant Use								
Considerations	Shoreside Access can be Limited by Geography	●	●	●	●	●	●	●	●
	Shoreside Access can be Limited by Private Property	●	●	●	●	●	●	●	●
	State or National Wildlife Refuge / Recreation Area	●	●	●	●	●	●	●	
	Threatened/Endangered Terrestrial Species *(Note: 6)*				●	●			
	Public or Commercial Marina(s) in Area								
	Commercial Vessel Movement / Port Area	●							
	Recreational Boat Traffic	●	●	●	●	●	●	●	●
	Tribal Lands or UandA Interests *(Note: 7)*				●				
	Historic / Cultural District(s) in Area								
	Dam(s) in Area								
	Interstate Highway Corridor					●	●	●	
	Oil Movement by Rail in Area	●	●	●	●	●	●	●	
	Oil Pipeline(s) in Area					●	●	●	

See the Northwest Area Contingency Plan (NWACP - Section 1900) for more information on the terminology used on this sheet. The NWACP is available online at http://www.rrt10nwac.com/NWACP/Default.aspx.

Note 1: Collection for Skimming Operations response options should include use of enhanced skimming using a U-boom, V – boom, or J – boom configuration in waters large enough for boats to maneuver (e.g., lake, large river).

Note 2: Vessel Based Skimming Operations response options should include use of advancing skimmers: weir, belt, brush, drum, or other skimmer types.

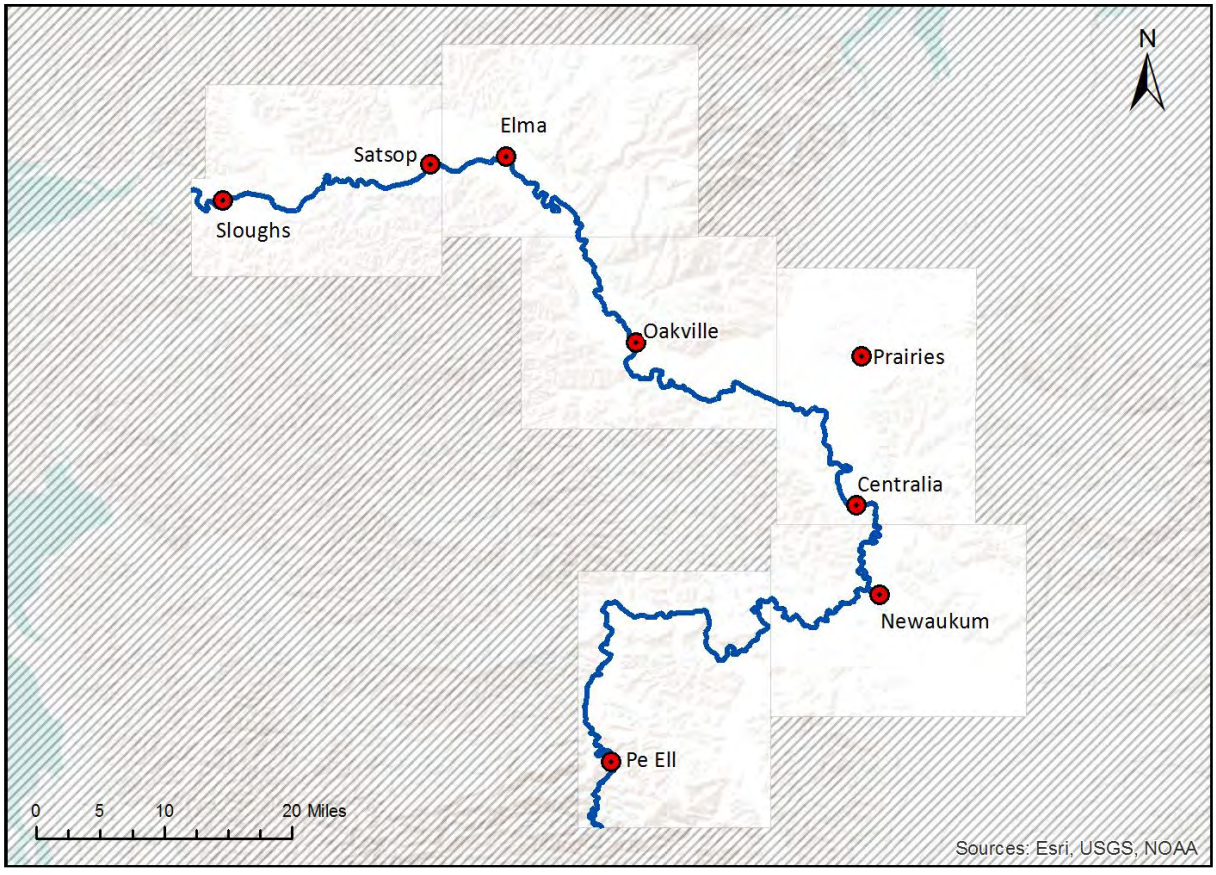
Note 3: Shore Based Skimming Operations response options should include use of fixed skimmers: weir, belt, brush, drum, or other skimmer types.

Note 4: Shoreline Protection should include the deployment of response strategies (boom) to divert and collect oil off of the water before shoreline areas are impacted, or deflect and exclude oil away from shoreline areas. These strategies include those published in this document (GRP response strategies), those provided in other plans (e.g., facility contingency plans), and "ad-hoc" strategies developed during the spill itself. A culvert block or underflow dam might be installed to aid in the recovery of spilled oil in small streams or those with intermittent flow.

Note 5: Shoreside Cleanup options depend on safe and efficient access to locations and the type of river, creek, or stream bank present. Potential activities could include flooding, flushing, manual removal, vacuum, mechanical removal, sorbents, vegetation cutting, mechanical tilling/aeration, and/or sediment reworking/surf washing.

Note 6: More information available in Chapter 6. Response and cleanup in these areas may require coordination with Federal or State Fish and Wildlife staff to reduce disturbances to upland species.

Note 7: This sheet doesn't represent all locations where Tribes and Tribal Nations have lands or areas of specific interest (including lands established by treaty or rights to Usual and Accustom areas). Early coordination with tribal governments is highly recommended during a response, regardless of the spill location or potential impact areas.



CHEHALIS RIVER

GEOGRAPHIC RESPONSE PLAN

(CHER 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 (POSOP), 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.wrrl.us. Information on protection techniques can be found in Appendix A. 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 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.

○ Centralia Police	(360) 330-7680	
○ City of Chehalis Police	(360) 748-8605	
○ Chehalis Tribal Police	(360) 273-7051	
○ Cosmopolis Police	(360) 532-9237 / (360) 533-8765 afterhours	
○ Elma Police	(360) 482-3131	
○ Montesano Police	(360) 249-1031	
○ Napavine Police	(360) 262-9888	
○ Pe Ell Marshal	(360) 291-2018	
○ Grays Harbor County Sheriff	(360) 249-3711	
○ Grays Harbor County Public Works	(360) 249-4222	
○ Lewis County EMD	(360) 740-1151	
○ Lewis County Sheriff	(360) 748-9286	
○ Lewis County Roads	(360) 740-1305	
○ Thurston County EMD	(360) 867-2800	*Call for any road closure in Thurston County*
○ Thurston County Sheriff	(360) 786-5500	
○ Thurston County Roads	(360) 867-2300 / (360) 704-2740 afterhours	
○ Washington State Patrol - District 1	(253) 538-3240	
○ Washington State Patrol - District 5	(360) 449-7909	
○ Washington State Patrol - District 8	(360) 473-0172	

During Strategy Implementation (Things to Remember)

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

After Strategy Implementation (Things to Understand)

- Oil containment boom should be maintained and periodically monitored to ensure its effectiveness. Changes in river or current speed will likely require modifications to boom deflection angles (see Table 4-1). Depending on conditions, some booming strategies may require around-the-clock tending.
- Although designed for implementation during the initial phase of an oil spill, GRP strategies may continue to be deployed and implemented throughout the entire lifespan of a response, as determined appropriate and necessary by the Incident Commander or Unified Command.

Water Speed and Boom Deflection Angle

Measure the speed that water is moving by anchoring a line with two floating markers/buoys attached that are spaced 100 feet apart. Time the movement of floating debris between the two buoys, and then use Table 4-1 to estimate the water speed based on the travel time of the debris between the two buoys. You can also measure 100 feet along a straight portion of river bank or shoreline, and time the movement of debris between those points, but this method is generally less accurate than using the buoys. The maximum boom deflection angle is also provided in the table, based on water speed measurements.

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

4.1.2 Historical River Streamflow Ranges

Gage/stream-flow data from U.S. Geological Survey (USGS) was used to determine the mean monthly river discharge for the Chehalis River and its tributaries. River discharge is recorded in cubic feet per second (cfs); surface 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 surface velocities based on the time it takes a floating object to drift 100 feet downstream from any given point in a river or creek. Additional information on calculating river velocities can be found in the Northwest Area Contingency Plan, Section 9302. Information on USGS river gage readings can be found online at http://maps.waterdata.usgs.gov/mapper/index.html.

Table 4-2: Historic streamflow for Chehalis River and tributaries

Monthly average flow in Cubic Feet per Second (cfs)					
	Chehalis River at Doty USGS **12020000** *(data from 1939 to 2014)*	Chehalis River at Grand Mound - USGS **12027500** *(data from 1928 to 2013)*	Chehalis River at Porter USGS **12031000** *(data from 1952 to 2013)*	Satsop River at Satsop USGS **12035000** *(data from 1929 to 2013)*	Wynoochee River at Montesano - USGS **12037400** *(data from 1956 to 2013)*
Jan	1,240	6,440	9,480	4,270	2,510
Feb	1,110	5,630	8,050	3,700	2,060
Mar	911	4,560	6,650	3,020	1,660
Apr	582	3,020	4,560	2,090	1,010
May	279	1,440	2,230	1,150	688
Jun	148	848	1,280	711	526
Jul	70	388	629	454	339
Aug	46	246	419	332	240
Sep	79	354	552	432	380
Oct	278	909	1,240	1,170	877
Nov	938	3,880	5,360	3,120	2,320
Dec	1,260	6,280	8,840	4,250	2,660

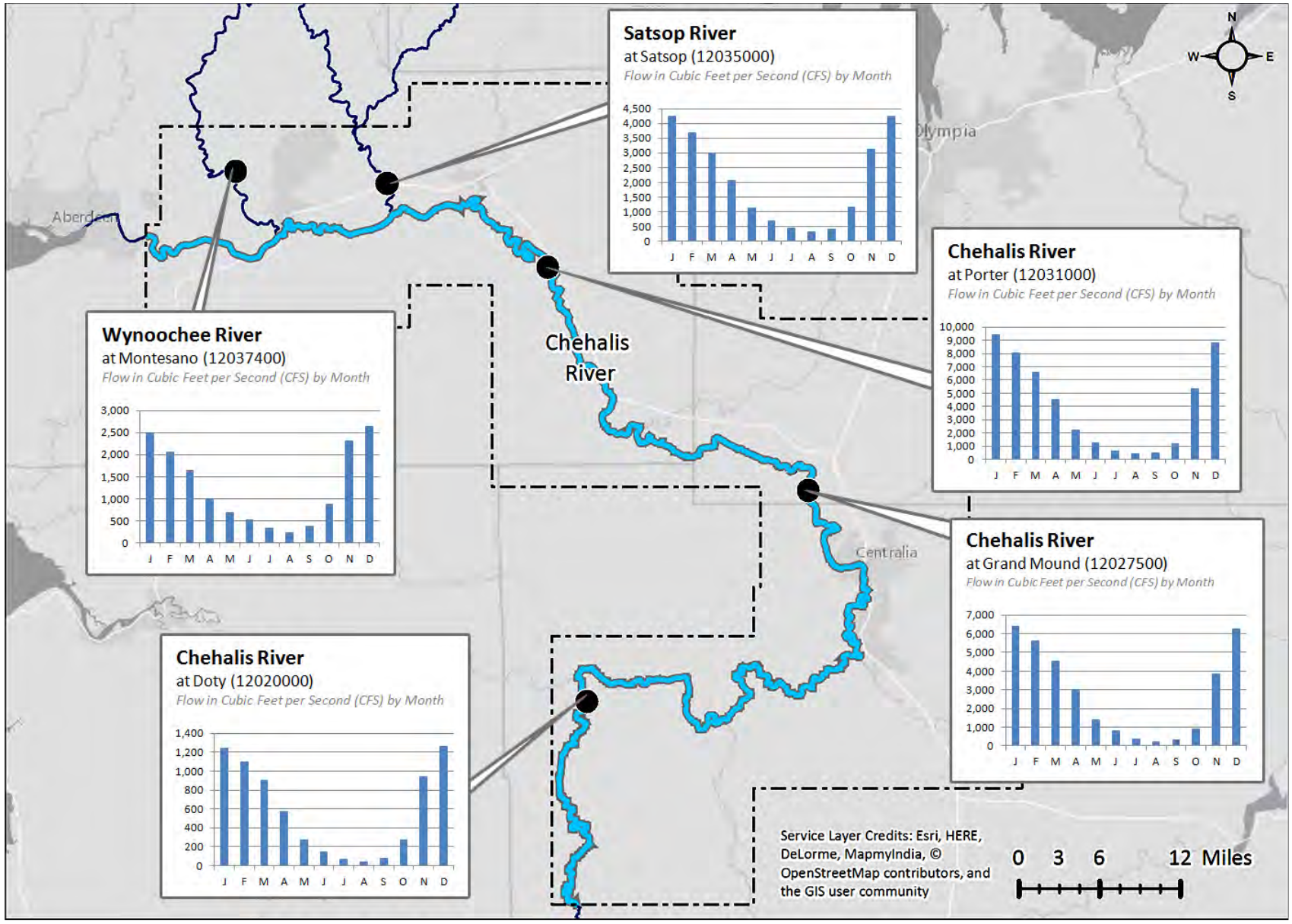


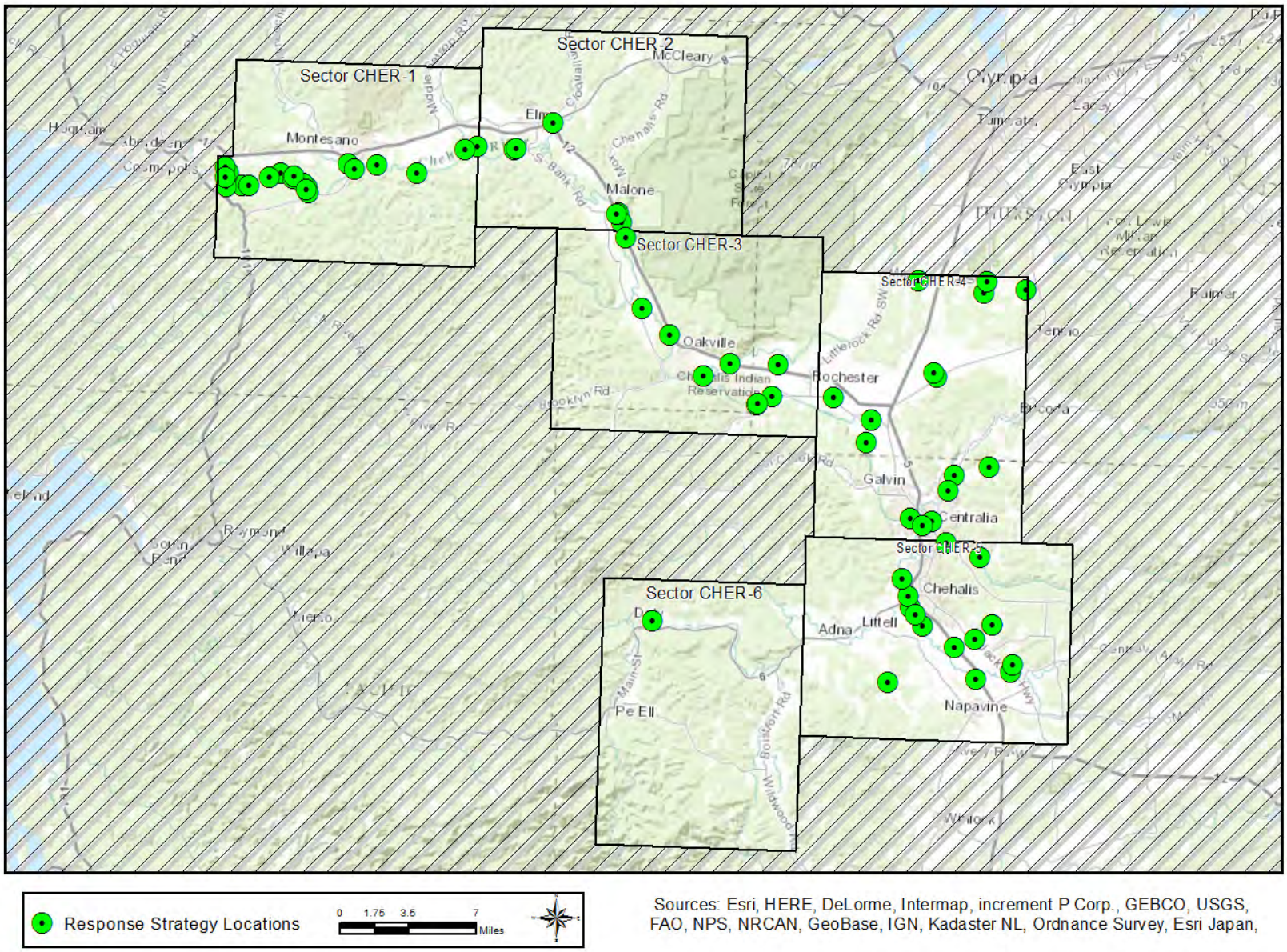
Figure 4-1: USGS Mean Monthly Discharge Measurements for Chehalis River and Tributaries

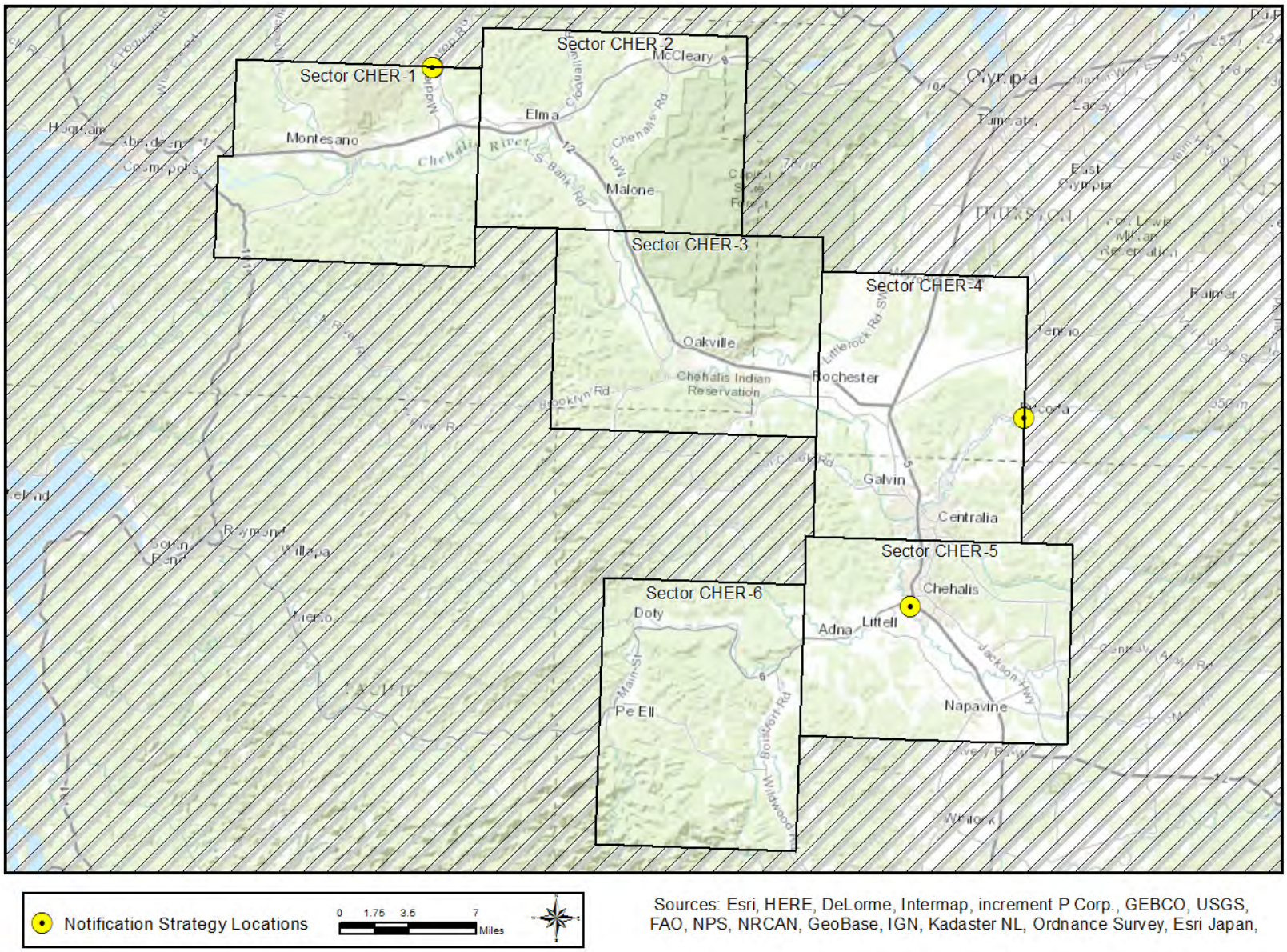
4. 2 AREA OVERVIEW MAPS

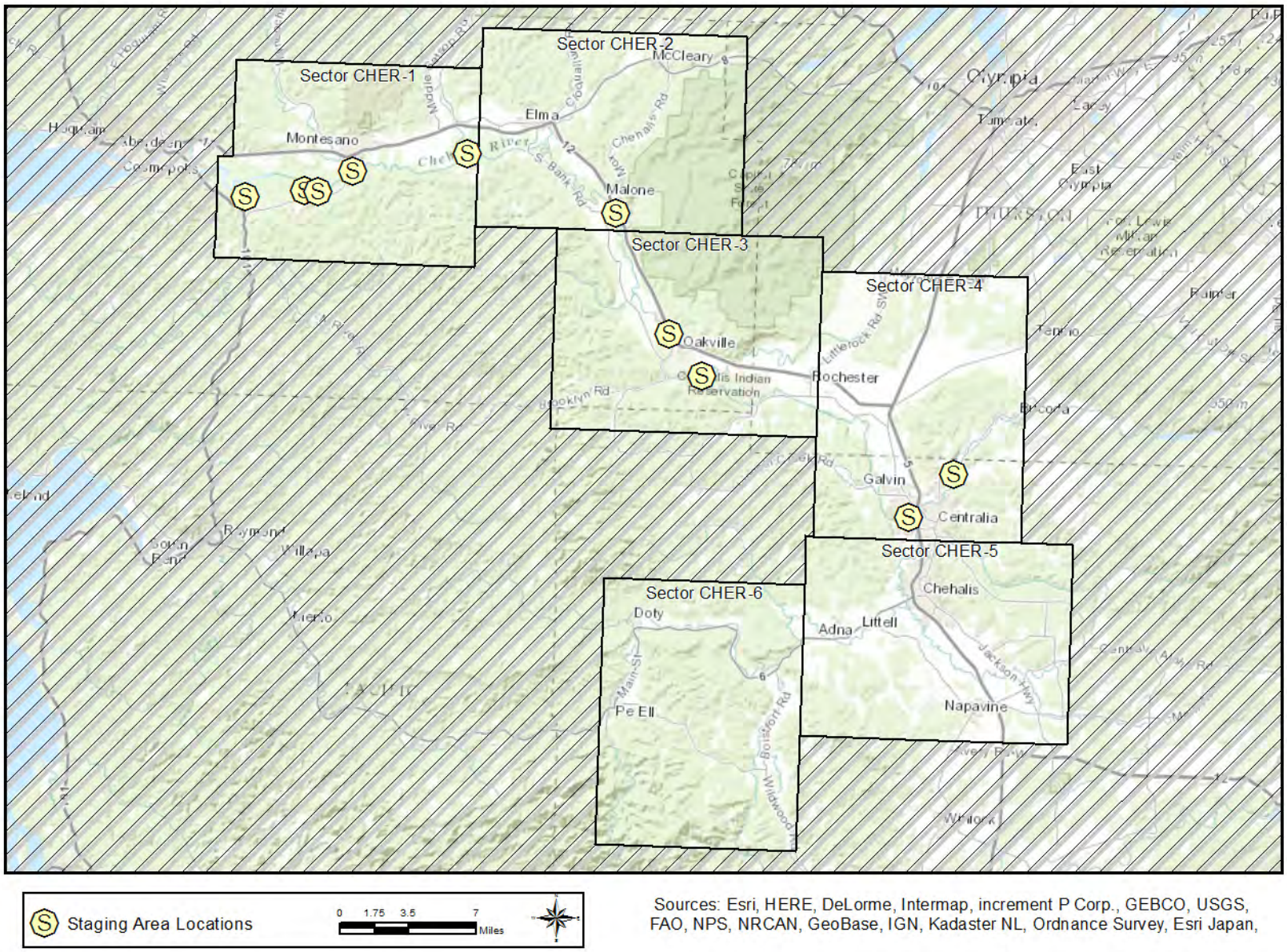
The following maps provide a geographic overview of the Chehalis River GRP area. Sector maps in Section 4.4 of this chapter provide more detail on the location of response strategies, notification strategies, staging areas, boat launch locations, and potential oil spill origin points. Detailed information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

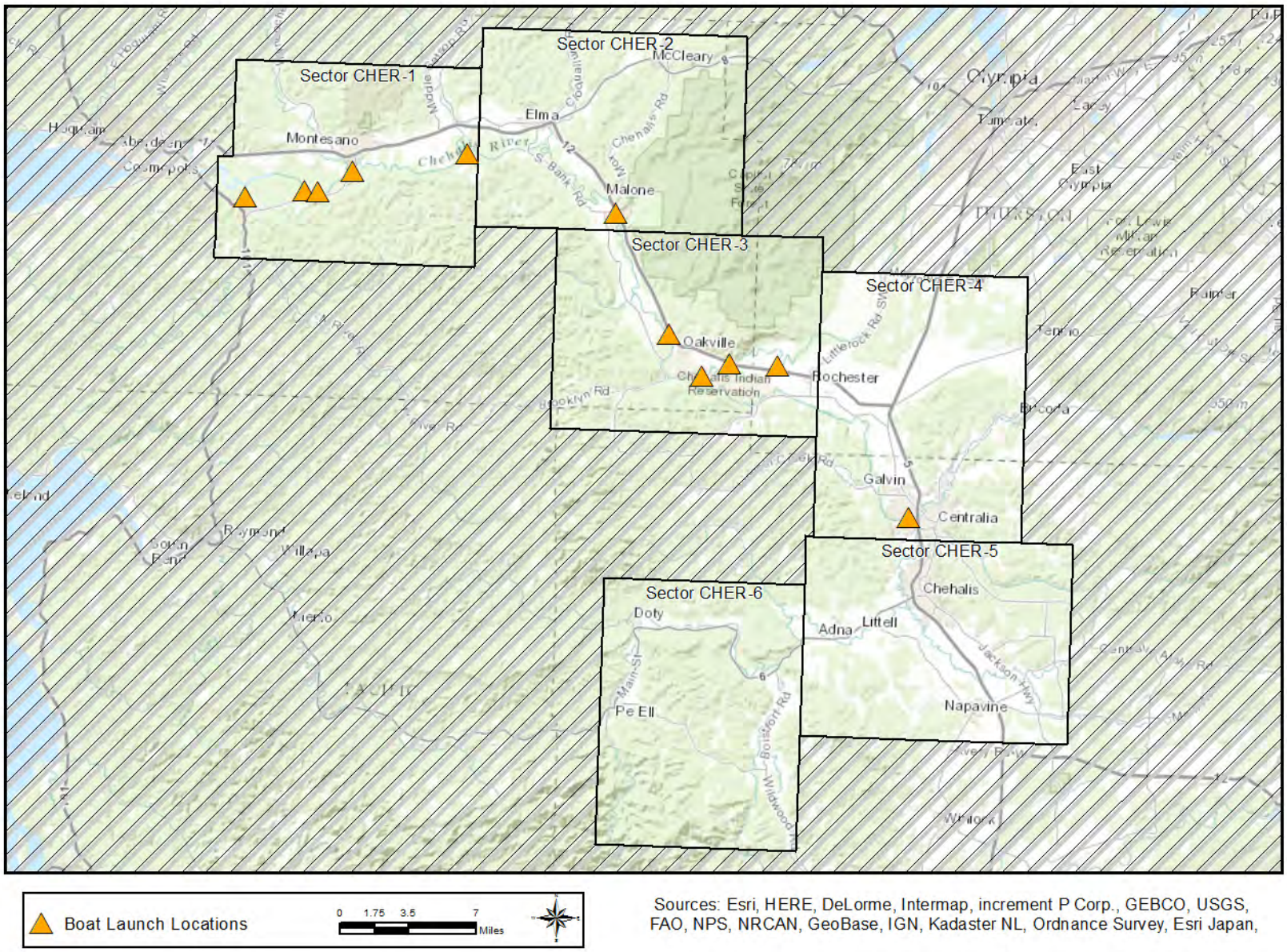
The following area maps are provided for reference:

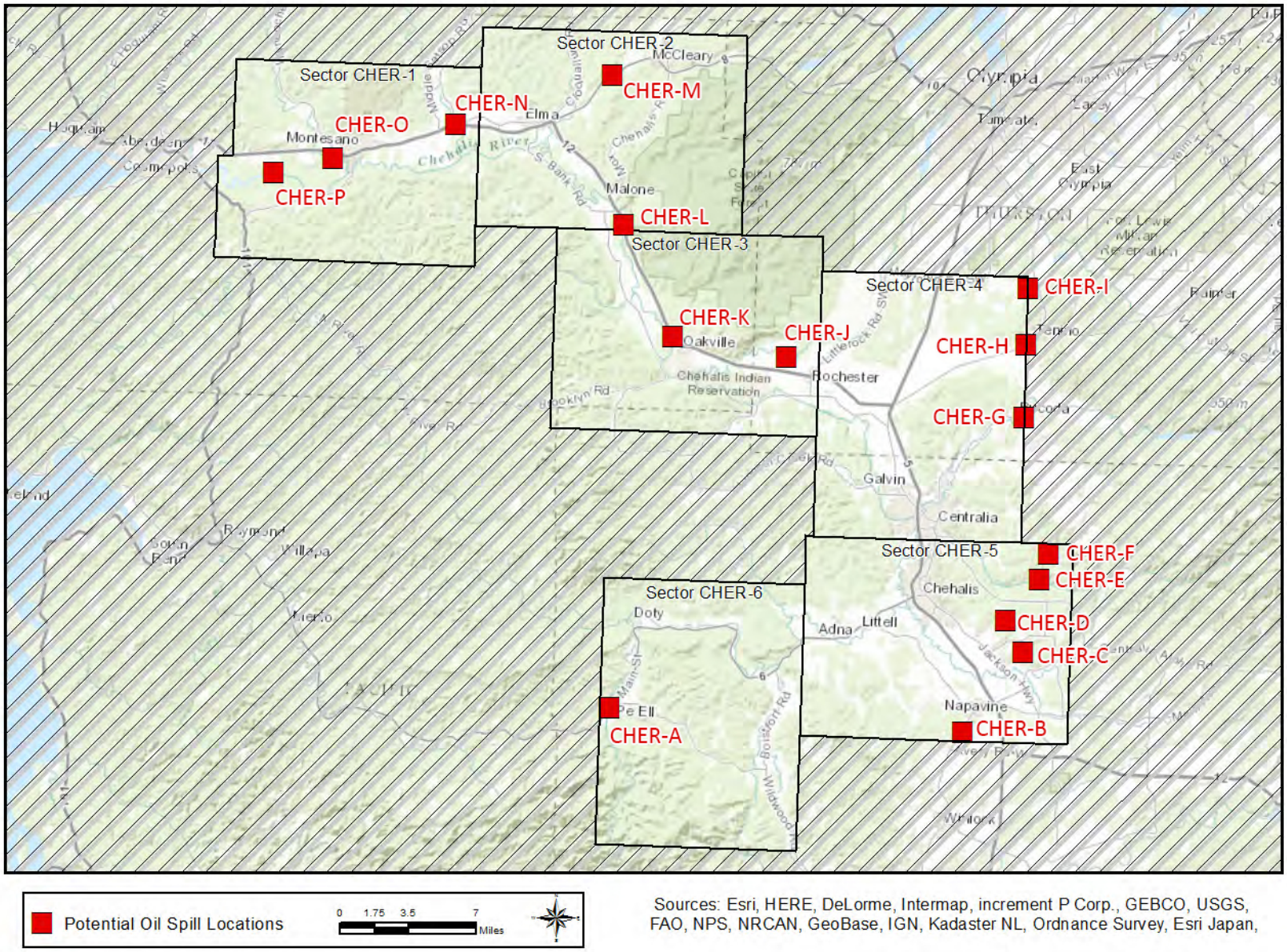
- Response Strategy Locations
- Notification Strategy Locations
- Staging Areas
- Boat Launch Locations
- Potential Oil Spill Origin Points


Sector CHER-1
Sector CHER-2
Sector CHER-3
Sector CHER-4
Sector CHER-5
Sector CHER-6
Montesano
McCleary
Elma
Malone
Oakville
Rochester
Galvin
Centralia
Chehalis
Adna
Littell
Napavine
Pe Ell
Olympia
Response Strategy Locations
0 1.75 3.5 7
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,


Sector CHER-1
Sector CHER-2
Sector CHER-3
Sector CHER-4
Sector CHER-5
Sector CHER-6
Montesano
Elma
McCleary
Malone
Oakville
Chehalis Indian Reservation
Rochester
Galvin
Centralia
Chehalis
Adna
Littell
Napavine
Doty
Pe Ell
Olympia
Notification Strategy Locations
0 1.75 3.5 7
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,


Sector CHER-1
Sector CHER-2
Sector CHER-3
Sector CHER-4
Sector CHER-5
Sector CHER-6
Montesano
Elma
McCleary
Malone
Oakville
Rochester
Galvin
Centralia
Chehalis
Adna
Littell
Napavine
Doty
Pe Ell
Olympia
Staging Area Locations
0 1.75 3.5 7
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,


Sector CHER-1
Sector CHER-2
Sector CHER-3
Sector CHER-4
Sector CHER-5
Sector CHER-6
Montesano
Elma
McCleary
Malone
Oakville
Rochester
Galvin
Centralia
Chehalis
Adna
Littell
Napavine
Doty
Pe Ell
Olympia
Boat Launch Locations
0 1.75 3.5 7
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,


Sector CHER-1
Sector CHER-2
Sector CHER-3
Sector CHER-4
Sector CHER-5
Sector CHER-6
CHER-A
CHER-B
CHER-C
CHER-D
CHER-E
CHER-F
CHER-G
CHER-H
CHER-I
CHER-J
CHER-K
CHER-L
CHER-M
CHER-N
CHER-O
CHER-P
McCleary
Elma
Montesano
Malone
Oakville
Rochester
Chehalis Indian Reservation
Galvin
Centralia
Chehalis
Adna
Littell
Napavine
Doty
Olympia
Tumwater
Lacey
Tenino
Raymond
Willapa
Potential Oil Spill Locations
0 1.75 3.5 7
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,

4. 3 STRATEGY AND RESPONSE PRIORITIES

4.3.1 General Response Priorities

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

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).

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 listed 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 Chehalis River area; points CHER-A through CHER-P. 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 the spill source, and other considerations.

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

Table 4-3: Priority Table CHER-A (Pe Ell CHER-106.3)

CHER-A (Pe Ell CHER-106.3)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-98.5R	68	80	179
2	CHER-75.1R	67	79	177
3	CHER-74.4R	67	79	175
4	CHER-72.4R	67	79	173

Table 4-4: Priority Table CHER-B (Stearns Creek STERC-10.2/CHER-77.8)

CHER-B (Stearns Creek STERC-10.2/CHER-77.8)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-66.8R	67	79	171
2	CHER-72.4R	67	79	173
3	CHER-74.4R	67	79	175
4	CHER-75.1R	67	79	177
5	STERC-3.8	67	85	223

Table 4-5: Priority Table CHER-C (Taylor Creek TAYLC-1.0/CHER-75.0)

CHER-C (Taylor Creek TAYLC-1.0/CHER-75.0)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-72.4R	67	79	173
2	CHER-74.4R	67	79	175
3	CHER-75.1R	67	79	177
4	NWKR-0.5	67	81	193
5	NWKR-1.5	67	81	195
6	NWKR-7.1	67	82	197
7	NWKR-9.8	67	82	199
8	TAYLC-0.2	67	85	227

Table 4-6: Priority Table CHER-D (Berwick/Dillenbaugh Creeks CHER-74.5)

CHER-D (Berwick/Dillenbaugh Creeks CHER-74.5)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-66.8R	66	79	171
2	CHER-72.4R	67	79	173
3	CHER-74.4R	67	79	175
4	BERW-0.6	67	70	107
5	DILB-4.9	67	80	187
6	DILB-6.1	67	81	189
7	DILB-6.2	67	81	191

Table 4-7: Priority Table CHER-E (Salzer Creek SALZ-9.5/CHER-69.2)

CHER-E (Salzer Creek SALZ-9.5/CHER-69.2)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-52.9L	65	78	167
2	CHER-59.9R	65	78	169
3	CHER-66.8R	65	79	171
4	SALZ-2.4	67	83	207
5	SALZ-4.4	67	83	209

Table 4-8: Priority Table CHER-F (South Hanaford Creek SHNFC-6.0/CHER-66.9)

CHER-F (South Hanaford Creek SHNFC-6.0/CHER-66.9)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-52.9L	65	78	167
2	CHER-59.9R	65	78	169
3	CHER-66.8R	65	79	171
4	SKOO-3.4	65	84	219
5	SHNFC-0.1	65	84	217

Table 4-9: Priority Table CHER-G (Skookumchuck River SKOO-10.8/CHER-66.9)

CHER-G (Skookumchuck River SKOO-10.8/CHER-66.9)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-52.9L	65	78	167
2	CHER-59.9R	65	78	169
3	CHER-66.8R	65	79	171
4	SKOO-3.4	65	84	219
5	SKOO-4.5	65	84	221

Table 4-10: Priority Table CHER-H (Scatter Creek SCTT-18.8/CHER-54.6)

CHER-H (Scatter Creek SCTT-18.8/CHER-54.6)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-42.3R	65	77	161
2	CHER-52.9L	65	78	167
3	CHER-52.1L	65	78	165
4	CHER-52.0L	65	78	163
5	SCTT-4.7	66	83	211
6	SCTT-12.1	66	83	213
7	SCTT-12.4	66	84	215

Table 4-11: Priority Table CHER-I (Beaver Creek BEAV-17.8/CHER-47.0)

CHER-I (Beaver Creek BEAV-17.8/CHER-47.0)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-42.3R	65	77	161
2	BLKR-0.9	65	71	109
3	BLKR-4.1	65	71	111
4	BLKR-8.4	65	71	113
5	BEAV-9.8	66	70	101
6	BEAV-15.1	66	70	103
7	ALLN-5.6	66	70	99
8	BEAV-17.6	66	70	105

Table 4-12: Priority Table CHER-J (Black River BLKR-9.1/CHER-47.0)

CHER-J (Black River BLKR-9.1/CHER-47.0)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-33.3R	64	76	151
2	CHER-33.5L	64	76	153
3	CHER-34.3R	64	77	155
4	CHER-35.7R	65	77	157
5	CHER-40.3L	65	77	159
6	CHER-42.3R	65	77	161
7	BLKR-0.9	65	71	109
8	BLKR-4.1	65	71	111
9	BLKR-8.4	65	71	113

Table 4-13: Priority Table CHER-K (Oakville CHER-42.7)

CHER-K (Oakville CHER-42.7)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-23.3R	64	76	149
2	CHER-23.2R	64	76	147
3	CHER-33.3R	64	76	151
4	CHER-33.5L	64	76	153
5	CHER-34.3R	64	77	155
6	CHER-35.7R	65	77	157
7	CHER-40.3L	65	77	159
8	CHER-42.3R	65	77	161

Table 4-14: Priority Table CHER-L (Porter CHER-34.5)

CHER-L (Porter CHER-34.5)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-17.5L	62	75	145
2	CHER-23.3R	64	76	149
3	CHER-23.2R	64	76	147
4	CHER-33.3R	64	76	151
5	CHER-33.5L	64	76	153
6	CHER-34.3R	64	77	155

Table 4-15: Priority Table CHER-M (Wildcat Creek CHER-25.2)

CHER-M (Wildcat Creek CHER-25.2)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-10.4L	63	74	137
2	CHER-10.4R	63	75	139
3	CHER-13.4R	62	75	141
4	CHER-15.0L	62	75	143
5	CHER-17.5L	62	75	145
6	CHER-23.3R	64	76	149
7	CHER-23.2R	64	76	147
8	CLOQ-2.3	64	80	185

Table 4-16: Priority Table CHER-N (Satsop River STSP-2.1/CHER-20.1)

CHER-N (Satsop River STSP-2.1/CHER-20.1)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-9.4L	63	74	131
2	CHER-9.4R	63	74	133
3	CHER-10.0R	63	74	135
4	CHER-10.4L	63	74	137
5	CHER-10.4R	63	75	139
6	PRCS-6.3	63	83	205
7	CHER-13.4R	62	75	141
8	CHER-15.0L	62	75	143
9	CHER-17.5L	62	75	145
10	STSP-0.5	62	85	225

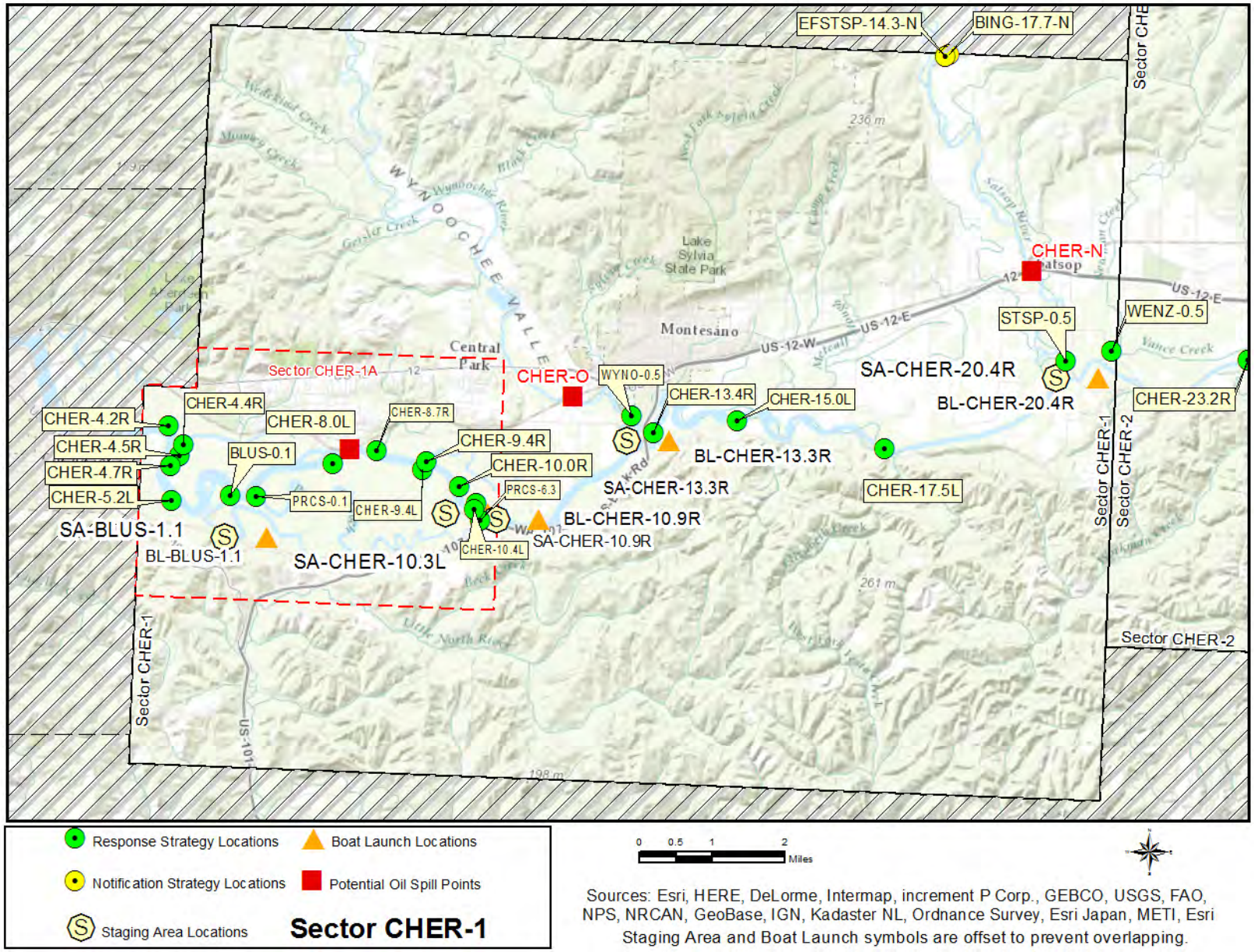
Table 4-17: Priority Table CHER-O (Wynoochee River WYNO-1.6/CHER-13.2)

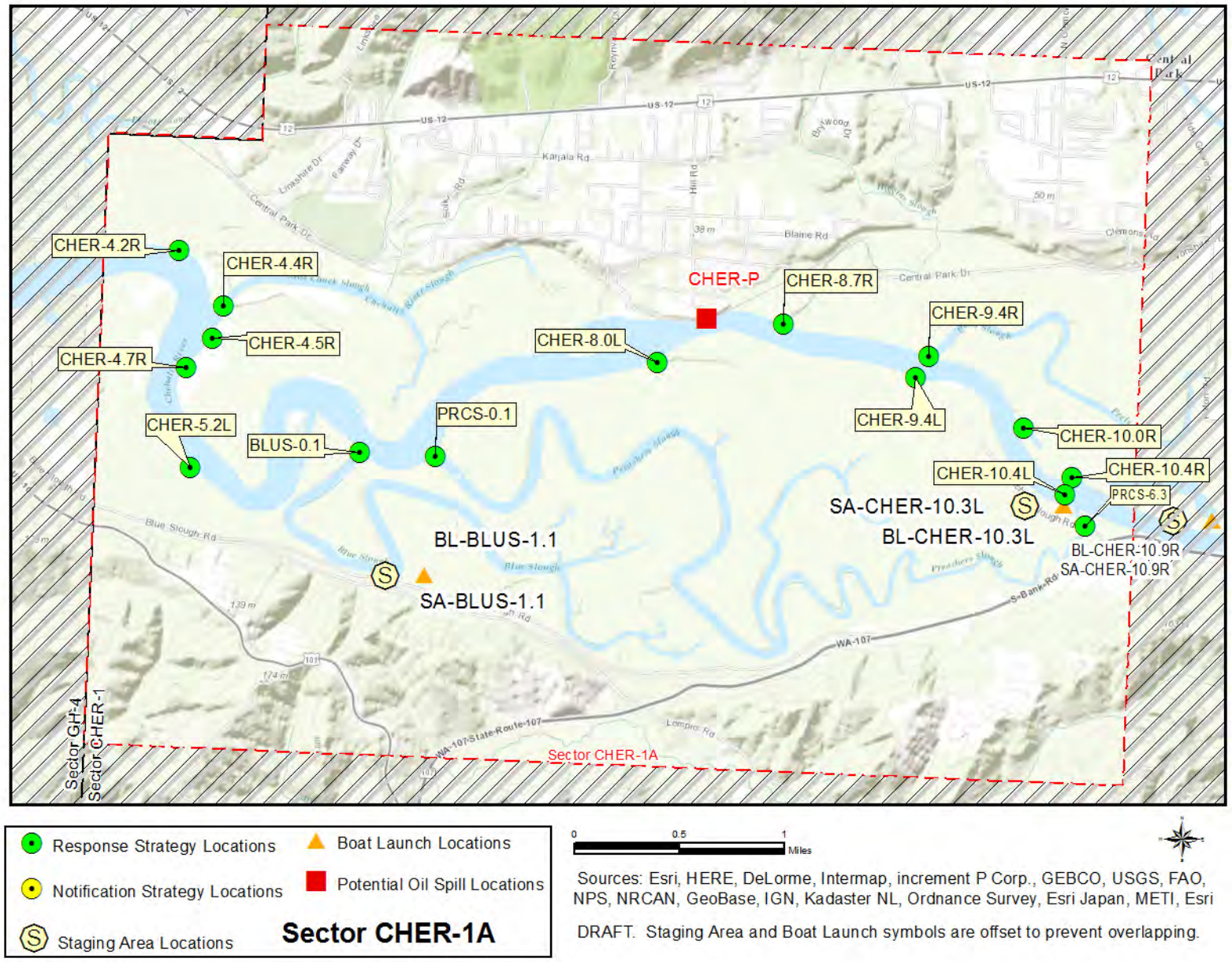
CHER-O (Wynoochee River WYNO-1.6/CHER-13.2)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-4.2R	63	72	117
2	CHER-4.4R	63	72	119
3	CHER-4.5R	63	72	121
4	CHER-4.7R	63	72	123
5	CHER-5.2L	63	73	125
6	BLUS-0.1	63	71	115
7	PRCS-0.1	63	82	203
8	CHER-8.0L	63	73	127
9	CHER-8.7R	63	73	129
10	CHER-9.4L	63	74	131
11	CHER-9.4R	63	74	133
12	CHER-10.0R	63	74	135
13	CHER-10.4L	63	74	137
14	CHER-10.4R	63	75	139
15	PRCS-6.3	63	83	205

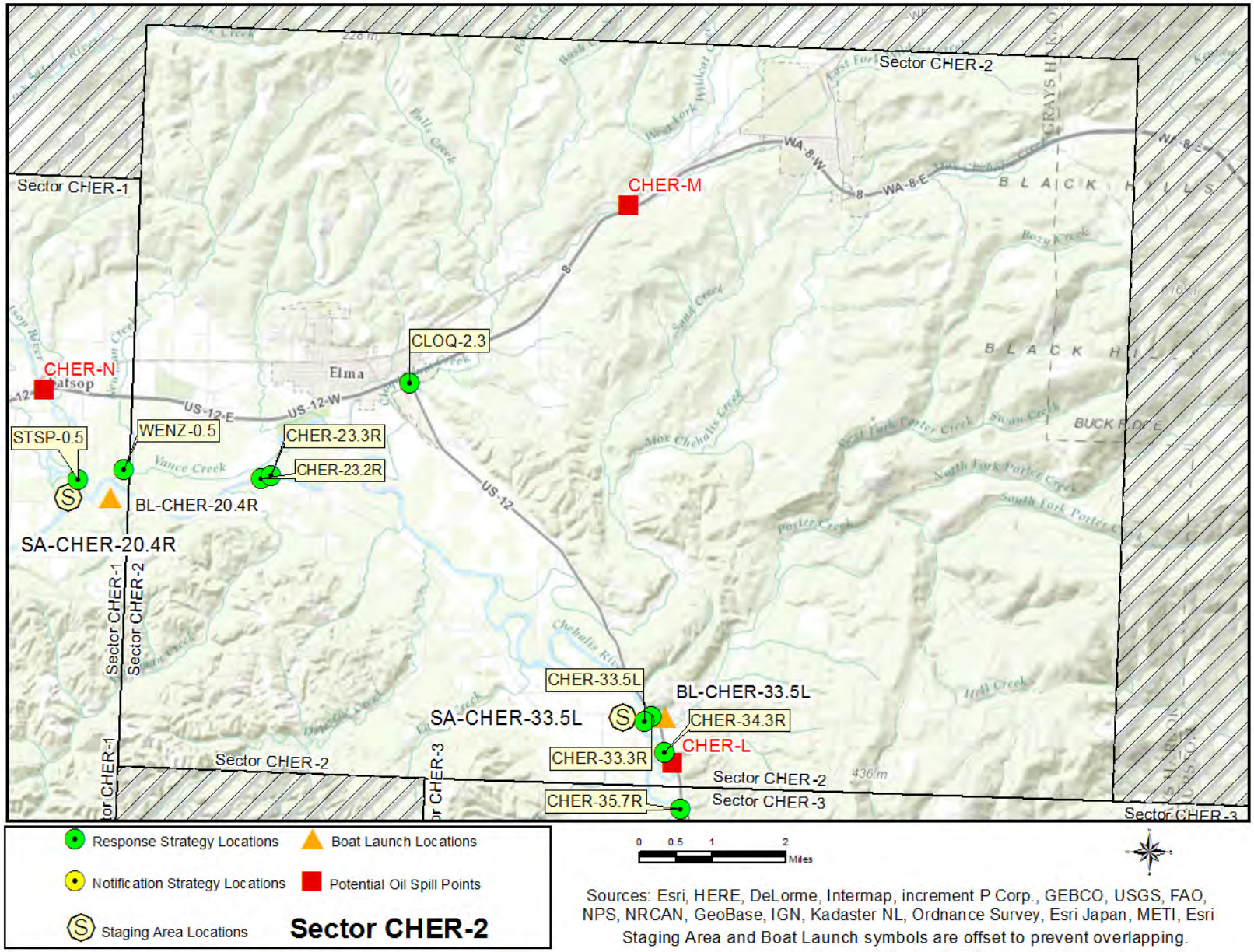
Table 4-18: Priority Table CHER-P (Central Park CHER-8.5)

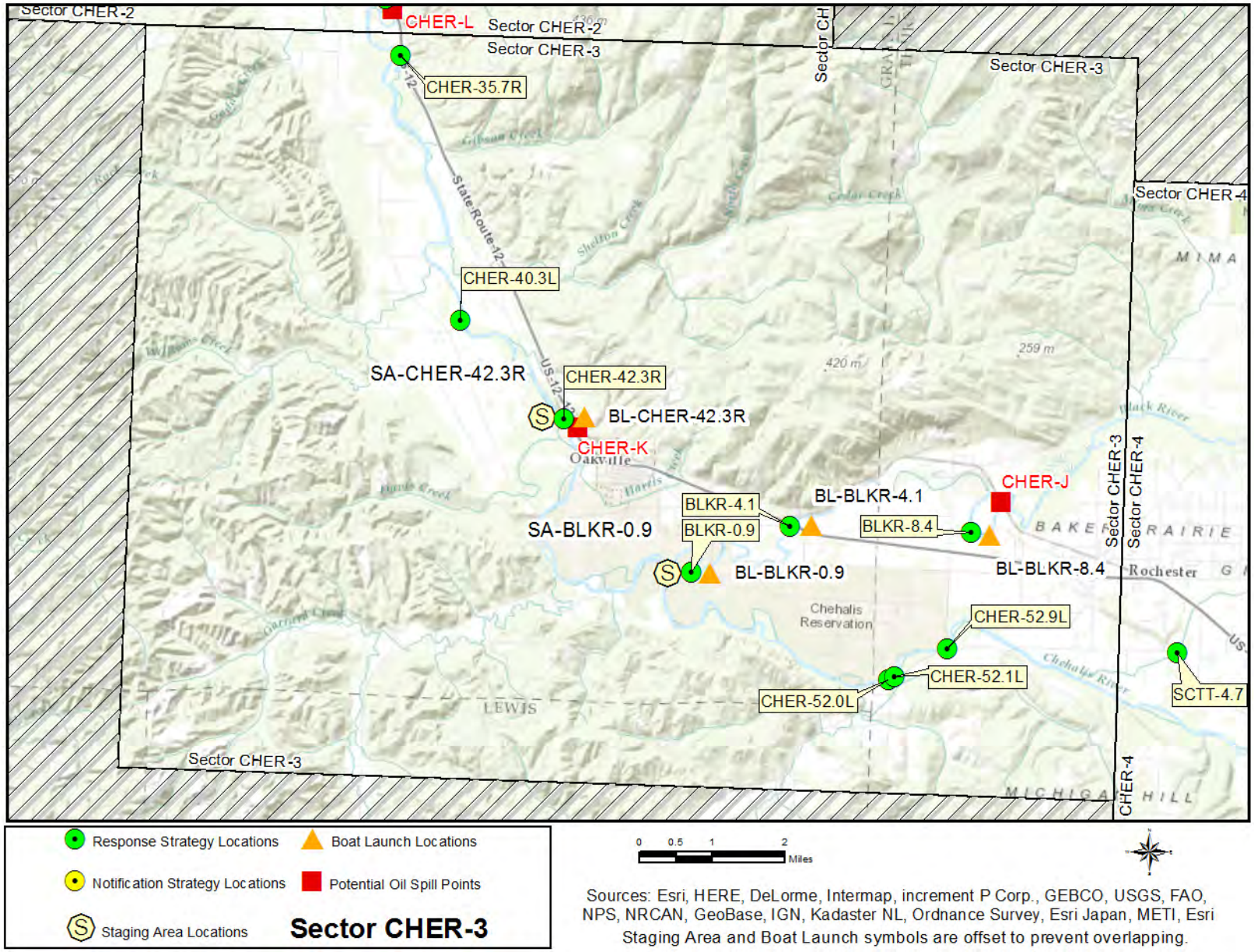
CHER-P (Central Park CHER-8.5)				
Implementation Priority	**Strategy Number**	**Sector Map (Page #)**	**Strategy Matrix (Page #)**	**Strategy Details (Page #)**
1	CHER-4.2R	63	72	117
2	CHER-4.4R	63	72	119
3	CHER-4.5R	63	72	121
4	CHER-4.7R	63	72	123
5	CHER-5.2L	63	73	125
6	BLUS-0.1	63	71	115
7	PRCS-0.1	63	82	203
8	CHER-8.0L	63	73	127
9	CHER-8.7R	63	73	129
10	CHER-9.4R	63	74	133
11	CHER-9.4L	63	74	131

4. 4 SECTOR MAPS (STRATEGY LOCATIONS)



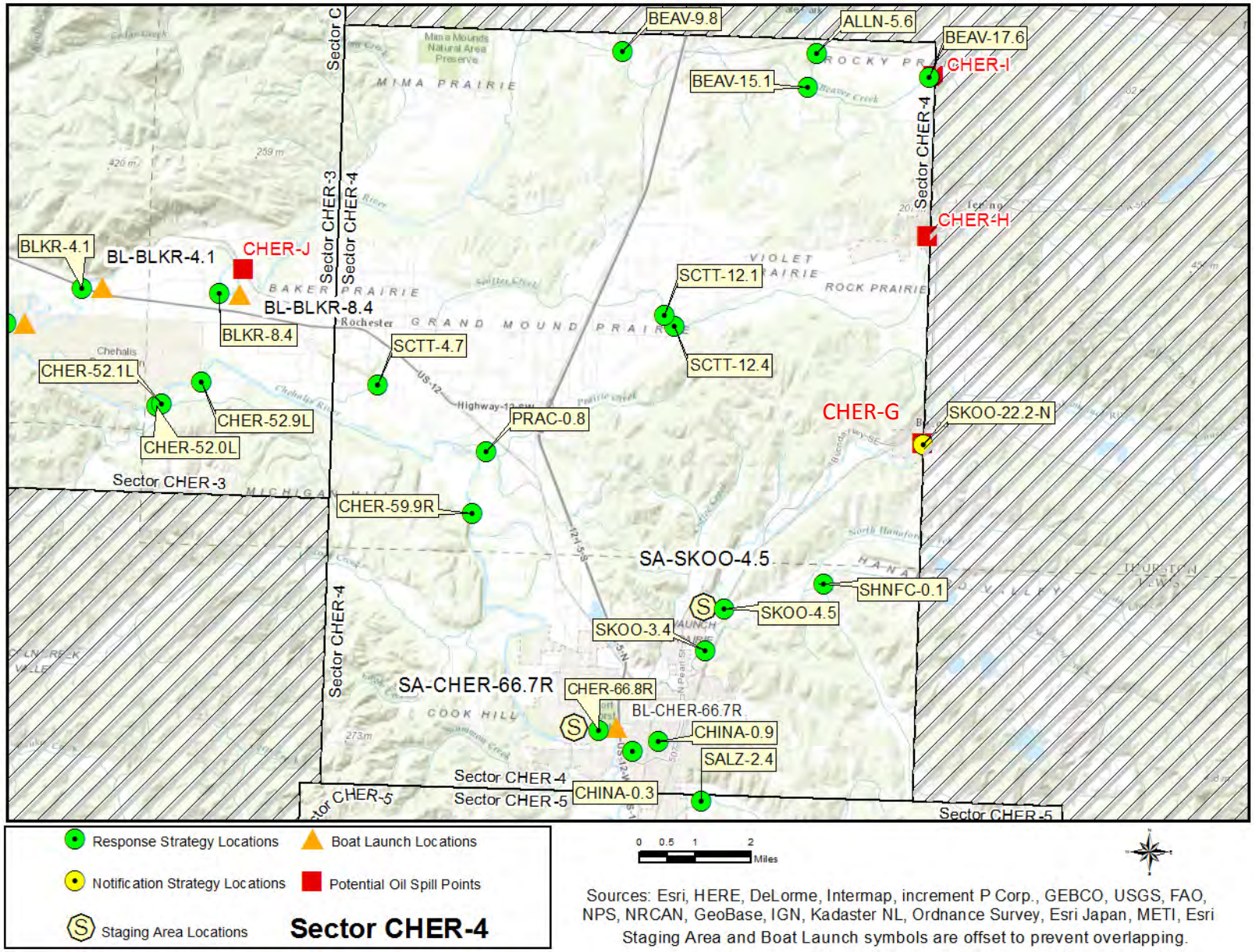

CHER-4.2R
CHER-4.4R
CHER-4.5R
CHER-4.7R
CHER-5.2L
BLUS-0.1
PRCS-0.1
CHER-P
CHER-8.7R
CHER-8.0L
CHER-9.4R
CHER-9.4L
CHER-10.0R
CHER-10.4L
CHER-10.4R
PRCS-6.3
SA-CHER-10.3L
BL-CHER-10.3L
BL-CHER-10.9R
SA-CHER-10.9R
BL-BLUS-1.1
SA-BLUS-1.1
US-12
Karjala Rd
Blaine Rd
Central Park Dr
Blue Slough Rd
WA-107
WA-107/State Route 107
Lompre Rd
Sector GH-4
Sector CHER-1
Sector CHER-1A
Response Strategy Locations
Notification Strategy Locations
Staging Area Locations
Boat Launch Locations
Potential Oil Spill Locations
Sector CHER-1A
0 0.5 1 Miles
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.


Sector CHER-1
Sector CHER-2
Sector CHER-3
CHER-M
CHER-N
CLOQ-2.3
Elma
WENZ-0.5
STSP-0.5
CHER-23.3R
CHER-23.2R
BL-CHER-20.4R
SA-CHER-20.4R
CHER-33.5L
BL-CHER-33.5L
SA-CHER-33.5L
CHER-34.3R
CHER-L
CHER-33.3R
CHER-35.7R
US-12-E
US-12-W
US-12
WA-8-W
WA-8-E
Response Strategy Locations
Boat Launch Locations
Notification Strategy Locations
Potential Oil Spill Points
Staging Area Locations
Sector CHER-2
0 0.5 1 2
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri
Staging Area and Boat Launch symbols are offset to prevent overlapping.



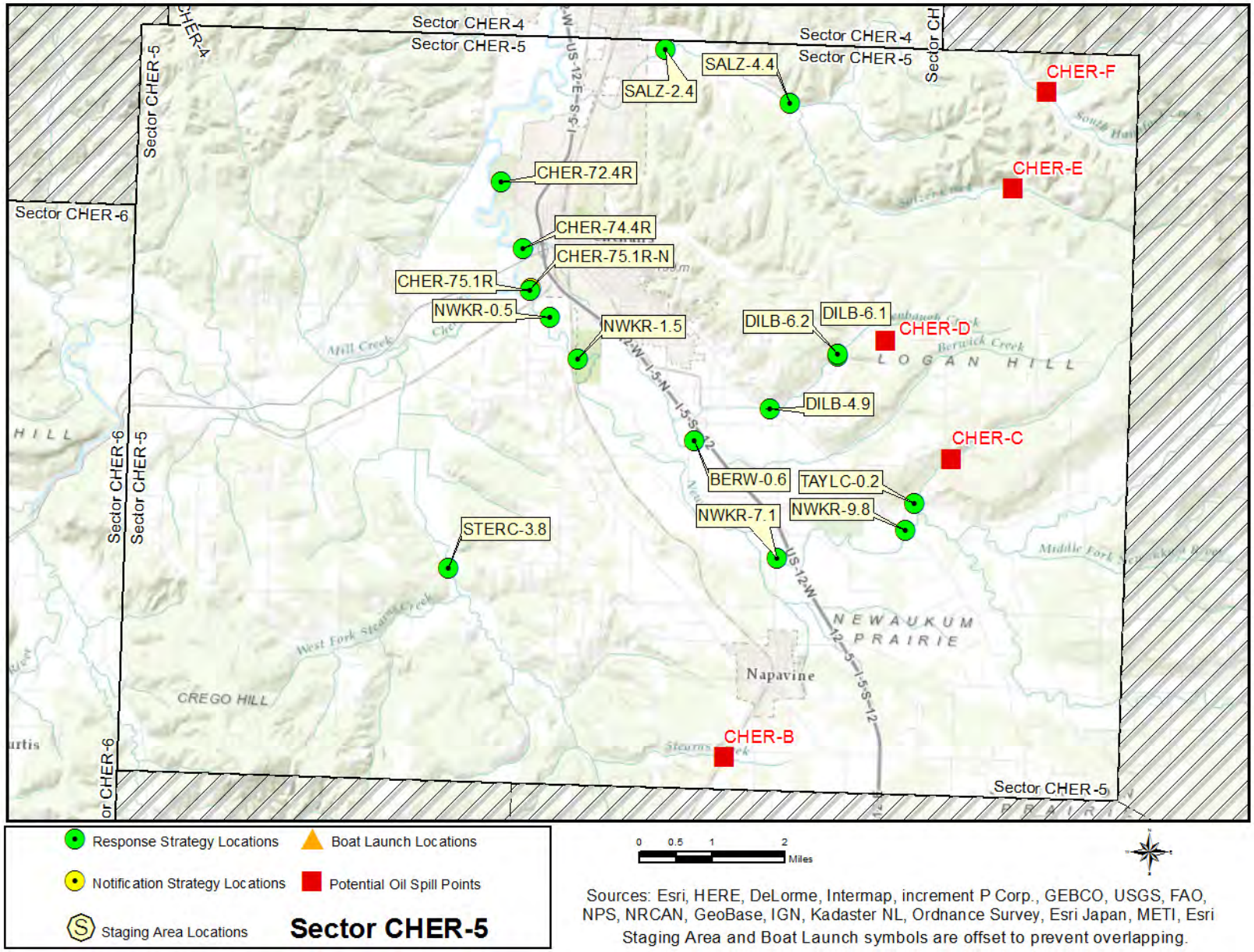
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

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



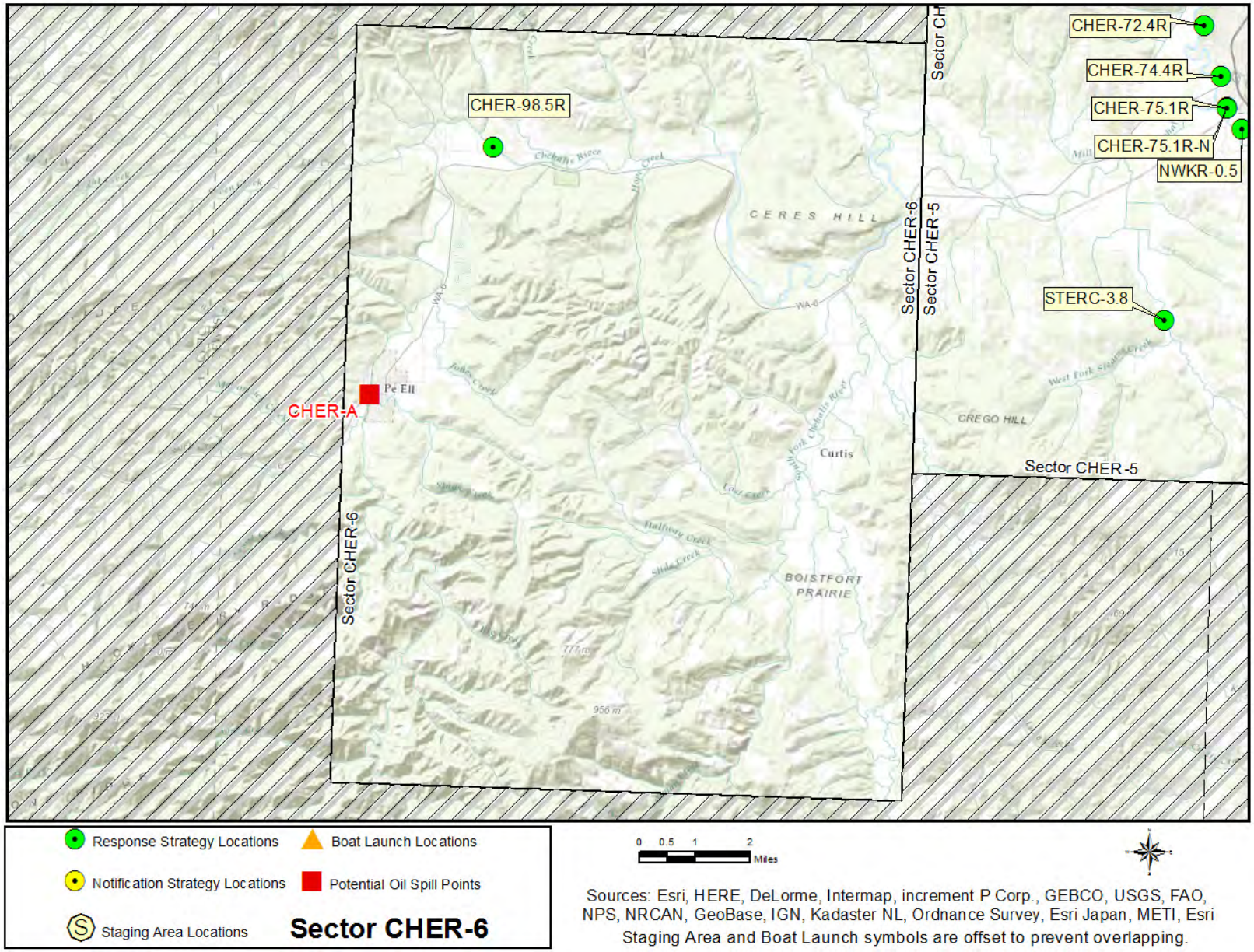
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri

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



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

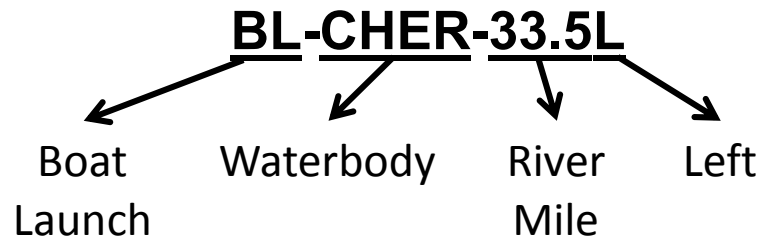
Staging Area and Boat Launch symbols are offset to prevent overlapping.


CHER-72.4R
CHER-74.4R
CHER-75.1R
CHER-75.1R-N
NWKR-0.5
CHER-98.5R
STERC-3.8
CHER-A
Pe Ell
CERES HILL
CREGO HILL
BOISTFORT PRAIRIE
Curtis
Sector CHER-6
Sector CHER-5
Response Strategy Locations
Boat Launch Locations
Notification Strategy Locations
Potential Oil Spill Points
Staging Area Locations
Sector CHER-6
0 0.5 1 2
Miles
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri
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:

ALLN = Allen Creek
BEAV = Beaver Creek
BERW = Berwick Creek
BING = Bingham Creek
BLKR = Black River
BLUS = Blue Slough
CHER = Chehalis River
CHINA = China Creek
CLOQ = Cloquallum Creek
DILB = Dillenbaugh Creek
EFSTSP = East Fork Satsop River
NWKR = Newaukum River
PRAC = Prairie Creek
PRCS = Preachers Slough
SALZ = Salzer Creek
SCTT = Scatter Creek
SHNFC = South Hanaford Creek
SKOO = Skookumchuck River
STERC = Stearns Creek
STSP = Satsop River
TAYLC = Taylor Creek
WENZ = Wenzel Slough
N = Notification Strategy
SA = Staging Area
BL = Boat Launch
L = River Left
R = River Right

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 #)
ALLN-5.6	Allen Creek - Tilley Road 46.89710 -122.90958	Collection, Culvert Block	Boom 100ft, Sorbent 200ft	No	Onsite Narrow shoulder at site. Use driveway to WDFW property across street or Millersylvania State Park 1 mi N on Tilley.	Downstream Resources, Lake Habitat, Resident Fish, State Park	Buried stream daylights next to road. Narrow shoulder on fast-moving roadway. Some space in driveway (WDFW) across street.	66	99
BEAV-9.8	Beaver Creek - Maytown Road 46.89619 -122.98351	Collection, Underflow Dam	Boom 100ft, Sorbent 100ft	No	Onsite Alert homeowners of activity, use road/field for staging.	Aquatic Mammals, Downstream Resources, Salmon Bearing Stream, Waterfowl, Wetlands	Driveway crossing over creek, muddy banks but vegetation is mild.	66	101
BEAV-15.1	Beaver Creek - Tilley Road S 46.88819 -122.91262	Collection, Underflow Dam	Boom 200ft, Sorbent 200ft	No	Onsite Small shoulder near site. More space at Millersylvania State Park 2 mi N on Tilley.	Downstream Resources, Salmonids, Waterfowl, Wetlands	Very small shoulder on roadside. Low wooden bridge with vegetation. Natural dam on upstream side creating small pool.	66	103
BEAV-17.6	Beaver Creek - West Rocky Prairie Wildlife Area 46.89179 -122.86644	Collection, Underflow Dam	Boom 200ft, Sorbent 200ft	No	Onsite Property owned by WDFW. Use parking lot for staging. Use caution in offroad areas - endangered animals and insects.	Downstream Resources, Salmonids, State Lands, Wetlands	Wildlife area. 1.1 mi gravel road, wild vegetation. Endangered species in area.	66	105
BERW-0.6	Berwick Creek - Hamilton Road N 46.62348 -122.93290	Collection, Underflow Dam	Boom 100ft, Sorbent 100ft	No	Onsite Pull-off area in driveway between gate and road.	Downstream Resources, Salmonids, Wetlands	Concrete culvert under road. Small creek with mild vegetation. Roadside with driveway pull-off.	67	107

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
BLKR-0.9	Black River - Chehalis Tribal Boat Launch 46.82003 -123.21421	Collection	Boom 400ft	Yes	Onsite Use Chehalis Tribal Boat Launch lot and boat ramp (BL-BLKR-0.9)	Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl, Wetlands	New boat launch with gravel lot. Slow current.	65	109
BLKR-4.1	Black River - WDFW Oakville Boat Launch 46.82980 -123.18598	Collection	Boom 300ft	Yes	Onsite Use parking lot and boat ramp onsite (BL-BLKR-4.1).	Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl, Wetlands	Small footpath on bank S of ramp to eddy. Shallow, slow water, in-channel vegetation.	65	111
BLKR-8.4	Black River Gate Boat Launch 46.82976 -123.13351	Collection	Boom 300ft	Yes	Onsite Use Black River Gate parking lot and boat ramp (BL-BLKR-8.4).	Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl, Wetlands	Slow, shallow water with lots of vegetation and muddy shorelines	65	113
BLUS-0.1	Blue Slough Mouth 46.94880 -123.72417	Exclusion	Boom 400ft, Sorbent 400ft	Yes	Remote Stage at Blue Slough Boat Launch parking lot (SA-BLUS-1.1). Use boat ramp at same location (BL-BLUS-1.1).	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	115

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-4.2R	Cosmopolis - Chehalis River (Unnamed Slough) 46.96212 -123.74306	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).	Marsh, Salmon, Shorebirds, Steelhead, Waterfowl, Wetlands	Best implemented at slack tide. Ensure boom ends at Point A and Point C are set above river's high water mark. Land access to site is not possible.	63	117
CHER-4.4R	Mox Chuck Slough 46.95845 -123.73841	Exclusion	Boom 600ft, Sorbent 600ft	Yes	Remote Stage 1.5mi downstream at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).	Salmonids, Tidal Marshes, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	119
CHER-4.5R	Unnamed Slough S of Mox Chuck 46.95624 -123.73940	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).	Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	121
CHER-4.7R	Unnamed Slough south of Mox Chuck 46.95409 -123.74192	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).	Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	123

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-5.2L	Unnamed Slough W 46.94727 -123.74105	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).	Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	125
CHER-8.0L	Unnamed Slough across from Higgins Island 46.95582 -123.69463	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	127
CHER-8.7R	Higgins Slough 46.95881 -123.68211	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).	Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	129

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-9.4L	Unnamed Slough across from Peels Slough 46.95549 -123.66865	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	131
CHER-9.4R	Peels Slough 46.95699 -123.66741	Exclusion	Boom 300ft, Sorbent 300ft	Yes	Remote Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).	Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	133
CHER-10.0R	Bents Island N 46.95232 -123.65756	Exclusion	Boom 500ft, Sorbent 500ft	Yes	Remote Stage at Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L). Use boat ramp at same location (BL-CHER-10.3L).	Fish Pens, Marsh, Salmonids, Waterfowl, Wetlands	Will require small boat/shallow draft for this area. Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	135
CHER-10.4L	Preacher's Slough Boat Launch 46.94782 -123.65313	Collection	Boom 1800ft	Yes	Remote Use Preacher's Slough boat launch for collection. Launch from Friend's Landing. (BL-CHER-10.9R)	Downstream Resources, Estuary Resources, Salmon, Steelhead, Tidal Marshes, Waterfowl	Bridge to site is not rated for heavy loads. Ensure boom ends are placed above river's high water mark along shore. Collect on upstream end of boat ramp to leave room for launches.	63	137

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-10.4R	Bents Island S 46.94906 -123.65252	Exclusion	Boom 200ft, Sorbent 200ft	Yes	Remote Stage at Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L). Use boat ramp at same location (BL-CHER-10.3L).	Fish Pens, Marsh, Salmonids, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	139
CHER-13.4R	South Montesano Boat Launch 46.96453 -123.60166	Collection	Boom 1600ft	Yes	Onsite Onsite at South Montesano Boat Launch for staging and boat ramp (BL-CHER-13.3R)	Bald Eagle Nests, Downstream Resources, Marsh, Resident Fish, Salmonids, Waterfowl, Wetlands	Bank from parking lot may be steep and have some vegetation. River erosion in area is high.	62	141
CHER-15.0L	Satsop Business Park Barge Slip 46.96771 -123.57761	Collection	Boom 1000ft	Yes	Onsite Dirt/gravel/paved area next to barge slip. Contact POGH/Satsop Business Park for access or alert of lock cutting.	Bald Eagle Nesting, Downstream Resources, Estuary Resources, Resident Fish, Salmonids, Tidal Marshes, Waterfowl	Site may flood during rainy season or high tide.	62	143
CHER-17.5L	WPPSS Road 46.96315 -123.53442	Collection	Boom 700ft	Yes	Remote Use Fuller Bridge Boat Launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R)	Downstream Resources, Raptors, Salmonids, State Lands, Wintering Waterfowl	Sloughing bank with eddy caused by stream outflow (to the north).	62	145

<< Go Back

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-23.2R	Chehalis River - Wenzel Slough Rd 46.98367 -123.42935	Collection	Boom 500ft	Yes	Remote Stage at Fuller Bridge boat launch (SA-CHER-20.4R). Use boat ramp at same location (BL-CHER-20.4R).	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl, Wetlands	20 ft of tall grass from road to river's edge. 15 deg slope.	64	147
CHER-23.3R	Chehalis River - Wenzel Slough Rd 46.98435 -123.42652	Collection	Boom 400ft	Yes	Remote Very narrow shoulder at site. Use Fuller Boat Launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R)	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl, Wetlands	Bank 20+ ft. Ensure boom ends are placed above river's high water mark along shore.	64	149
CHER-33.3R	Porter Creek Mouth 46.93918 -123.31324	Exclusion	Boom 100ft, Sorbent 100ft	Yes	Remote Use Porter Creek boat launch for staging (SA-CHER-33.5L) and boat launch (BL-CHER-33.5L).	Downstream Resources, Salmon Habitat, Shorebirds, Waterfowl, Wetlands	Just downstream of boat launch. No access from road but could put someone ashore under bridge and where creek meets river.	64	151
CHER-33.5L	Porter Creek Boat Launch 46.93809 -123.31526	Collection	Boom 500ft	Yes	Onsite Large gravel lot at boat launch. Vault toilet.	Bald Eagle Nests, Downstream Resources, Salmonids, Waterfowl, Wetlands	Eddy at bottom of boat ramp. Sandy beach and vegetation on other bank.	64	153

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-34.3R	Hoxit Unit, Chehalis Wildlife Area 46.93213 -123.30905	Exclusion	Boom 300ft, Sorbent 300ft	Yes	Remote Use Porter Creek boat launch for staging (SA-CHER-33.5L) and boat launch (BL-CHER-33.5L)	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl (Wintering)	No road or land access. Train tracks along east bank. Shallow water in oxbow.	64	155
CHER-35.7R	Hoxit Unit South, Chehalis Wildlife Area 46.92105 -123.30404	Exclusion	Boom 300ft, Sorbent 300ft	Yes	Remote Stage at Porter Creek Boat Launch parking lot (SA-CHER-33.5L). Use boat ramp at same location (BL-CHER-33.5L).	Downstream Resources, Salmonids, State Lands, Waterfowl, Wetlands	Shallow side channel, use low-draft boat	65	157
CHER-40.3L	Blockhouse-Smith Road 46.86858 -123.28390	Collection	Boom 500ft	Yes	Remote Stage at Oakville (Chehalis) boat launch (SA-CHER-42.3R). Use boat ramp at same location (BL-CHER-42.3R).	Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands	Sloughing high bank at collection site, extra pump and hose extension required. Narrow dirt road opens to field.	65	159
CHER-42.3R	Chehalis River - Oakville Boat Ramp 46.84966 -123.25293	Collection	Boom 600ft	Yes	Onsite Use parking and boat launch onsite (BL-CHER-42.3R)	Downstream Resources, Salmonids, State Lands, Waterfowl, Wetlands	Short path from parking lot to eddy. Heavy vegetation on both shores.	65	161

<< Go Back

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-52.0L	Chehalis River - Independence Road Tribal Land 46.79988 -123.15591	Collection	Boom 500ft	Yes	Onsite Use parking area and tribal road for staging. Use Black River boat launch (BL-BLKR-0.9)	Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Tribal Lands/Resources, Waterfowl	Cut gate to abandoned railroad grade road headed west off Independence. Sloughing bank and eddy just upstream of shallow riffle.	65	163
CHER-52.1L	Chehalis River - Independence Road 46.80046 -123.15424	Collection	Boom 1100ft	Yes	Onsite Gravel pull-off on shoulder, can also use tribe's road to the west.	Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Wetlands	Chehalis Tribal Land. Could hand-launch kayak/canoe. Shoreline is reinforced with rip-rap. Large eddy.	65	165
CHER-52.9L	Chehalis River - Independence Road 46.80646 -123.13922	Collection	Boom 700ft	Yes	Remote Use Black River launch (7mi downstream) for staging (SA-BLKR-0.9) and boat ramp (BL-BLKR-0.9)	Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl	Small grass pull-off at road edge. Low rip-rap bank. Adjoining private property.	65	167
CHER-59.9R	Chehalis River - Prather Bridge 46.77438 -123.03505	Collection	Boom 700ft	Yes	Remote Use Fort Borst Park staging area (SA-CHER-66.7R) and boat launch (BL-CHER-66.7R)	Downstream Resources, Riparian Habitat, Salmonids, Tribal Lands/Resources, Waterfowl	Dirt road leading from Prather Rd to upstream end of bridge. Steep drop-off at bank.	66	169

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-66.8R	Fort Borst Park 46.71898 -122.98429	Collection	Boom 800ft	Yes	Onsite Use park facilities and parking onsite for staging. Use boat launch on site (BL-CHER-66.7R)	City Park, Downstream Resources, Resident Fish, Salmonids, Waterfowl	Just downstream of Skookumchuck confluence. Large, popular city park.	66	171
CHER-72.4R	Chehalis River - Riverside Golf Course 46.67389 -122.99119	Collection	Boom 300ft	Yes	Onsite Boat ramp at Fort Borst Park (BL-CHER-66.7R) 5.7 mi downstream. Use golf course parking/restaurant for staging.	Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands	Shoreside access at pump station, steep slope with cleared debris. Close to water's edge.	67	173
CHER-74.4R	Chehalis River - Chehalis Wastewater Plant 46.66063 -122.98427	Collection	Boom 400ft	Yes	Onsite Hand launch kayak/raft onsite. Boat launch at Fort Borst (BL-CHER-66.7R) 7.7mi downstream. Stage in parking onsite.	Downstream Resources, Salmonids, Waterfowl, Wetlands	Quiet water, inactive wastewater plant. Steps and steep trail from parking area to water. USGS gage.	67	175
CHER-75.1R	Chehalis River - Chehalis Pump Station 46.65237 -122.98180	Collection	Boom 300ft	Yes	Onsite Hand-launch here or at Lintott-Alexander Park. Shoreline access from park. Paved area onsite.	Downstream Resources, Public Health and Safety, Pump Station, Salmonids, Water Intakes, Waterfowl, Wetlands	Steep bank from pump station. Can drive close to edge but watch slope.	67	177

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
CHER-98.5R	Chehalis River - Doty Trail Bridge 46.63581 -123.26019	Collection	Boom 200ft	No	Onsite Use trail for small staging, or Rainbow Falls State Park on Leudinghaus Rd 1.3 mi east for facilities/large area.	Downstream Resources, Riparian Habitat, Salmonids, State Park	Washed-out trail bridge. Rip-rap, construction debris and blackberry at road's end/bankside. Island in channel.	68	179
CHINA-0.3	China Creek at Marsh Ave 46.71390 -122.97127	Collection, Underflow Dam	Boom 100ft, Sorbent 100ft	No	Onsite Motel around corner or Centralia School Bus Parking next door.	Downstream Resources, Salmonids, Waterfowl	Quiet road with driveway alongside creek.	66	181
CHINA-0.9	China Creek at Centralia College 46.71660 -122.96174	Sorbent, Underflow Dam	Sorbent 100ft	No	Onsite Large parking area and ped walkway just south of the classroom building.	Downstream Resources, Public Lands/Facilities, Salmonids, Waterfowl	Sidewalk and roadside on college campus. Just upstream of restoration/park area.	66	183
CLOQ-2.3	Cloquallum Creek at Highway 12 47.00386 -123.38727	Collection	Boom 200ft	No	Onsite Stage in parking area at Pacific Pride gas station.	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands	Use plywood to reinforce 50 ft trail through light vegetation. Limited access to north bank through vegetation off State Rte 12 / US 8 E - use caution. Fast-flowing, shifting creek.	64	185

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
DILB-4.9	Dillenbaugh Creek - Jackson Highway 46.63026 -122.91140	Collection, Underflow Dam	Boom 100ft, Sorbent 100ft	No	Onsite Private driveway off narrow shoulder, larger shoulder to the NW.	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands	Narrow shoulder on highway but private drive next to creek. Low banks, concrete culvert, cleared vegetation.	67	187
DILB-6.1	Dillenbaugh Creek - Macomber Road 46.64124 -122.89231	Collection, Underflow Dam	Boom 100ft, Sorbent 100ft	No	Onsite Alert house residents and use driveway/road shoulder.	Downstream Resources, Salmonids, Waterfowl, Wetlands	Front yard of a house just off roadside. Low banks and little vegetation.	67	189
DILB-6.2	Dillenbaugh Creek - Macomber Road 46.64158 -122.89243	Culvert Block	Boom 100ft, Sorbent 200ft	No	Onsite No shoulder on road, use driveway/flat areas next to road.	Downstream Resources, Salmonids, Wetlands	Small side channel that splits and rejoins Dillenbaugh Creek. Unmaintained vegetation, shallow banks, just off roadside.	67	191
NWKR-0.5	Newaukum River - Trail Bridge 46.64714 -122.97581	Collection	Boom 200ft	No	Onsite Parking area at road/trail intersection.	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Resident Fish, Salmonids, Wintering Waterfowl	Old rail bridge converted to trail. Steep banks with boulders and vegetation. Collection site has lower banks via neighboring field.	67	193

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
NWKR-1.5	Newaukum River - Stan Hedwall Park 46.63899 -122.96752	Collection	Boom 900ft	Yes	Onsite Hand-launch. Small pull-off at site. Park with full facilities and paved parking, covered areas. Seasonal RV park.	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Resident Fish, Salmonids, Wintering Waterfowl	May be flooded in high water. Hand launch from easy slope to river short distance from road. Unstable banks with trees that could fall.	67	195
NWKR-7.1	Newaukum River - Rush Road Bridge 46.60057 -122.90806	Collection	Boom 300ft	No	Onsite Parking pull-off just off Rush Rd at trailhead (N bank). Large 24hr truck stop 0.5mi north on Rush.	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Salmonids, Wintering Waterfowl	Unofficial trail from roadside under bridge. Mild vegetation, some steep slopes.	67	197
NWKR-9.8	Newaukum River - Jackson Highway Bridge 46.60679 -122.87127	Collection	Boom 400ft	No	Onsite Cul-de-sac next to strategy off Taylor Road with few/no residents.	Downstream Resources, Resident Fish, Salmonids, Waterfowl	New bridge with rip-rap banks and cul-de-sac on NW bank. Private property in area. Slow water and side channel on outside bend.	67	199
PRAC-0.8	Prairie Creek - Maple Lane School 46.79072 -123.03046	Collection	Boom 100ft, Sorbent 100ft	No	Onsite Correctional facility. Some space outside fence at site, full facilities inside.	Downstream Resources, Salmonids, Waterfowl, Wetlands	Footbridge over small creek. Behind correctional facility, need to notify for access. Drivable to site, bridge not rated for heavy loads.	66	201

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
PRCS-0.1	Preacher's Slough Downstream Mouth 46.94869 -123.71650	Exclusion	Sorbent 500ft	Yes	Remote Stage at Blue Slough Boat Launch parking lot (SA-BLUS-1.1). Use boat ramp at same location (BL-BLUS-1.1).	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.	63	203
PRCS-6.3	Bridge over Preacher's Slough 46.94572 -123.65099	Collection, Exclusion	Boom 100ft, Sorbent 200ft	No	Remote Stage at Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L).	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands	Bridge is not rated for heavy loads. Best implemented at slack tide. Ensure shore anchors are placed above high water mark.	63	205
SALZ-2.4	Salzer Creek - Alvord Road 46.70129 -122.94487	Collection, Underflow Dam	Boom 200ft, Sorbent 200ft	No	Onsite Speak with landowners in area or use business parking in Centralia.	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands	Farmland, shallow banks, no road shoulder.	67	207
SALZ-4.4	Salzer Creek - Proffitt Road 46.69119 -122.90823	Collection, Underflow Dam	Boom 200ft, Sorbent 200ft	No	Onsite No road shoulder. Can drive onto fields to access creek.	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands	Culvert under paved road, farmland on 3 sides. Residence nearby.	67	209
SCTT-4.7	Scatter Creek - James Road Bridge 46.80710 -123.07230	Collection, Sorbent	Boom 100ft, Sorbent 100ft	No	Onsite Shoulder pull-off nearby. Use driveway or speak with residents.	Downstream Resources, Salmonids, Waterfowl	Creek runs dry most of the year but can flow after rainstorms. Gentle slopes from nearby yards, in high water adjust location accordingly.	66	211

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
SCTT-12.1	Scatter Creek - Violet Prairie Farm 46.82777 -122.96460	Collection	Boom 100ft, Sorbent 100ft	Yes	Onsite Gravel lot at barn, natural area at site. Need 4WD vehicle to drive to site, bolt cutters for barbed wire fence.	Downstream Resources, Resident Fish, Salmonids, Special Protection Area, Waterfowl	Tractor road from barn. Barbed wire fence 50 ft from site. Can hand-launch raft from bank in high water, creek will shrink in summer to a yard width.	67	213
SCTT-12.4	Scatter Creek - Gibson Road Bridge 46.82504 -122.96066	Collection	Boom 100ft	No	Onsite Small shoulder on road at site. Cul-de-sac 300 ft south or use Violet Prairie site (SCTT-12.1).	Downstream Resources, Freshwater Wildlife, Resident Fish, Salmonids, Wetlands	Wide slow water with vegetation. Shoulder space for truck on SE side of bridge.	66	215
SHNFC-0.1	South Hanaford Creek 46.75886 -122.90092	Underflow Dam	Boom 100ft, Sorbent 100ft	No	Remote Very little space here. Use Schaefer Park 2.5 mi SW (SA-SKOO-4.5)	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl	Very small shoulder on roadside. Small pull-off 200 ft NE at corner.	66	217
SKOO-3.4	Skookumchuck River Industrial Site 46.74051 -122.94511	Collection	Boom 300ft	Yes	Onsite Large empty parking area onsite. Hand-launch from bank or use Fort Borst (BL-CHER-66.7R)	City Park, Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl (Wintering)	Abandoned industrial area. Low bank with some vegetation. Swirling eddy.	66	219

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
SKOO-4.5	Schaefer Park 46.75161 -122.93817	Collection	Boom 300ft	No	Onsite Hand-launch if needed. County park with facilities and room for staging.	Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl, Wetlands	Could hand-launch if needed, paved trail to mud/grass gradual slope. Eddy on river left. Ped bridge. County park with facilities.	66	221
STERC-3.8	Stearns Creek at Pleasant Valley Road 46.59643 -123.00313	Collection	Boom 100ft, Sorbent 100ft	No	Onsite Road shoulder in area, narrow space to pull off.	Downstream Resources, Public Recreation Site/Area, Salmonids, Waterfowl, Wetlands	Steep banks, in-water debris, farm animals nearby.	67	223
STSP-0.5	Satsop River at Keys Rd 46.98212 -123.48247	Collection	Boom 400ft	Yes	Remote Use Fuller Bridge boat launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R). Can also stage on-site.	Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands	Mouth of Satsop has braiding and debris, use caution in boat. Large boulders on bank at roadside.	62	225
TAYLC-0.2	Taylor Creek - Taylor Road Bridge 46.61231 -122.86894	Collection	Boom 100ft, Sorbent 100ft	No	Onsite No shoulder but quiet road and some pull-off spaces (driveways). Very close to NWKR-9.8 can also stage there.	Downstream Resources, Salmonids, Waterfowl, Wetlands	No shoulder, quiet road. Pool just downstream of bridge. May be able to use yards to access or stage, consult with residents.	67	227

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page #)
WENZ-0.5	Wenzel Slough Bridge 46.98438 -123.46922	Underflow Dam	Boom 200ft, Sorbent 200ft	No	Remote Stage at Fuller Bridge boat ramp parking (SA-CHER-20.4R)	Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Shorebirds, State Lands, Waterfowl	Small road connecting farms. Lots of vegetation on bank and in channel.	62	229
WYNO-0.5	Wynoochee River - Montesano Treatment Plant 46.96782 -123.60841	Collection	Boom 400ft	Yes	Remote Use South Montesano Boat Launch for staging (SA-CHER-13.3R) and boat ramp (BL-CHER-13.3R).	Downstream Resources, Resident Fish, Salmonids, Waterfowl Concentrations	Wastewater Treatment Plant. Some staff onsite but not 24/7, fire/police have keys. High rip-rap bank with paved road on top of berm.	62	231

4.5.3 Notification Strategy Matrices

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page #)
BING-17.7-N	WDFW Chehalis Basin Hatcheries 47.04222 -123.51993	Notification	Salmon (Coho, Chinook and Chum), Steelhead	Notify WDFW Region 6 Hatchery Manager. Call (360) 249-1203. Hatcheries to be notified include: Bingham Creek, Skookumchuck, and Lake Aberdeen. Release locations include Skookumchuck River (Centralia), Satsop River (Satsop), Wynoochee (Montesano) and Elliot Slough (Aberdeen).	Inform WDFW hatcheries of oil spill in area so that release of fish won't coincide with ongoing spill response efforts.	62	235
CHER-75.1R-N	City of Centralia Pump Station 46.65276 -122.98179	Notification	Pump Station	Inform City of Centralia Public Works that a spill has occurred and to consider shutting down the pump station. Call (360) 740-7536 M-F 8:30-4:30 or afterhours (360) 740-1105.	Shut down pump station.	67	237
EFSTSP-14.3-N	Satsop Springs Hatchery 47.04194 -123.52103	Notification	Salmon (Coho, Chinook and Chum), Steelhead	Call (360) 482-3364 to inform the Chehalis Basin Fisheries Task Force that a spill has occurred. If the spill is on the East Fork Satsop River, advise they shut down their water intake. Ask them to notify all projects that also release salmon in the Chehalis basin.	Notify hatchery of oil spill.	62	239

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page #)
SKOO-22.2-N	Skookumchuck Dam 46.79599 -122.86482	Notification	Steelhead	Call (360) 330 8316 to notify Dam Hydro Operator that a spill has occurred and to delay any fish releases.	Inform Skookumchuck Dam of oil spill in area so that release of fish won't coincide with ongoing spill response efforts.	66	241

4.5.4 Staging Area Matrices

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
SA-BLKR-0.9	Chehalis Tribe Black River Boat Launch	46.81986 -123.21480	116 Howanut Rd Oakville, WA 98568	Chehalis Tribe Department of Natural Resources Property owner Oakville, WA 98568 (360) 273-5911	BLKR-0.9, CHER-52.9L	Large gravel lot, no facilities	65	247
SA-BLUS-1.1	DNR Blue Slough Hand Launch	46.94048 -123.71890	Blue Slough Rd Montesano, WA 98563	Washington Department of Natural Resources Property owner Olympia, WA (360) 902-1064	BLUS-0.1, PRCS-0.1	Small gravel lot with portable toilet.	63	249
SA-CHER-10.3L	DNR Preacher's Slough Boat Launch	46.94701 -123.65495	Preacher's Slough Rd Montesano, WA 98563	Washington Department of Natural Resources Property owner Olympia, WA (360) 902-1064	CHER-10.0R, CHER-10.4R	Small gravel lot with portable restroom.	63	251
SA-CHER-10.9R	Friends Landing Boat Launch	46.94636 -123.64003	300 Katon Rd Montesano, WA 98563	Friends Landing Property owner Montesano, WA 98563 (360) 249-5117	CHER-8.0L, CHER-8.7R CHER-9.4L, CHER-9.4R, CHER-10.4L	Large gravel lot adjoining private campground with full facilities.	62	253

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
SA-CHER-13.3R	WDFW South Montesano Boat Launch	46.96294 -123.60306	75 WA-107 Montesano, WA 98563	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-13.4R, WYNO-0.5	Large gravel lot with pit toilet and no other facilities	62	255
SA-CHER-20.4R	WDFW Fuller Bridge Boat Launch	46.97867 -123.47876	164 Keys Rd Elma, WA 98541	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-17.5L, CHER-23.2R, CHER-23.3R	Large gravel lot, small pit toilet	62	257
SA-CHER-33.5L	WDFW Porter Bridge Boat Launch	46.93896 -123.31526	41 Porter Creek Rd W Elma, WA 98541	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-33.3R, CHER-34.3R, CHER-35.7R	Large gravel and grass lot with pit toilet, no other facilities	64	259
SA-CHER-42.3R	WDFW Oakville Boat Launch	46.85016 -123.25299	113 Elma Gate Rd W Oakville, WA 98568	WDFW Region 6 Property Manager (360) 249-4628	CHER-40.3L, CHER-42.3R	Gravel lot, no facilities.	65	261

Strategy Name	Location	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
SA-CHER-66.7R	Fort Borst Park Boat Launch	46.71960 -122.98556	2560 Pioneer Way Centralia, WA 98531	City of Centralia Parks and Rec Property Owner Centralia, WA 98531 (360) 330-7688	CHER-59.9R	Small gravel lot in public park, facilities nearby.	66	263
SA-SKOO-4.5	Schaefer Park	46.75229 -122.93804	106 Big Hanford Rd Centralia, WA 98531	Lewis County Property Owner 351 NW North St Chehalis, WA 98532 (360) 740-1192	SHNFC-0.1	County park with lots of facilities and large parking lot.	66	265

4.5.5 Boat Launch Matrices

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
BL-BLKR-0.9	Chehalis Tribe Black River Boat Launch	46.81986 -123.21480	116 Howanut Rd Oakville, WA 98568	Chehalis Tribe Department of Natural Resources Property owner Oakville, WA 98568 (360) 273-5911	BLKR-0.9, CHER-52.0L, CHER-52.9L	New concrete ramp with large gravel turnaround near mouth of Black River	65	271
BL-BLKR-4.1	WDFW Oakville Boat Launch	46.82997 -123.18576	7310 US-12 Oakville, WA 98568	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	BLKR-4.1	Gravel lot with concrete planks, gradual descent and quiet water	65	273
BL-BLKR-8.4	WDFW Black River Gate Boat Launch	46.82931 -123.13381	11878 School Land Rd SW Rochester, WA 98579	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	BLKR-8.4	Gravel, easy grade, no amenities, quiet water, lots of vegetation	65	275

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
BL-BLUS-1.1	DNR Blue Slough hand launch	46.94048 -123.71890	Blue Slough Rd Montesano, WA 98563	Washington Department of Natural Resources Property owner Olympia, WA (360) 902-1064	BLUS-0.1, PRCS-0.1	Intended for hand-launch but bollards can be removed or cut (contact DNR before/after) and small motorized boat could be launched. Wheelchair guard rail on left side of ramp.	63	277
BL-CHER-10.3L	DNR Preacher's Slough Boat Launch	46.94701 -123.65495	Preacher's Slough Rd Montesano, WA 98563	Washington Department of Natural Resources Property owner Olympia, WA (360) 902-1064	CHER-10.0R, CHER-10.4R	Intended for hand launch with wheelchair rail on side. Can cut padlocks on bollards to access with trailer, notify DNR before/after. Could probably launch small motored boats.	63	279
BL-CHER-10.9R	Friends Landing Boat Launch	46.94636 -123.64003	300 Katon Rd Montesano, WA 98563	Friends Landing Property owner Montesano, WA 98563 (360) 249-5117	CHER-8.0L, CHER-8.7R, CHER-9.4L, CHER-9.4R, CHER-10.4L	Be aware of abandoned pilings in area. Moorage space/dock just downriver at campground.	62	281

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
BL-CHER-13.3R	WDFW South Montesano Boat Launch	46.96294 -123.60306	75 WA-107 Montesano, WA 98563	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-13.4R, CHER-15.0L, WYNO-0.5	Three side-by-side concrete plank boat ramps, large gravel lot	62	283
BL-CHER-20.4R	WDFW Fuller Bridge Boat Launch	46.97867 -123.47876	164 Keys Rd Elma, WA 98541	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-17.5L, CHER-23.2R, CHER-23.3R	Large gravel lot, concrete plank boat ramp, minimal amenities	62	285
BL-CHER-33.5L	WDFW Porter Bridge Boat Launch	46.93896 -123.31526	41 Porter Creek Rd W Elma, WA 98541	WDFW Region 6 Property Manager 48 Devonshire Road, Montesano, WA 98563 (360) 249-4628	CHER-33.5L, CHER-33.3R, CHER-34.3R, CHER-35.7R	Single concrete plank ramp, large gravel and grass lot	64	287
BL-CHER-42.3R	WDFW Oakville Boat Launch	46.85016 -123.25299	113 Elma Gate Rd W Oakville, WA 98568	WDFW Region 6 Property Manager (360) 249-4628	CHER-40.3L, CHER-42.3R	Concrete plank 11-degree angle.	65	289

<< Go Back

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page #)
BL-CHER-66.7R	Fort Borst Park Boat Launch	46.71960 -122.98556	2560 Pioneer Way Centralia, WA 98531	City of Centralia Parks and Rec Property Owner Centralia, WA 98531 (360) 330-7688	CHER-59.9R, CHER-66.8R CHER-72.4R	Concrete plank launch 8-deg slope, small gravel/paved lot but inside a large park.	66	291

This page was intentionally left blank.

APPENDIX 4A

Response Strategy 2-Pagers

RESPONSE STRATEGIES – LIST

ALLN-5.6	BEAV-9.8	BEAV-15.1	BEAV-17.6	BERW-0.6
BLKR-0.9	BLKR-4.1	BLKR-8.4	BLUS-0.1	CHER-4.2R
CHER-4.4R	CHER-4.5R	CHER-4.7R	CHER-5.2L	CHER-8.0L
CHER-8.7R	CHER-9.4L	CHER-9.4R	CHER-10.0R	CHER-10.4L
CHER-10.4R	CHER-13.4R	CHER-15.0L	CHER-17.5L	CHER-23.2R
CHER-23.3R	CHER-33.3R	CHER-33.5L	CHER-34.3R	CHER-35.7R
CHER-40.3L	CHER-42.3R	CHER-52.0L	CHER-52.1L	CHER-52.9L
CHER-59.9R	CHER-66.8R	CHER-72.4R	CHER-74.4R	CHER-75.1R
CHER-98.5R	CHINA-0.3	CHINA-0.9	CLOQ-2.3	DILB-4.9
DILB-6.1	DILB-6.2	NWKR-0.5	NWKR-1.5	NWKR-7.1
NWKR-9.8	PRAC-0.8	PRCS-0.1	PRCS-6.3	SALZ-2.4
SALZ-4.4	SCTT-4.7	SCTT-12.1	SCTT-12.4	SHNFC-0.1
SKOO-3.4	SKOO-4.5	STERC-3.8	STSP-0.5	TAYLC-0.2
WENZ-0.5	WYNO-0.5			

Allen Creek - Tilley Road ALLN-5.6

Position - Location:	46° 53.826', -122° 54.575'	46° 53' 49.6", -122° 54' 34.5"	46.89710, -122.90958	Olympia

Strategy Objective:	Collection, Culvert Block : Collect oil moving downstream on Allen Creek
Implementation:	If time allows, install culvert block at this location on west/upstream side of roadway. If not, deploy one length of river boom (hard boom) on downstream side of culvert, leaving space between the culvert and hard boom. 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 vac-truck or skimmer & storage for collection (if site is collecting oil).
Staging Area:	Onsite: Narrow shoulder at site. Use driveway to WDFW property across street or Millersylvania State Park 1 mi N on Tilley.
Site Safety:	Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Buried stream daylights next to road. Narrow shoulder on fast-moving roadway. Some space in driveway (WDFW) across street.
Watercourse:	Creek - Allen Creek - in high flows will drain from Beaver Creek north into Deep Lake in Millersylvania State Park
Resources at Risk:	Downstream Resources, Lake Habitat, Resident Fish, State Park

Recommended Equipment

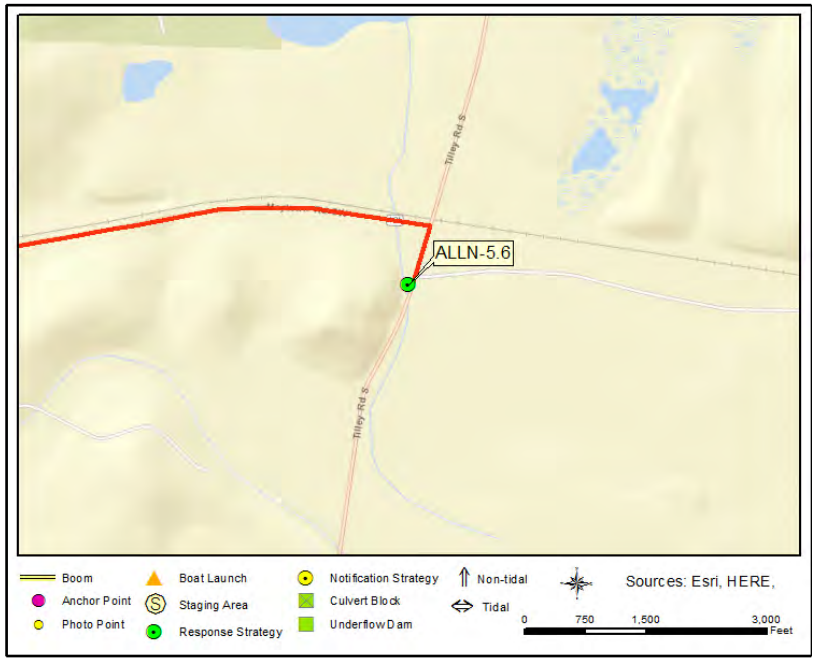
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Roll	Plastic Sheeting
2	Each	Plywood sheets (4ft x 4ft)
1	Each	Vac Truck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

Recommended Personnel

1	Laborer
1	Supervisor

Allen Creek - Tilley Road ALLN-5.6

ALLN-5.6 Photo: From roadside, looking W at downstream side of culvert on Allen Creek right. Taken early December.



Site Contact

WDFW Scatter Creek Wildlife Area
Primary Contact : Manager
360-480-9105

WDFW Region 6
Alternate Contact : Property Manager
360-249-4628

Nearest Address

13155 Tilley Rd SW
Olympia, WA 98512

Driving Directions

1. From I-5 in Olympia, head south to exit 95.
2. Take exit 95 for WA-121 N toward Littlerock/Maytown (0.2 mi)
3. Follow WA-121 N/Maytown Rd SW to Tilley Rd SW for 5 min (2.9 mi)
4. Turn right onto WA-121 N/Maytown Rd SW (2.7 mi)
5. Turn right onto Tilley Rd SW.
6. Powder-Plant Rd is the second driveway on the left (0.2 mi). Strategy is across the street.

Beaver Creek - Maytown Road BEAV-9.8

Position - Location:	46° 53.772', -122° 59.011'	46° 53' 46.3", -122° 59' .6"	46.89619, -122.98351	Olympia

Strategy Objective: Collection, Underflow Dam : Collect oil moving downstream on Beaver Creek

Implementation: Use boom and sorbent on the upstream side of the driveway for initial containment. Use sandbags with PVC to create an underflow dam at this location. The creek is approximately 20 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Onsite: Alert homeowners of activity, use road/field for staging.

Site Safety: Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Driveway crossing over creek, muddy banks but vegetation is mild.

Watercourse: Creek - Beaver Creek

Resources at Risk: Aquatic Mammals, Downstream Resources, Salmon Bearing Stream, Waterfowl, Wetlands

Recommended Equipment

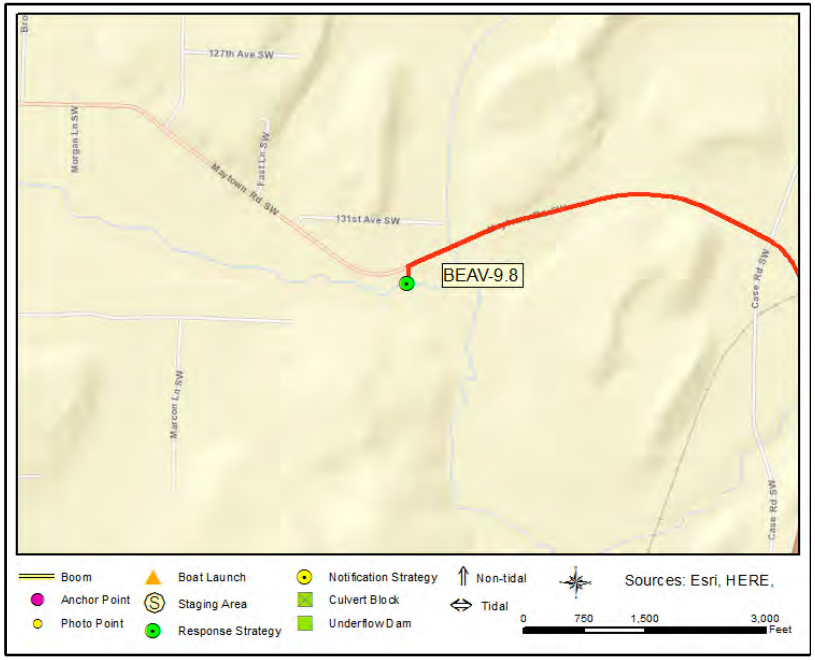
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
50	Each	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

4	Laborer
1	Supervisor

Beaver Creek - Maytown Road BEAV-9.8

BEAV-9.8 Photo: From driveway on Beaver Creek right, looking S at upstream end of crossing. Taken early December.



Site Contact

No Information
Unknown :

Nearest Address

4737 Maytown Rd SW
Olympia, WA 98512

Driving Directions

1. From I-5 in Olympia head S to exit 95.
2. At exit 95 take ramp on the right to WA-121 N toward Littlerock/Maytown (0.18 miles)
3. Bear right onto ramp toward Littlerock (0.08 miles)
4. Continue on Maytown Rd SW (1.08 miles)
5. Turn left into the private dirt road. Strategy is at bridge200 ft from Maytown.

<< Go Back

Beaver Creek - Tilley Road S BEAV-15.1

Position - Location:	46° 53.292', -122° 54.757'	46° 53' 17.5", -122° 54' 45.4"	46.88819, -122.91262	Tenino

Strategy Objective: Collection, Underflow Dam : Collect oil moving downstream on Beaver Creek

Implementation: Use boom and sorbent on both sides of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam at this location. The creek is approximately 20 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Onsite: Small shoulder near site. More space at Millersylvania State Park 2 mi N on Tilley.

Site Safety: Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Very small shoulder on roadside. Low wooden bridge with vegetation. Natural dam on upstream side creating small pool.

Watercourse: Creek - Beaver Creek

Resources at Risk: Downstream Resources, Salmonids, Waterfowl, Wetlands

Recommended Equipment

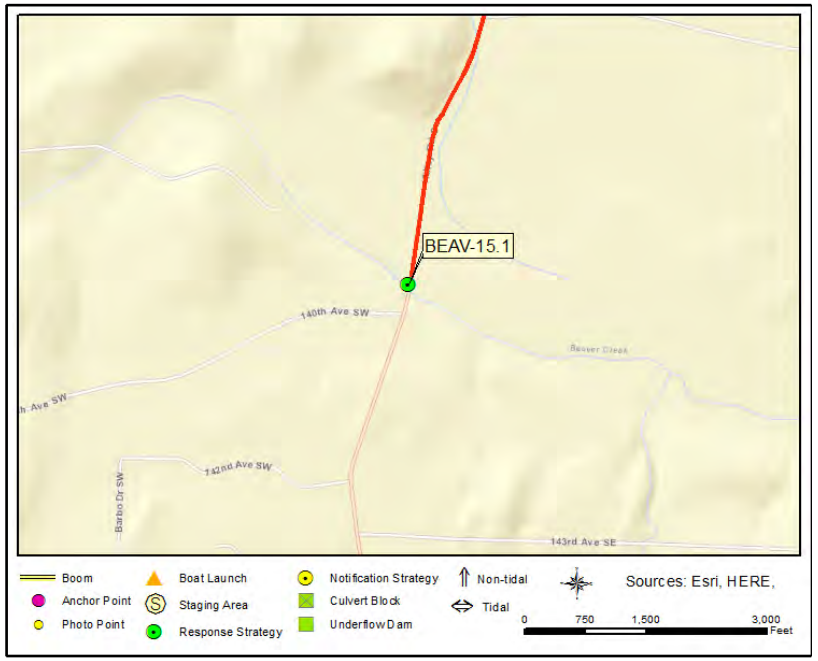
4	Kit	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
30	Each	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage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

Recommended Personnel

4	Laborer
1	Supervisor

Beaver Creek - Tilley Road S BEAV-15.1

BEAV-15.1 Photo: On Beaver Creek right downstream of Tilley Rd, looking S at culvert. Taken early Dec.



Site Contact

No Information
Unknown :

Nearest Address

13895 Tilley Rd S
Tenino, WA 98589

Driving Directions

1. From I-5 in Olympia head south towards exit 99.
2. At exit 99 take ramp on the right to WA-121 S/93rd Ave (0.34 miles)
3. Turn left on WA-121 (93rd Ave SW) (1.49 miles)
4. Turn right at 93rd Ave SE to stay on WA-121 (Tilley Rd S) (3 miles)
5. Millersylvania State Park (staging) is on the right.
6. The strategy site is 1.6 miles further south on Tilley Rd.

<< Go Back

Beaver Creek - West Rocky Prairie Wildlife Area BEAV-17.6

Position - Location:	46° 53.508', -122° 51.986'	46° 53' 30.5", -122° 51' 59.2"	46.89179, -122.86644	Tenino

Strategy Objective:	Collection, Underflow Dam : Collect oil moving downtream on Beaver Creek
Implementation:	Use boom and sorbent on both sides of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam upstream of road. The creek is approximately 3 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.
Staging Area:	Onsite: Property owned by WDFW. Use parking lot for staging. Use caution in offroad areas - endangered animals & insects.
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Wildlife area. 1.1 mi gravel road, wild vegetation. Endangered species in area.
Watercourse:	Creek - Beaver Creek
Resources at Risk:	Downstream Resources, Salmonids, State Lands, Wetlands

Recommended Equipment

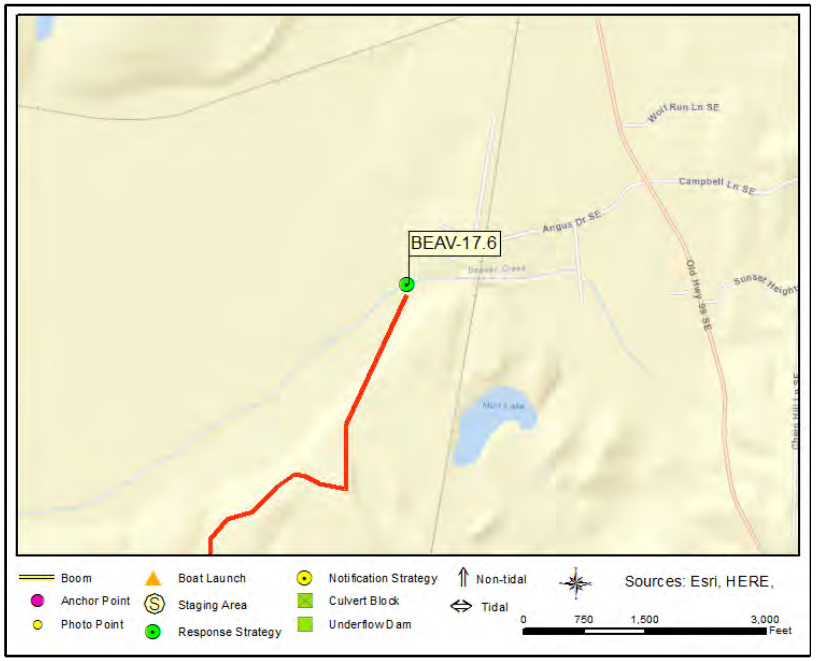
4	Kit	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
30	Each	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage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

Recommended Personnel

4	Laborer
1	Supervisor

Beaver Creek - West Rocky Prairie Wildlife Area BEAV-17.6

BEAV-17.6 Photo: From WDFW gravel access road looking east upstream at Beaver Creek and culvert. Taken mid-April in low water.



Site Contact

WDFW Scatter Creek Wildlife Area
Primary Contact : Manager
360-480-9105

WDFW Region 6
Land/Property Owner : Property Manager
360-249-4628

Nearest Address

2048 143rd Ave SE
Tenino, WA 98589

Driving Directions

1. From I-5 in Olympia, head south to exit 95.
2. Take exit 95 for WA-121 N toward Littlerock/Maytown (0.2 mi)
3. Follow WA-121 N/Maytown Rd SW to Tilley Rd SW for 5 min (2.9 mi)
4. Turn right onto WA-121 N/Maytown Rd SW (2.7 mi)
5. Turn right onto Tilley Rd SW (1.4 mi).
6. Turn left onto 143rd Ave SE (1.8 mi).
7. Turn left into WDFW gravel parking area. Cut or unlock gate and proceed north to strategy location (1 mi).

<< Go Back

Berwick Creek - Hamilton Road N BERW-0.6

Position - Location:	46° 37.409', -122° 55.974'	46° 37' 24.5", -122° 55' 58.5"	46.62348, -122.93290	Chehalis

Strategy Objective:	Collection, Underflow Dam : Collect oil moving downstream on Berwick Creek
Implementation:	Use boom and sorbent for initial containment. Use sandbags with PVC to create an underflow dam on the upstream side of Hamilton Road. The creek is approximately 10 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approva (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.
Staging Area:	Onsite: Pull-off area in driveway between gate and road.
Site Safety:	Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Concrete culvert under road. Small creek with mild vegetation. Roadside with driveway pull-off.
Watercourse:	Creek - Berwick Creek
Resources at Risk:	Downstream Resources, Salmonids, Wetlands

Recommended Equipment

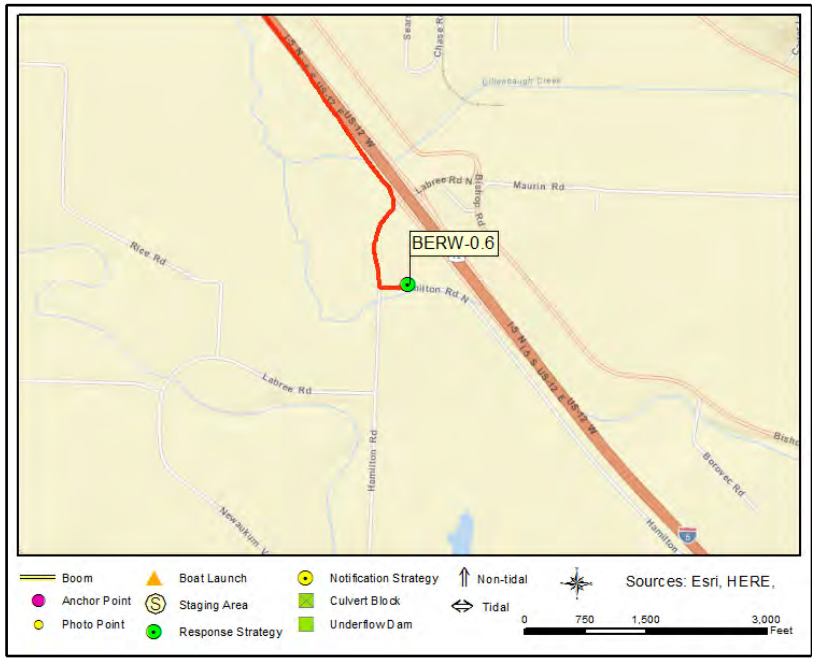
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

4	Laborer
1	Supervisor

Berwick Creek - Hamilton Road N BERW-0.6

BERW-0.6 Photo: From driveway N of Hamilton Road, looking E at Berwick Creek right. Taken mid-November.



Site Contact

No Information
Unknown :

Nearest Address

382 Hamilton Rd N
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.35 miles)
3. Bear right (0.06 miles)
4. Bear right on Labree Rd (0.19 miles)
5. Turn left on Hamilton Rd N (0.08 miles)
6. Turn left into the second driveway (for Chehalis Livestock Market) at382 Hamilton Rd N, 98532

Black River - Chehalis Tribal Boat Launch BLKR-0.9

Position - Location:	46° 49.202', -123° 12.853'	46° 49' 12.1", -123° 12' 51.2"	46.82003, -123.21421	Oakville

Strategy Objective: Collection : Collect oil moving downstream on the Black River.

Implementation: Using workboat, anchor one end of 400ft length of boom near A (46.8201, -123.2132). Then extend boom ~350ft W and secure remaining boom end to shore near B (46.82, -123.2146) on upriver side of boat launch. Use additional anchoring systems (as needed) to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.

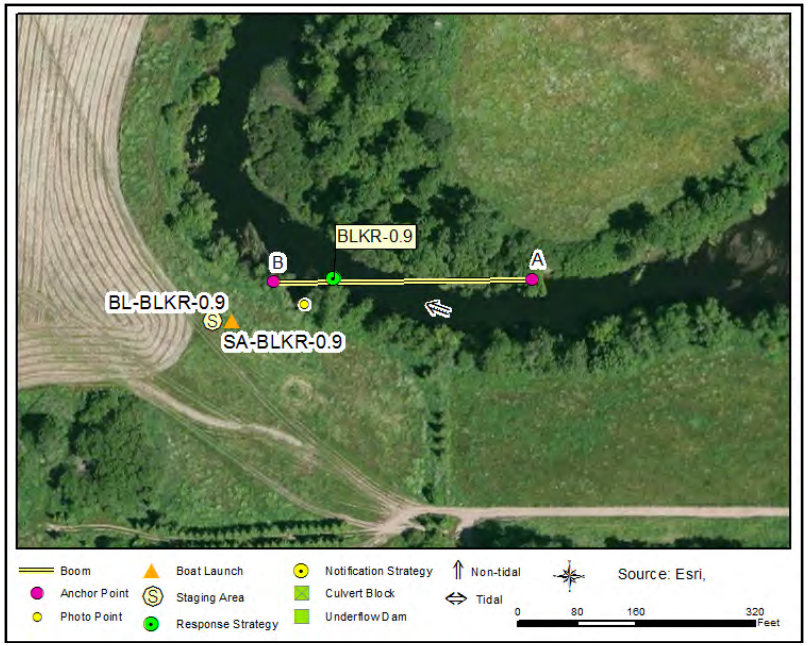
Staging Area: Onsite: Use Chehalis Tribal Boat Launch lot and boat ramp (BL-BLKR-0.9)

Site Safety: Recreational Boat Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: New boat launch with gravel lot. Slow current.

Watercourse: River - Without a Dam - Black River

Resources at Risk: Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl, Wetlands



Recommended Equipment

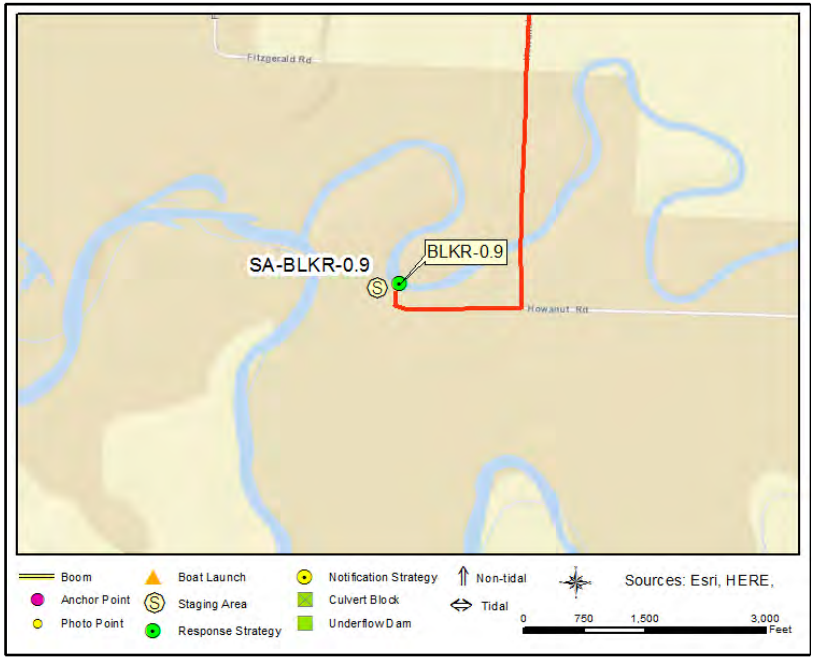
7	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Black River - Chehalis Tribal Boat Launch BLKR-0.9

BLKR-0.9 Photo: From edge of boat ramp on Black River left, looking N downstream to opposite bank. Taken mid-Nov at low winter water.



Site Contact

Chehalis Tribe Department of Natural Resources
Land/Property Contact : Property owner

Oakville, WA 98568
360-273-5911

Nearest Address

116 Howanut Rd
Oakville, WA 98568

Driving Directions

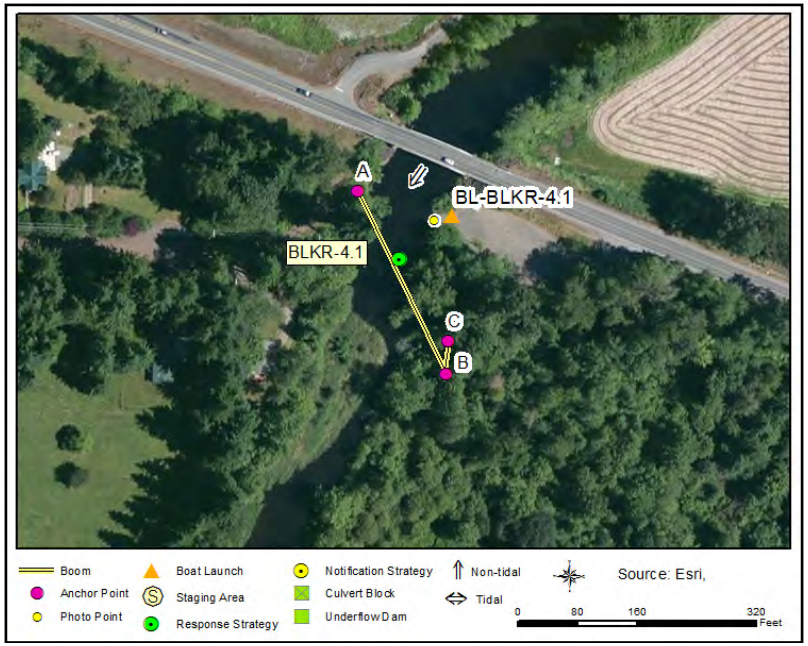
1. From I-5 in Olympia head S towards exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (9.08 miles)
4. Turn left on Elma Gate Br Rd (Elma Gate Rd E) (0.09 miles)
5. Turn right on Elma Gate Rd E (0.9 miles)
6. Turn left on Howanut Rd (0.74 miles)
7. Turn right at gate and follow road to boat launch (1200 ft).

<< Go Back

Black River - WDFW Oakville Boat Launch BLKR-4.1

Position - Location:	46° 49.788', -123° 11.159'	46° 49' 47.3", -123° 11' 9.5"	46.82980, -123.18598	Oakville

Strategy Objective:	Collection : Collect oil moving downstream on the Black River.
Implementation:	Using workboat, anchor one end of 300ft length of boom near A (46.8301, -123.1862). Then extend boom ~300ft SE and secure remaining boom end to shore near C (46.8295, -123.1857). Pull tension S along shore and create collection pocket by anchoring near B (46.8294, -123.1857). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Use parking lot and boat ramp onsite (BL-BLKR-4.1).
Site Safety:	Recreational Boat Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Small footpath on bank S of ramp to eddy. Shallow, slow water, in-channel vegetation.
Watercourse:	River - Without a Dam - Black River
Resources at Risk:	Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl, Wetlands



Recommended Equipment

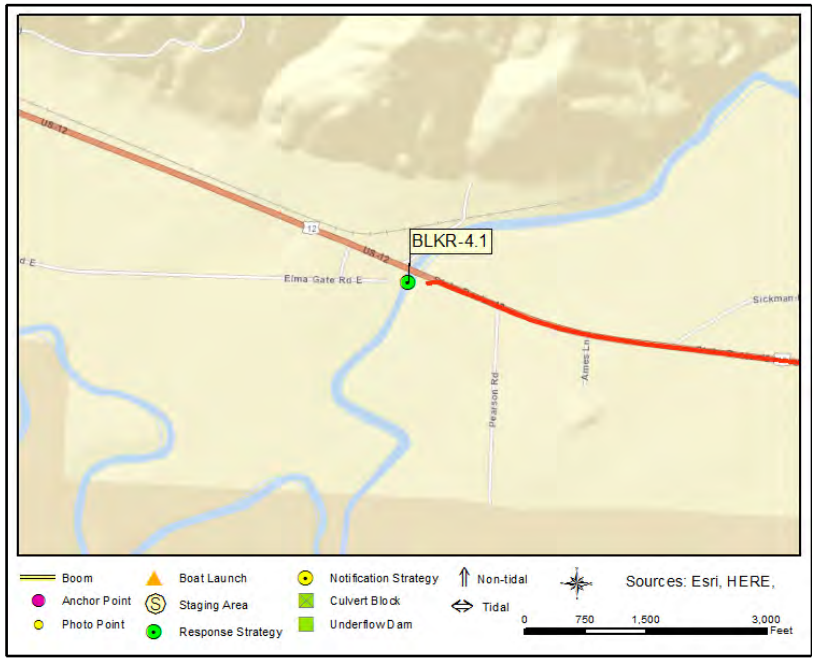
6	Kit	Anchoring System(s) - (anchor, lines, floats)
3	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Black River - WDFW Oakville Boat Launch BLKR-4.1

BLKR-4.1 Photo: Looking downstream SW from end of boat ramp on Black River left. Taken mid-August, low water.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

7310 US-12
Oakville, WA 98568

Driving Directions

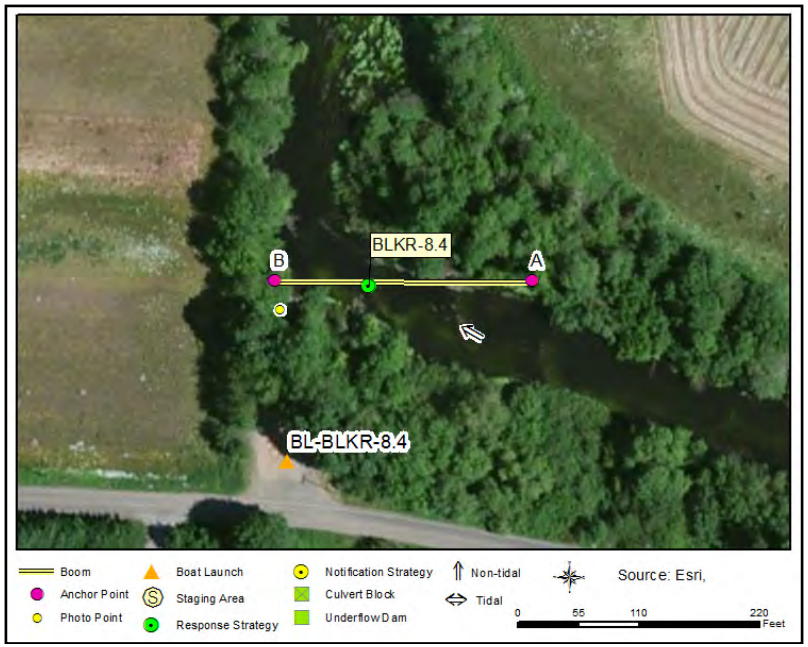
1. From I-5 in Olympia, head south towards exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (8.89 miles)
4. Turn left into WDFW Oakville (Black River) boat ramp parking lot.

<< Go Back

Black River Gate Boat Launch BLKR-8.4

Position - Location:	46° 49.785', -123° 8.010'	46° 49' 47.1", -123° 8' .6"	46.82976, -123.13351	Rochester

Strategy Objective:	Collection : Collect oil moving downstream on the Black River.
Implementation:	Using workboat, anchor one end of 300ft length of boom near A (46.8298, -123.1329). Then extend boom ~240ft W and secure remaining boom end to shore near B (46.8298, -123.1339). Use additional anchoring systems (as needed) to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Use Black River Gate parking lot and boat ramp (BL-BLKR-8.4).
Site Safety:	Shallow water; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Slow, shallow water with lots of vegetation and muddy shorelines
Watercourse:	River - Without a Dam - Black River
Resources at Risk:	Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

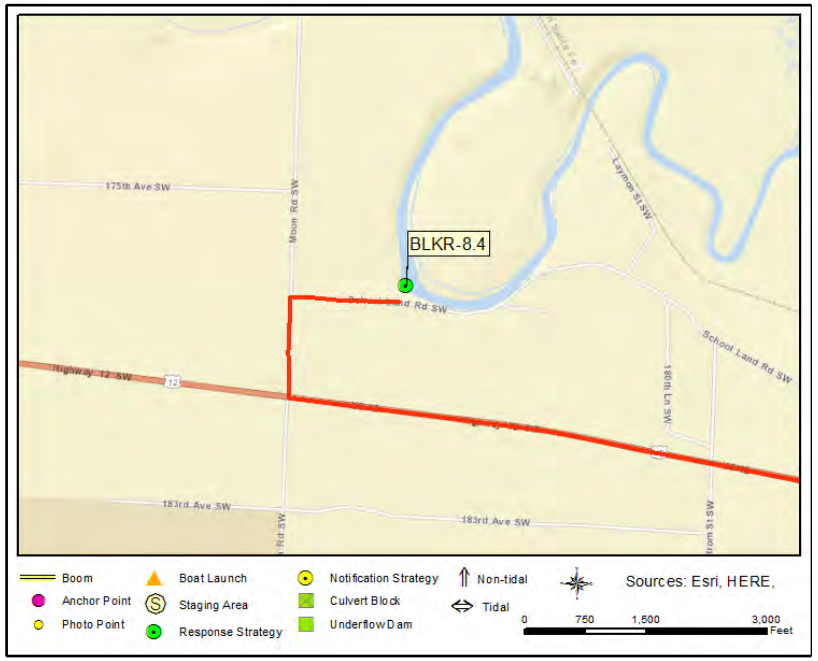
5	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Black River Gate Boat Launch BLKR-8.4

BLKR-8.4 Photo: Looking N from end of boat ramp on Black River left. Taken during low water in mid-August.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager
360-249-4628

Nearest Address

11878 School Land Rd SW
Rochester, WA 98579

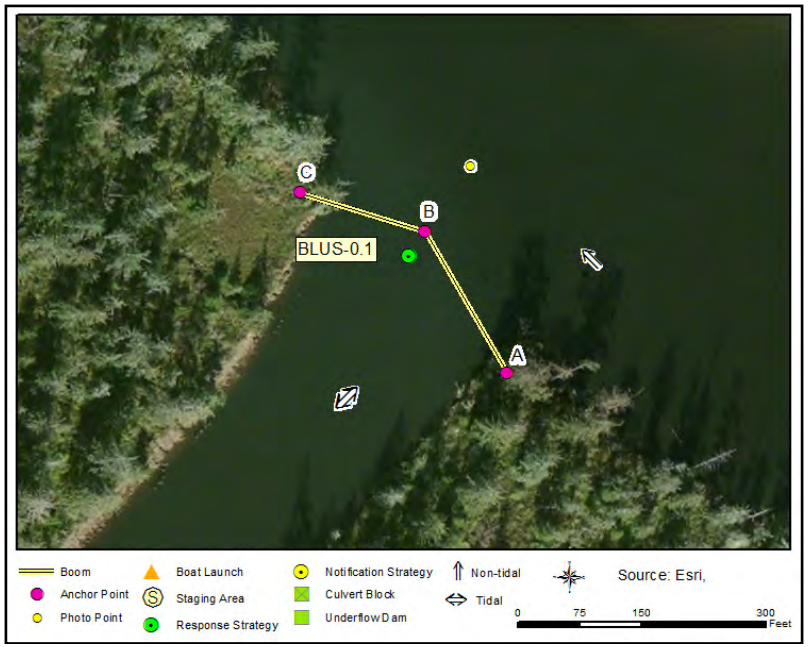
Driving Directions

1. From I-5 in Olympia head S towards exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (6.68 miles)
4. Turn right on Moon Rd SW (0.24 miles)
5. Turn right on School Land Rd SW (0.26 miles)
6. Turn left into gravel WDFW lot at 11878 School Land Rd SW, 98579.

Blue Slough Mouth BLUS-0.1

Position - Location:	46° 56.928', -123° 43.450'	46° 56' 55.7", -123° 43' 27.0"	46.94880, -123.72417	Montesano

Strategy Objective:	Exclusion : Prevent oil from entering Blue Slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 400ft length of boom to strategy location at mouth of Blue Slough. Avoid obstructions and anchor boom end near A (46.9484, -123.7237) and extend NW ~350ft to anchor onshore near C (46.949, -123.7247). Pull tension near boom center point, anchoring it at B (46.9489, -123.7241). Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water. Back hard boom with 400ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Blue Slough Boat Launch parking lot (SA-BLUS-1.1). Use boat ramp at same location (BL-BLUS-1.1).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	Slough - Blue Slough at Chehalis River
Resources at Risk:	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands



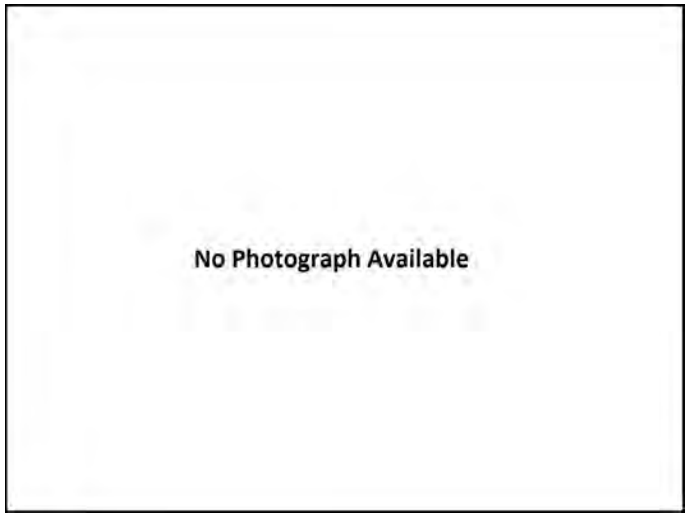
Recommended Equipment

4	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	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)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - of adequate size for type and amount of boom

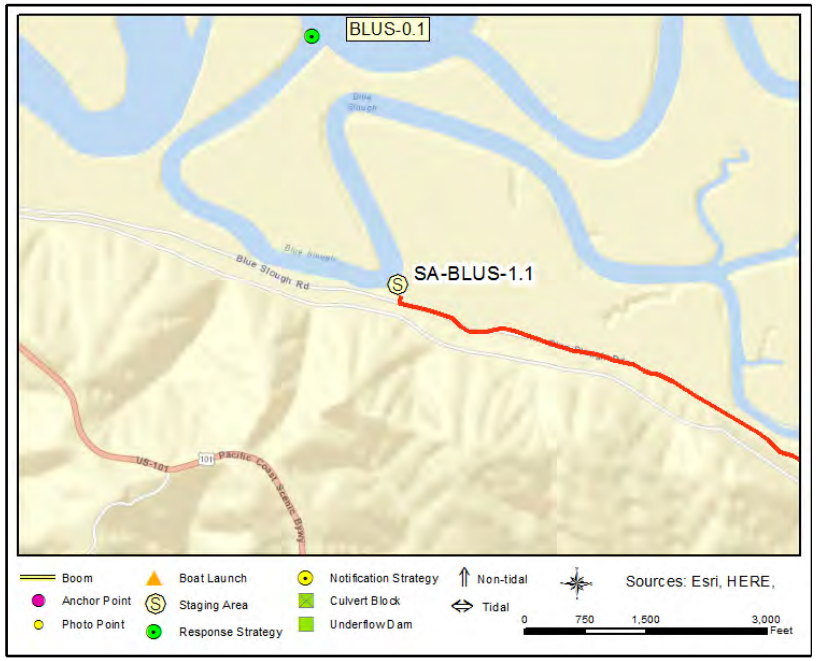
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Blue Slough Mouth BLUS-0.1



BLUS-0.1 Photo: No Photograph Available



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Blue Slough Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (10 miles)
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond (0.25 miles)
6. Turn left on S Main St (0.15 miles)
7. Continue on WA-107 (State Route 107) (4.92 miles)
8. Turn right on Blue Slough Rd (2.4 miles)
9. Turn right into the DNR boat launch parking lot.

Cosmopolis - Chehalis River (Unnamed Slough) CHER-4.2R

Position - Location:	46° 57.727', -123° 44.584'	46° 57' 43.6", -123° 44' 35.0"	46.96212, -123.74306	Cosmpolis

Strategy Objective:	Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 200ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9621, -123.7428) and remaining boom end near C (46.9622, -123.7433). Pull tension near boom center point, anchoring it slightly askew (towards downstream) at B (46.962, -123.7433). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Ensure boom ends at Point A & Point C are set above river's high water mark. Land access to site is not possible.
Watercourse:	River - With Tidal Influence - Chehalis River
Resources at Risk:	Marsh, Salmon, Shorebirds, Steelhead, Waterfowl, Wetlands

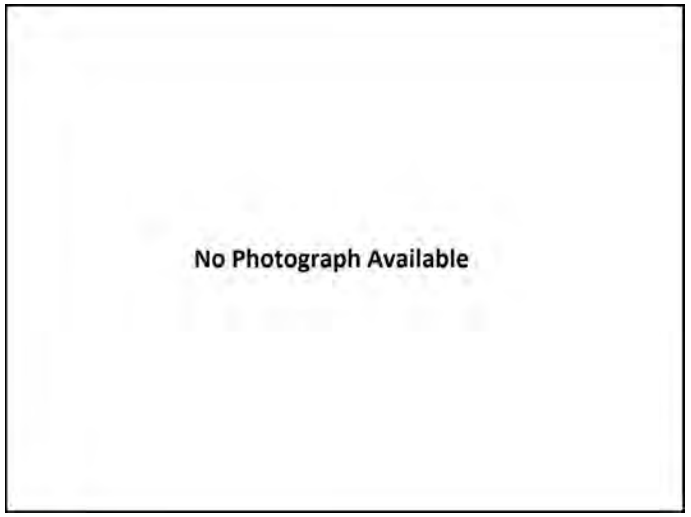
Recommended Equipment

2	Each	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

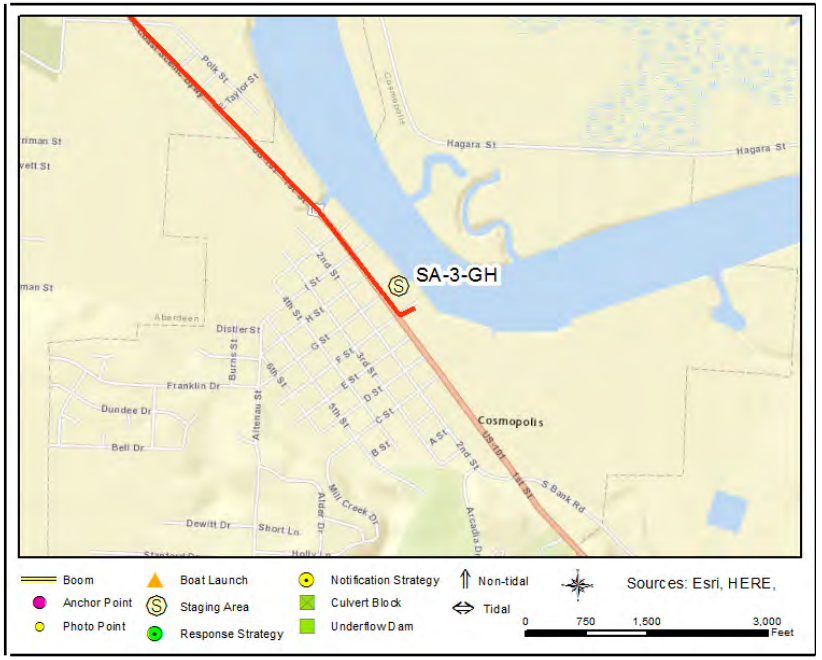
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Cosmopolis - Chehalis River (Unnamed Slough) CHER-4.2R



CHER-4.2R Photo: No Photo Available



Site Contact

No Information
Unknown :

Nearest Address

1101 1st Street
Cosmpolis, WA 98537

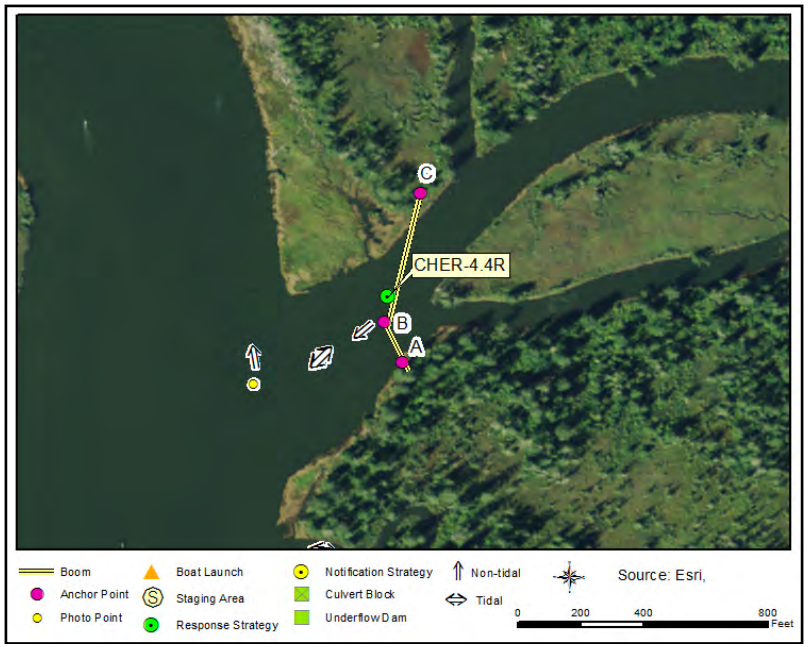
Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (20.73 miles)
5. Continue on US-101 (E Wishkah St) (0.07 miles)
6. Make sharp left on S H St (0.14 miles)
7. Continue on US-101 (Pacific Coast Scenic Bywy) (1.05 miles)
8. Slight right onto Northwest Blvd (0.5 mi)
9. Continue onto US-101 S/ Southwest Blvd. Continue to follow US-101 S (1.2 mi)
10. Turn left at F St. Parking area is 300 ft down on left.

Mox Chuck Slough CHER-4.4R

Position - Location:	46° 57.507', -123° 44.305'	46° 57' 30.4", -123° 44' 18.3"	46.95845, -123.73841	Cosmopolis

Strategy Objective:	Exclusion : Prevent oil from entering Mox Chuck Slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 600ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9578, -123.7381) and remaining boom end near C (46.9594, -123.7381). Pull tension near boom center point, anchoring it at B (46.9582, -123.7385). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 600ft sorbent boom for added protection.
Staging Area:	Remote: Stage 1.5mi downstream at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	River - With Tidal Influence - Chehalis River
Resources at Risk:	Salmonids, Tidal Marshes, Waterfowl, Wetlands



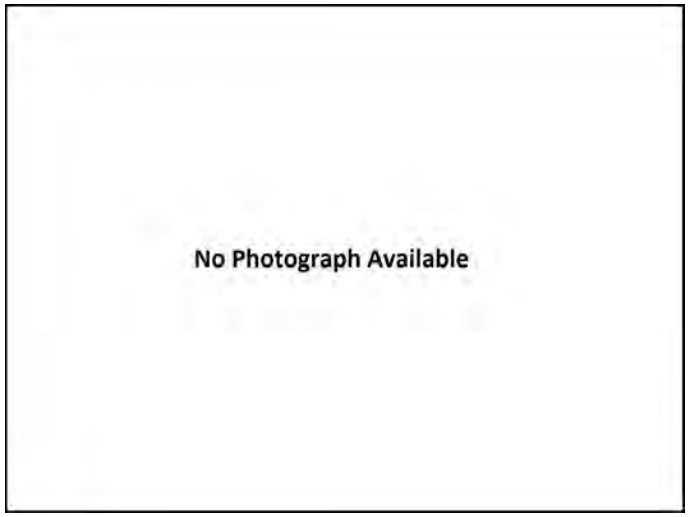
Recommended Equipment

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

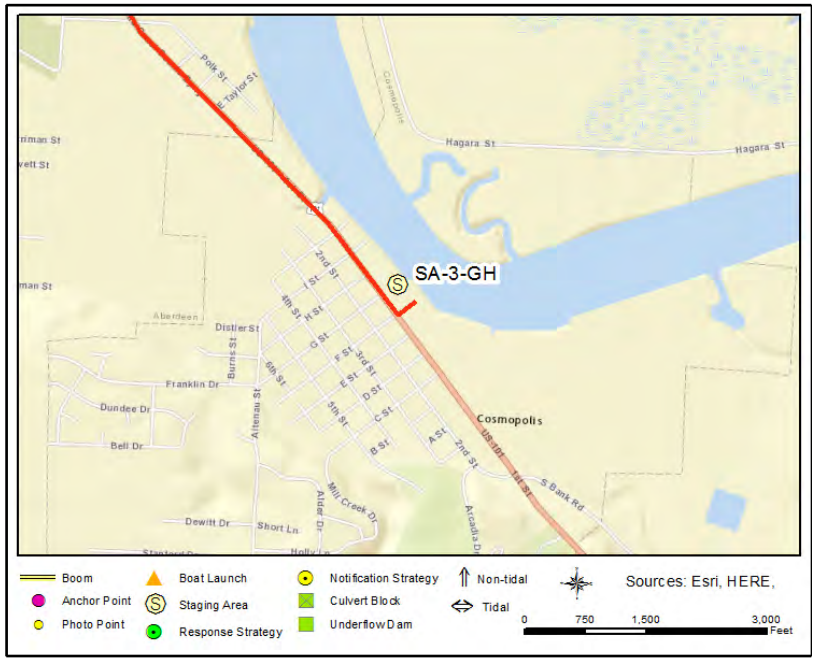
Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Mox Chuck Slough CHER-4.4R



CHER-4.4R Photo: No photograph available.



Site Contact

No Information
Unknown :

Nearest Address

1101 1st Street
Cosmopolis, WA 98537

Driving Directions

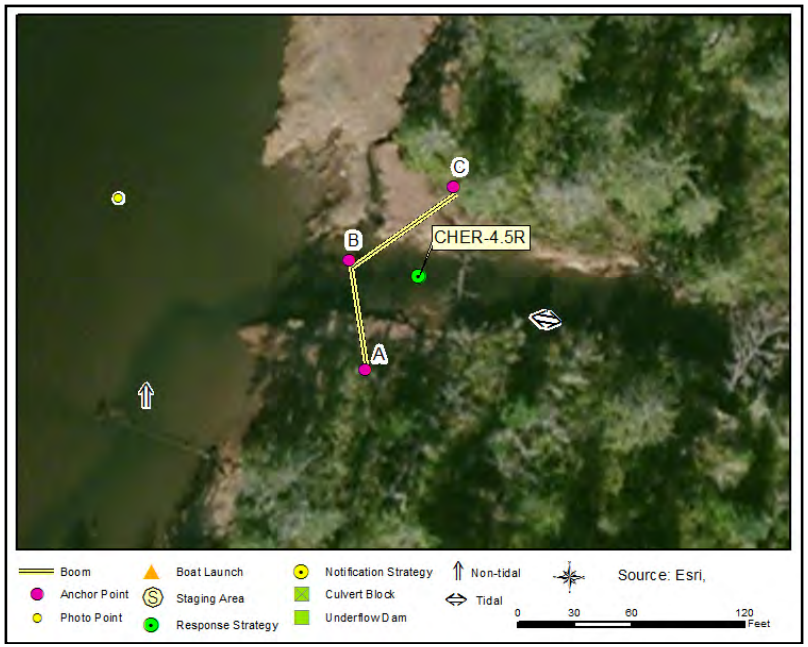
1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (20.73 miles)
5. Continue on US-101 (E Wishkah St) (0.07 miles)
6. Make sharp left on S H St (0.14 miles)
7. Continue on US-101 (Pacific Coast Scenic Bywy) (1.05 miles)
8. Slight right onto Northwest Blvd (0.5 mi)
9. Continue onto US-101 S/ Southwest Blvd. Continue to follow US-101 S (1.2 mi)
10. Turn left at F St. Parking area is 300 ft down on left.

<< Go Back

Unnamed Slough S of Mox Chuck CHER-4.5R

Position - Location:	46° 57.374', -123° 44.364'	46° 57' 22.5", -123° 44' 21.8"	46.95624, -123.73940	Cosmopolis

Strategy Objective:	Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 200ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9561, -123.7395) and remaining boom end near C (46.9564, -123.7393). Pull tension near boom center point, anchoring it at B (46.9563, -123.7396). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	River - With Tidal Influence - Chehalis River
Resources at Risk:	Marsh, Salmonids, Waterfowl, Wetlands



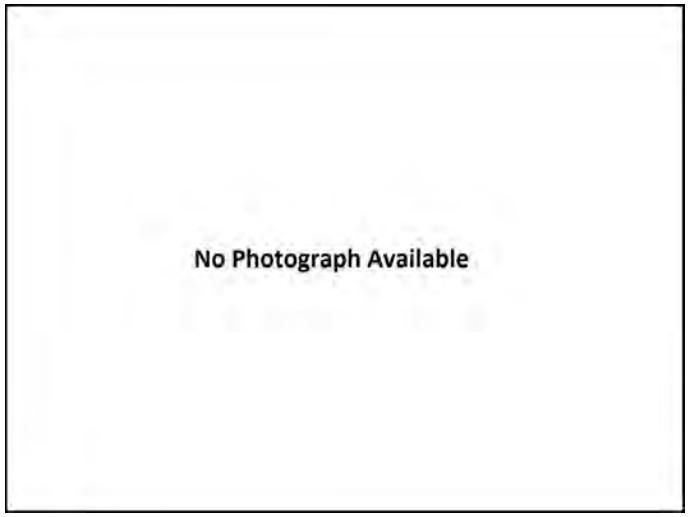
Recommended Equipment

2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

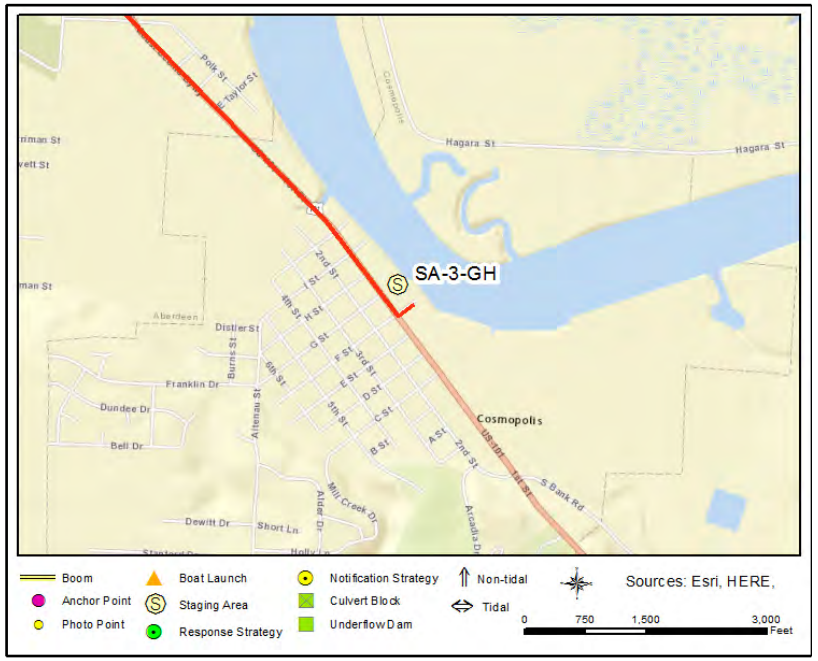
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Unnamed Slough S of Mox Chuck CHER-4.5R



CHER-4.5R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

1101 1st Street
Cosmopolis, WA 98537

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (20.73 miles)
5. Continue on US-101 (E Wishkah St) (0.07 miles)
6. Make sharp left on S H St (0.14 miles)
7. Continue on US-101 (Pacific Coast Scenic Bywy) (1.05 miles)
8. Slight right onto Northwest Blvd (0.5 mi)
9. Continue onto US-101 S/ Southwest Blvd. Continue to follow US-101 S (1.2 mi)
10. Turn left at F St. Parking area is 300 ft down on left.

Unnamed Slough south of Mox Chuck CHER-4.7R

Position - Location:	46° 57.246', -123° 44.515'	46° 57' 14.7", -123° 44' 30.9"	46.95409, -123.74192	Cosmpolis

Strategy Objective: Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.

Implementation: Using workboat, tow 200ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9539, -123.7419) and remaining boom end near C (46.9542, -123.7418). Pull tension near boom center point, anchoring it at B (46.9541, -123.742). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.

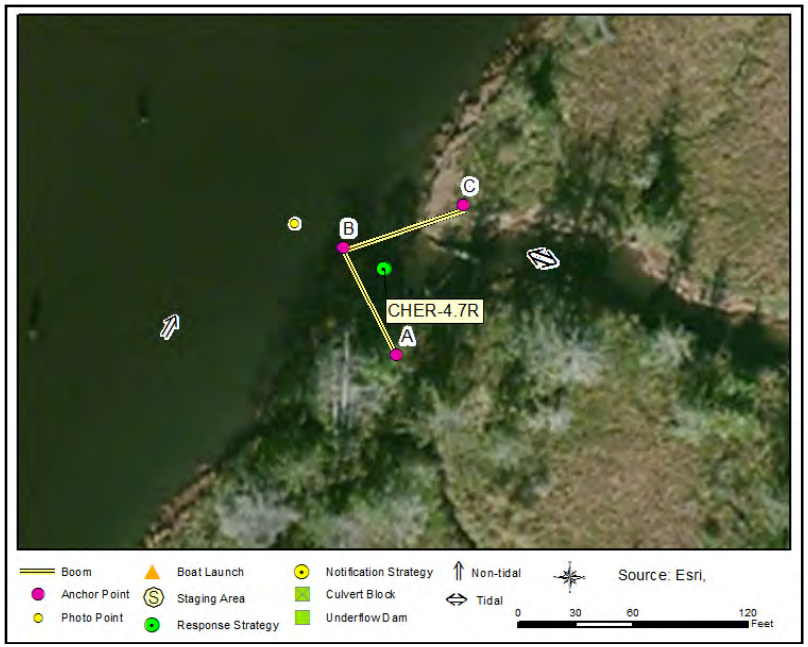
Staging Area: Remote: Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.

Watercourse: River - With Tidal Influence - Chehalis River

Resources at Risk: Marsh, Salmonids, Waterfowl, Wetlands



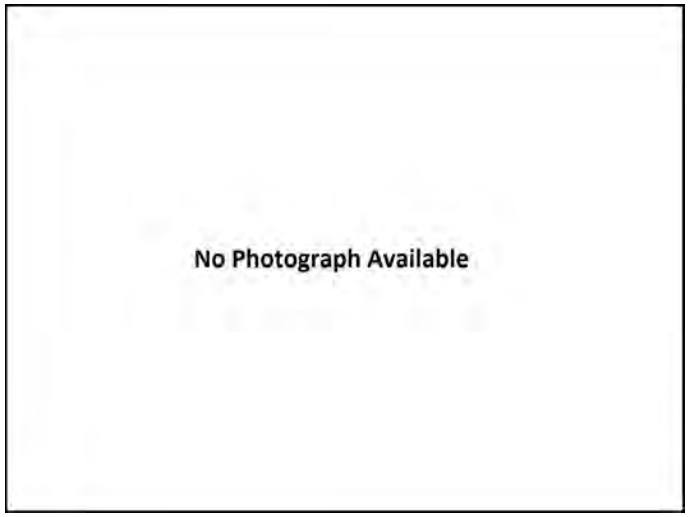
Recommended Equipment

2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

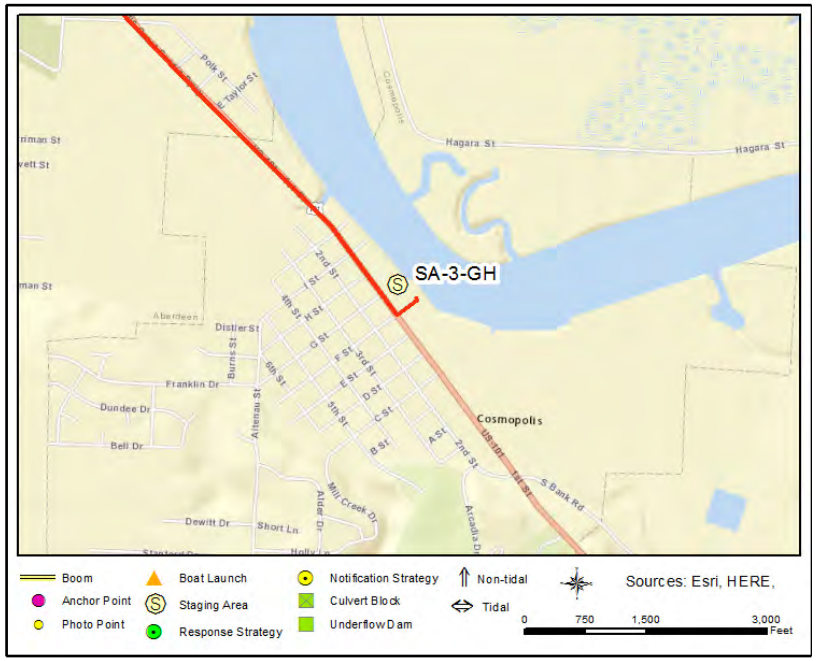
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Unnamed Slough south of Mox Chuck CHER-4.7R



CHER-4.7R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

1101 1st Street
Cosmpolis, WA 98537

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (20.73 miles)
5. Continue on US-101 (E Wishkah St) (0.07 miles)
6. Make sharp left on S H St (0.14 miles)
7. Continue on US-101 (Pacific Coast Scenic Bywy) (1.05 miles)
8. Slight right onto Northwest Blvd (0.5 mi)
9. Continue onto US-101 S/ Southwest Blvd. Continue to follow US-101 S (1.2 mi)
10. Turn left at F St. Parking area is 300 ft down on left.

Unnamed Slough W CHER-5.2L

Position - Location:	46° 56.836', -123° 44.463'	46° 56' 50.2", -123° 44' 27.8"	46.94727, -123.74105	Cosmopolis

Strategy Objective: Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.

Implementation: Using workboat, tow 200ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9471, -123.7408) and remaining boom end near C (46.9474, -123.7412). Pull tension near boom center point, anchoring it at B (46.9473, -123.741). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.

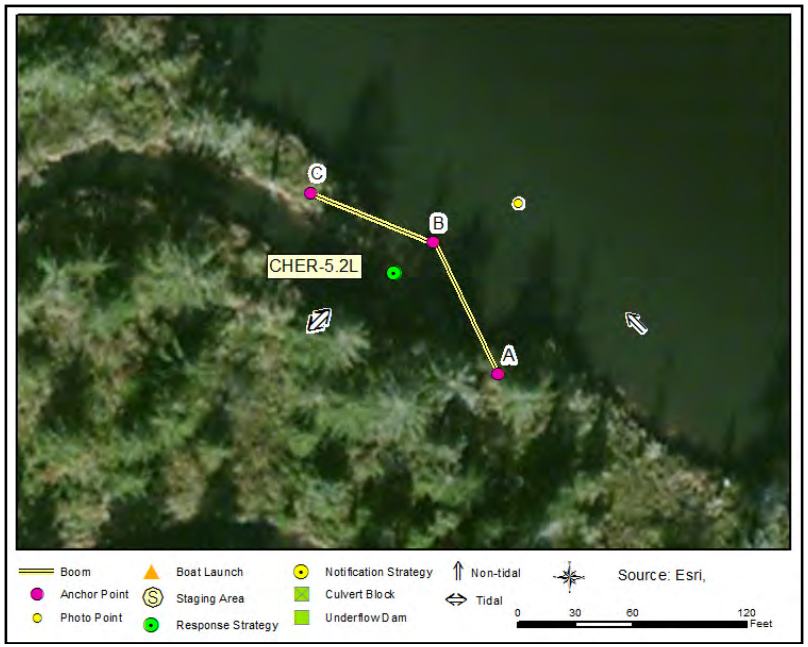
Staging Area: Remote: Stage at Cosmopolis Boat Launch Parking Lot (SA-3-GH). Use boat ramp at same location (BL-3-GH).

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.

Watercourse: River - With Tidal Influence - Chehalis River

Resources at Risk: Marsh, Salmonids, Waterfowl, Wetlands



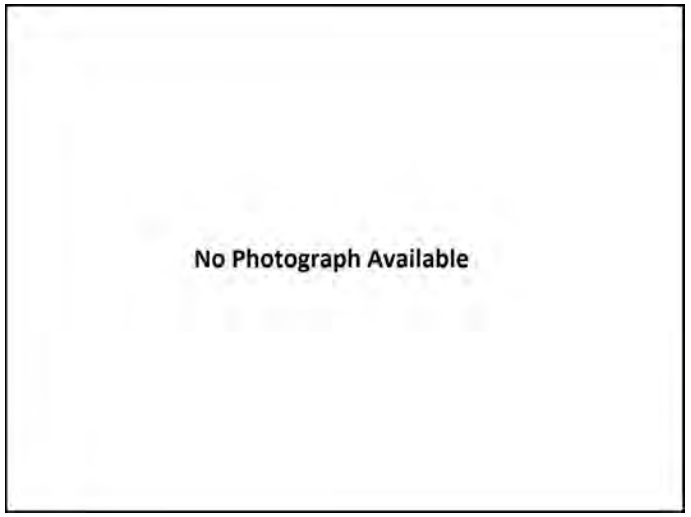
Recommended Equipment

2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

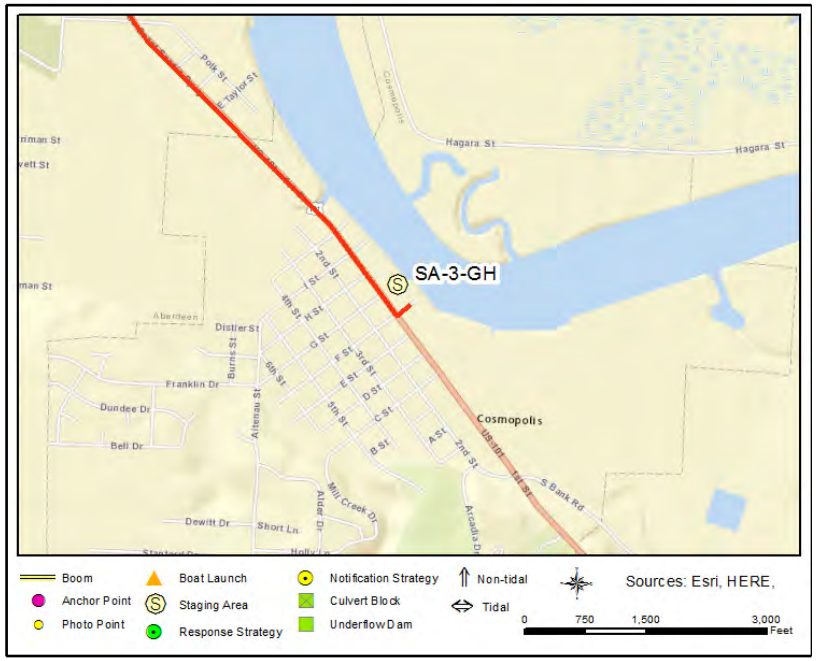
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Unnamed Slough W CHER-5.2L



CHER-5.2L Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

1101 1st Street
Cosmopolis, WA 98537

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (20.73 miles)
5. Continue on US-101 (E Wishkah St) (0.07 miles)
6. Make sharp left on S H St (0.14 miles)
7. Continue on US-101 (Pacific Coast Scenic Bywy) (1.05 miles)
8. Slight right onto Northwest Blvd (0.5 mi)
9. Continue onto US-101 S/ Southwest Blvd. Continue to follow US-101 S (1.2 mi)
10. Turn left at F St. Parking area is 300 ft down on left.

Unnamed Slough across from Higgins Island CHER-8.0L

Position - Location:	46° 57.349', -123° 41.678'	46° 57' 21.0", -123° 41' 40.7"	46.95582, -123.69463	Montesano

Strategy Objective:	Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 200ft length of boom to strategy location on river left of Chehalis River. Avoid obstructions and anchor boom end near A (46.956, -123.6945) and remaining boom end near C (46.9556, -123.6948). Pull tension near boom center point, anchoring it at B (46.9559, -123.6947). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	River - With Tidal Influence - Chehalis River at entrance to unnamed slough
Resources at Risk:	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands

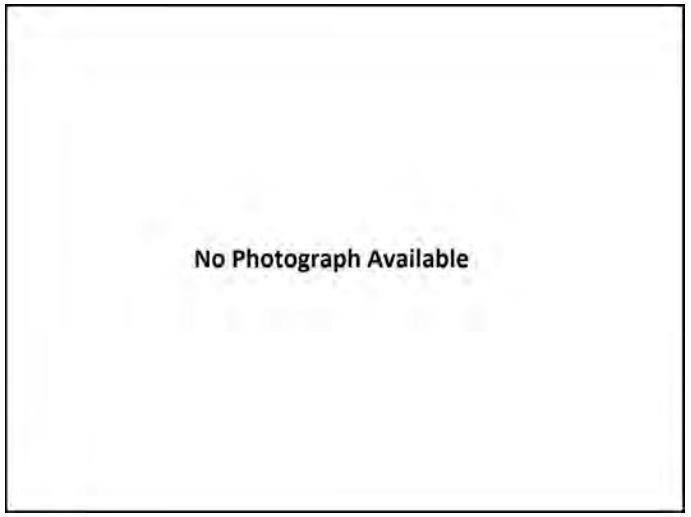
Recommended Equipment

2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

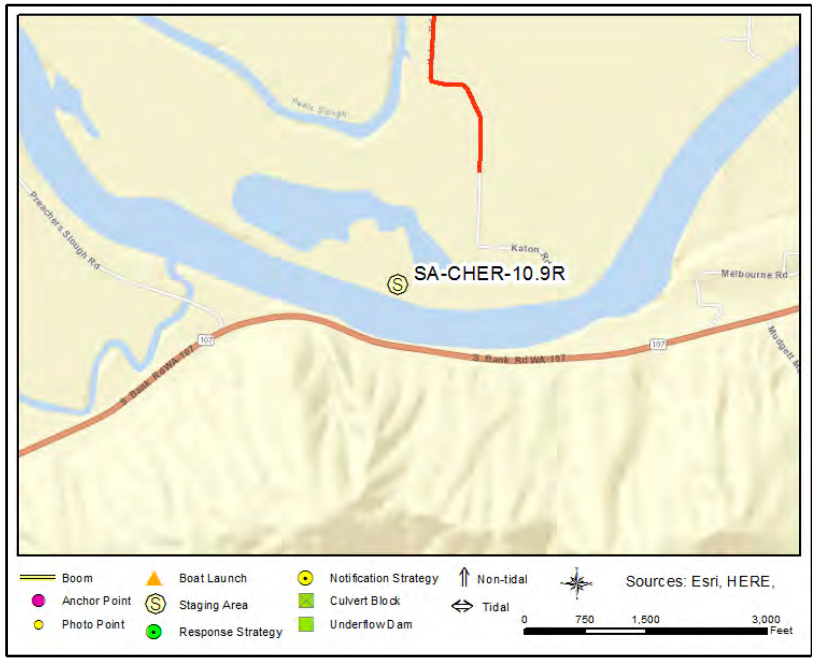
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Unnamed Slough across from Higgins Island CHER-8.0L



CHER-8.0L Photo: No Photograph Available



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

Higgins Slough CHER-8.7R

Position - Location:	46° 57.529', -123° 40.926'	46° 57' 31.7", -123° 40' 55.6"	46.95881, -123.68211	Montesano

Strategy Objective:	Exclusion : Prevent oil from entering Higgins Slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 200ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9587, -123.6818) and remaining boom end near C (46.959, -123.6823). Pull tension near boom center point, anchoring it at B (46.9588, -123.6821). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	River - With Tidal Influence - Chehalis River at Higgins Slough mouth
Resources at Risk:	Marsh, Salmonids, Waterfowl, Wetlands

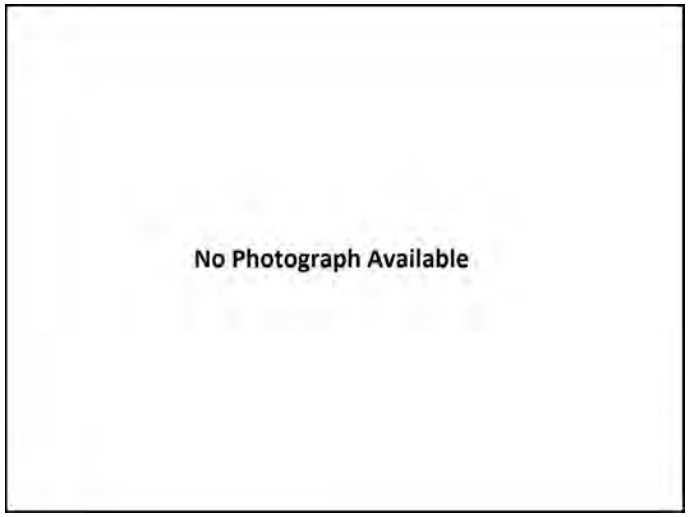
Recommended Equipment

2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

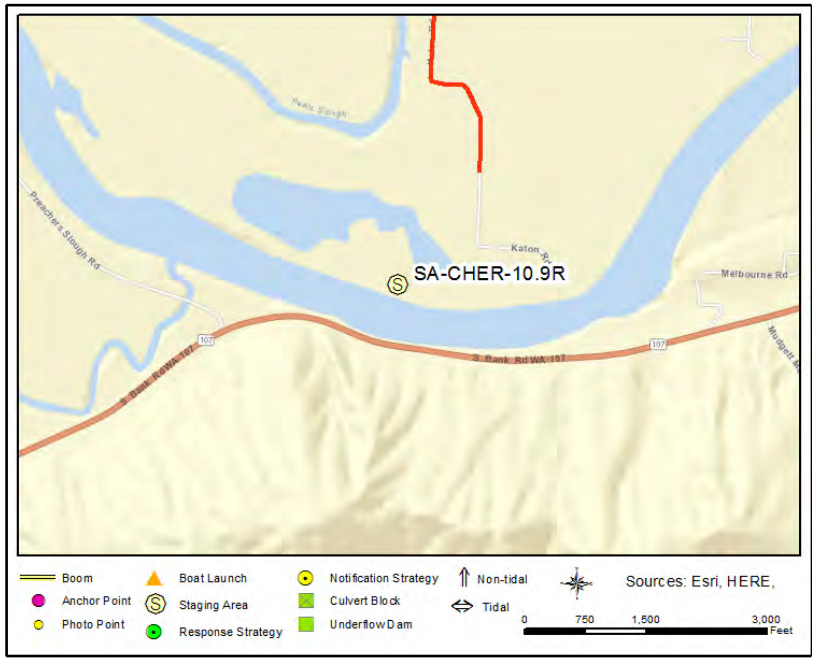
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Higgins Slough CHER-8.7R



CHER-8.7R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

Unnamed Slough across from Peels Slough CHER-9.4L

Position - Location:	46° 57.330', -123° 40.119'	46° 57' 19.8", -123° 40' 7.1"	46.95549, -123.66865	Montesano

Strategy Objective: Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.

Implementation: Using workboat, tow 200ft length of boom to strategy location on river left of Chehalis River. Avoid obstructions and anchor boom end near A (46.9555, -123.6685) and remaining boom end near C (46.9555, -123.6689). Pull tension near boom center point, anchoring it at B (46.9555, -123.6686). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 200ft sorbent boom for added protection.

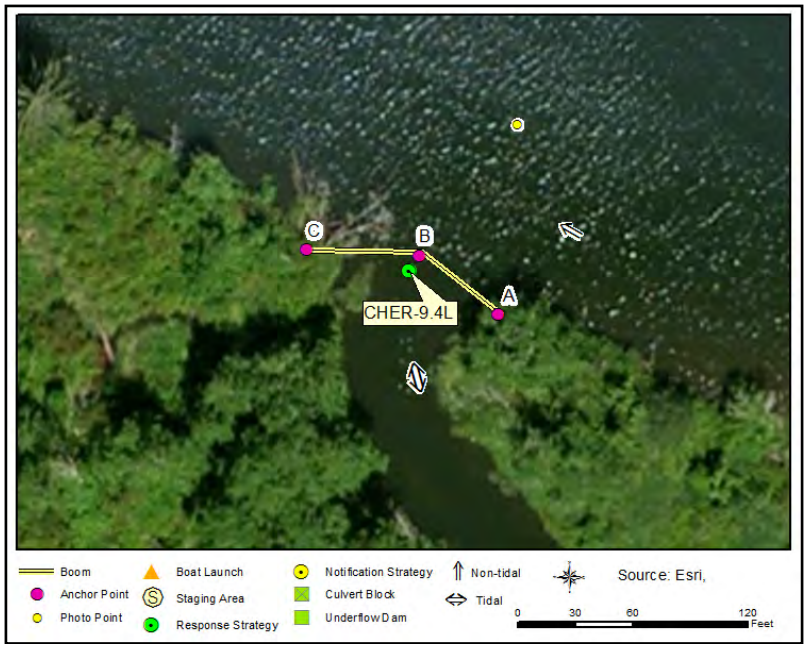
Staging Area: Remote: Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.

Watercourse: River - With Tidal Influence - Chehalis River at slough mouth

Resources at Risk: Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands



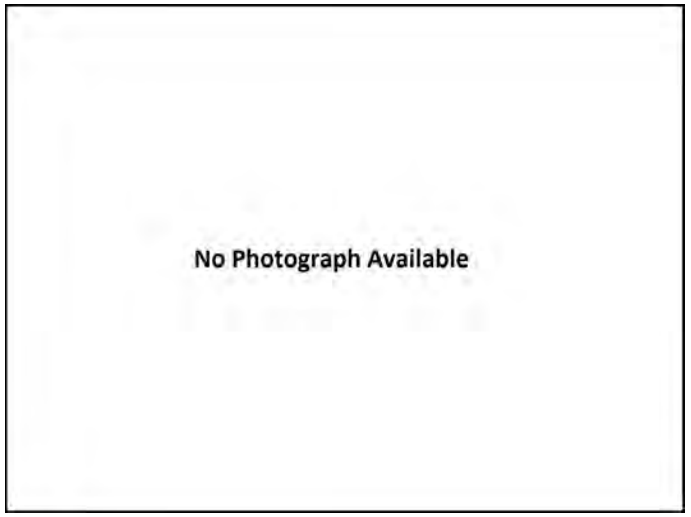
Recommended Equipment

2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

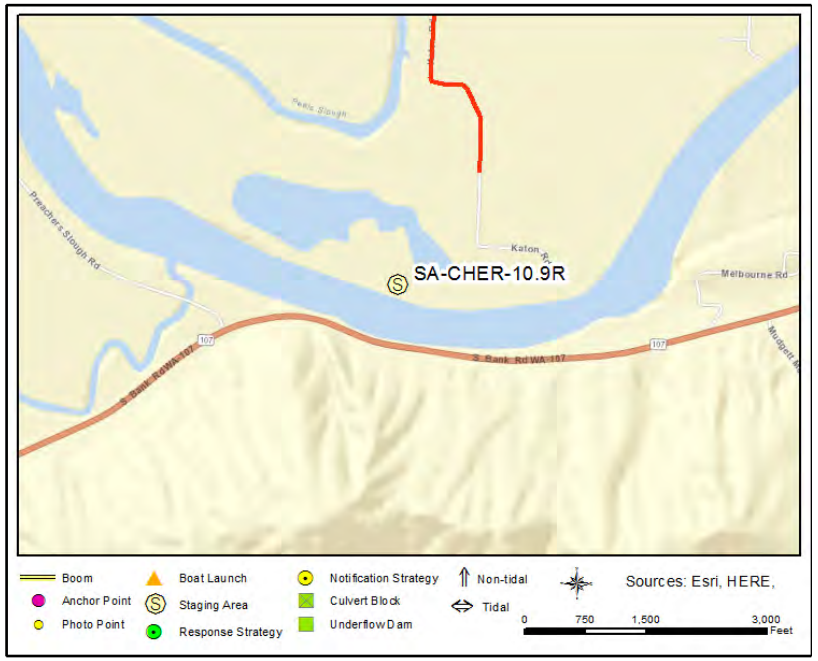
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Unnamed Slough across from Peels Slough CHER-9.4L



CHER-9.4L Photo: No Photograph Available



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

<< Go Back

Peels Slough CHER-9.4R

Position - Location:	46° 57.419', -123° 40.045'	46° 57' 25.1", -123° 40' 2.7"	46.95699, -123.66741	Montesano

Strategy Objective: Exclusion : Prevent oil from entering Peels Slough during incoming or outgoing tide.

Implementation: Using workboat, tow 300ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom end near A (46.9568, -123.667) and remaining boom end near C (46.9572, -123.6678). Pull tension near boom center point, anchoring it at B (46.9569, -123.6675). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 300ft sorbent boom for added protection.

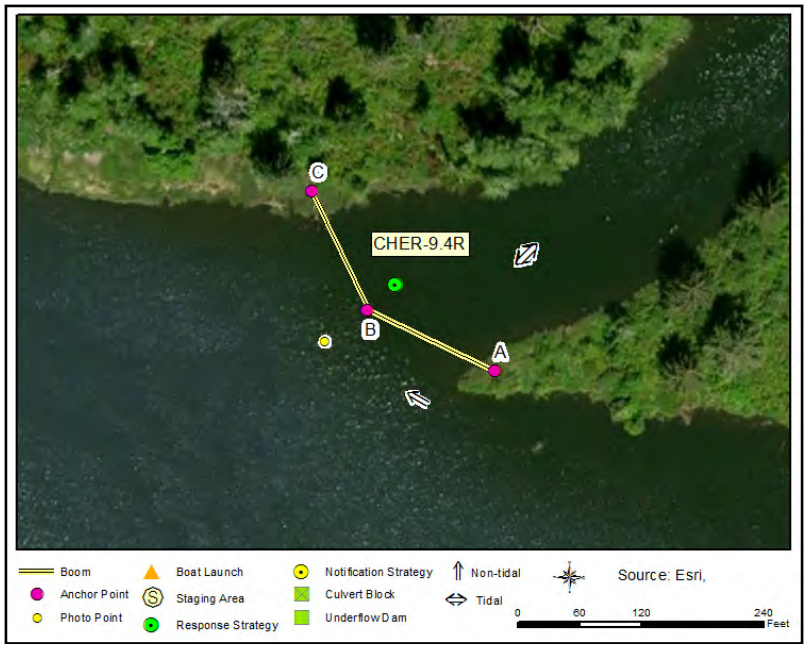
Staging Area: Remote: Stage at Friend's Landing (SA-CHER-10.9R). Use boat ramp at same location (BL-CHER-10.9R).

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.

Watercourse: River - With Tidal Influence - Chehalis River at Peels Slough mouth

Resources at Risk: Marsh, Salmonids, Waterfowl, Wetlands



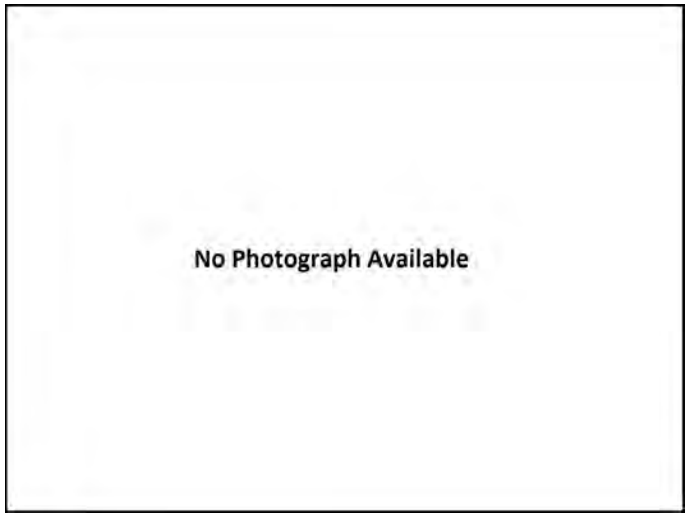
Recommended Equipment

7	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	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)
1	Each	Workboat(s) - of adequate size for type and amount of boom

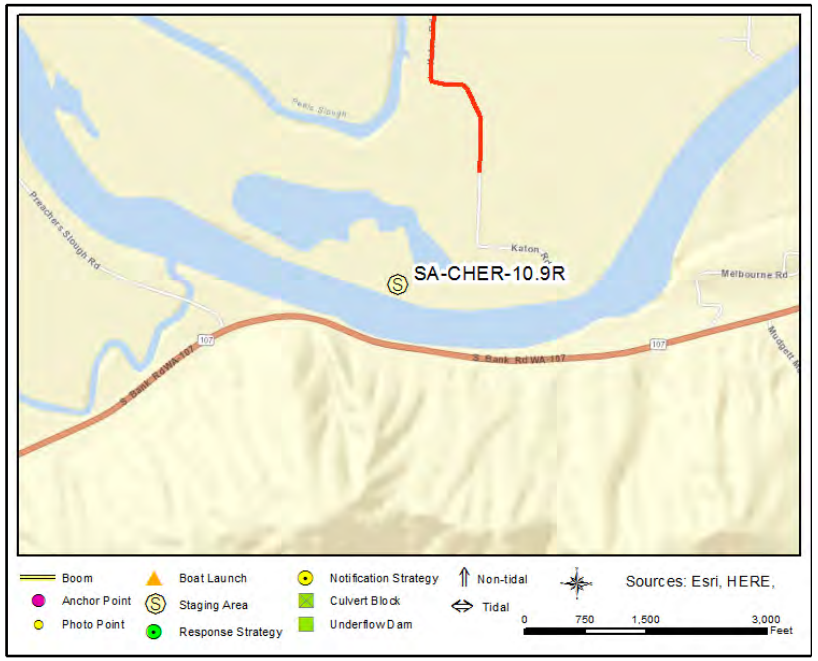
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Peels Slough CHER-9.4R



CHER-9.4R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

Bents Island N CHER-10.0R

Position - Location:	46° 57.139', -123° 39.454'	46° 57' 8.3", -123° 39' 27.2"	46.95232, -123.65756	Montesano

Strategy Objective:	Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 500ft length of boom to strategy location on Chehalis River right. Avoid obstructions and anchor boom end near A (46.9516, -123.6573) and extend NW ~350ft to anchor onshore near C (46.9528, -123.6573). Pull tension near boom center point, anchoring it at B (46.9523, -123.6574). Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water. Back hard boom with 500ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L). Use boat ramp at same location (BL-CHER-10.3L).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Will require small boat/shallow draft for this area. Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	River - With Tidal Influence - Chehalis River side-channel at slough mouth/lake drainage
Resources at Risk:	Fish Pens, Marsh, Salmonids, Waterfowl, Wetlands

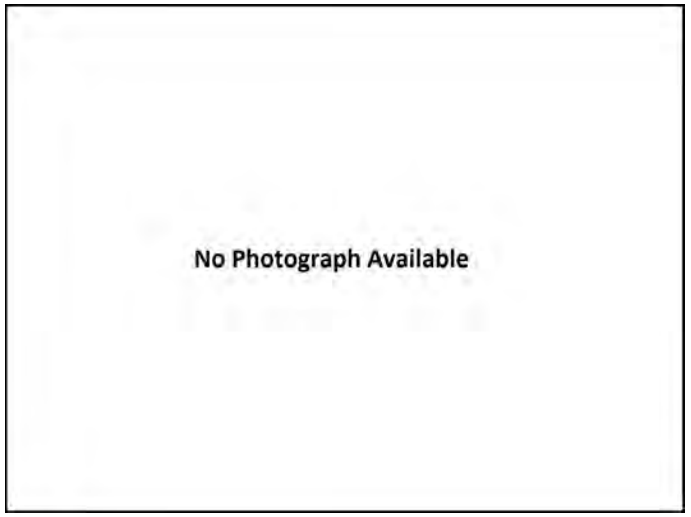
Recommended Equipment

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

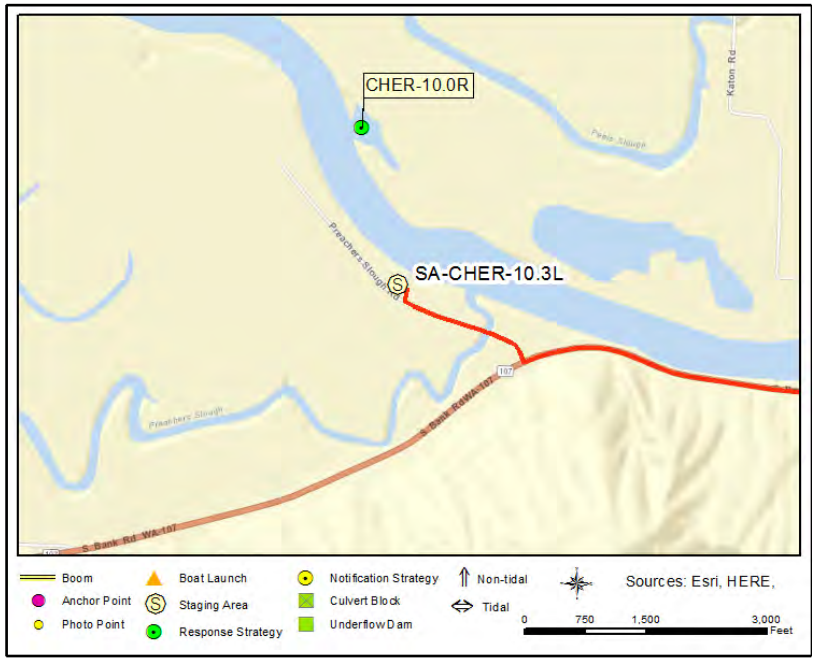
Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Bents Island N CHER-10.0R



CHER-10.0R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

Preacher's Slough Rd
Montesano, WA 98563

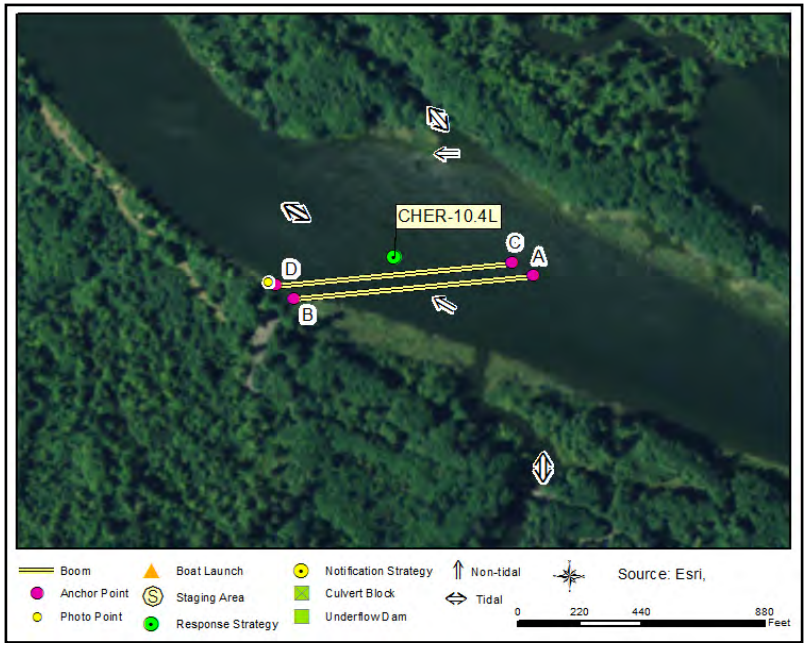
Driving Directions

1. From I-5 in Olympia, head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles
3. Continue on WA-8 toward Montesano/Aberdeen
4. Continue on US-12
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond
6. Turn left on S Main St
7. Continue on WA-107 (State Route 107)
8. Turn right on Preachers Slough Rd
9. The boat launch parking area is 0.5 miles down on the right.

Preacher's Slough Boat Launch CHER-10.4L

Position - Location:	46° 56.869', -123° 39.188'	46° 56' 52.2", -123° 39' 11.3"	46.94782, -123.65313	Montesano

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 900ft length of boom near A (46.9477, -123.6512). Then extend boom ~850ft SW and secure remaining boom end to shore near B (46.9474, -123.6547). Use additional anchoring systems (as needed) to keep boom secure in water Deploy second 900ft segment of boom between Points C & D in same manner as Points A & B, with ~60ft separation between boom segments. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Remote: Use Preacher's Slough boat launch for collection. Launch from Friend's Landing. (BL-CHER-10.9R)
Site Safety:	Boat Traffic; Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Vegetation
Field Notes:	Bridge to site is not rated for heavy loads. Ensure boom ends are placed above river's high water mark along shore. Collect on upstream end of boat ramp to leave room for launches.
Watercourse:	River - With Tidal Influence - Chehalis River
Resources at Risk:	Downstream Resources, Estuary Resources, Salmon, Steelhead, Tidal Marshes, Waterfowl



Recommended Equipment

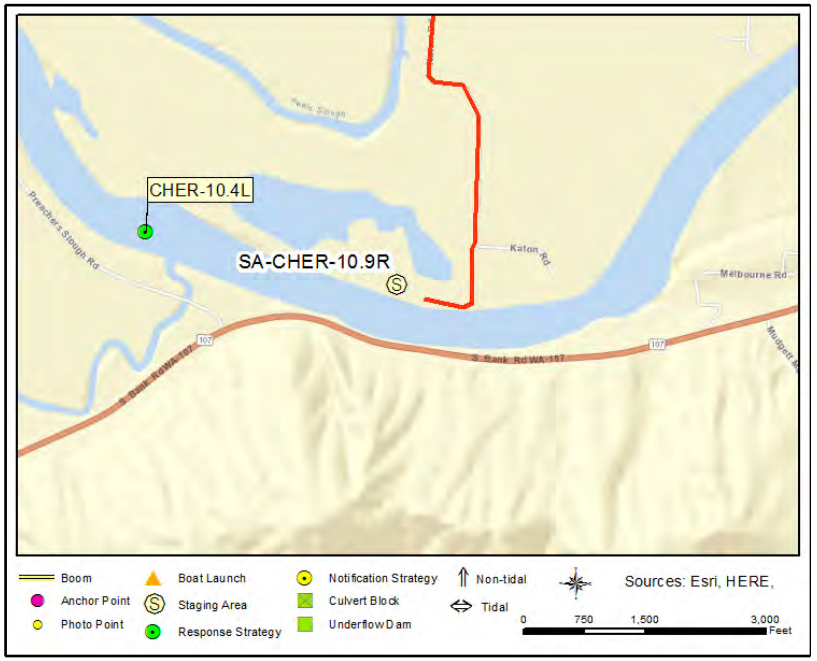
2	Each	Anchor - Danforth (or other appropriate type)
36	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
1800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Preacher's Slough Boat Launch CHER-10.4L

CHER-10.4L Photo: Looking NE upriver on Chehalis River right, at upstream edge of boat launch. Mid-low tide (4ft at Montesano gage) on 10/14/14.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

Bents Island S CHER-10.4R

Position - Location:	46° 56.944', -123° 39.151'	46° 56' 56.6", -123° 39' 9.1"	46.94906, -123.65252	Montesano

Strategy Objective: Exclusion : Prevent oil from entering unnamed slough during incoming or outgoing tide.

Implementation: Using workboat, tow 200ft length of boom to strategy location on Chehalis River right. Avoid obstructions and anchor boom end near A (46.9491, -123.6523) and extend NW ~350ft to anchor onshore near C (46.9491, -123.6527). Pull tension near boom center point, anchoring it at B (46.949, -123.6525). Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water. Back hard boom with 200ft sorbent boom for added protection.

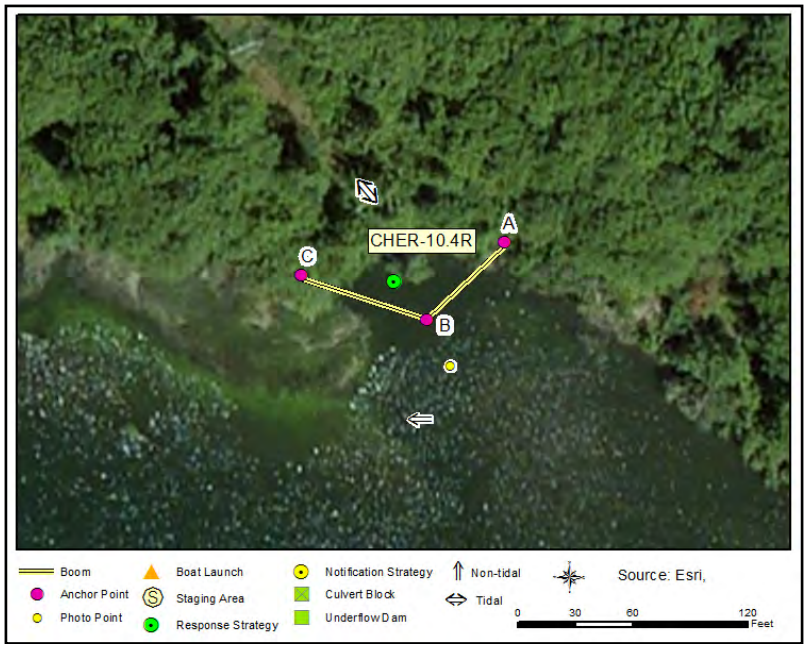
Staging Area: Remote: Stage at Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L). Use boat ramp at same location (BL-CHER-10.3L).

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.

Watercourse: River - With Tidal Influence - Chehalis River at slough mouth

Resources at Risk: Fish Pens, Marsh, Salmonids, Waterfowl, Wetlands



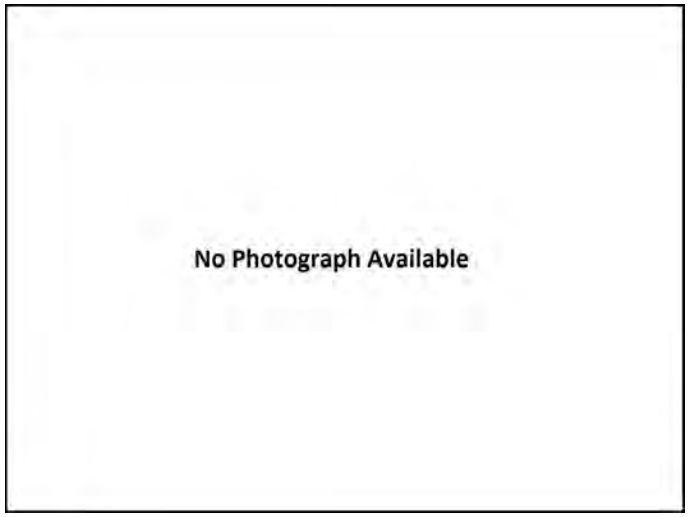
Recommended Equipment

2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
200	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) - of adequate size for type and amount of boom

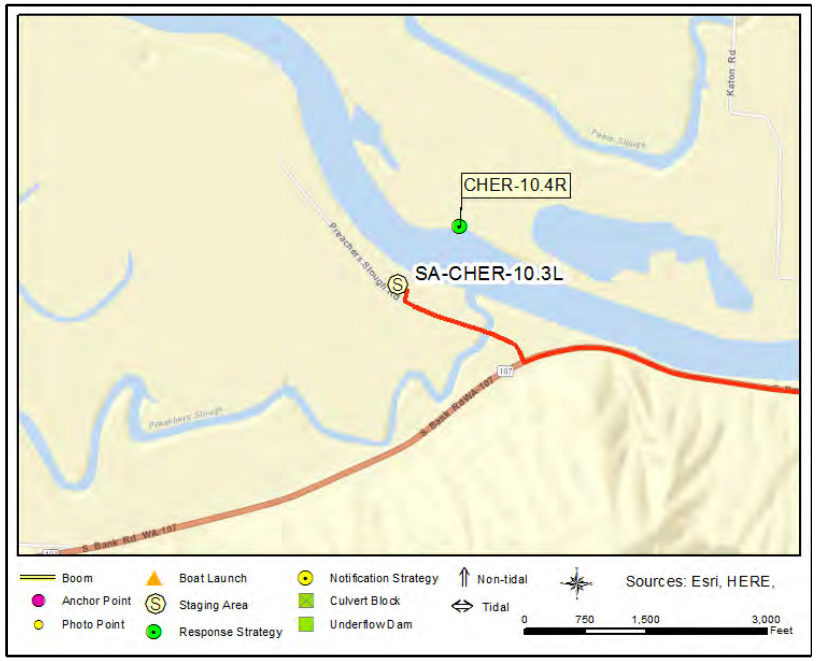
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Bents Island S CHER-10.4R



CHER-10.4R Photo: No Photograph Available



Site Contact

No Information
Unknown :

Nearest Address

Preacher's Slough Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia, head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles
3. Continue on WA-8 toward Montesano/Aberdeen
4. Continue on US-12
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond
6. Turn left on S Main St
7. Continue on WA-107 (State Route 107)
8. Turn right on Preachers Slough Rd
9. The boat launch parking area is 0.5 miles down on the right.

South Montesano Boat Launch CHER-13.4R

Position - Location:	46° 57.872', -123° 36.099'	46° 57' 52.3", -123° 36' 6.0"	46.96453, -123.60166	Montesano

Strategy Objective: Collection : Collect oil moving downstream on the Chehalis River.

Implementation: Using workboat, anchor 800-ft section of boom near A (46.9651, -123.6009) and extend SW ~750ft to anchor onshore near B (46.9634, -123.6026). Repeat with second 800-ft section of boom between C and D, using same process as A & B. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use anchoring systems to keep boom secure in water.

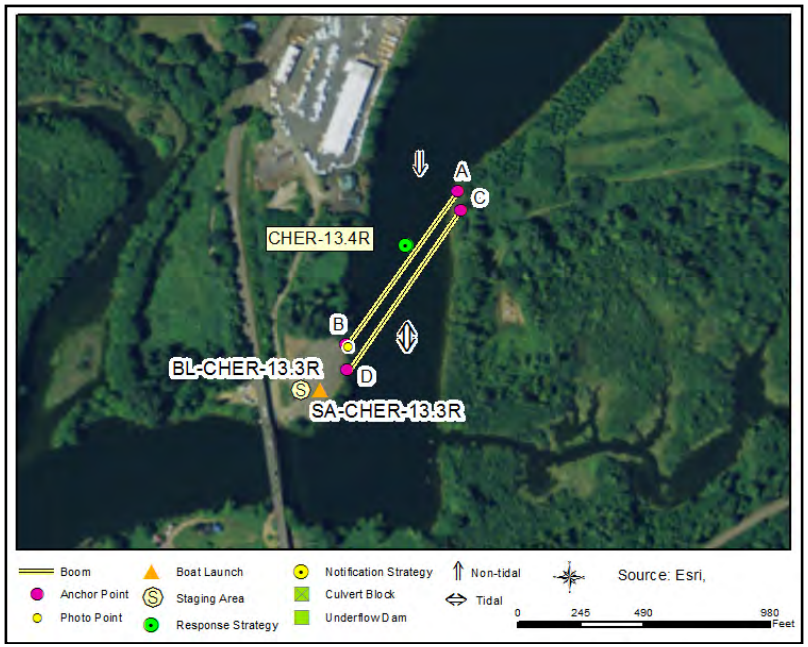
Staging Area: Onsite: Onsite at South Montesano Boat Launch for staging and boat ramp (BL-CHER-13.3R)

Site Safety: Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Bank from parking lot may be steep and have some vegetation. River erosion in area is high.

Watercourse: River - With Tidal Influence - Chehalis River

Resources at Risk: Bald Eagle Nests, Downstream Resources, Marsh, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

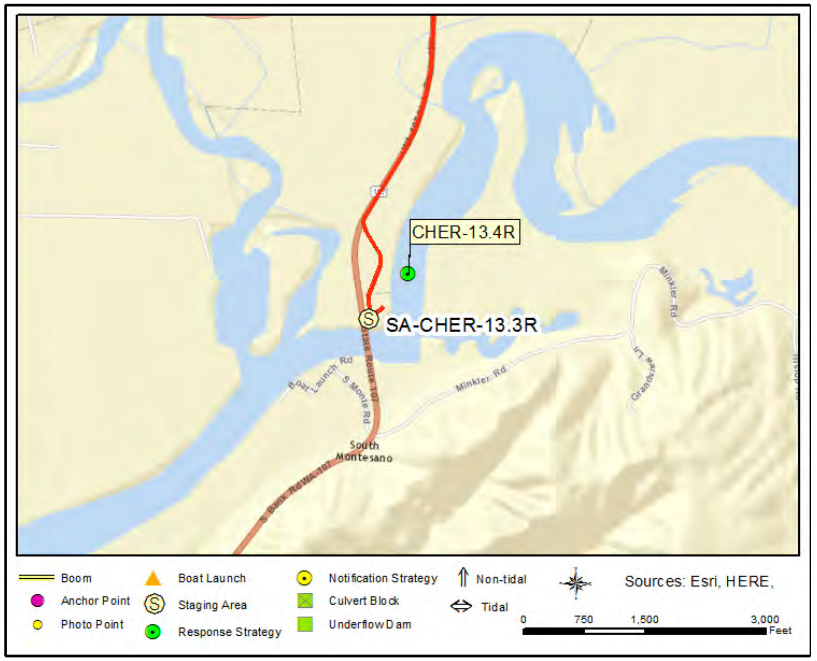
30	Kit	Anchoring System(s) - (anchor, lines, floats)
4	Kit	Anchoring System(s)- Shoreside
1600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
5	Laborer
1	Supervisor

South Montesano Boat Launch CHER-13.4R

CHER-13.4R Photo: From Chehalis River right at northeast corner of boat ramp parking lot, looking southeast upriver at A. Note pilings near collection point. Taken late April, 6ft at Montesano gage.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

75 WA-107
Montesano, WA 98563

Driving Directions

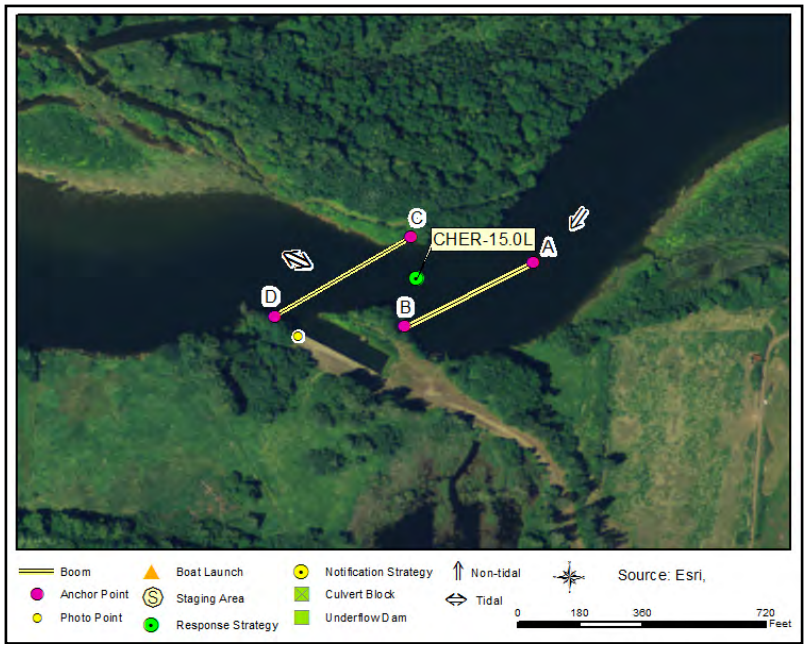
1. From I-5 in Olympia head S towards Highway 101.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (10 miles)
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond (0.25 miles)
6. Turn left on S Main St (0.15 miles)
7. Continue on WA-107 (State Route 107) (0.75 miles).
8. At the sign for Mary's River Lumber Office take a left. The parking area and site is at the end of the road (1000ft).

<< Go Back

Satsop Business Park Barge Slip CHER-15.0L

Position - Location:	46° 58.063', -123° 34.657'	46° 58' 3.8", -123° 34' 39.4"	46.96771, -123.57761	Montesano

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor 500-ft section of boom near A (46.9679, -123.5763) and extend SW ~415ft to anchor onshore near B (46.9673, -123.5778). Repeat with second 500-ft section of boom between C and D, using same process as A & B. Adjust anchor points and angles as needed for conditions. 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: Dirt/gravel/paved area next to barge slip. Contact POGH/Satsop Business Park for access or alert of lock cutting.
Site Safety:	Site may become flooded during high tide. Do not park vehicles without verifying high water.
Field Notes:	Site may flood during rainy season or high tide.
Watercourse:	River - With Tidal Influence - High flow from November to March
Resources at Risk:	Bald Eagle Nesting, Downstream Resources, Estuary Resources, Resident Fish, Salmonids, Tidal Marshes, Waterfowl



Recommended Equipment

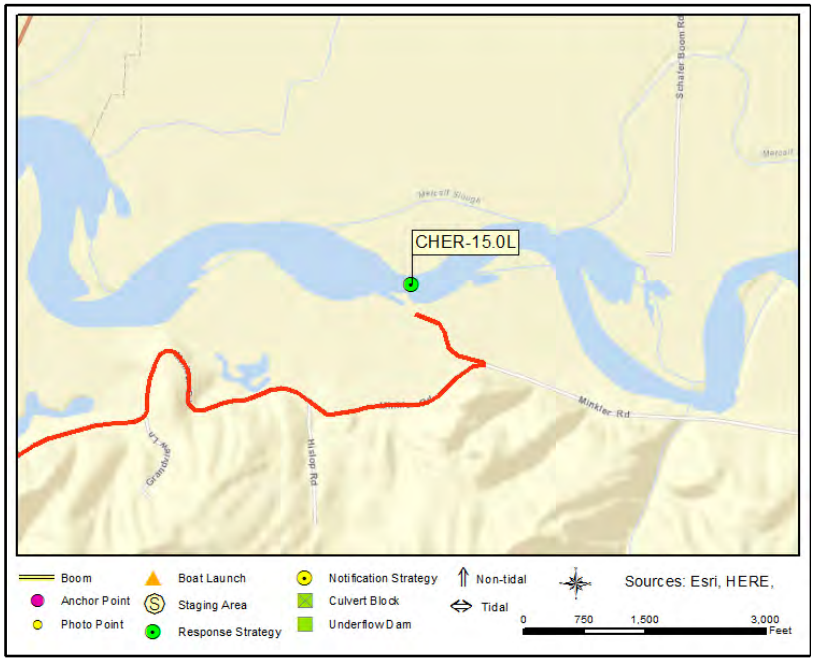
20	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
1000	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
500	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Satsop Business Park Barge Slip CHER-15.0L

CHER-15.0L Photo: From Chehalis River left, looking NE upstream at edge of barge slip and C. Taken mid-Nov, 8 ft at Montesano gage.



Site Contact

Satsop Business Park (PoGH)
Land/Property Owner : Owner
150 Technology Lane Ste 100
Elma, WA 98541
360-482-1600 ext. 1651

Nearest Address

285 Minkler Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia, head south to exit 104.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (10 miles)
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond (0.25 miles)
6. Turn left on S Main St (0.15 miles)
7. Continue on WA-107 (State Route 107) (1.13 miles)
8. Turn left on Minkler Rd (1.78 miles)
9. Take a left and cut gate (or call for access). Site is at end of0.25 mi paved/gravel road.

<< Go Back

WPPSS Road CHER-17.5L

Position - Location:	46° 57.789', -123° 32.065'	46° 57' 47.4", -123° 32' 3.9"	46.96315, -123.53442	Elma

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor 700-ft section of boom near A (46.963, -123.5327) and extend SW ~650ft to anchor onshore near B (46.963, -123.5353). Adjust anchor points and angles as needed for conditions. 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: Use Fuller Bridge Boat Launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R)
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Sloughing bank with eddy caused by stream outflow (to the north).
Watercourse:	River - With Tidal Influence - Chehalis River
Resources at Risk:	Downstream Resources, Raptors, Salmonids, State Lands, Wintering Waterfowl

Recommended Equipment

14	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
700	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

WPPSS Road CHER-17.5L

CHER-17.5L Photo: At river left, looking NE upstream across Chehalis River.

Site Contact

Satsop Business Park (PoGH)
Land/Property Owner : Owner
150 Technology Lane Ste 100
Elma, WA 98541
360-482-1600 ext. 1651

Nearest Address

164 Keys Rd
Elma, WA 98541

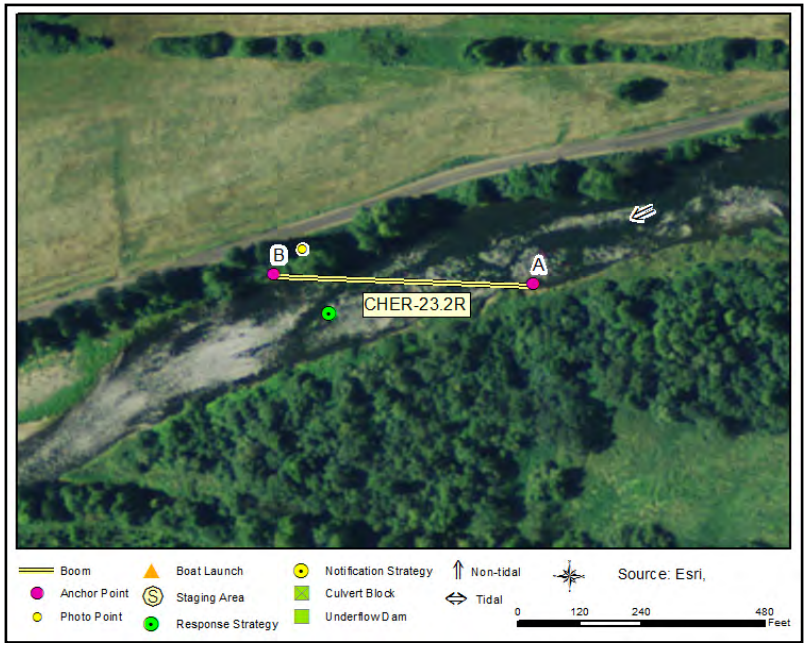
Driving Directions

1. From Olympia take I-5 south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.21 miles)
7. Slight right on unnamed road (just before bridge) to access WDFW Fuller Bridge boat launch.

Chehalis River - Wenzel Slough Rd CHER-23.2R

Position - Location:	46° 59.020', -123° 25.761'	46° 59' 1.2", -123° 25' 45.7"	46.98367, -123.42935	Elma

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor 500-ft section of boom near A (46.9839, -123.4278) and extend NW ~500ft to anchor onshore near B (46.9839, -123.4298). Adjust anchor points and angles as needed for conditions. 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 Fuller Bridge boat launch (SA-CHER-20.4R). Use boat ramp at same location (BL-CHER-20.4R).
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	20 ft of tall grass from road to river's edge. 15 deg slope.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl, Wetlands



Recommended Equipment

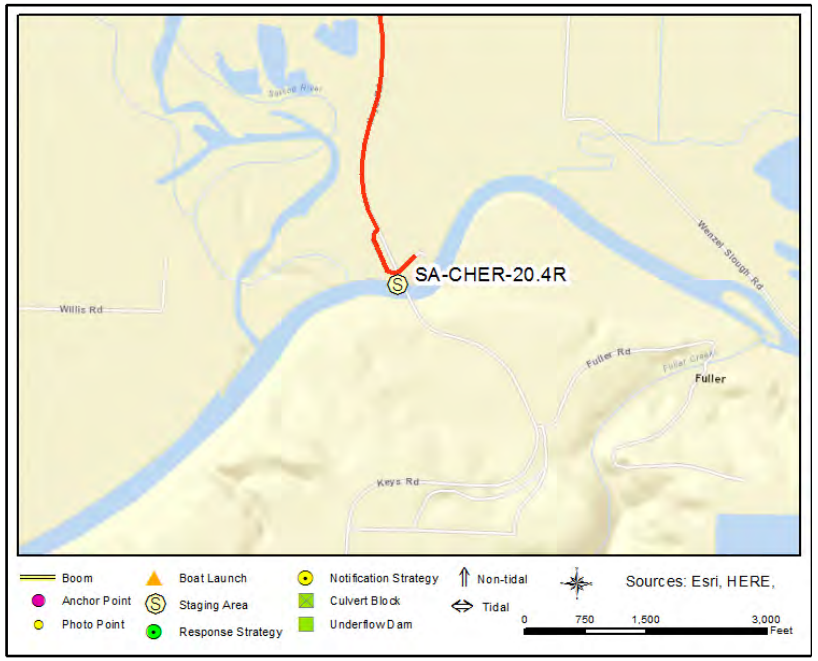
11	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chehalis River - Wenzel Slough Rd CHER-23.2R

CHER-23.2R Photo: From road edge on Chehalis River right, looking S at vegetation on bank near B. Taken mid-Nov 2300 cfs/7ft at Porter gage.



Site Contact

No Information
Unknown :

Nearest Address

164 Keys Rd
Elma, WA 98541

Driving Directions

Directions to Fuller Bridge boat launch/staging area:
1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.3 miles)
7. Turn right into WDFW parking area.

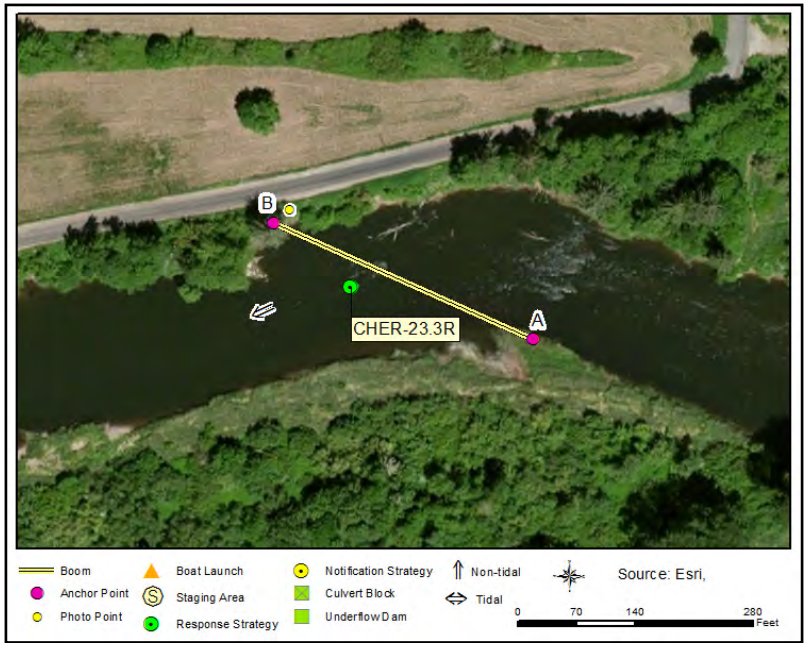
.
Site access for vac truck (narrow shoulder) at 513 Wenzel Slough Rd, Elma 98541:
1. From staging area, head north on Keys Rd. (0.5 mi)
2. Take first right onto Wenzel Slough Rd. (3.2 mi)

<< Go Back

Chehalis River - Wenzel Slough Rd CHER-23.3R

Position - Location:	46° 59.061', -123° 25.591'	46° 59' 3.7", -123° 25' 35.5"	46.98435, -123.42652	Elma

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor 400-ft section of boom near A (46.9842, -123.4257) and extend NW ~350ft to anchor onshore near B (46.9846, -123.4269). Adjust anchor points and angles as needed for conditions. 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: Very narrow shoulder at site. Use Fuller Boat Launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R)
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Bank 20+ ft. Ensure boom ends are placed above river's high water mark along shore.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl, Wetlands



Recommended Equipment

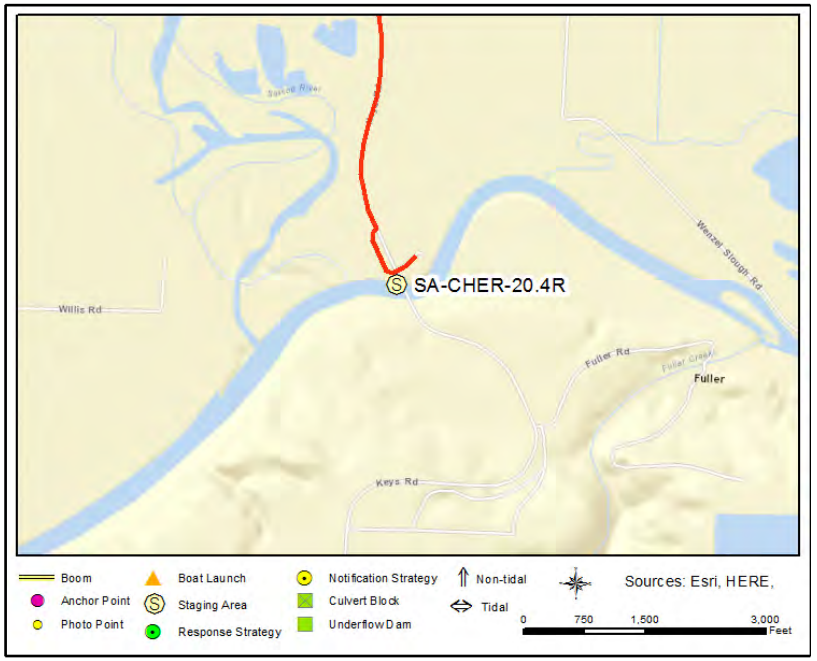
8	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Chehalis River - Wenzel Slough Rd CHER-23.3R

CHER-23.3R Photo: On Chehalis River right, looking SW downstream from road edge. Taken mid-Nov 2300 cfs/7ft at Porter gage.



Site Contact

No Information
Unknown :

Nearest Address

164 Keys Rd
Elma, WA 98541

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.3 miles)
7. Turn right into WDFW parking area.

.

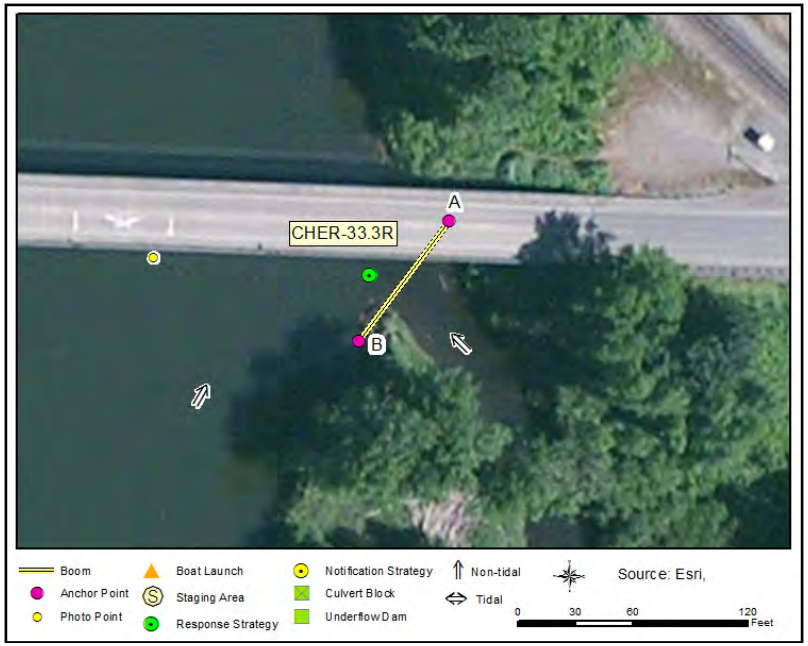
Site access for vac truck (narrow shoulder) at 513 Wenzel Slough Rd, Elma 98541:

1. From staging area, head north on Keys Rd. (0.5 mi)
2. Take first right onto Wenzel Slough Rd. (3.2 mi)

Porter Creek Mouth CHER-33.3R

Position - Location:	46° 56.351', -123° 18.794'	46° 56' 21.1", -123° 18' 47.7"	46.93918, -123.31324	Elma

Strategy Objective:	Exclusion : Prevent oil from entering or leaving Porter Creek.
Implementation:	Using workboat, tow 100ft length of boom to strategy location on river right of Chehalis River. Avoid obstructions and anchor boom under bridge near A (46.9393, -123.3131) and remaining boom end near B (46.9391, -123.3133). Use existing structures, anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 100ft sorbent boom for added protection.
Staging Area:	Remote: Use Porter Creek boat launch for staging (SA-CHER-33.5L) and boat launch (BL-CHER-33.5L).
Site Safety:	Recreational boat traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Just downstream of boat launch. No access from road but could put someone ashore under bridge and where creek meets river.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Downstream Resources, Salmon Habitat, Shorebirds, Waterfowl, Wetlands



Recommended Equipment

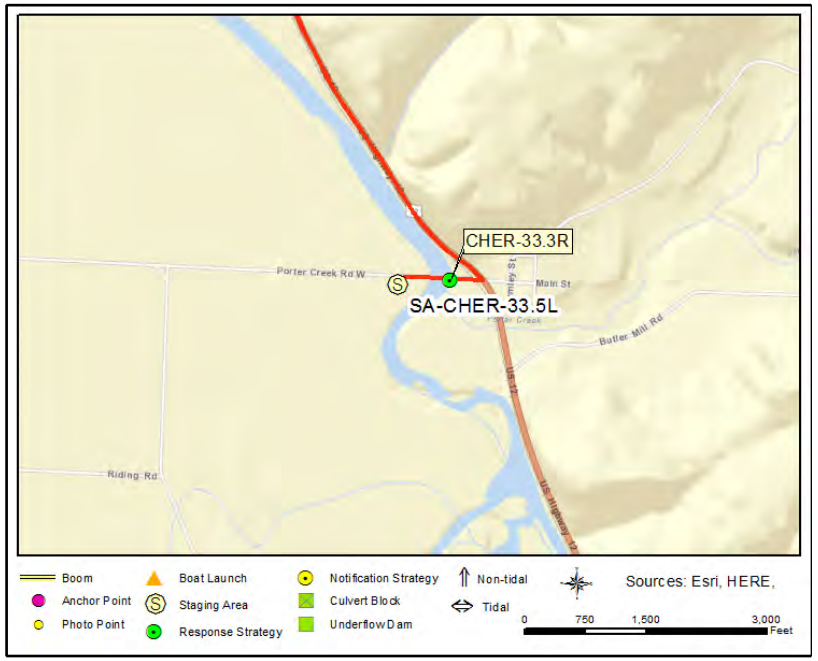
2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Porter Creek Mouth CHER-33.3R

CHER-33.3R Photo: From river channel under bridge, looking E at Porter Creek mouth. Taken early Dec 3800 cfs/8.9 ft at Porter gage.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

41 Porter Creek Rd W
Elma, WA 98541

Driving Directions

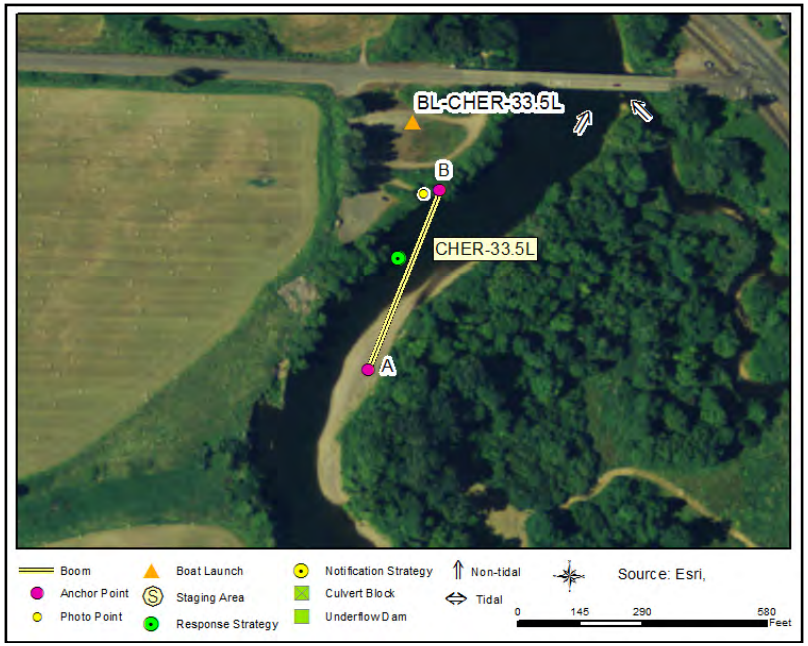
1. From I-5 in Olympia, head south to exit 104.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (20.58 miles)
4. Take ramp on the right to US-12 E toward Oakville/Centralia (0.23 miles)
5. Make sharp left on US-12 (6 miles)
6. Make sharp right on Porter Creek Rd W (0.19 miles)
7. Turn left into the boat launch at 39 Porter Creek Rd W, 98541

<< Go Back

Porter Creek Boat Launch CHER-33.5L

Position - Location:	46° 56.285', -123° 18.916'	46° 56' 17.1", -123° 18' 54.9"	46.93809, -123.31526	Elma

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River
Implementation:	Using workboat, anchor 500ft length of boom near A (46.938, -123.3155). Extend boom ~450 ft NW and anchor remaining boom end near B (46.9385, -123.3149). Adjust anchor points and angles as needed for conditions. Use existing structures, anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river.
Staging Area:	Onsite: Large gravel lot at boat launch. Vault toilet.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Eddy at bottom of boat ramp. Sandy beach and vegetation on other bank.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Salmonids, Waterfowl, Wetlands



Recommended Equipment

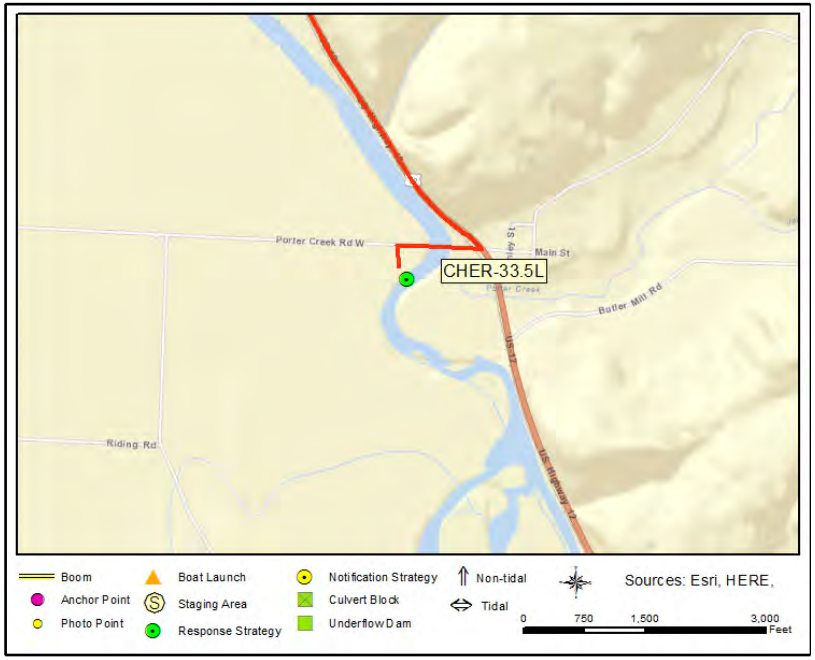
9	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Porter Creek Boat Launch CHER-33.5L

CHER-33.5L Photo: From Chehalis River left, looking upstream S at opposite bank and A. Taken mid-Aug, 500 cfs/3.7 ft at Porter gage.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

39 Porter Creek Rd W
Elma, WA 98541

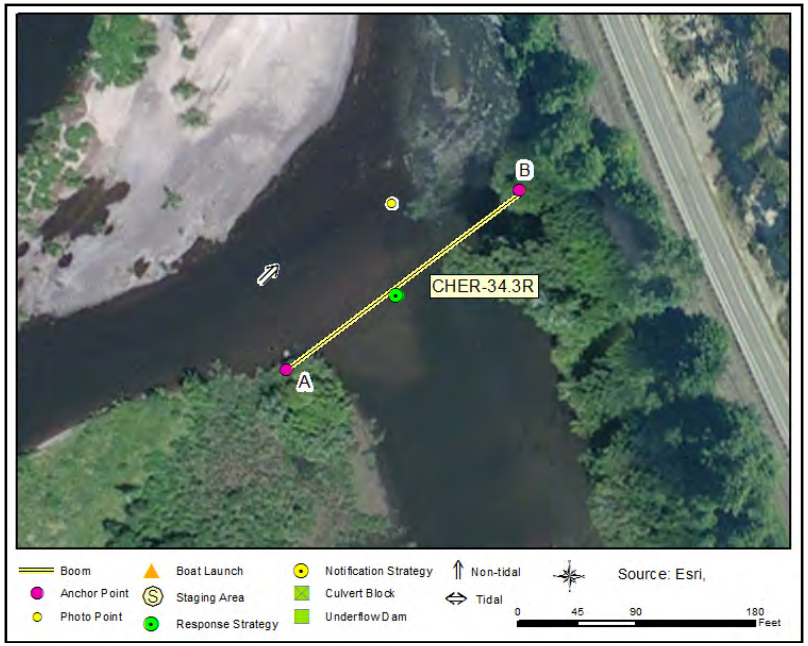
Driving Directions

1. From I-5 in Olympia, head south to exit 104.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (20.58 miles)
4. Take ramp on the right to US-12 E toward Oakville/Centralia (0.23 miles)
5. Make sharp left on US-12 (6 miles)
6. Make sharp right on Porter Creek Rd W (0.19 miles)
7. Turn left into the boat launch at 39 Porter Creek Rd W, 98541

Hoxit Unit, Chehalis Wildlife Area CHER-34.3R

Position - Location:	46° 55.928', -123° 18.543'	46° 55' 55.7", -123° 18' 32.6"	46.93213, -123.30905	Elma

Strategy Objective:	Exclusion : Prevent oil from entering or leaving side channel.
Implementation:	Using workboat, anchor 300ft length of boom near A (46.932, -123.3094) and remaining boom end near B (46.9324, -123.3087). Use existing structures, anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 300ft sorbent boom for added protection.
Staging Area:	Remote: Use Porter Creek boat launch for staging (SA-CHER-33.5L) and boat launch (BL-CHER-33.5L)
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	No road or land access. Train tracks along east bank. Shallow water in oxbow.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Shorebirds, State Lands, Waterfowl (Wintering)



Recommended Equipment

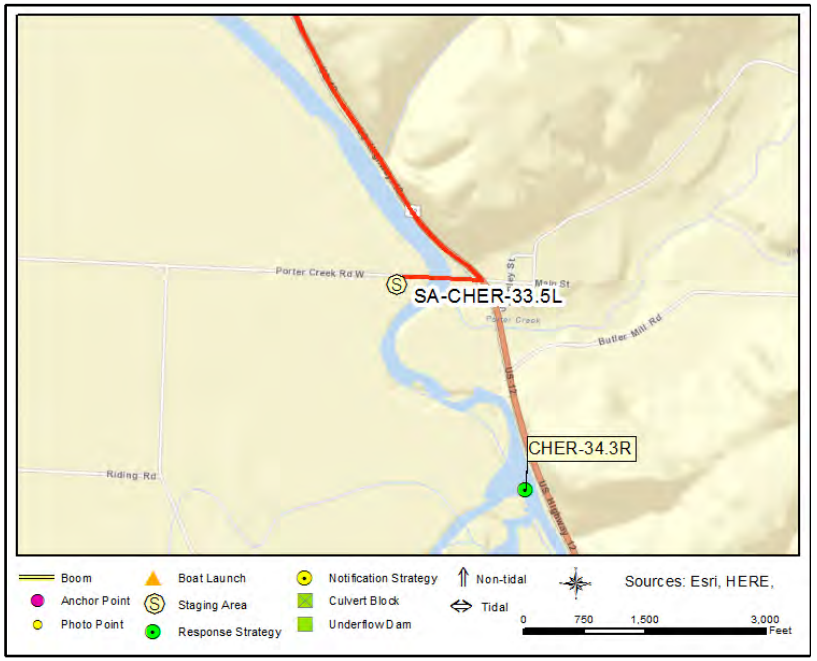
4	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
300	Feet	Boom - Sorbent
1	Each	Heaving Line(s)
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Hoxit Unit, Chehalis Wildlife Area CHER-34.3R

CHER-34.3R Photo: Looking S from river at entrance to oxbow. Taken early Dec 3800 cfs/8.9 ft at Porter gage.



Site Contact

WDFW Chehalis Wildlife Area
Land/Property Contact : Manager
360-533-5676

WDFW Region 6
Alternate Contact : Property Manager
360-249-4628

Nearest Address

41 Porter Creek Rd W
Elma, WA 98541

Driving Directions

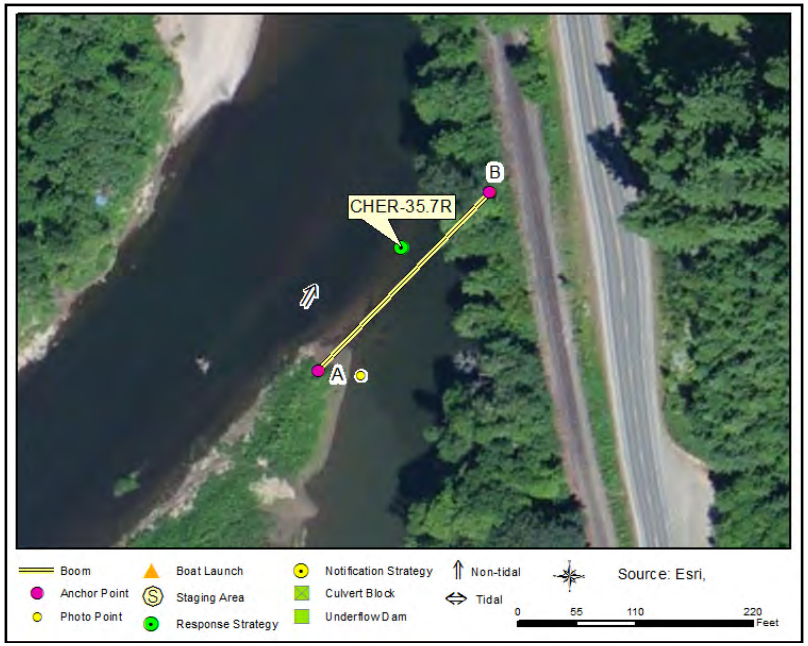
1. From I-5 in Olympia, head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (20.58 miles)
4. Take ramp on the right to US-12 E toward Oakville/Centralia (0.23 miles)
5. Make sharp left on US-12 (6 miles)
6. Make sharp right on Porter Creek Rd W (0.19 miles)
7. Turn left into the WDFW boat ramp & parking lot. 39 Porter Creek Rd W, 98541

<< Go Back

Hoxit Unit South, Chehalis Wildlife Area CHER-35.7R

Position - Location:	46° 55.263', -123° 18.243'	46° 55' 15.8", -123° 18' 14.6"	46.92105, -123.30404	Elma

Strategy Objective:	Exclusion : Prevent oil from entering or escaping side channel.
Implementation:	Using workboat, anchor 300ft length of boom near A (46.9207, -123.3043) and remaining boom end near B (46.9212, -123.3037). Use existing structures, anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 300ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Porter Creek Boat Launch parking lot (SA-CHER-33.5L). Use boat ramp at same location (BL-CHER-33.5L).
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Shallow side channel, use low-draft boat
Watercourse:	River - Side Channel - Chehalis River
Resources at Risk:	Downstream Resources, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

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

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Hoxit Unit South, Chehalis Wildlife Area CHER-35.7R

CHER-35.7R Photo: In side channel, looking NW at bank on Chehalis River right near B. Taken early Dec 3800 cfs/8.9 ft at Porter gage.

Site Contact

WDFW Chehalis Wildlife Area
Land/Property Contact : Manager
360-533-5676

WDFW Region 6
Alternate Contact : Property Manager
360-249-4628

Nearest Address

41 Porter Creek Rd W
Elma, WA 98541

Driving Directions

1. From I-5 in Olympia, head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (20.58 miles)
4. Take ramp on the right to US-12 E toward Oakville/Centralia (0.23 miles)
5. Make sharp left on US-12 (6 miles)
6. Make sharp right on Porter Creek Rd W (0.19 miles)
7. Turn left into the WDFW boat ramp & parking lot. 39 Porter Creek Rd W, 98541

Blockhouse-Smith Road CHER-40.3L

Position - Location:	46° 52.115', -123° 17.034'	46° 52' 6.9", -123° 17' 2.0"	46.86858, -123.28390	Oakville

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor 500ft length of boom near A (46.868, -123.2836). Extend boom ~450 ft S and anchor remaining boom end near B (46.8692, -123.2841). Adjust anchor points and angles as needed for conditions. Use existing structures, anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river.
Staging Area:	Remote: Stage at Oakville (Chehalis) boat launch (SA-CHER-42.3R). Use boat ramp at same location (BL-CHER-42.3R).
Site Safety:	Sloughing banks. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Sloughing high bank at collection site, extra pump and hose extension required. Narrow dirt road opens to field.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands

Recommended Equipment

11	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Pump(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Blockhouse-Smith Road CHER-40.3L

CHER-40.3L Photo: From Chehalis River left, looking S upstream at A. Taken mid-Nov at 1600 cfs/ 5.8 ft at Porter gage.

Site Contact

No Information
Unknown :

Nearest Address

113 Elma Gate Rd W
Oakville, WA 98568

Driving Directions

1. From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (12.03 miles)
4. Bear left on Elma Gate Rd W (0.52 miles)
5. Finish at 113 Elma Gate Rd, 98568, on the left

Chehalis River - Oakville Boat Ramp CHER-42.3R

Position - Location:	46° 50.979', -123° 15.176'	46° 50' 58.8", -123° 15' 10.5"	46.84966, -123.25293	Oakville

Strategy Objective: Collection : Collect oil moving downstream on the Chehalis River.

Implementation: Using workboat, anchor 500ft length of boom near A (46.8485, -123.2523). Extend NW ~580 ft and secure boom end near B (46.85, -123.2531). Repeat with second 300-ft section of boom between C and D, using same process as A & B, maintaining 30 ft separation between sections. Adjust anchor points and angles as needed for conditions. Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river.

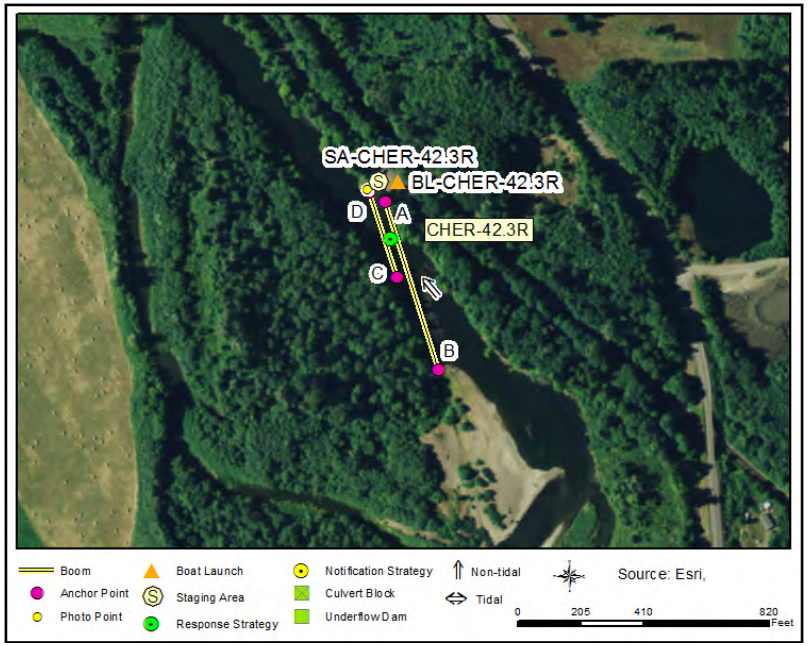
Staging Area: Onsite: Use parking and boat launch onsite (BL-CHER-42.3R)

Site Safety: Recreational boat traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Short path from parking lot to eddy. Heavy vegetation on both shores.

Watercourse: River - Without a Dam - Chehalis River

Resources at Risk: Downstream Resources, Salmonids, State Lands, Waterfowl, Wetlands



Recommended Equipment

18	Kit	Anchoring System(s) - (anchor, lines, floats)
4	Kit	Anchoring System(s)- Shoreside
600	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chehalis River - Oakville Boat Ramp CHER-42.3R

CHER-42.3R Photo: From Chehalis River right at end of boat ramp, looking S upstream towards C. Taken mid-Feb at 9500 cfs/ 14 ft at Porter gage.

Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

113 Elma Gate Rd W
Oakville, WA 98568

Driving Directions

1. From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (12.03 miles)
4. Bear left on Elma Gate Rd W (0.52 miles)
5. Finish at 113 Elma Gate Rd, 98568, on the left

<< Go Back

Chehalis River - Independence Road Tribal Land CHER-52.0L

Position - Location:	46° 47.993', -123° 9.355'	46° 47' 59.6", -123° 9' 21.3"	46.79988, -123.15591	Rochester

Strategy Objective: Collection : Collect oil moving downstream on the Chehalis River.

Implementation: Using workboat, anchor one end of 500ft length of boom near A (46.8002, -123.1555). Then extend boom ~450ft SW and secure remaining boom end to shore near B (46.7995, -123.157). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.

Staging Area: Onsite: Use parking area and tribal road for staging. Use Black River boat launch (BL-BLKR-0.9)

Site Safety: Sloughing bank; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Cut gate to abandoned railroad grade road headed west off Independence. Sloughing bank and eddy just upstream of shallow riffle.

Watercourse: River - Without a Dam - Chehalis River

Resources at Risk: Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Tribal Lands/Resources, Waterfowl

Recommended Equipment

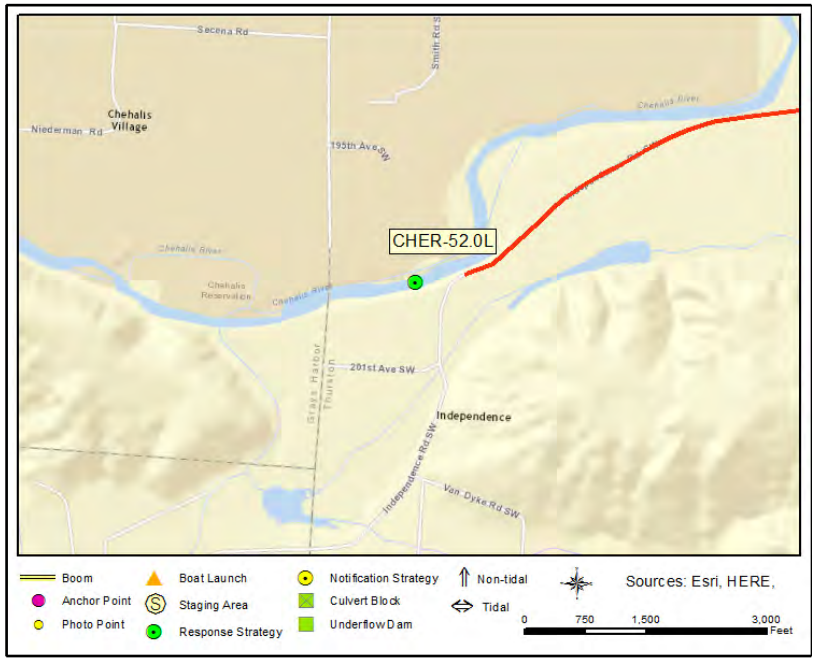
5	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chehalis River - Independence Road Tribal Land CHER-52.0L

CHER-52.0L Photo: Looking NW from Chehalis River left, upstream at A. Taken mid-Nov at 1100 cfs/4.8 ft at Grand Mound gage.



Site Contact

Chehalis Tribal Police
Security Contact : Emergency Contact
360-273-7051

Chehalis Tribe Department of Natural Resources
Tribal Contact : Property owner
360-273-5911

Nearest Address

12804 Independence Rd
Rochester, WA 98579

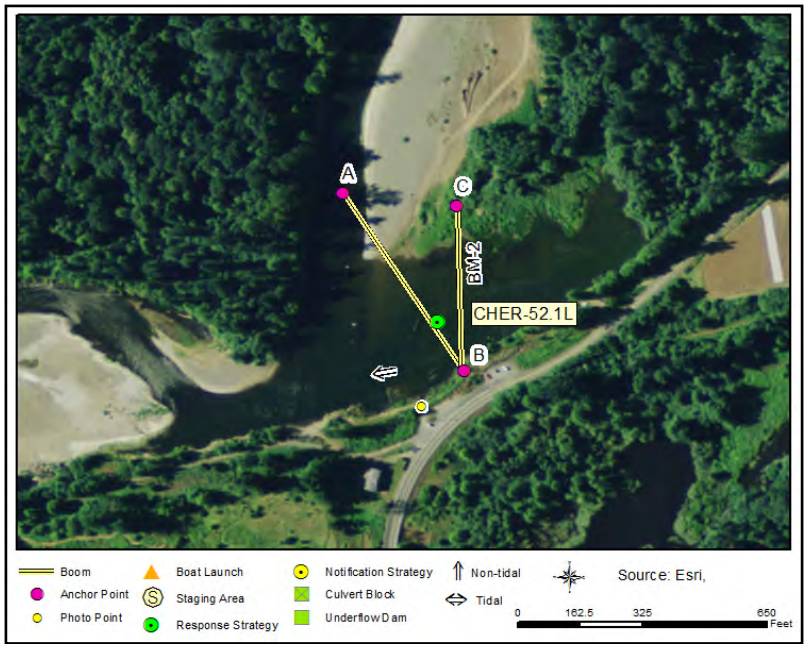
Driving Directions

1. From I-5 in Olympia, head S towards exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (4.61 miles)
4. Turn left on 183rd Way SW (0.09 miles)
5. Turn left on Albany St SW (0.24 miles)
6. Turn right on Marble St SW (0.04 miles)
7. Turn left at 185th Ave SW to stay on Marble St SW (0.87 miles)
8. Continue on Independence Rd SW (2.6 miles)
9. Finish at 12804 Independence Rd, 98579, on the right. Cut gate and continue west on dirt road (500 ft).

Chehalis River - Independence Road CHER-52.1L

Position - Location:	46° 48.028', -123° 9.254'	46° 48' 1.7", -123° 9' 15.3"	46.80046, -123.15424	Rochester

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 600ft length of boom near A (46.8014, -123.1553). Then extend boom ~560ft SE and secure remaining boom end to shore near B (46.8001, -123.154). Deploy second 500ft section of boom ~450 ft across eddy mouth between B and C (46.8013, -123.1541) to create collection pocket at roadside. Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Gravel pull-off on shoulder, can also use tribe's road to the west.
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Chehalis Tribal Land. Could hand-launch kayak/canoe. Shoreline is reinforced with rip-rap. Large eddy.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Wetlands



Recommended Equipment

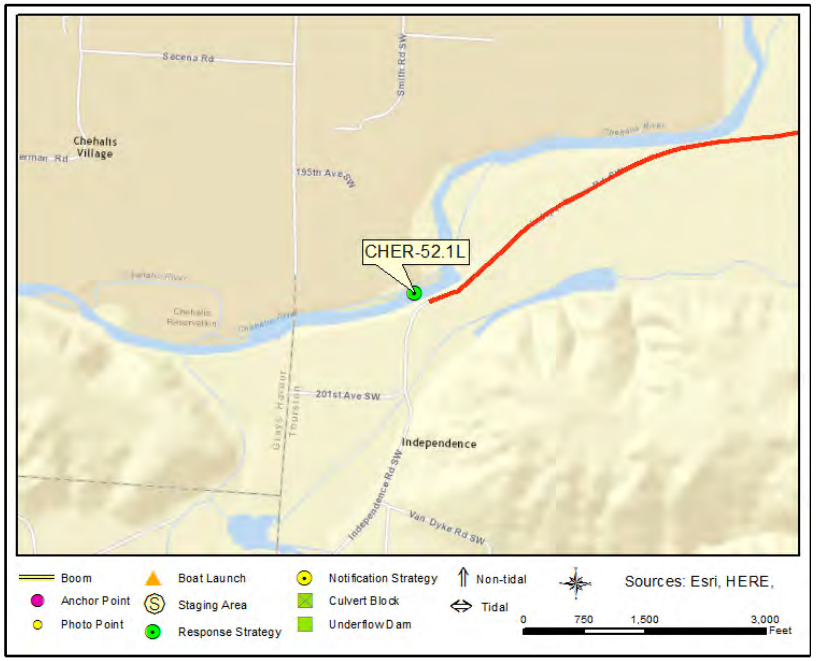
16	Kit	Anchoring System(s) - (anchor, lines, floats)
3	Kit	Anchoring System(s)- Shoreside
1100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Chehalis River - Independence Road CHER-52.1L

CHER-52.1L Photo: Looking N from Chehalis River left, upstream at eddy and A. Taken mid-Nov at 1100 cfs/4.8 ft at Grand Mound gage.



Site Contact

Chehalis Tribal Police
Police Department/Sheriff : Emergency Contact
360-273-7051

Chehalis Tribe Department of Natural Resources
Tribal Contact : Property owner
360-273-5911

Nearest Address

12804 Independence Rd SW
Rochester, WA 98579

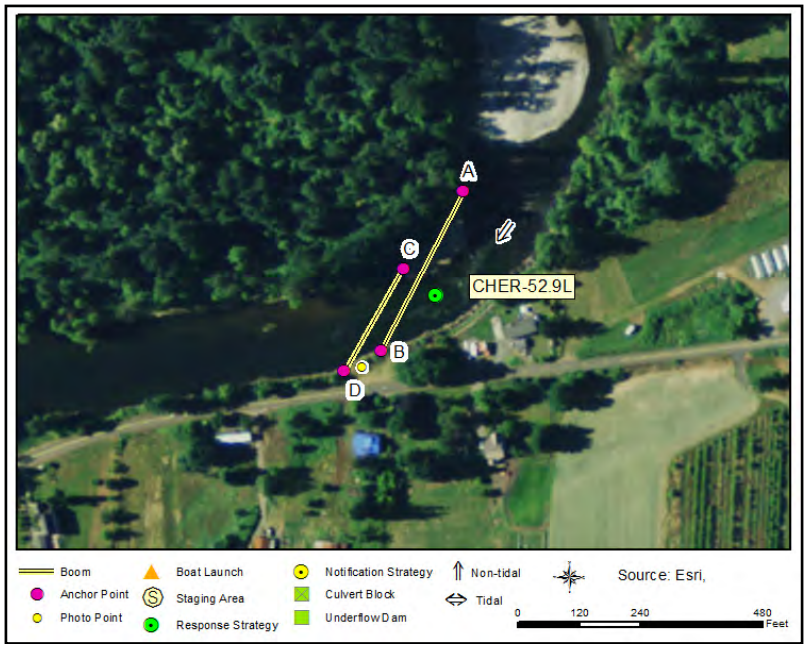
Driving Directions

1. From I-5 in Olympia, head S to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (4.61 miles)
4. Turn left on 183rd Way SW (0.09 miles)
5. Turn left on Albany St SW (0.24 miles)
6. Turn right on Marble St SW (0.04 miles)
7. Turn left at 185th Ave SW to stay on Marble St SW (0.87 miles)
8. Continue on Independence Rd SW (2.6 miles)
9. Finish at 12804 Independence Rd SW, 98579, on the right

Chehalis River - Independence Road CHER-52.9L

Position - Location:	46° 48.388', -123° 8.353'	46° 48' 23.3", -123° 8' 21.2"	46.80646, -123.13922	Rochester

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 400ft length of boom near A (46.807, -123.1391). Then extend boom ~350ft NE and secure remaining boom end to shore near B (46.8062, -123.1397). Deploy second 300ft section of boom ~250 ft between C & D using same process as A & B, maintaining 30 ft separation between segments. Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Remote: Use Black River launch (7mi downstream) for staging (SA-BLKR-0.9) and boat ramp (BL-BLKR-0.9)
Site Safety:	Road traffic; sloughing bank; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Small grass pull-off at road edge. Low rip-rap bank. Adjoining private property.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Harlequin Ducks, Salmonids, Tribal Lands/Resources, Waterfowl



Recommended Equipment

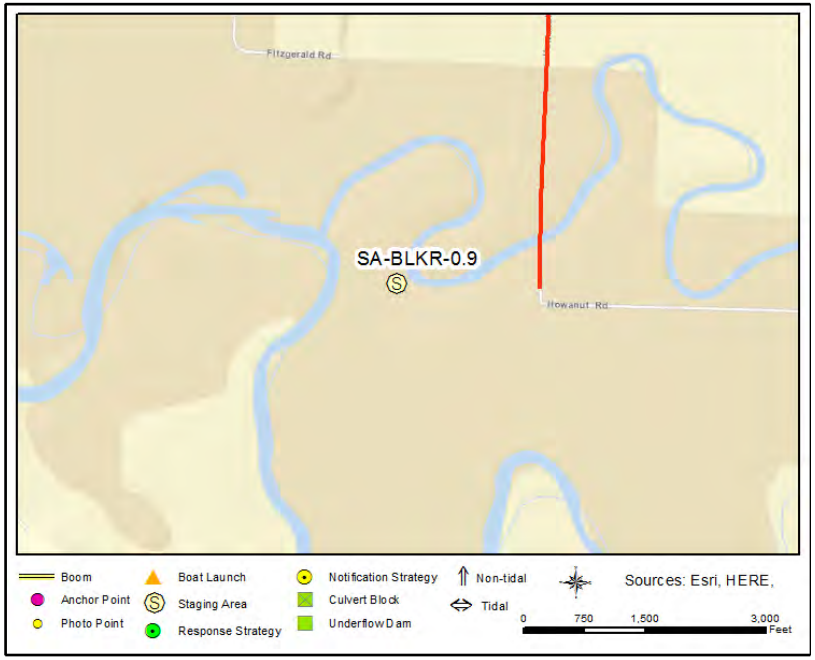
12	Kit	Anchoring System(s) - (anchor, lines, floats)
4	Kit	Anchoring System(s)- Shoreside
700	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chehalis River - Independence Road CHER-52.9L

CHER-52.9L Photo: From bank on Chehalis River left, looking NE upstream at bend.



Site Contact

Chehalis Tribal Police
Police Department/Sheriff : Emergency Contact
30 Niederman Rd
Oakville, WA 98568
360-273-7051

Nearest Address

116 Howanut Rd
Rochester, WA 98568

Driving Directions

1. At exit 88, take ramp right for US-12 West toward Aberdeen / Tenino
2. Turn right onto US-12.
3. In 9.1 mi, just after the WDFW Oakville boat launch, turn left onto Elma Gate Br Rd.
4. Take an immediate right onto Elma Gate Rd E.
5. In 0.9 mi, turn left onto Howanut Rd.
6. In 0.8 mi at the dead-end, turn right into the boat ramp entrance.

Chehalis River - Prather Bridge CHER-59.9R

Position - Location:	46° 46.463', -123° 2.103'	46° 46' 27.8", -123° 2' 6.2"	46.77438, -123.03505	Centralia

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 700ft length of boom near A (46.7732, -123.0353). Then extend boom ~670ft NE and secure remaining boom end to shore near B (46.775, -123.0349). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Remote: Use Fort Borst Park staging area (SA-CHER-66.7R) and boat launch (BL-CHER-66.7R)
Site Safety:	Road traffic. Sloughing bank. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Dirt road leading from Prather Rd to upstream end of bridge. Steep drop-off at bank.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Downstream Resources, Riparian Habitat, Salmonids, Tribal Lands/Resources, Waterfowl

Recommended Equipment

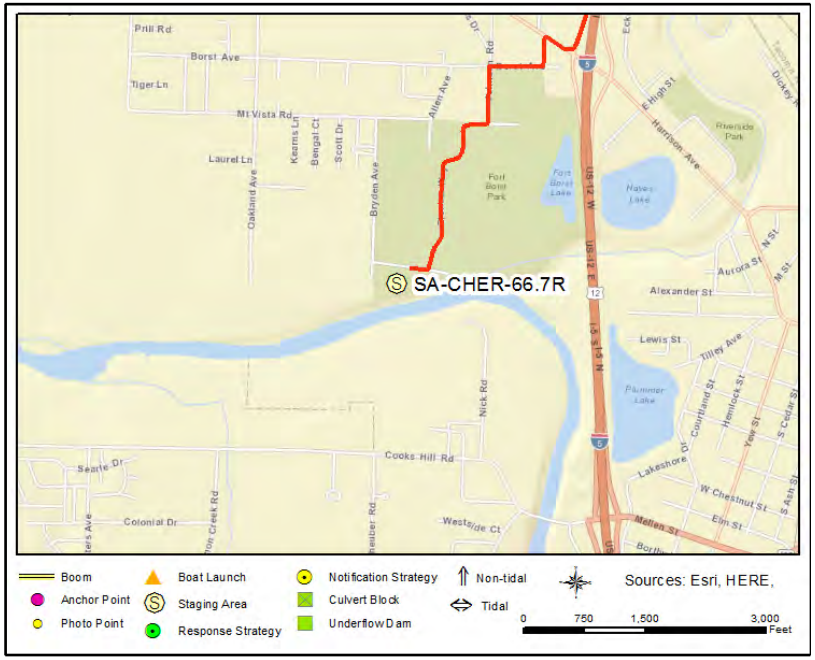
13	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
700	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Chehalis River - Prather Bridge CHER-59.9R

CHER-59.9R Photo: From high bank on Chehalis River right, looking SW upstream. Taken mid-Aug at 300 cfs/3.6 ft at Grand Mound gage.



Site Contact

No Information
Unknown :

Nearest Address

2560 Pioneer Way
Centralia, WA 98531

Driving Directions

To Fort Borst Park boat launch and staging area:
1. From I-5, take exit 82.
2. Take ramp right for Harrison Ave toward Factory Outlet Way.
3. Turn west onto Harrison Ave.
4. In a quarter mile, at the second light, turn left onto Johnson Rd.
5. In 0.3 miles at the dead-end, turn right onto Pioneer Way.
6. Follow Pioneer south a half-mile through the ball fields and turn right at the dead-end. The boat launch is immediately to the left.

.

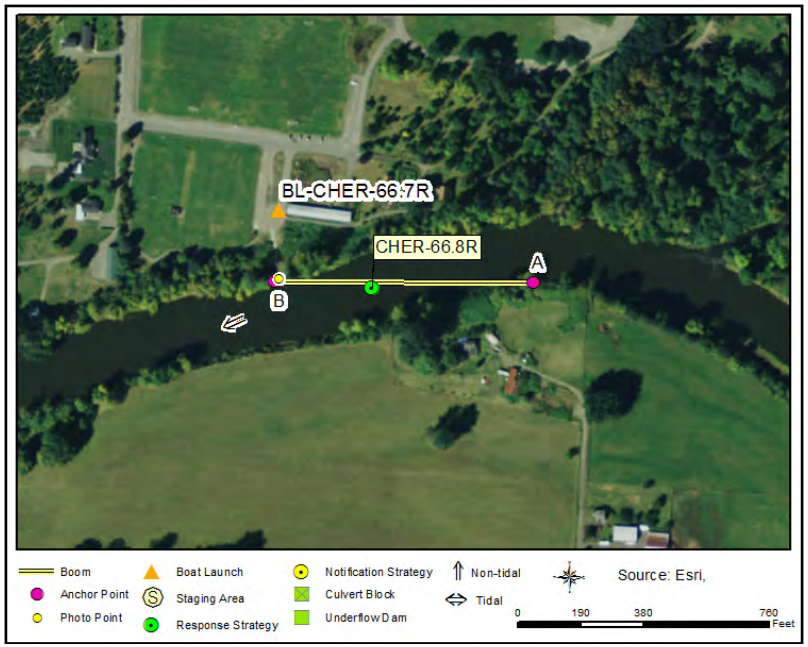
To access site at ~7105 Prather Rd:
1. From Forst Borst park, head north on Johnson Rd toward Borst Ave (0.2 mi)
2. Turn left onto Harrison Ave/99 SW (3.2 mi)
3. Turn left onto Prather Rd SW (1.3 mi)
4. Turn left before the bridge on to dirt path.
5. There is a steep drop at the end into the river. Use caution, especially in muddy conditions.

<< Go Back

Fort Borst Park CHER-66.8R

Position - Location:	46° 43.139', -122° 59.058'	46° 43' 8.3", -122° 59' 3.5"	46.71898, -122.98429	Centralia

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 800ft length of boom near A (46.7191, -122.9824). Then extend boom ~770ft W and secure remaining boom end to shore near B (46.719, -122.9846). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Use park facilities and parking onsite for staging. Use boat launch on site (BL-CHER-66.7R)
Site Safety:	Recreational boat traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Just downstream of Skookumchuck confluence. Large, popular city park.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	City Park, Downstream Resources, Resident Fish, Salmonids, Waterfowl



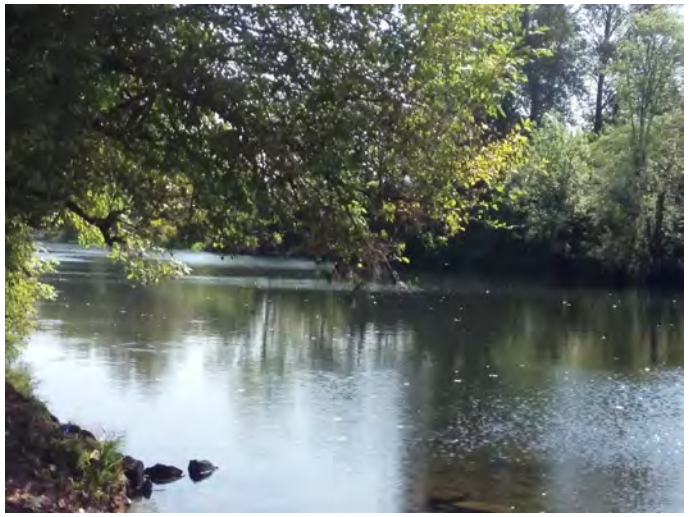
Recommended Equipment

15	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

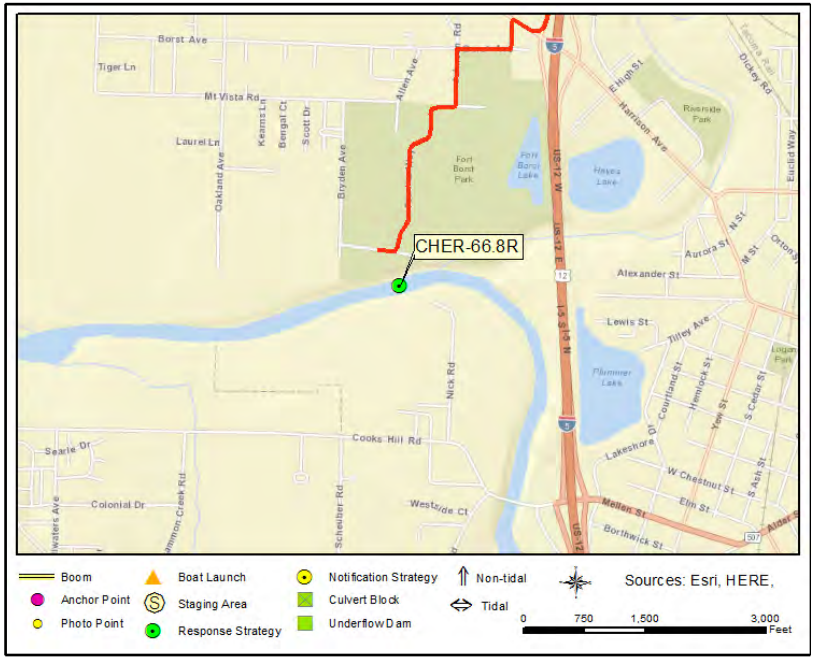
Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Fort Borst Park CHER-66.8R



CHER-66.8R Photo: From end of boat ramp on Chehalis River right, looking east upstream towards Skookumchuck. Taken mid-Aug at 300 cfs/3.6 ft at Grand Mound gage.



Site Contact

City of Centralia Parks and Rec
Land/Property Owner : Property Owner

Centralia, WA 98531
360-330-7688

Nearest Address

2560 Pioneer Way
Centralia, WA 98531

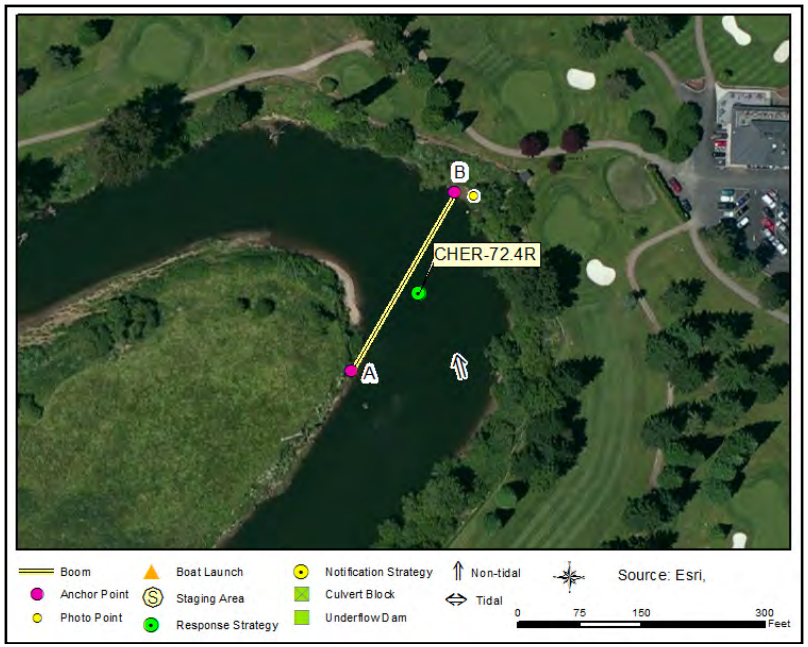
Driving Directions

1. From I-5 in Olympia, head S to exit 82.
2. At exit 82 take ramp on the right to Harrison Ave toward Factory Outlet Way (0.26 miles)
3. At fork keep right (0.03 miles)
4. Bear right on Harrison Ave (0.06 miles)
5. Turn left on Belmont Ave (0.07 miles)
6. Turn right on Borst Ave (0.12 miles)
7. Turn left on Johnson Rd (0.14 miles)
8. Turn right on Pioneer Way (0.47 miles)
9. Turn right at the dead-end. The boat launch is immediately to the left.

Chehalis River - Riverside Golf Course CHER-72.4R

Position - Location:	46° 40.433', -122° 59.471'	46° 40' 26.0", -122° 59' 28.3"	46.67389, -122.99119	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 300ft length of boom near A (46.6736, -122.9915). Then extend boom ~250ft NE and secure remaining boom end to shore near B (46.6742, -122.991). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Boat ramp at Fort Borst Park (BL-CHER-66.7R) 5.7 mi downstream. Use golf course parking/restaurant for staging.
Site Safety:	Golfers; Sloughing Banks; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Shoreside access at pump station, steep slope with cleared debris. Close to water's edge.
Watercourse:	River - Without a Dam - Chehalis River - Generally slow water in this area
Resources at Risk:	Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

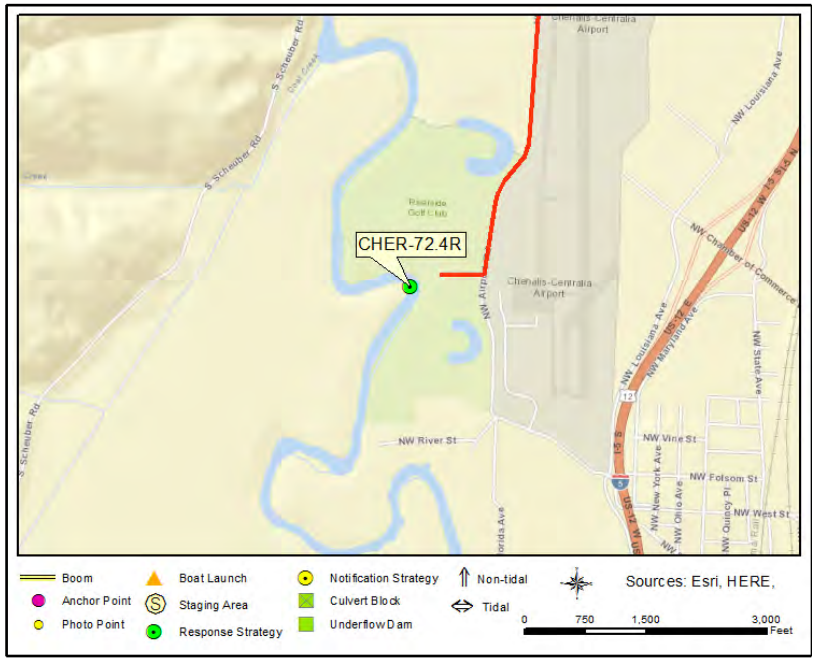
2	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Chehalis River - Riverside Golf Course CHER-72.4R

CHER-72.4R Photo: On Chehalis River right, from steep access trail to pump house. Taken mid-October, 49.3 ft at Centralia gage.



Site Contact

Riverside Golf Club
Land/Property Owner :
1451 NW Airport Road
Chehalis, WA 98532
360-748-8182

Nearest Address

1451 NW Airport Rd
Chehalis, WA 98532

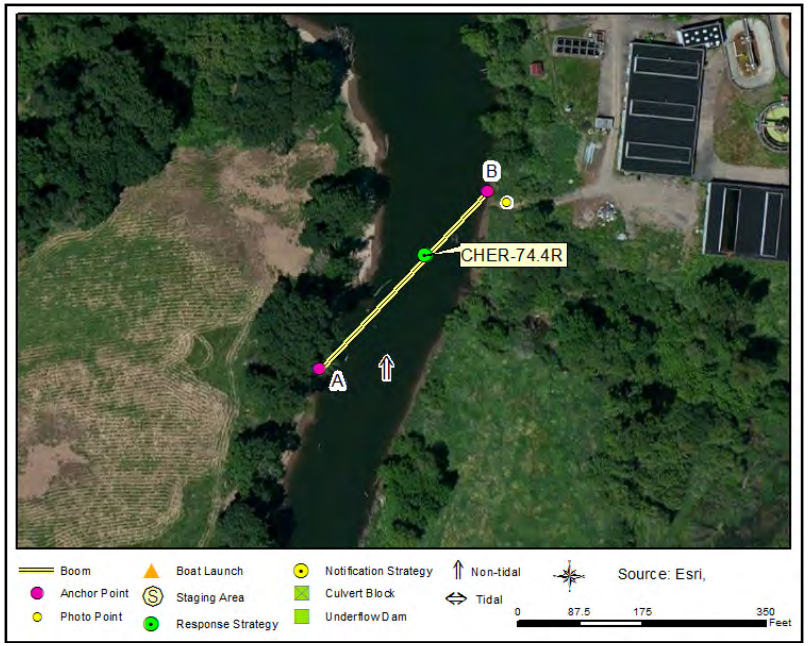
Driving Directions

1. From I-5 in Olympia, head south to exit 81.
2. At exit 81 take ramp on the right to WA-507 N toward Mellen St (0.23 miles)
3. Turn right on WA-507 (Mellen St) (0.02 miles)
4. Continue on Mellen St (0.04 miles)
5. Turn left on Airport Rd (3.11 miles)
6. Turn right into Riverside Golf Course parking lot. Use golf cart trail to access pump station.

Chehalis River - Chehalis Wastewater Plant CHER-74.4R

Position - Location:	46° 39.638', -122° 59.056'	46° 39' 38.3", -122° 59' 3.4"	46.66063, -122.98427	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using workboat, anchor one end of 400ft length of boom near A (46.6602, -122.9849). Then extend boom ~350ft NE and secure remaining boom end to shore near B (46.6609, -122.9839). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Hand launch kayak/raft onsite. Boat launch at Fort Borst (BL-CHER-66.7R) 7.7mi downstream. Stage in parking onsite.
Site Safety:	Police training area; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Quiet water, inactive wastewater plant. Steps and steep trail from parking area to water. USGS gage.
Watercourse:	River - Without a Dam - Chehalis River - Generally slow water in this area
Resources at Risk:	Downstream Resources, Salmonids, Waterfowl, Wetlands



Recommended Equipment

7	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Pump(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Chehalis River - Chehalis Wastewater Plant CHER-74.4R

CHER-74.4R Photo: From Chehalis River right, looking W at USGS gage and opposite bank. Taken mid October, 49.2 ft at Centralia gage.

Site Contact

City of Chehalis Public Works Department
Land/Property Owner : Owner

Chehalis, WA
360-740-1105

Nearest Address

1283 NW Shoreline Dr
Chehalis, WA 98532

Driving Directions

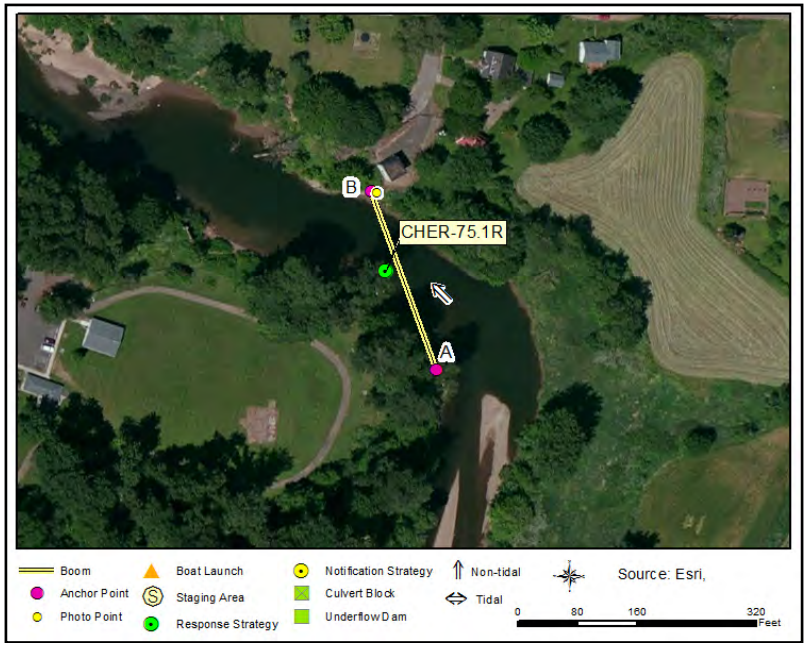
1. From I-5 in Olympia, head south to exit 77.
2. At exit 77 take ramp on the right to WA-6 W toward Pe Ell/Raymond (0.29 miles)
3. Turn right on WA-6 (State Route 6) (0.04 miles)
4. Turn right on NW Louisiana Ave (0.23 miles)
5. Turn left on NW Shoreline Dr (0.18 miles)
6. Turn left into Chehalis Wastewater Treatment Plant (non-operational) and drive straight back to end of road Trail down to water splits off west from parking lot.

<< Go Back

Chehalis River - Chehalis Pump Station CHER-75.1R

Position - Location:	46° 39.142', -122° 58.908'	46° 39' 8.5", -122° 58' 54.5"	46.65237, -122.98180	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Using hand-launch workboat, anchor one end of 300ft length of boom near A (46.652, -122.9815). Then extend boom ~250ft NW and secure remaining boom end to shore near B (46.6527, -122.9819). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Hand-launch here or at Lintott-Alexander Park. Shoreline access from park. Paved area onsite.
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Steep bank from pump station. Can drive close to edge but watch slope.
Watercourse:	River - Without a Dam - Chehalis River - Generally slow water in this area.
Resources at Risk:	Downstream Resources, Public Health and Safety, Pump Station, Salmonids, Water Intakes, Waterfowl, Wetlands



Recommended Equipment

5	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Each	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Pump(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Chehalis River - Chehalis Pump Station CHER-75.1R

CHER-75.1R Photo: From Chehalis River right at pump station, looking SW down at hand-launch access to water's edge. Taken mid-October, 49.2 ft at Centralia gage.

Site Contact

City of Chehalis Public Works Department
Land/Property Owner : Owner

Chehalis, WA
360-740-1105

Nearest Address

585 SW Riverside Dr
Chehalis, WA 98532

Driving Directions

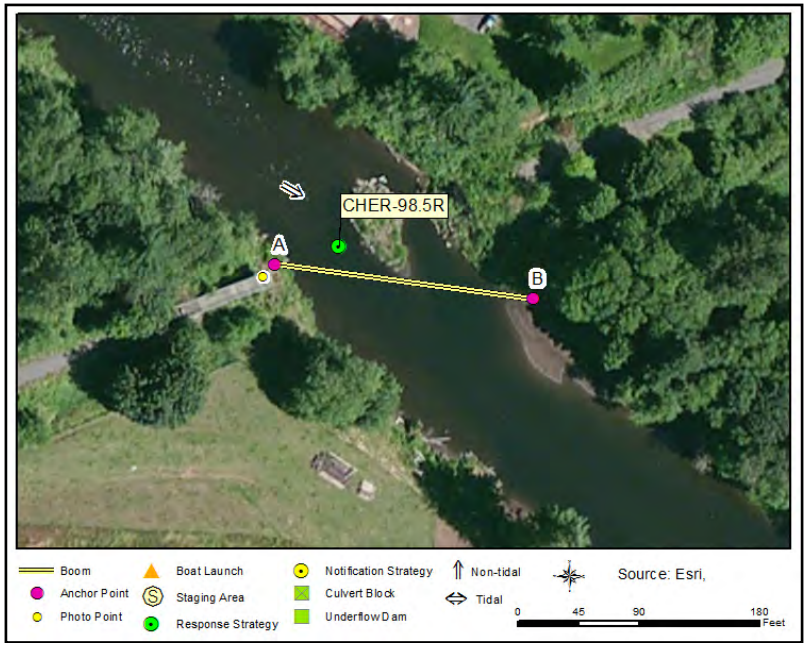
1. From I-5 in Olympia, head south to exit 77.
2. At exit 77 take ramp on the right to WA-6 W toward Pe Ell/Raymond (0.29 miles)
3. Turn right on WA-6 (State Route 6) (0.02 miles)
4. Bear left (0.02 miles)
5. Turn left on SW Riverside Dr (0.52 miles)
6. Drive to pump station at road's end. Cut gate and use paved area for staging.

<< Go Back

Chehalis River - Doty Trail Bridge CHER-98.5R

Position - Location:	46° 38.149', -123° 15.611'	46° 38' 8.9", -123° 15' 36.7"	46.63581, -123.26019	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Chehalis River.
Implementation:	Anchor line on west bank near A (46.6378, -123.2604). Using line-throwing device, extend line SE ~ 190 ft. Secure to shore near B (46.6357, -123.2596). Adjust anchor points and angles as needed for conditions. Use power winch to extend 200 ft section of boom. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Use trail for small staging, or Rainbow Falls State Park on Leudinghaus Rd 1.3 mi east for facilities/large area.
Site Safety:	Construction debris; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Washed-out trail bridge. Rip-rap, construction debris and blackberry at road's end/bankside. Island in channel.
Watercourse:	River - Without a Dam - Chehalis River
Resources at Risk:	Downstream Resources, Riparian Habitat, Salmonids, State Park



Recommended Equipment

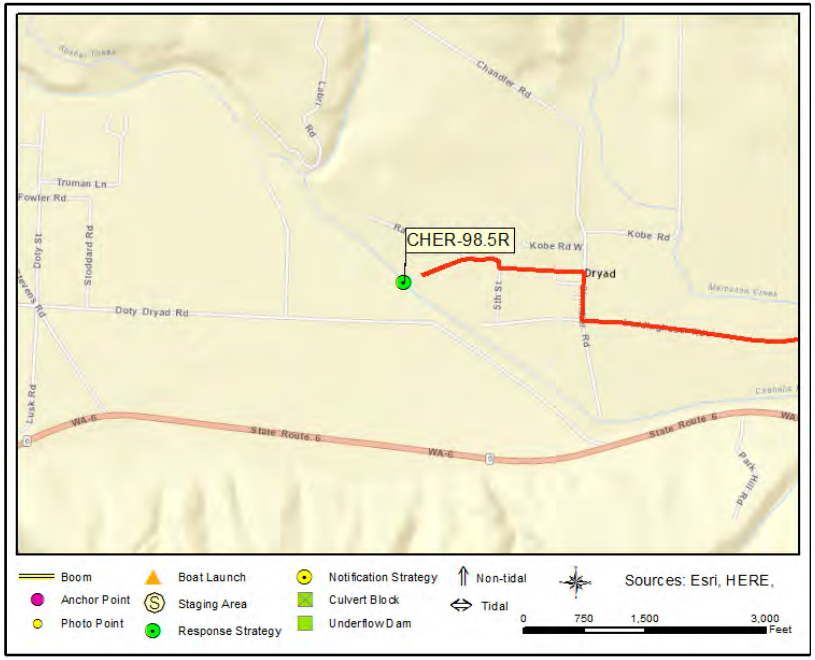
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Line - 3/8" poly line
1	Each	Line throwing gun(s) or device(s)
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Pump(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

2	Laborer
1	Supervisor

Chehalis River - Doty Trail Bridge CHER-98.5R

CHER-98.5R Photo: From Chehalis River right, looking NE from one side of trail end to the other. Taken mid-November, 350 cfs/2.8 ft at Doty gage.



Site Contact

Washington State Parks and Recreation Commission
Land/Property Contact : General Number
360-902-8844

Nearest Address

107 Railroad Ave
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia head south to exit 77.
2. At exit 77 take ramp on the right to WA-6 W toward Pe Ell/Raymond (0.29 miles)
3. Turn right on WA-6 (State Route 6) (13.52 miles)
4. Turn right on River Rd (0.23 miles)
5. Turn left on Leudinghaus Rd (0.04 miles)
6. Turn left at Meskill Rd to stay on Leudinghaus Rd (3.39 miles)
7. Turn right on Chandler Rd (0.12 miles)
8. Turn left on Olive St (0.2 miles)
9. Turn right on 5th St (Fifth Dryad St) (0.07 miles)
10. Bear right on Railroad Ave (0.02 miles)
11. Turn left onto DNR trail (cut gate/bollards) and drive 600 ft to washed-out bridge.

China Creek at Marsh Ave CHINA-0.3

Position - Location:	46° 42.834', -122° 58.276'	46° 42' 50.0", -122° 58' 16.6"	46.71390, -122.97127	Centralia

Strategy Objective: Collection, Underflow Dam : Collect oil moving downstream on China Creek.

Implementation: Use boom and sorbent on upstream side of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam at this location. The creek is approximately 15 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Onsite: Motel around corner or Centralia School Bus Parking next door.

Site Safety: Slips; trips; falls; traffic hazard; overgrown vegetation

Field Notes: Quiet road with driveway alongside creek.

Watercourse: Creek - China Creek

Resources at Risk: Downstream Resources, Salmonids, Waterfowl

Recommended Equipment

2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
	Each	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

4	Laborer
1	Supervisor

China Creek at Marsh Ave CHINA-0.3

CHINA-0.3 Photo: From China Creek right, looking SE at upstream side of Marsh Ave bridge. Taken mid-May at average seasonal water.

Site Contact

City of Centralia Schools Transportation
Land/Property Contact : Property Owner
1119 West Chestnut
Centralia, WA 98531
360-330-7628

Nearest Address

616 Marsh Ave
Centralia, WA 98531

Driving Directions

1. From I-5 in Olympia, head south to exit 81.
2. At exit 81 take ramp on the right to WA-507 N toward Mellen St (0.23 miles)
3. Turn left on WA-507 (Mellen St) (0.09 miles)
4. Turn left on Ellsbury St (0.09 miles)
5. Bear right on Lakeshore Dr (0.15 miles)
6. Turn right on Marsh Ave (0.02 miles)
7. Finish at 616 Marsh Ave, 98531, on the left

China Creek at Centralia College — CHINA-0.9

Position - Location:	46° 42.996', -122° 57.704'	46° 42' 59.8", -122° 57' 42.3"	46.71660, -122.96174	Centralia

Strategy Objective: Sorbent, Underflow Dam : Collect oil moving downstream on China Creek

Implementation: Use sorbent for initial containment. If time allows, use sandbags with PVC to create an underflow dam at this location. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Onsite: Large parking area and ped walkway just south of the classroom building.

Site Safety: Traffic hazard; slips, trips, falls

Field Notes: Sidewalk and roadside on college campus. Just upstream of restoration/park area.

Watercourse: Creek - China Creek

Resources at Risk: Downstream Resources, Public Lands/Facilities, Salmonids, Waterfowl

Recommended Equipment

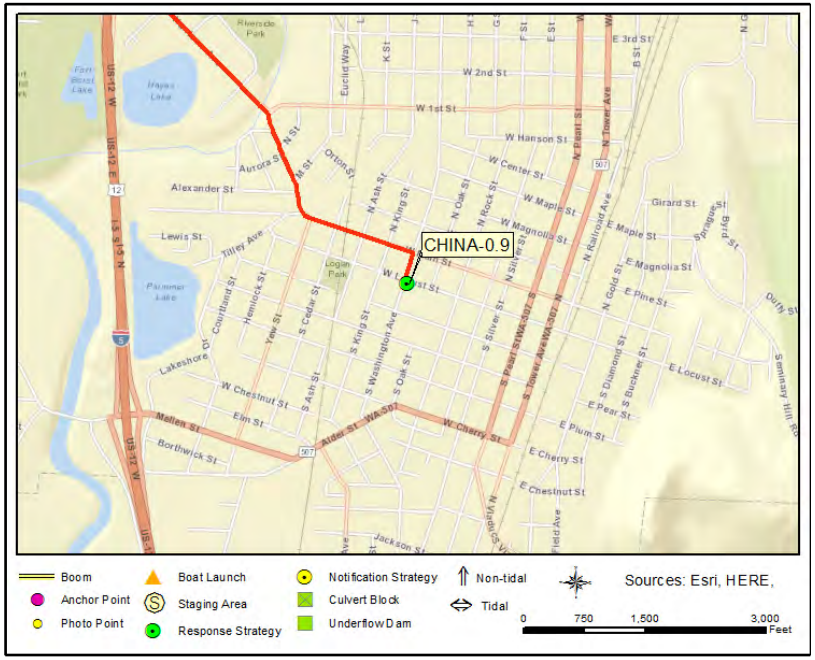
1	Each	Bolt Cutters
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
	Other	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

4	Laborer
1	Supervisor

China Creek at Centralia College CHINA-0.9

CHINA-0.9 Photo: From sidewalk looking NE over China Creek on creek left to Locust St (Centralia College Blvd). Taken mid-May at seasonal avg water.



Site Contact

City of Centralia Parks and Rec
Security Contact : Property Owner
360-330-7688

Nearest Address

210 S Washington Ave
Centralia, WA 98531

Driving Directions

1. Start at Location 1
2. Go south on I-5 toward 105 (24.05 miles)
3. At exit 82 take ramp on the right to Harrison Ave toward Factory Outlet Way (0.26 miles)
4. At fork keep left (0.02 miles)
5. Turn left on Harrison Ave (0.81 miles)
6. Bear left on W Main St (0.28 miles)
7. Turn right on S Washington Ave (0.08 miles)
8. Finish at 210 S Washington Ave, 98531, on the left

<< Go Back

Cloquallum Creek at Highway 12 CLOQ-2.3

Position - Location:	47° .231', -123° 23.236'	47° 0' 13.9", -123° 23' 14.2"	47.00386, -123.38727	Elma

Strategy Objective:	Collection : Collect oil moving downstream on Cloquallum Creek.
Implementation:	Using line-throwing device or EXTREME CAUTION on bridge shoulder, extend 150 ft line across creek. Anchor on north bank under bridge near A (47.004, -123.387). Secure to shore near B (47.0037, -123.3874). Use power winch to extend 200 ft section of boom. 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: Stage in parking area at Pacific Pride gas station.
Site Safety:	Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Use plywood to reinforce 50 ft trail through light vegetation. Limited access to north bank through vegetation off State Rte 12 / US 8 E - use caution. Fast-flowing, shifting creek.
Watercourse:	Creek - Cloquallum Creek
Resources at Risk:	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands

Recommended Equipment

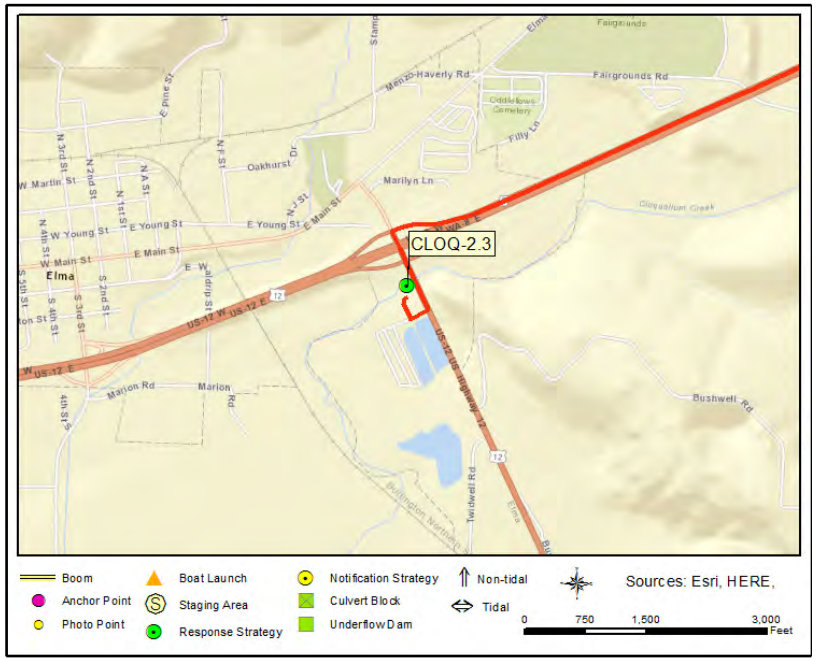
2	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Line - 3/8" poly line
1	Each	Line throwing gun(s) or device(s)
1	Each	Machete(s) - (or other vegetation cutting tool)
4	Each	Plywood sheets (4ft x 8ft)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

3	Laborer
1	Supervisor

Cloquallum Creek at Highway 12 CLOQ-2.3

CLOQ-2.3 Photo: From Cloquallum Creek left, looking N at opposite bank. Running 2.5 knots in December.



Site Contact

Pacific Pride Gas Station - Elma
Private Owner : Property Owner
4700 State Rte 12
Elma, WA 98541
360-532-9380

Nearest Address

4700 SR 12
Elma, WA 98541

Driving Directions

1. From I-5 in Olympia, head S towards Highway 101.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (20.58 miles)
4. Take ramp on the right to US-12 E toward Oakville/Centralia (0.23 miles)
5. Turn left on US-12 (0.08 miles)
6. Turn right into Pacific Pride gas station, 4700 SR 12, 98541.

Dillenbaugh Creek - Jackson Highway DILB-4.9

Position - Location:	46° 37.816', -122° 54.684'	46° 37' 48.9", -122° 54' 41.0"	46.63026, -122.91140	Chehalis

Strategy Objective:	Collection, Underflow Dam : Collect oil moving downstream on Dillenbaugh Creek
Implementation:	Use boom and sorbent for initial containment. Use sandbags with PVC to create an underflow dam at this location. The creek is approximately 15 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.
Staging Area:	Onsite: Private driveway off narrow shoulder, larger shoulder to the NW.
Site Safety:	Road traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Narrow shoulder on highway but private drive next to creek. Low banks, concrete culvert, cleared vegetation.
Watercourse:	Creek - Dillenbaugh Creek
Resources at Risk:	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands

Recommended Equipment

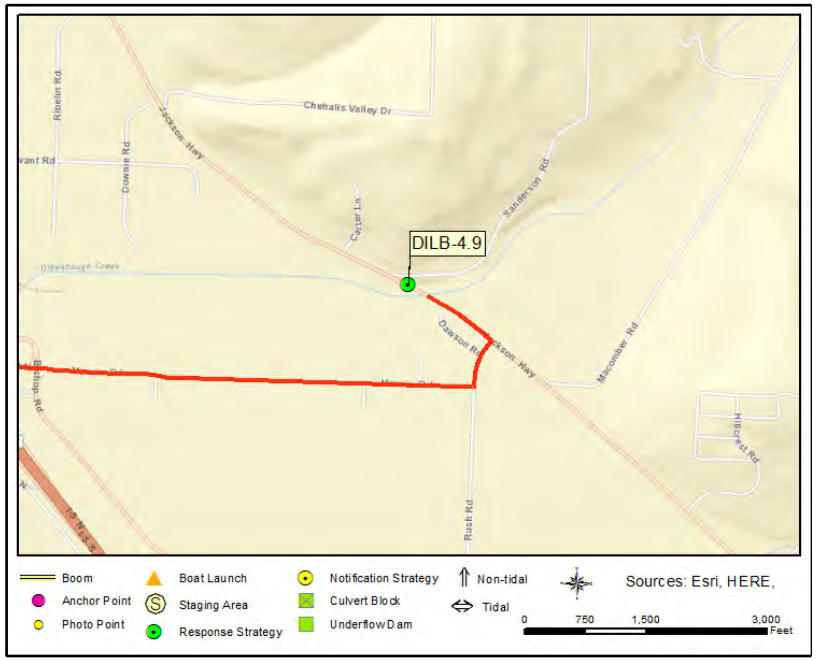
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

4	Laborer
1	Supervisor

Dillenbaugh Creek - Jackson Highway DILB-4.9

DILB-4.9 Photo: On Dillenbaugh Creek right, from driveway, looking E at upstream culvert. Taken early December.



Site Contact

No Information
Unknown :

Nearest Address

2710 Jackson Highway
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia, head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.4 miles)
3. Turn left on Labree Rd N (0.2 miles)
4. Continue on Maurin Rd (1.03 miles)
5. Turn left on Rush Rd (0.12 miles)
6. Turn left on Jackson Hwy (0.18 miles)
7. Finish at 2710 Jackson Highway, 98532, on the left. Use the driveway and shoulder for staging and access.

<< Go Back

Dillenbaugh Creek - Macomber Road DILB-6.1

Position - Location:	46° 38.475', -122° 53.538'	46° 38' 28.5", -122° 53' 32.3"	46.64124, -122.89231	Chehalis

Strategy Objective:	Collection, Underflow Dam : Collect oil moving downstream on Dillenbaugh Creek
Implementation:	Use boom and sorbent for initial containment. Use sandbags with PVC to create an underflow dam at this location. The creek is approximately 15 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.
Staging Area:	Onsite: Alert house residents and use driveway/road shoulder.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Front yard of a house just off roadside. Low banks and little vegetation.
Watercourse:	Creek - Dillenbaugh Creek
Resources at Risk:	Downstream Resources, Salmonids, Waterfowl, Wetlands

Recommended Equipment

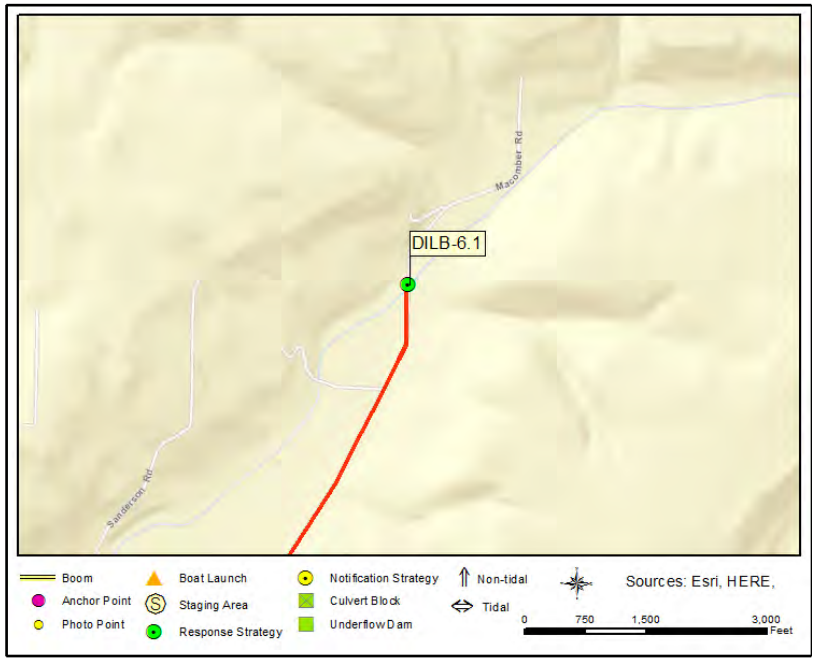
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

4	Laborer
1	Supervisor

Dillenbaugh Creek - Macomber Road DILB-6.1

DILB-6.1 Photo: From Dillenbaugh Creek left, looking NE upstream from road shoulder. Taken early December.



Site Contact

No Information
Unknown :

Nearest Address

344 Macomber Road
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.4 miles)
3. Turn left on Labree Rd N (0.2 miles)
4. Continue on Maurin Rd (1.03 miles)
5. Turn left on Rush Rd (0.12 miles)
6. Turn right on Jackson Hwy (0.17 miles)
7. Turn left on Macomber Rd (1.22 miles)
8. Finish at 344 Macomber Road, 98532, on the right.

Dillenbaugh Creek - Macomber Road DILB-6.2

Position - Location:	46° 38.495', -122° 53.546'	46° 38' 29.7", -122° 53' 32.7"	46.64158, -122.89243	Chehalis

Strategy Objective:	Culvert Block : Collect oil moving downstream on Dillenbaugh Creek
Implementation:	If time allows, install culvert block at this location on east/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 vac-truck or skimmer & storage for collection (if site is collecting oil).
Staging Area:	Onsite: No shoulder on road, use driveway/flat areas next to road.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Small side channel that splits and rejoins Dillenbaugh Creek. Unmaintained vegetation, shallow banks, just off roadside.
Watercourse:	Creek - Side channel of Dillenbaugh Creek
Resources at Risk:	Downstream Resources, Salmonids, Wetlands

Recommended Equipment

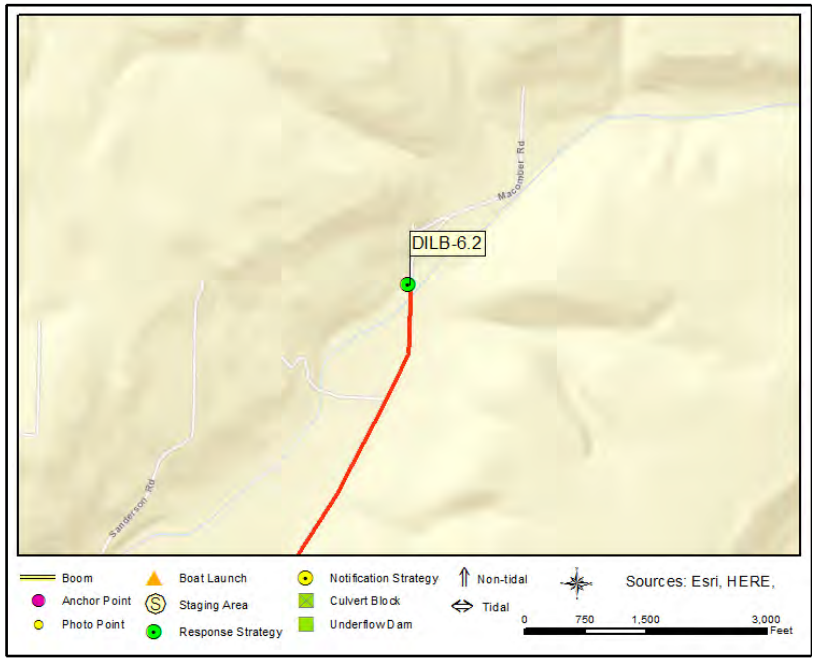
4	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Plastic Sheeting
4	Each	Plywood sheets (4ft x 8ft)
1	Each	Vac Truck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

Recommended Personnel

1	Laborer
1	Supervisor

Dillenbaugh Creek - Macomber Road DILB-6.2

DILB-6.2 Photo: From roadside, looking E upstream at side channel of Dillenbaugh Creek. Taken early December.



Site Contact

No Information
Unknown :

Nearest Address

347 Macomber Rd
Chehalis, WA 98532

Driving Directions

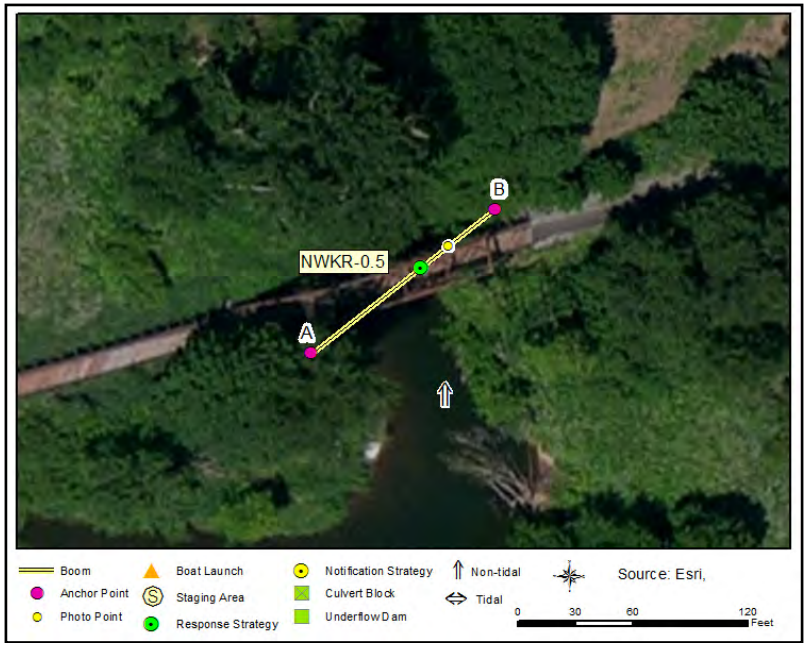
1. From I-5 in Olympia, head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.4 miles)
3. Turn left on Labree Rd N (0.2 miles)
4. Continue on Maurin Rd (1.03 miles)
5. Turn left on Rush Rd (0.12 miles)
6. Turn right on Jackson Hwy (0.17 miles)
7. Turn left on Macomber Rd (1.23 miles)
8. Finish at 347 Macomber Rd, 98532, on the right.

<< Go Back

Newaukum River - Trail Bridge NWKR-0.5

Position - Location:	46° 38.829', -122° 58.549'	46° 38' 49.7", -122° 58' 32.9"	46.64714, -122.97581	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Newaukum River.
Implementation:	Anchor line as close to waterline as possible near A (46.647, -122.976). Bring line under bridge and walk across bridge to river right, 120 ft NE near B (46.6472, -122.9757). Use line and power winch to deploy 200 ft section of boom. Adjust anchor points and angles as needed for conditions. Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river.
Staging Area:	Onsite: Parking area at road/trail intersection.
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Old rail bridge converted to trail. Steep banks with boulders and vegetation. Collection site has lower banks via neighboring field.
Watercourse:	River - Without a Dam - Newaukum River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Resident Fish, Salmonids, Wintering Waterfowl



Recommended Equipment

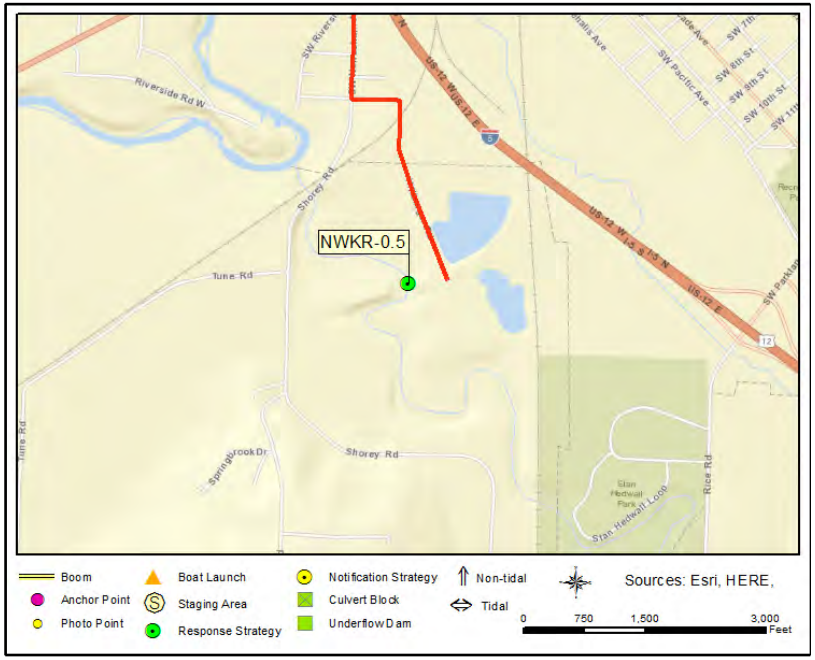
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Line - 3/8” poly line
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

2	Laborer
1	Supervisor

Newaukum River - Trail Bridge NWKR-0.5

NWKR-0.5 Photo: From bridge over Newaukum River, looking NE at river right bank and collection point A. Taken mid-November at 250 cfs/2 ft at Newaukum Chehalis gage.



Site Contact

Washington State Parks and Recreation Commission
Land/Property Contact : General Number
360-902-8844

Nearest Address

962 SW Hillburger Rd
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia head south to exit 77.
2. At exit 77 take ramp on the right to WA-6 W toward Pe Ell/Raymond (0.29 miles)
3. Turn right on WA-6 (State Route 6) (0.02 miles)
4. Bear left (0.02 miles)
5. Turn left on SW Riverside Dr (0.22 miles)
6. Continue on SW Newaukum Ave (0.25 miles)
7. Turn left on SW Sylvenus St (0.12 miles)
8. Turn right on SW Hillburger Rd (0.36 miles)
9. Trail parking lot is just past the trail before the gate. Cut bollards to access trail to the west.

<< Go Back

Newaukum River - Stan Hedwall Park NWKR-1.5

Position - Location:	46° 38.340', -122° 58.051'	46° 38' 20.4", -122° 58' 3.1"	46.63899, -122.96752	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Newaukum River.
Implementation:	Using hand-launch workboat, anchor one end of 400ft length of boom near A (46.6385, -122.9672). Then extend boom ~315 ft NW and secure remaining boom end to shore near B (46.6393, -122.9676). Deploy second 500 ft section of boom between C & D, using same process as A & B. Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Hand-launch. Small pull-off at site. Park with full facilities and paved parking, covered areas. Seasonal RV park.
Site Safety:	Unstable banks. Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	May be flooded in high water. Hand launch from easy slope to river short distance from road. Unstable banks with trees that could fall.
Watercourse:	River - Without a Dam - Newaukum River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Resident Fish, Salmonids, Wintering Waterfowl

Recommended Equipment

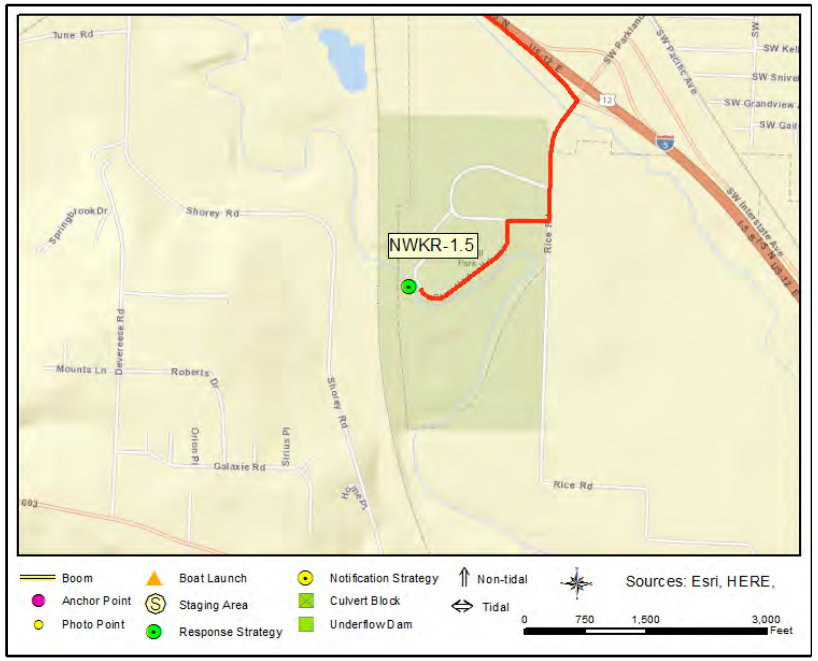
14	Kit	Anchoring System(s) - (anchor, lines, floats)
4	Kit	Anchoring System(s)- Shoreside
900	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Newaukum River - Stan Hedwall Park NWKR-1.5

NWKR-1.5 Photo: From Stan Hedwell Park road on Newaukum River right, looking W at mild slope and hand-launch/collection site. Taken mid-October at 300 cfs at Newaukum Chehalis gage.



Site Contact

City of Chehalis Parks & Recreation
Land/Property Owner : Property owner
1321 South Market Blvd
Chehalis, WA 98532
360-748-0271

Nearest Address

141 Stan Hedwall Loop
Chehalis, WA 98532

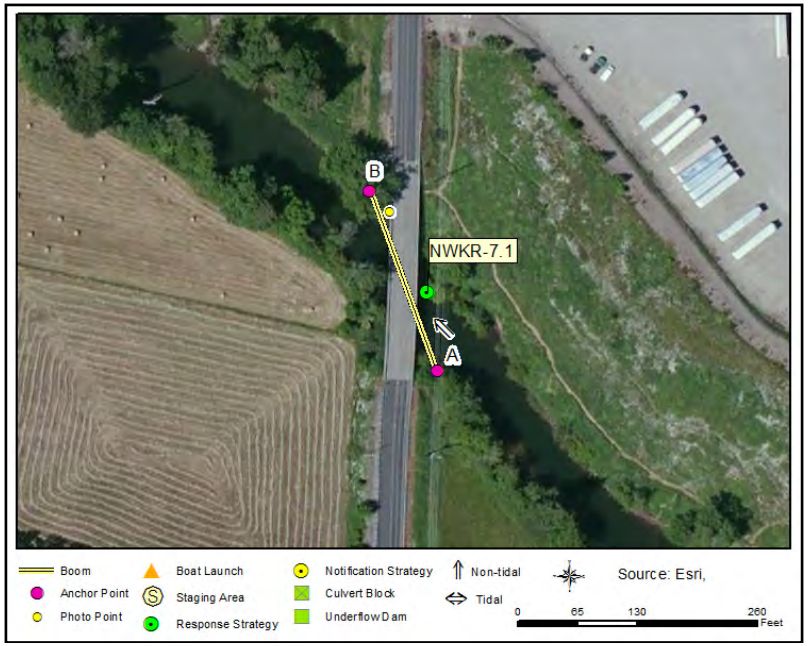
Driving Directions

1. From I-5 in Olympia, head south to exit 76.
2. At exit 76 take ramp to 13th St (0.24 miles)
3. Turn right on Rice Rd (0.3 miles)
4. Turn right on Stan Hedwall Loop (0.1 miles)
5. Turn left to stay on Stan Hedwall Loop (0.32 miles)
6. Finish at 141 Stan Hedwall Loop, 98532, on the left. River is visible from road and there's a small turnout just NW of the site.

Newaukum River - Rush Road Bridge NWKR-7.1

Position - Location:	46° 36.034', -122° 54.483'	46° 36' 2.0", -122° 54' 29.0"	46.60057, -122.90806	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Newaukum River.
Implementation:	Anchor line near A (46.9456, -122.6509) and extend 210 ft N across and under bridge to anchor near B (46.9457, -122.6511). Use line and power winch to deploy 300 ft section of boom. Adjust anchor points and angles as needed for conditions. 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: Parking pull-off just off Rush Rd at trailhead (N bank). Large 24hr truck stop 0.5mi north on Rush.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Unofficial trail from roadside under bridge. Mild vegetation, some steep slopes.
Watercourse:	River - Without a Dam - Newaukum River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Emergent Wetlands, Salmonids, Wintering Waterfowl



Recommended Equipment

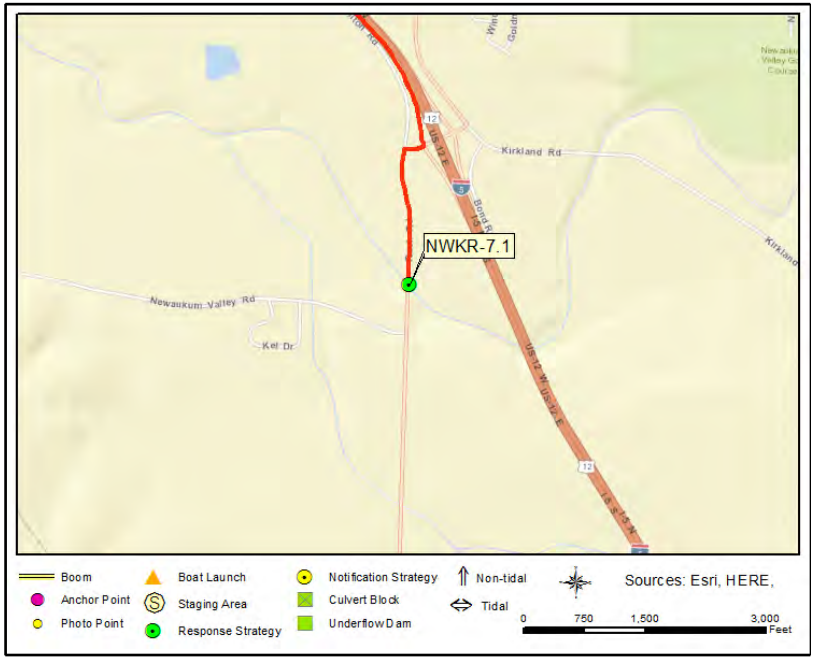
4	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
300	Feet	Line - 3/8" poly line
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Winch - Power Winch

Recommended Personnel

2	Laborer
1	Supervisor

Newaukum River - Rush Road Bridge NWKR-7.1

NWKR-7.1 Photo: From Newaukum River right, looking S and slightly upstream. Taken mid-Nov, 250 cfs/2 ft at Newaukum Centralia gage.



Site Contact

No Information
Unknown :

Nearest Address

1241 Rush Rd
Chehalis, WA 98532

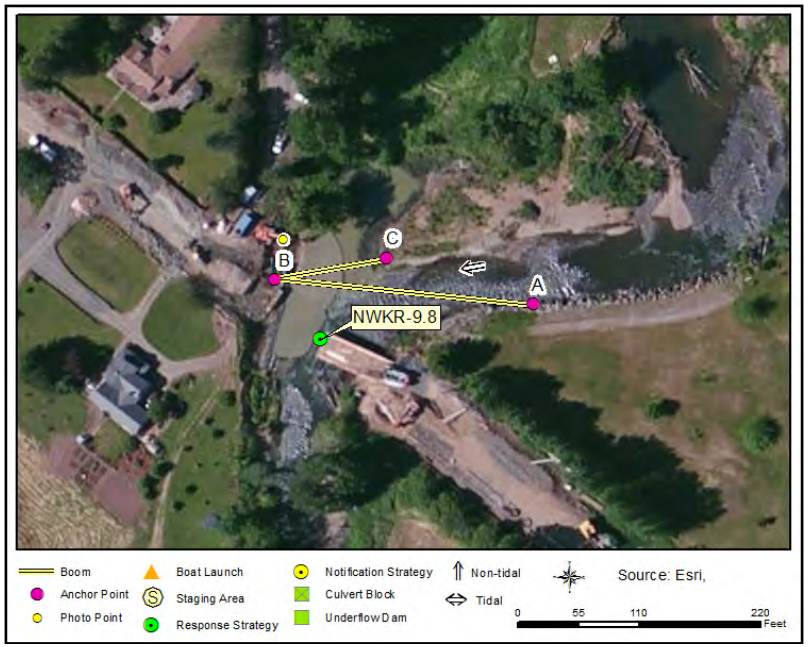
Driving Directions

1. From I-5 in Olympia head south to exit 72.
2. At exit 72 take ramp on the right to Rush Rd (0.23 miles)
3. Turn right on Rush Rd (0.37 miles)
4. After the truck stop, take a left into the small parking area with concrete blocks, just before the bridge.

Newaukum River - Jackson Highway Bridge NWKR-9.8

Position - Location:	46° 36.407', -122° 52.276'	46° 36' 24.4", -122° 52' 16.6"	46.60679, -122.87127	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on the Newaukum River.
Implementation:	Anchor line near A (46.6069, -122.8705) and extend 250 ft W across bridge to anchor near B (46.6069, -122.8715). Use line and power winch to deploy 300 ft section of boom. Extend second 100 ft section of boom between B and C (46.607, -122.8711) to create collection pocket and exclude oil from side channel. Adjust anchor points and angles as needed for conditions. 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: Cul-de-sac next to strategy off Taylor Road with few/no residents.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	New bridge with rip-rap banks and cul-de-sac on NW bank. Private property in area. Slow water and side channel on outside bend.
Watercourse:	River - Without a Dam - Newaukum River
Resources at Risk:	Downstream Resources, Resident Fish, Salmonids, Waterfowl



Recommended Equipment

6	Kit	Anchoring System(s) - (anchor, lines, floats)
3	Kit	Anchoring System(s)- Shoreside
400	Feet	Boom - B3 (River Boom) or equivalent
300	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

2	Laborer
1	Supervisor

Newaukum River - Jackson Highway Bridge NWKR-9.8

NWKR-9.8 Photo: From Newaukum River right, looking SE along Jackson Highway Bridge. Taken early Dec, 600 cfs/3.1 ft at Newaukum Chehalis gage.

Site Contact

No Information
Unknown :

Nearest Address

126 Taylor Rd
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia, head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.4 miles)
3. Turn left on Labree Rd N (0.2 miles)
4. Turn right on Bishop Rd (2.21 miles)
5. Turn right on Jackson Hwy (1.09 miles)
6. Turn left on Taylor Rd (0.09 miles)
7. Turn right at the hairpin turn and proceed to the cul-de-sac at the end of the road.

<< Go Back

Prairie Creek - Maple Lane School PRAC-0.8

Position - Location:	46° 47.443', -123° 1.828'	46° 47' 26.6", -123° 1' 49.7"	46.79072, -123.03046	Rochester

Strategy Objective:	Collection : Remove oil moving downstream on Prairie Creek
Implementation:	Anchor 100 ft section of hard boom across upstream (east) side of bridge. Back hard boom with sorbent. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Correctional facility. Some space outside fence at site, full faciliites inside.
Site Safety:	Slips, Trips, Falls; Water Hazard; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Footbridge over small creek. Behind correctional facility, need to notify for access. Drivable to site, bridge not rated for heavy loads.
Watercourse:	Creek - Prairie Creek
Resources at Risk:	Downstream Resources, Salmonids, Waterfowl, Wetlands

Recommended Equipment

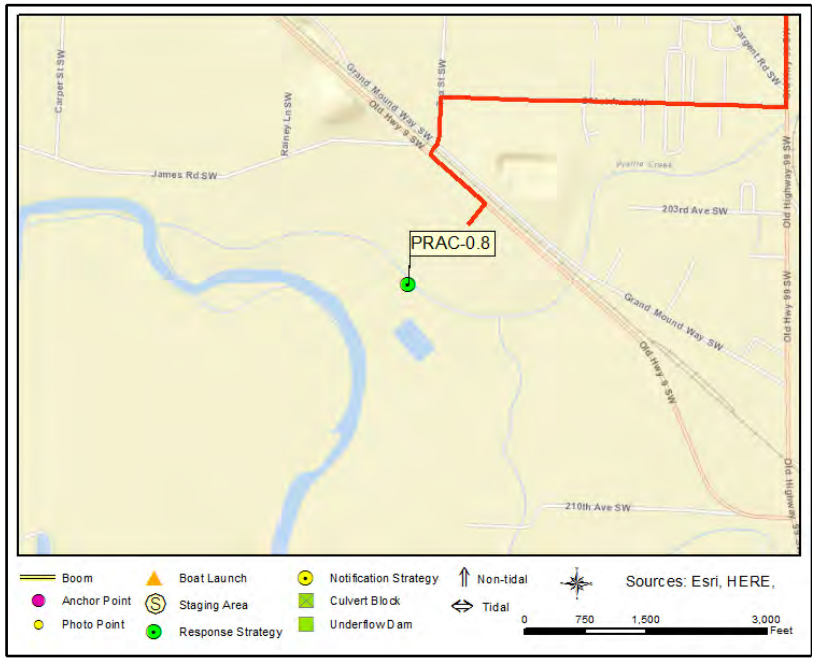
2	Each	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

2	Laborer
1	Supervisor

Prairie Creek - Maple Lane School PRAC-0.8

PRAC-0.8 Photo: From Prairie Creek right, looking S on upstream end of pedestrian bridge. Taken early December 2700 cfs/6.2 ft at Grand Mound gage.



Site Contact

WA DOC Maple Lane School
Pre-Notification Required : Security/Owner
20311 Old Highway 9 SW
Centralia, WA 98531
360-359-4100

Nearest Address

20267 Old Hwy 9 SW
Rochester, WA 98579

Driving Directions

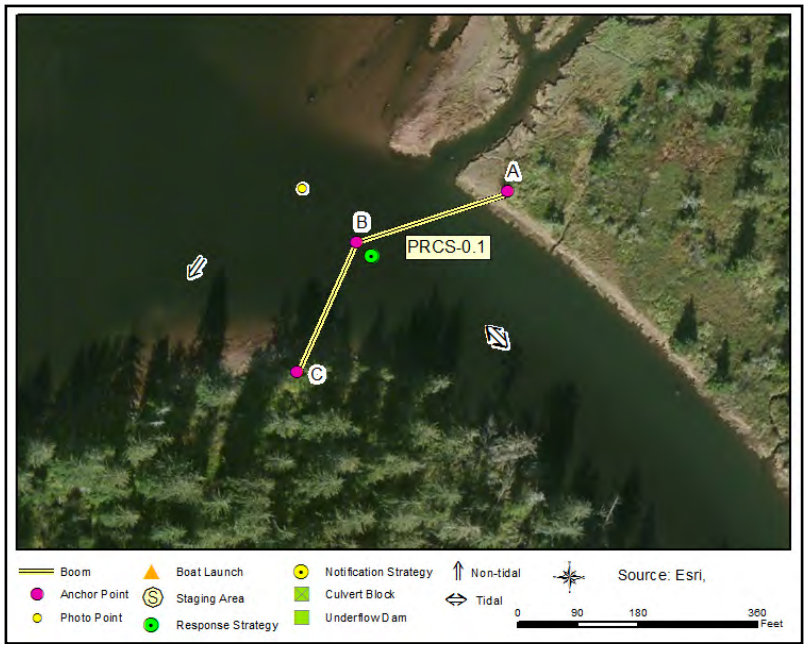
1. From I-5 in Olympia head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (0.2 miles)
4. Turn left on Old Hwy 99 SW (0.36 miles)
5. Turn right on 201st Ave SW (0.81 miles)
6. Turn left on Tea St SW (0.14 miles)
7. Turn left on Old Hwy 9 SW (0.13 miles)
8. Turn right into Maple Lane School. Call ahead for access.

<< Go Back

Preacher's Slough Downstream Mouth PRCS-0.1

Position - Location:	46° 56.921', -123° 42.990'	46° 56' 55.3", -123° 42' 59.4"	46.94869, -123.71650	Montesano

Strategy Objective:	Exclusion : Prevent oil from entering Preacher's Slough during incoming or outgoing tide.
Implementation:	Using workboat, tow 500ft length of boom to strategy location at mouth of Preacher's Slough on Chehalis River. Avoid obstructions and anchor boom end near A (46.949, -123.7157). Extend boom ~450 ft SW and anchor end near C (46.9482, -123.7169). Pull tension near boom center point, anchoring it at B (46.9488, -123.7166). Use anchor posts or trees to secure boom to river banks. Use additional anchoring systems to keep boom secure in river. Back hard boom with 500ft sorbent boom for added protection.
Staging Area:	Remote: Stage at Blue Slough Boat Launch parking lot (SA-BLUS-1.1). Use boat ramp at same location (BL-BLUS-1.1).
Site Safety:	Slips, Trips, Falls; Water Hazard; Exposed & Submerged Pilings; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Best implemented at slack tide. Land access to site is not possible. Ensure boom ends at A and C are placed above river's high water mark along shore.
Watercourse:	Slough - Preacher's Slough mouth at Chehahlis River
Resources at Risk:	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands



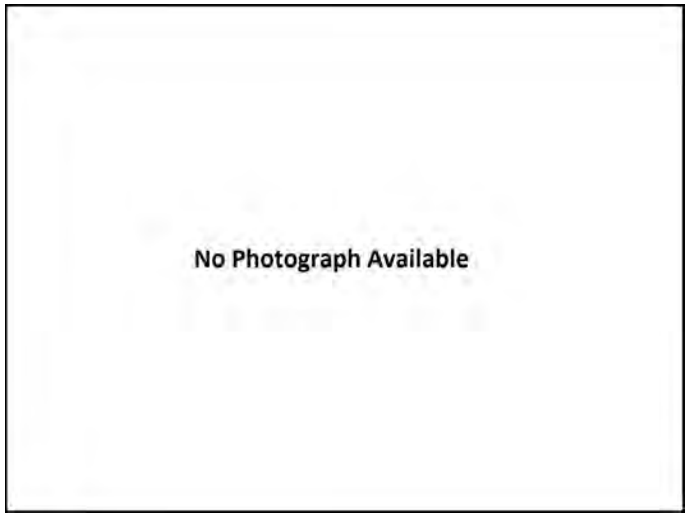
Recommended Equipment

10	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
500	Feet	Boom - Sorbent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
1	Each	Workboat(s) - of adequate size for type and amount of boom

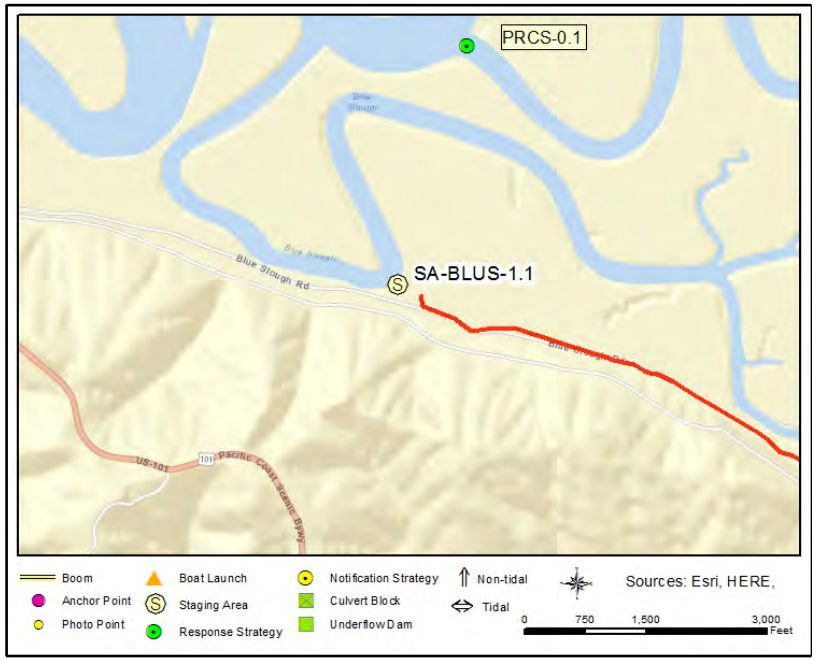
Recommended Personnel

1	Boat Operator
4	Laborer
1	Supervisor

Preacher's Slough Downstream Mouth PRCS-0.1



PRCS-0.1 Photo: No Photograph Available



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Blue Slough Rd
Montesano, WA 98563

Driving Directions

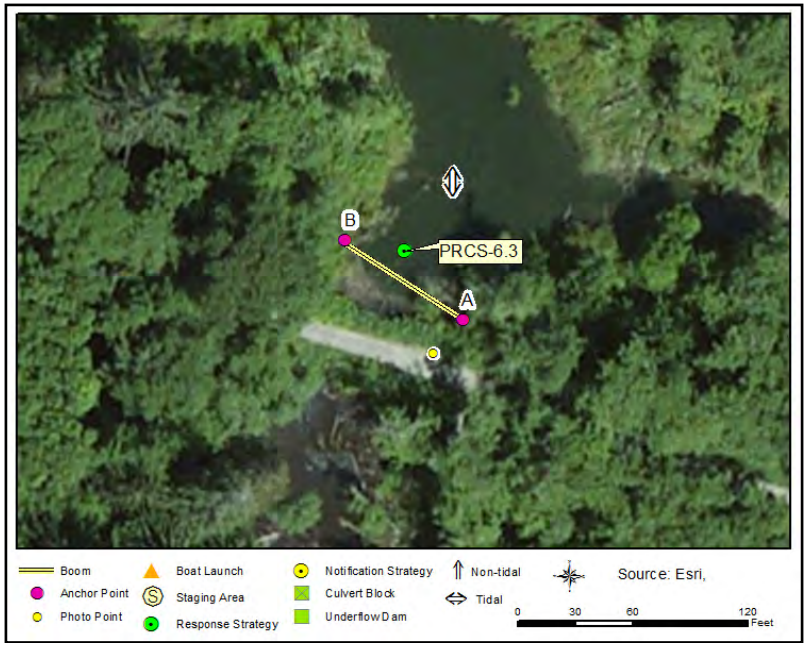
1. From I-5 take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen 5.9 mi.
3. Keep left onto WA-8 W for 21.0 mi.
4. Road name changes to US-12 W, stay straight for10.0 mi.
5. Take ramp right toward Raymond / Montesano.
6. At stop sign, turn left onto S Main St, then keep straight onto WA-107 / S Main St.
7. In 5.0 mi, bear right onto Blue Slough Rd.
8. In 2.4 mi turn right into the parking lot.

<< Go Back

Bridge over Preacher's Slough PRCS-6.3

Position - Location:	46° 56.743', -123° 39.060'	46° 56' 44.6", -123° 39' 3.6"	46.94572, -123.65099	Montesano

Strategy Objective:	Collection, Exclusion : Prevent oil from entering Preacher's Slough during incoming or outgoing tide. Collect any oil that accumulates
Implementation:	Anchor 100-ft section of boom near A (46.9456, -123.6509) and extend across northern side of bridge to anchor near B (46.9457, -123.6511), angling to create a collection pocket. Line with sorbent between boom and bridge. Repeat with second 100-ft section of sorbent across downstream edge of bridge. Adjust anchor points and angles as needed for conditions. 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 Preacher's Slough Boat Launch parking lot (SA-CHER-10.3L).
Site Safety:	Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Bridge is not rated for heavy loads. Best implemented at slack tide. Ensure shore anchors are placed above high water mark.
Watercourse:	Slough - Preacher's Slough just off Chehalis River
Resources at Risk:	Marsh, Salmonids, State Protected Area/Lands, Waterfowl, Wetlands



Recommended Equipment

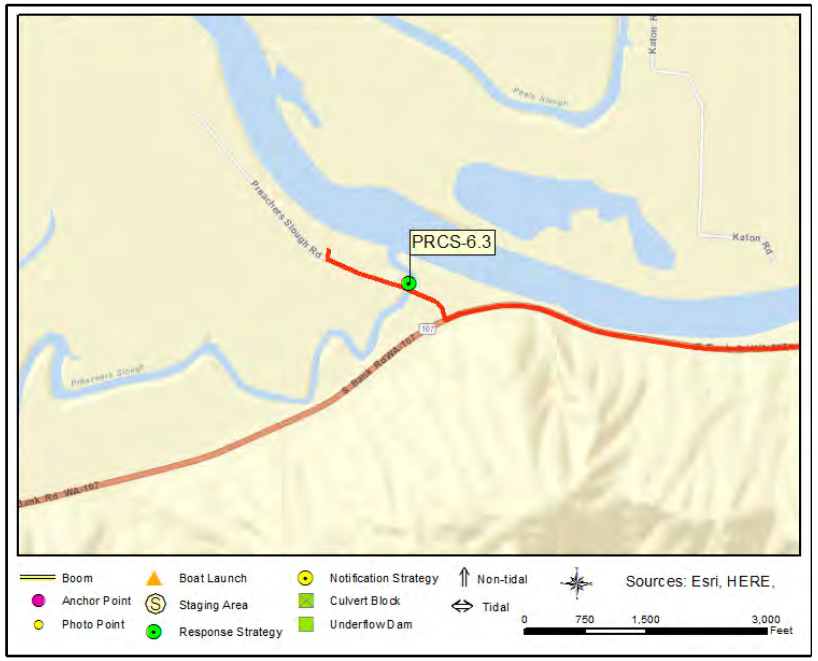
1	Kit	Anchoring System(s) - (anchor, lines, floats)
4	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

2	Laborer
1	Supervisor

Bridge over Preacher's Slough PRCS-6.3

PRCS-6.3 Photo: Looking NW towards Chehalis River on Preacher's Slough, from east end of bridge. Taken at mid-low tide (3ft at Montesano gage) 10/14/14.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia, head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles
3. Continue on WA-8 toward Montesano/Aberdeen
4. Continue on US-12
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond
6. Turn left on S Main St
7. Continue on WA-107 (State Route 107)
8. Turn right on Preachers Slough Rd
9. The boat launch parking area is 0.5 miles down on the right.

Salzer Creek - Alvord Road SALZ-2.4

Position - Location:	46° 42.077', -122° 56.692'	46° 42' 4.6", -122° 56' 41.5"	46.70129, -122.94487	Centralia

Strategy Objective: Collection, Underflow Dam : Collect oil moving downstream on Salzer Creek

Implementation: Use boom and sorbent on both sides of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam at this location. The creek is approximately 10 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Onsite: Speak with landowners in area or use business parking in Centralia.

Site Safety: Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Farmland, shallow banks, no road shoulder.

Watercourse: Creek - Salzer Creek

Resources at Risk: Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands

Recommended Equipment

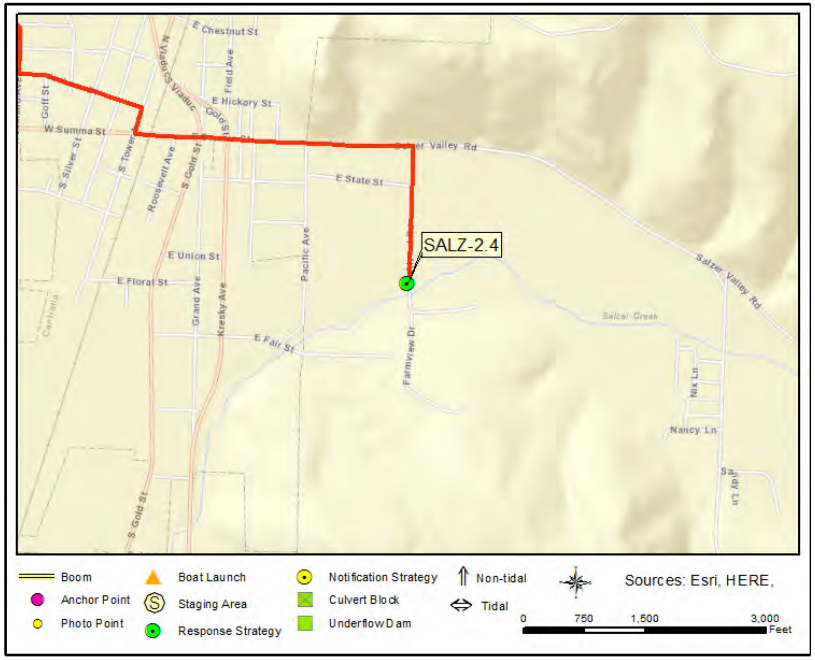
4	Kit	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

4	Laborer
1	Supervisor

Salzer Creek - Alvord Road SALZ-2.4

SALZ-2.4 Photo: From Salzer Creek right, upstream side of Alvord, looking S across culvert. Taken in early December.



Site Contact

No Information
Unknown :

Nearest Address

167 Alvord Road
Centralia, WA 98531

Driving Directions

1. From I-5 in Olympia, head south to exit 81.
2. At exit 81 take ramp on the right to WA-507 N toward Mellen St (0.23 miles)
3. Turn left on WA-507 (Mellen St) (0.5 miles)
4. Turn right on Woodland Ave (0.23 miles)
5. Turn left on Jackson St (0.3 miles)
6. Turn right on S Tower Ave (0.06 miles)
7. Make sharp left on E Summa St (0.4 miles)
8. Continue on Salzer Valley Rd (0.25 miles)
9. Turn right on Alvord Rd (0.33 miles)
10. Finish at 167 Alvord Road, 98531, on the bridge.

<< Go Back

Salzer Creek - Proffitt Road SALZ-4.4

Position - Location:	46° 41.471', -122° 54.494'	46° 41' 28.3", -122° 54' 29.6"	46.69119, -122.90823	Centralia

Strategy Objective:	Collection, Underflow Dam : Collect oil moving downstream on Salzer creek
Implementation:	Use boom and sorbent on both sides of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam at this location. The creek is approximately 10 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.
Staging Area:	Onsite: No road shoulder. Can drive onto fields to access creek.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Culvert under paved road, farmland on 3 sides. Residence nearby.
Watercourse:	Creek - Salzer Creek
Resources at Risk:	Downstream Resources, Riparian Habitat, Salmonids, Waterfowl, Wetlands

Recommended Equipment

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

Recommended Personnel

4	Laborer
1	Supervisor

Salzer Creek - Proffitt Road SALZ-4.4

SALZ-4.4 Photo: From Salzer Creek right, upstream side of Proffitt, looking S across culvert. Taken in early December.

Site Contact

No Information
Unknown :

Nearest Address

113 Proffitt Road
Centralia, WA 98531

Driving Directions

1. From I-5 in Olympia, head south to exit 81.
2. At exit 81 take ramp on the right to WA-507 N toward Mellen St (0.23 miles)
3. Turn left on WA-507 (Mellen St) (0.5 miles)
4. Turn right on Woodland Ave (0.23 miles)
5. Turn left on Jackson St (0.3 miles)
6. Turn right on S Tower Ave (0.06 miles)
7. Make sharp left on E Summa St (0.4 miles)
8. Continue on Salzer Valley Rd (2.29 miles)
9. Turn right on Proffitt Rd (0.06 miles)
10. Finish at 113 Proffitt Road, 98531, on the left

<< Go Back

Scatter Creek - James Road Bridge SCTT-4.7

Position - Location:	46° 48.426', -123° 4.338'	46° 48' 25.6", -123° 4' 20.3"	46.80710, -123.07230	Rochester

Strategy Objective:	Collection, Sorbent : Remove oil moving downstream on Scatter Creek
Implementation:	In low water, drop sorbent boom off bridge and anchor to either side of creek. When creek is flowing, anchor hard boom and back with sorbent. Use skimmer/vac truck if oil collects. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Shoulder pull-off nearby. Use driveway or speak with residents.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Creek runs dry most of the year but can flow after rainstorms. Gentle slopes from nearby yards, in high water adjust location accordingly.
Watercourse:	Creek - Scatter Creek - usually dry, call for local conditions
Resources at Risk:	Downstream Resources, Salmonids, Waterfowl

Recommended Equipment

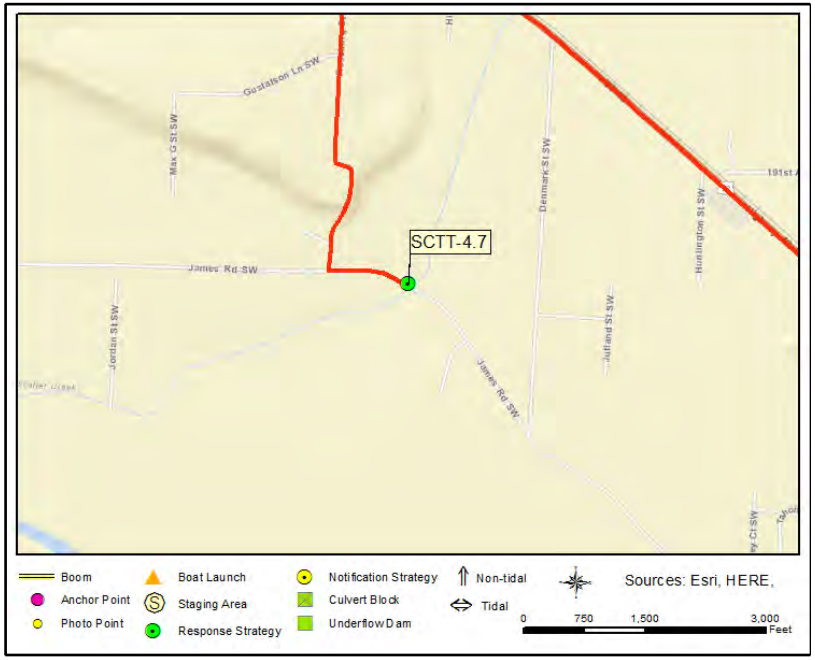
4	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

1	Laborer
1	Supervisor

Scatter Creek - James Road Bridge SCTT-4.7

SCTT-4.7 Photo: On Scatter Creek left while creek is dry. Looking NW from shoulder. Taken late Nov. in lower than average water.



Site Contact

Chehalis Tribe Department of Natural Resources
Call for Local Conditions : Property owner

Oakville, WA 98568
360-273-5911

Nearest Address

8990 James Rd SW
Rochester, WA 98579

Driving Directions

1. From I-5 in Olympia head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (3.65 miles)
4. Make sharp left on Roseburg St SW (0.94 miles)
5. Turn left on James Rd SW (0.21 miles)
6. Finish at 8990 James Rd SW, 98579, on the left

<< Go Back

Scatter Creek - Violet Prairie Farm SCTT-12.1

Position - Location:	46° 49.666', -122° 57.876'	46° 49' 40.0", -122° 57' 52.6"	46.82777, -122.96460	Tenino

Strategy Objective:	Collection : Remove oil moving downstream on Scatter Creek
Implementation:	Using inflatable raft (high water) or plywood and waders (low water), anchor 100 ft section of boom near A (46.9456, -122.6509) and extend 75 ft N to anchor near B (46.8278, -122.9645). Back with sorbent boom in low water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Gravel lot at barn, natural area at site. Need 4WD vehicle to drive to site, bolt cutters for barbed wire fence.
Site Safety:	Barbed Wire; Farm Workers & Equipment; Slips, Trips, Falls; Water Hazard; Muddy Shorelines; Vegetation
Field Notes:	Tractor road from barn. Barbed wire fence 50 ft from site. Can hand-launch raft from bank in high water, creek will shrink in summer to a yard width.
Watercourse:	Creek - Scatter Creek - extreme seasonal variations
Resources at Risk:	Downstream Resources, Resident Fish, Salmonids, Special Protection Area, Waterfowl

Recommended Equipment

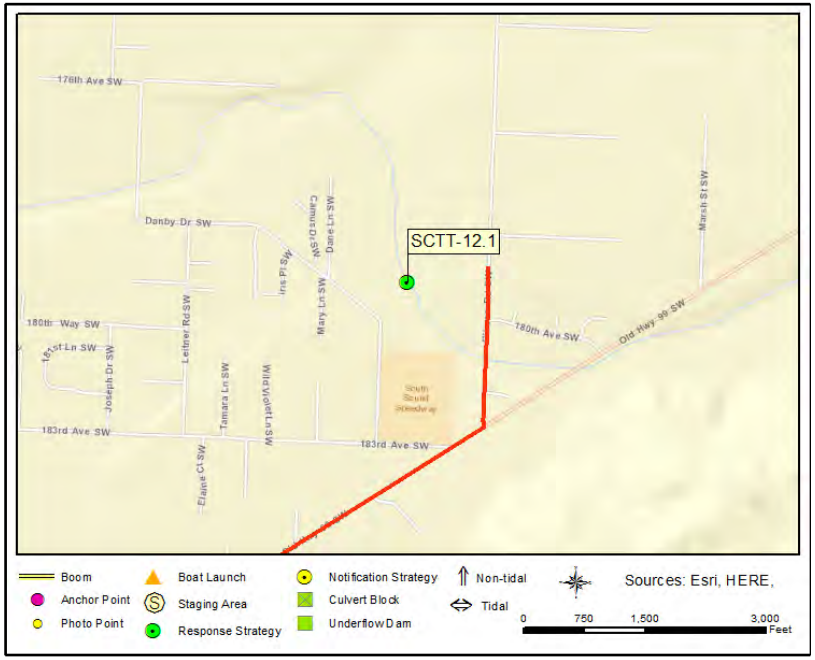
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
2	Each	Plywood sheets (4ft x 8ft)
1	Each	Skimmer (appropriately sized) with Portable Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
1	Laborer
1	Supervisor

Scatter Creek - Violet Prairie Farm SCTT-12.1

SCTT-12.1 Photo: From Scatter Creek right, 20 ft from fence & gate. Taken early December, 1.5 knots.



Site Contact

Center for Natural Lands Management - South Puget Sound Prairies
Land/Property Owner : Property Owner
120 Union Avenue, SE #215
Olympia, WA 98501
360-451-6696

Nearest Address

17871 Gibson Rd SW
Tenino, WA 98589

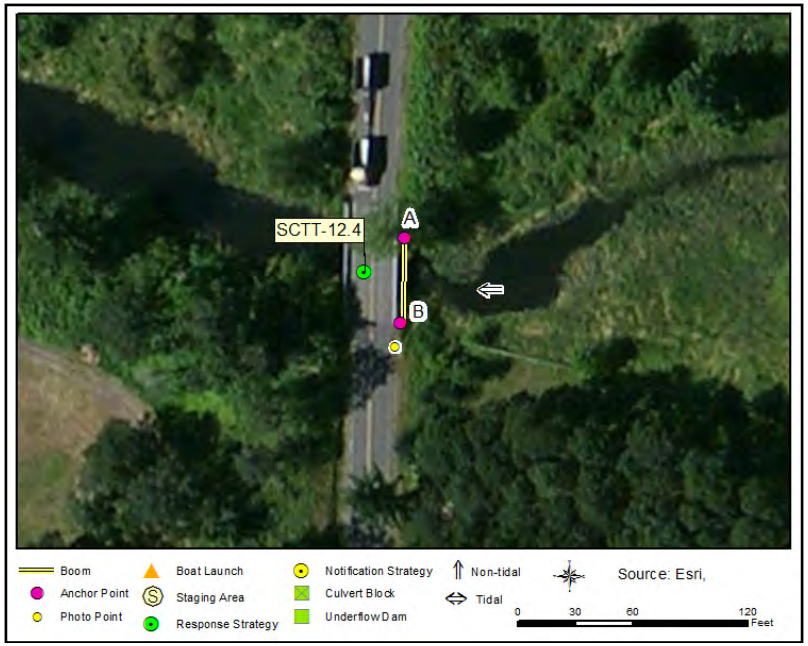
Driving Directions

1. From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Make sharp left on US-12 (Hwy 99 SW) (0.12 miles)
4. Continue on Old Hwy 99 SW (2.54 miles)
5. Turn left on Gibson Rd SW (0.38 miles)
6. Turn left into parking for Violet Prairie Farm.

Scatter Creek - Gibson Road Bridge SCTT-12.4

Position - Location:	46° 49.502', -122° 57.639'	46° 49' 30.1", -122° 57' 38.4"	46.82504, -122.96066	Tenino

Strategy Objective:	Collection : Remove oil moving downstream on Scatter Creek
Implementation:	Anchor line as far upstream as possible near A (46.8251, -122.9606) and extend 75 ft S across bridge to anchor near B (46.825, -122.9606). Use line and power winch to deploy 100 ft section of boom. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Small shoulder on road at site. Cul-de-sac 300 ft south or use Violet Prairie site (SCTT-12.1).
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Wide slow water with vegetation. Shoulder space for truck on SE side of bridge.
Watercourse:	Creek - Scatter Creek
Resources at Risk:	Downstream Resources, Freshwater Wildlife, Resident Fish, Salmonids, Wetlands



Recommended Equipment

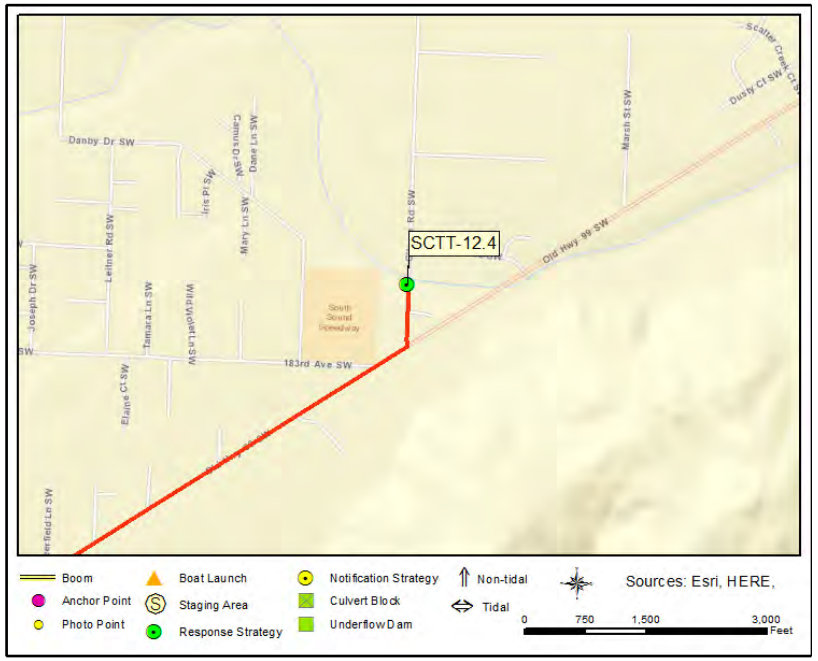
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

1	Laborer
1	Supervisor

Scatter Creek - Gibson Road Bridge SCTT-12.4

SCTT-12.4 Photo: On Scatter Creek left, from shoulder, looking N. Taken early December in high water, speed 1 knot.



Site Contact

No Information
Unknown :

Nearest Address

18134 Gibson Rd SW
Tenino, WA 98589

Driving Directions

1. From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Make sharp left on US-12 (Hwy 99 SW) (0.12 miles)
4. Continue on Old Hwy 99 SW (2.54 miles)
5. Turn left on Gibson Rd SW (0.14 miles)
6. Stage in cul-de-sac at 181st Ct SW, on shoulder at bridge, or continue straight to Violet Prairie farm0.2 miles north on the left.

South Hanaford Creek SHNFC-0.1

Position - Location:	46° 45.532', -122° 54.055'	46° 45' 31.9", -122° 54' 3.3"	46.75886, -122.90092	Centralia

Strategy Objective: Underflow Dam : Collect oil moving downstream on South Hanaford Creek

Implementation: Use boom and sorbent for initial containment. Use sandbags with PVC to create an underflow dam on the downstream side of the bridge. The slough is approximately 10 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Remote: Very little space here. Use Schaefer Park 2.5 mi SW (SA-SKOO-4.5)

Site Safety: Road traffic. Overgrown vegetation. Slips, Trips, Falls; Water Hazard.

Field Notes: Very small shoulder on roadside. Small pull-off 200 ft NE at corner.

Watercourse: Creek - South Hanaford Creek

Resources at Risk: Downstream Resources, Riparian Habitat, Salmonids, Waterfowl

Recommended Equipment

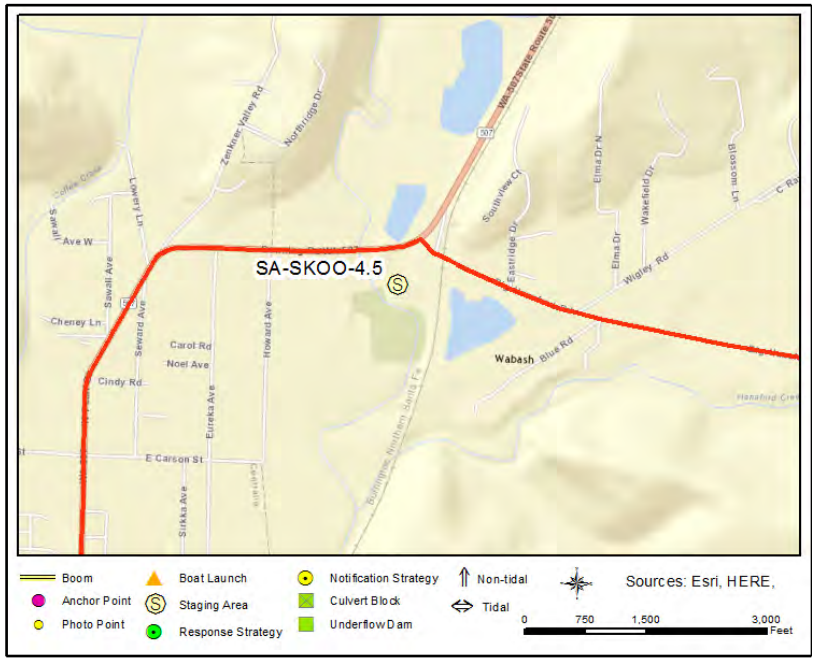
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
	Assort	Equipment (shovels, pickaxes, tamper bars, sledge hammers)
50	Assort	Fill material (sand, earth, gravel, sandbags)
10	Each	Pipe(s), PVC (8 inch x 8ft)
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

4	Laborer
1	Supervisor

South Hanaford Creek SHNFC-0.1

SHNFC-0.1 Photo: Looking SW from creek right at roadside. Taken early Dec.



Site Contact

No Information
Unknown :

Nearest Address

106 Big Hanaford Rd
Centralia, WA 98531

Driving Directions

Directions to Schaefer Park staging area:
1. From 1-5 in Olympia headS towards exit 82.
2. At exit 82 take ramp on the r ight to Harrison Ave toward Factory Outlet Way (0.26 miles)
3. At fork keep right (0.03 miles)
4. Bear right on Harrison Ave (0.08 miles)
5. Turn right on Belmont Ave (0.47 miles)
6. Turn right on W Reynolds Ave (1.23 miles)
7. Turn left on WA-507 (N Pearl St) (1.88 miles)
8. Turn right on Big Hanaford Rd (0.03 miles)
9. Take the next right into Schaefer Park.

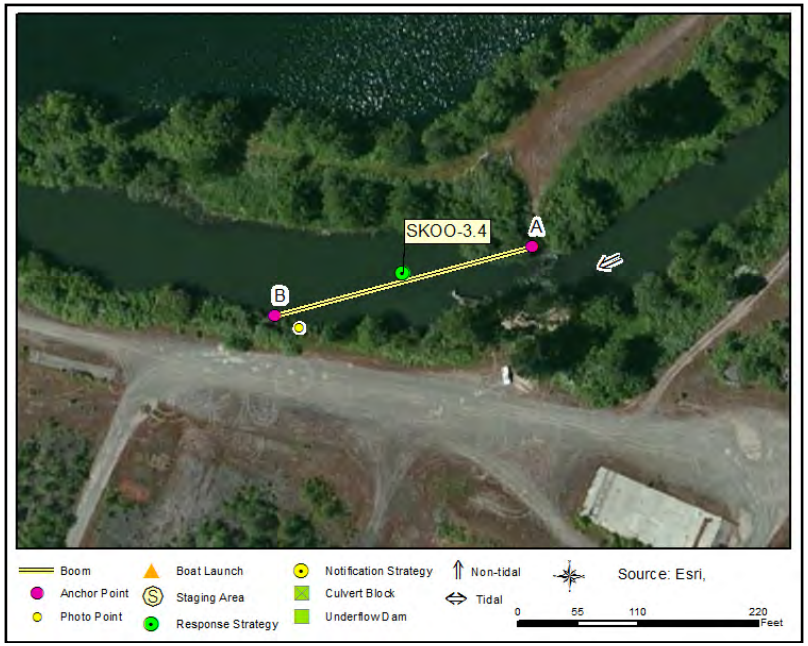
.

Directions to site from staging area:
1. Turn right to head east on Big Hanaford Rd (2.1 mi)
2. Site is 75 ft SW of intersection with Teitzel Rd. Small shoulder area at that intersection.

Skookumchuck River Industrial Site SKOO-3.4

Position - Location:	46° 44.431', -122° 56.707'	46° 44' 25.9", -122° 56' 42.4"	46.74051, -122.94511	Centralia

Strategy Objective:	Collection : Collect oil moving downstream on the Skookumchuck River.
Implementation:	Using hand-launch boat, anchor 300-ft section of boom near A (46.7406, -122.9447) and extend SW ~250 ft to anchor near B (46.7404, -122.9456). Adjust anchor points and angles as needed for conditions. 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: Large empty parking area onsite. Hand-launch from bank or use Fort Borst (BL-CHER-66.7R)
Site Safety:	Industrial Equipment. Rail traffic.Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Abandoned industrial area. Low bank with some vegetation. Swirling eddy.
Watercourse:	River - Below a Dam - Skookumchuck River
Resources at Risk:	City Park, Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl (Wintering)



Recommended Equipment

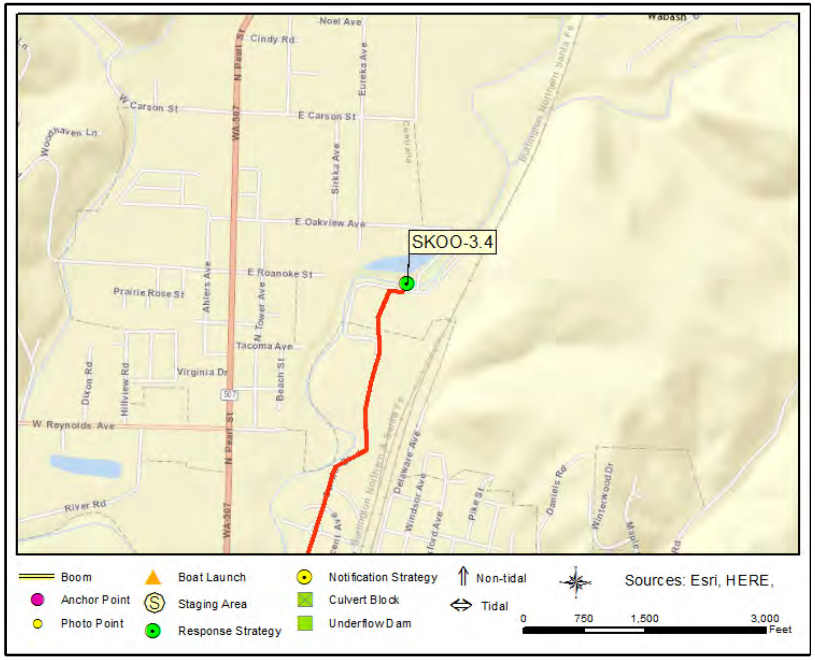
5	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (hand-launch)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Skookumchuck River Industrial Site SKOO-3.4

SKOO-3.4 Photo: Bankside on Skookumchuck River left, looking NE upstream. Taken early Dec at 350 cfs/6.3 ft at Bucoda gage.



Site Contact

No Information
Unknown :

Nearest Address

1956 Central Blvd
Centralia, WA 98531

Driving Directions

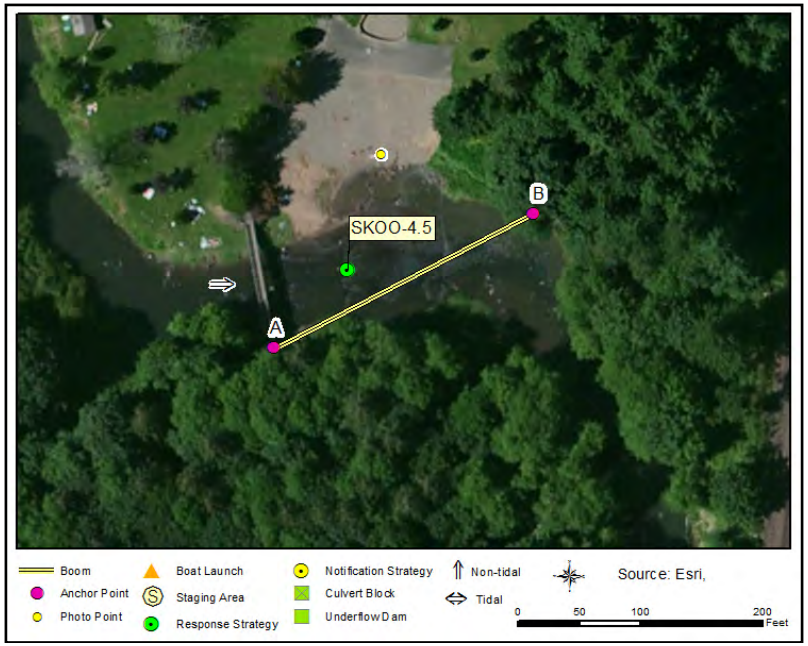
1. From Olympia, go south on I-5 toward exit 82.
2. At exit 82 take ramp on the right to Harrison Ave toward Factory Outlet Way (0.26 miles)
3. At fork keep left (0.02 miles)
4. Turn left on Harrison Ave (0.56 miles)
5. Turn left on W 1st St (0.86 miles)
6. Bear left on B St (0.5 miles)
7. Bear right on Kearney St (0.04 miles)
8. Turn left on Central Blvd (0.57 miles)
9. Alert security at lumber mill of presence. Continue straight on dirt/gravel road for 0.5 miles to gravel lot.

<< Go Back

Schaefer Park SKOO-4.5

Position - Location:	46° 45.096', -122° 56.290'	46° 45' 5.8", -122° 56' 17.4"	46.75161, -122.93817	Centralia

Strategy Objective:	Collection : Collect oil moving downstream on Skookumchuck River.
Implementation:	Stage boom along N bank. Anchor end of 300-ft section of boom near B (46.7518, -122.9376). Attach 100-ft line to other end of boom and toss to pedestrian bridge. Walk across bridge and anchor at A (46.7514, -122.9384). Use power winch to deploy boom. Adjust anchor points and angles as needed for conditions. 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: Hand-launch if needed. County park with facilities and room for staging.
Site Safety:	Public park. Rail traffic nearby. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Could hand-launch if needed, paved trail to mud/grass gradual slope. Eddy on river left. Ped bridge. County park with facilities.
Watercourse:	River - Below a Dam - Skookumchuck River
Resources at Risk:	Downstream Resources, Harlequin Ducks, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

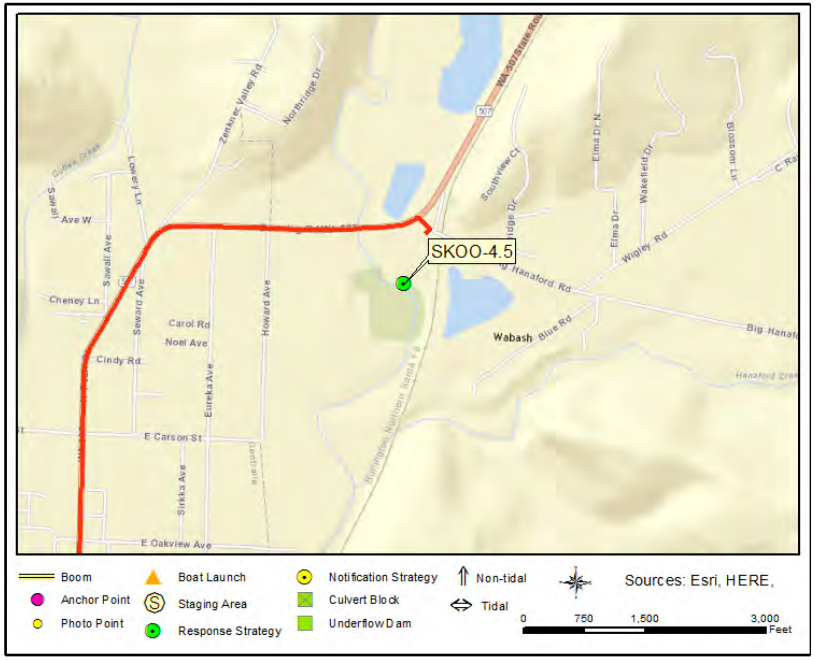
5	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
300	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Line - 3/8" poly line
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

2	Laborer
1	Supervisor

Schaefer Park SKOO-4.5

SKOO-4.5 Photo: Bankside on Skookumchuck River left, looking SW upstream at pedestrian bridge and B. Taken early Dec at 350 cfs/6.3 ft at Bucoda gage.



Site Contact

Lewis County
Land/Property Owner : Property Owner
351 NW North St
Chehalis, WA 98532
360-740-1192

Nearest Address

106 Big Hanford Rd
Centralia, WA 98531

Driving Directions

1. From I-5 in Olympia, head south to exit 82.
2. At exit 82 take ramp on the right to Harrison Ave toward Factory Outlet Way (0.26 miles)
3. At fork keep right (0.03 miles)
4. Bear right on Harrison Ave (0.08 miles)
5. Turn right on Belmont Ave (0.47 miles)
6. Turn right on W Reynolds Ave (1.23 miles)
7. Turn left on WA-507 (N Pearl St) (1.88 miles)
8. Turn right on Big Hanaford Rd (0.03 miles)
9. Take the next right into Schaefer Park. Cut bollards to trail and follow south to beach.

<< Go Back

Stearns Creek at Pleasant Valley Road STERC-3.8

Position - Location:	46° 35.786', -123° .188'	46° 35' 47.2", -123° 0' 11.3"	46.59643, -123.00313	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on Stearns Creek
Implementation:	Stage boom along E bank. Anchor end of 100-ft section of boom near A (46.5963, -123.0031). Attach 100-ft line to other end of boom and toss to bridge. Walk across bridge and anchor near B (46.5964,-123.0032). Use power winch to deploy boom. Line with sorbent. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: Road shoulder in area, narrow space to pull off.
Site Safety:	Slips, trips, falls; Road traffic; Water hazard; Overgrown vegetation; Barbed wire fence
Field Notes:	Steep banks, in-water debris, farm animals nearby.
Watercourse:	Creek - Stearns Creek
Resources at Risk:	Downstream Resources, Public Recreation Site/Area, Salmonids, Waterfowl, Wetlands

Recommended Equipment

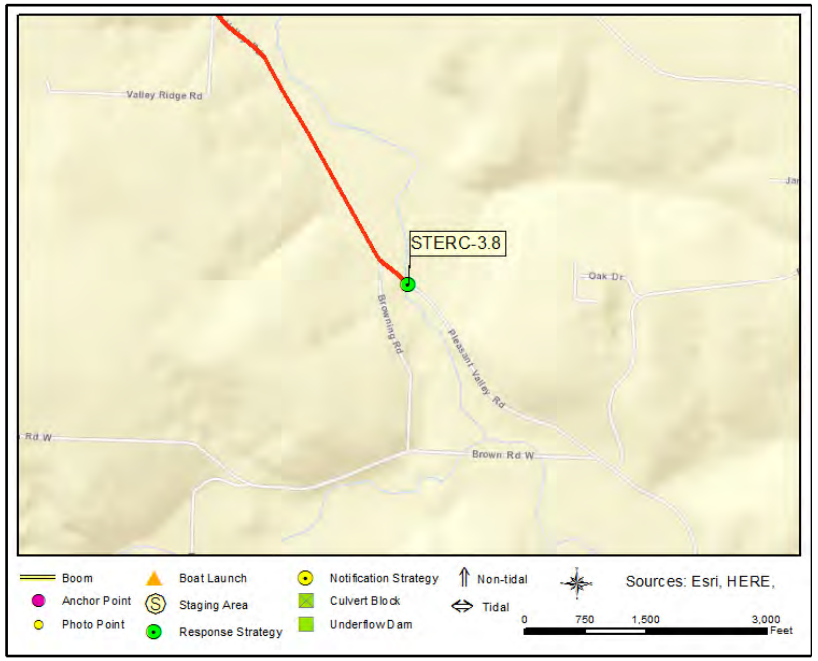
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
100	Feet	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Winch - Power Winch

Recommended Personnel

1	Laborer
1	Supervisor

Stearns Creek at Pleasant Valley Road STERC-3.8

STERC-3.8 Photo: From Stearns Creek left looking N downstream at anchor point B. Underneath Pleasant Valley Rd Bridge. Taken mid-April in low water.



Site Contact

No Information
Unknown :

Nearest Address

1190 Pleasant Valley Rd
Chehalis, WA 98532

Driving Directions

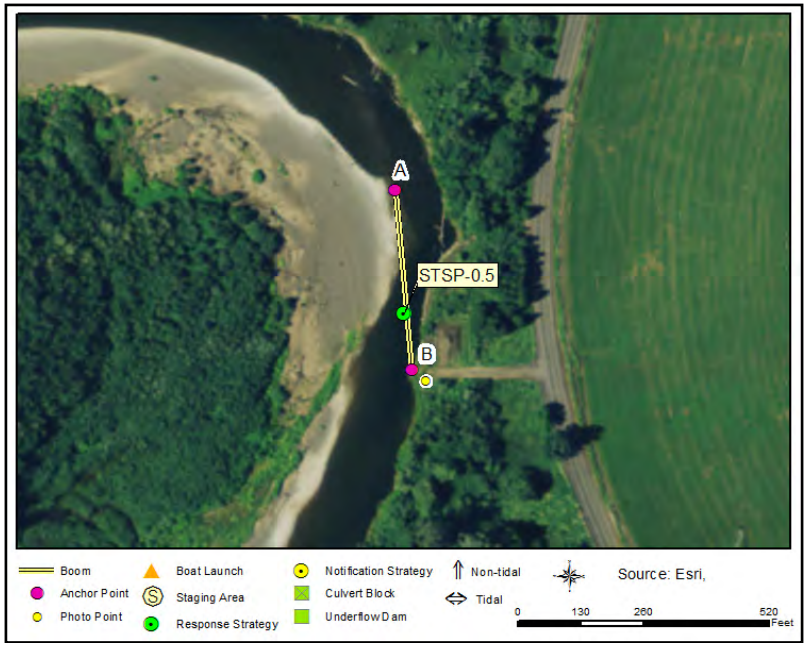
1. Start at I-5 S in Olympia
2. Go south on I-5 toward Exit 77 (28.57 miles)
3. At exit 77 take ramp on the right to WA-6 W toward Pe Ell/Raymond (0.29 miles)
4. Turn right on WA-6 (State Route 6) (4.86 miles)
5. Turn left on Twin Oaks Rd (1.43 miles)
6. Turn right on Pleasant Valley Rd (2.67 miles)
7. Finish at 1190 Pleasant Valley Rd, 98532, on the left

<< Go Back

Satsop River at Keys Rd STSP-0.5

Position - Location:	46° 58.927', -123° 28.948'	46° 58' 55.6", -123° 28' 56.9"	46.98212, -123.48247	Satsop

Strategy Objective:	Collection : Collect oil moving downstream on Satsop River.
Implementation:	Using airboat or jet boat, anchor one end of 400 ft length of boom near A (46.9827,-123.4827). Then extend boom ~375 ft SE and secure remaining boom end to shore near B (46.9818, -123.4824). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Remote: Use Fuller Bridge boat launch for staging (SA-CHER-20.4R) and boat ramp (BL-CHER-20.4R). Offroad parking onsite.
Site Safety:	Slips, trips, falls; Water hazard; Vegetation; In-channel debris
Field Notes:	Mouth of Satsop has braiding and debris, use caution in boat. Large boulders on bank at roadside.
Watercourse:	River - Satsop River
Resources at Risk:	Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Waterfowl, Wetlands



Recommended Equipment

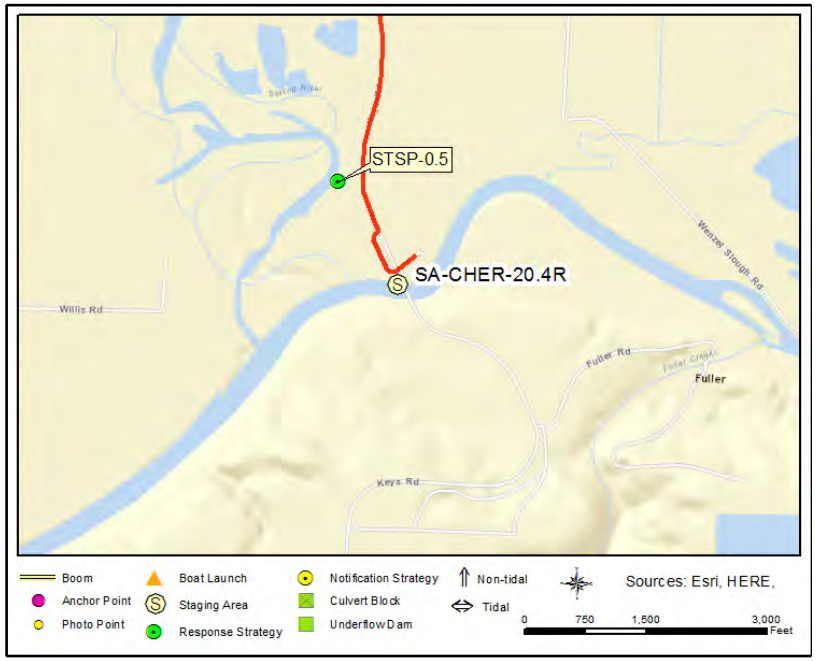
7	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - (jet drive)

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Satsop River at Keys Rd STSP-0.5

STSP-0.5 Photo: From end of Fadden Rd on Satsop River left, looking NW upstream at A. Taken mid-April at 1100 cfs Satsop gage.



Site Contact

Port of Grays Harbor
Land/Property Owner :

111 S. Wooding Street, Aberdeen, WA
360-268-9665

Nearest Address

164 Keys Rd
Satsop, WA 98541

Driving Directions

To Fuller Bridge boat launch and staging area:
1. From I-5 in Olympia head south to exit 104.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.2 miles)
7. The Fuller Bridge boat launch is on the right just before the bridge.

.

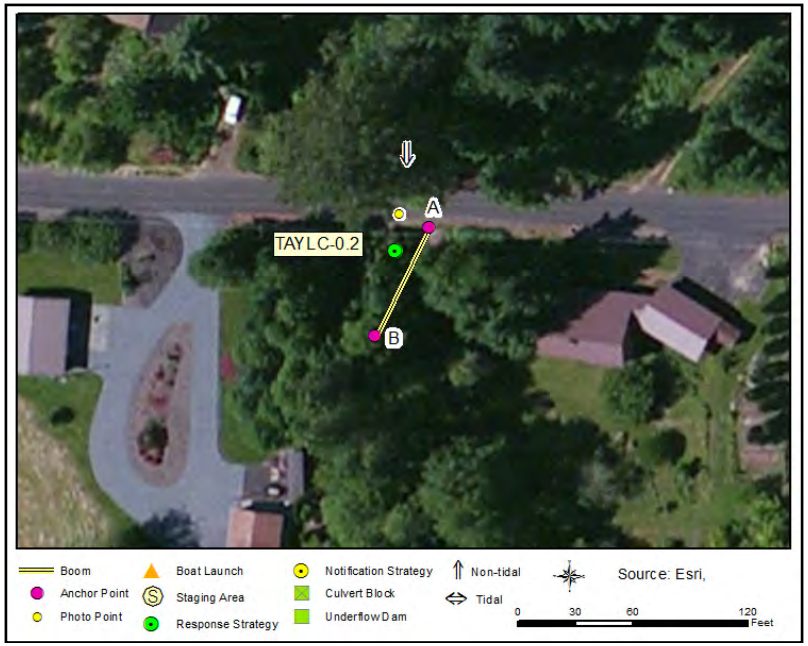
From staging area to site:
1. Head north on Keys road (350 ft)
2. Turn left on to unmarked dirt road to access collection site.

<< Go Back

Taylor Creek - Taylor Road Bridge TAYLC-0.2

Position - Location:	46° 36.738', -122° 52.137'	46° 36' 44.3", -122° 52' 8.2"	46.61231, -122.86894	Chehalis

Strategy Objective:	Collection : Collect oil moving downstream on Taylor Creek
Implementation:	Anchor line creekside near A (46.6124, -122.8689). Walk across bridge and as far south as possible to opposite bank near B (46.6122, -122.869). Extend 100 ft section of boom between A and B. Line upstream side of boom with sorbent. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore.
Staging Area:	Onsite: No shoulder but quiet road and some pull-off spaces (driveways). Very close to NWKR-9.8 can also stage there.
Site Safety:	Road Traffic; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	No shoulder, quiet road. Pool just downstream of bridge. May be able to use yards to access or stage, consult with residents.
Watercourse:	Creek - Taylor Creek
Resources at Risk:	Downstream Resources, Salmonids, Waterfowl, Wetlands



Recommended Equipment

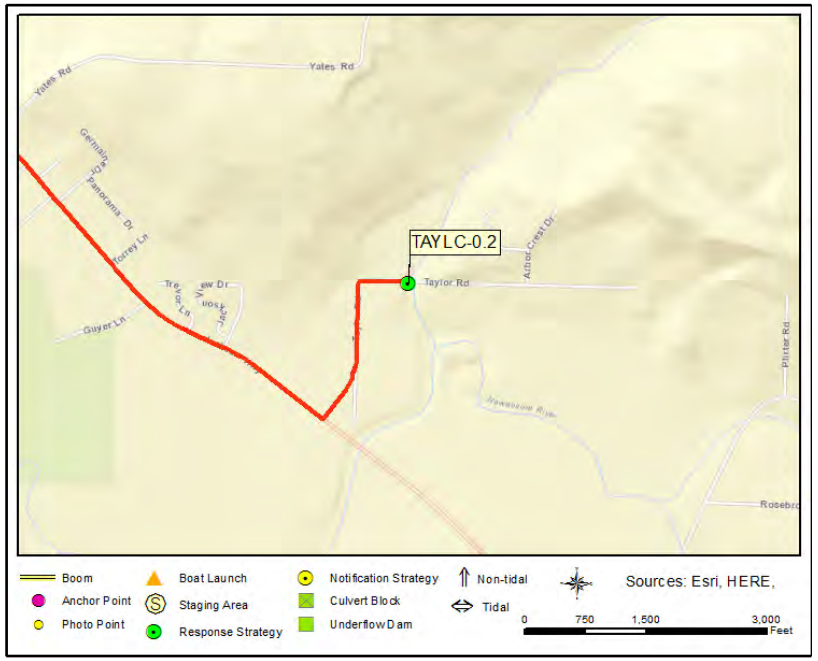
2	Kit	Anchoring System(s)- Shoreside
100	Feet	Boom - B3 (River Boom) or equivalent
100	Feet	Boom - Sorbent
100	Feet	Line - 3/8" poly line
1	Each	Machete(s) - (or other vegetation cutting tool)
1	Each	Vac Truck or Skimmer and Storage (if collection)

Recommended Personnel

1	Laborer
1	Supervisor

Taylor Creek - Taylor Road Bridge TAYLC-0.2

TAYLC-0.2 Photo: From Taylor Road bridge, looking downstream S at Taylor Creek. Taken early December, average winter flow, speed 1.5k.



Site Contact

No Information
Unknown :

Nearest Address

206 Taylor Rd
Chehalis, WA 98532

Driving Directions

1. From I-5 in Olympia head south to exit 74.
2. At exit 74 take ramp on the right to Labree Rd (0.4 miles)
3. Turn left on Labree Rd N (0.2 miles)
4. Turn right on Bishop Rd (2.21 miles)
5. Turn right on Jackson Hwy (1.09 miles)
6. Turn left on Taylor Rd (0.46 miles)
7. Use available driveway or shoulder near creek bridge.

Wenzel Slough Bridge WENZ-0.5

Position - Location:	46° 59.063', -123° 28.153'	46° 59' 3.8", -123° 28' 9.2"	46.98438, -123.46922	Elma

Strategy Objective: Underflow Dam : Collect oil moving downstream on Wenzel Slough.

Implementation: Use boom and sorbent for initial containment on either side of bridge. Use sandbags with PVC to create an underflow dam at this location. The slough is approximately 10 ft in width but will vary seasonally. Responders must receive Emergency Hydraulic Project Approval (HPA) permit from WDFW prior to using culvert blocks and underflow dams; call WDFW duty pager at 360-534-8233.

Staging Area: Remote: Stage at Fuller Bridge boat ramp parking (SA-CHER-20.4R)

Site Safety: Road traffic. Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation

Field Notes: Small road connecting farms. Lots of vegetation on bank and in channel.

Watercourse: Slough - Wenzel Slough

Resources at Risk: Bald Eagle Nests, Downstream Resources, Resident Fish, Salmonids, Shorebirds, State Lands, Waterfowl

Recommended Equipment

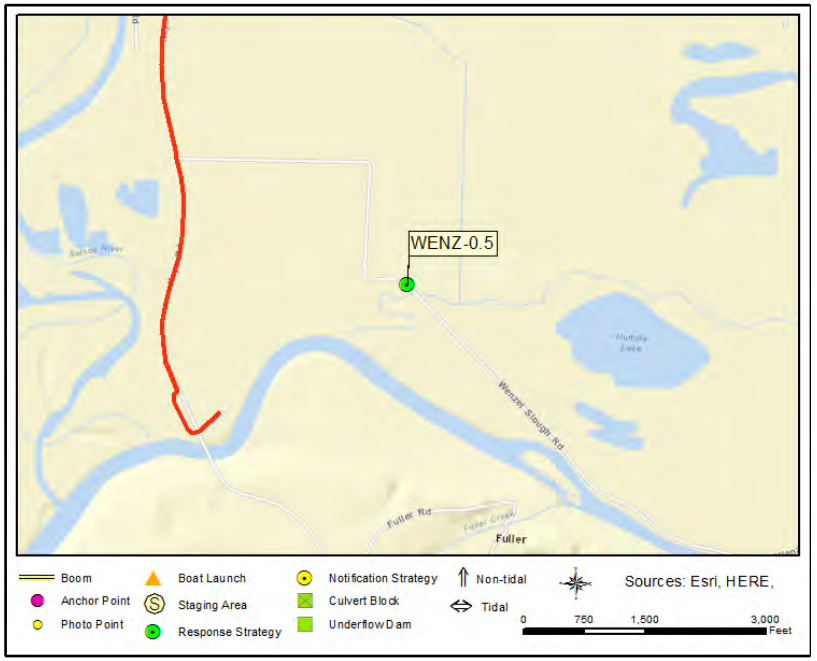
2	Kit	Anchoring System(s)- Shoreside
200	Feet	Boom - B3 (River Boom) or equivalent
200	Feet	Boom - Sorbent
	Assort	Fill material (sand, earth, gravel, sandbags)
1	Each	Machete(s) - (or other vegetation cutting tool)
10	Each	Pipe(s), PVC (8 inch x 8ft)
1	Roll	Plastic Sheeting
50	Each	Sandbag(s)
1	Each	Vac Truck or Skimmer and Storage

Recommended Personnel

3	Laborer
1	Supervisor

Wenzel Slough Bridge WENZ-0.5

WENZ-0.5 Photo: From Wenzel Slough Rd bridge, looking SW at Wenzel Slough/Vance Creek 0.5 mi downstream of Newman Creek.



Site Contact

No Information
Unknown :

Nearest Address

164 Keys Rd
Elma, WA 98541

Driving Directions

To Fuller Bridge staging area/boat launch:
1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left at Satsop (0.02 miles)
6. Continue on Keys Rd (1.3 miles)
7. Turn right into WDFW parking area.

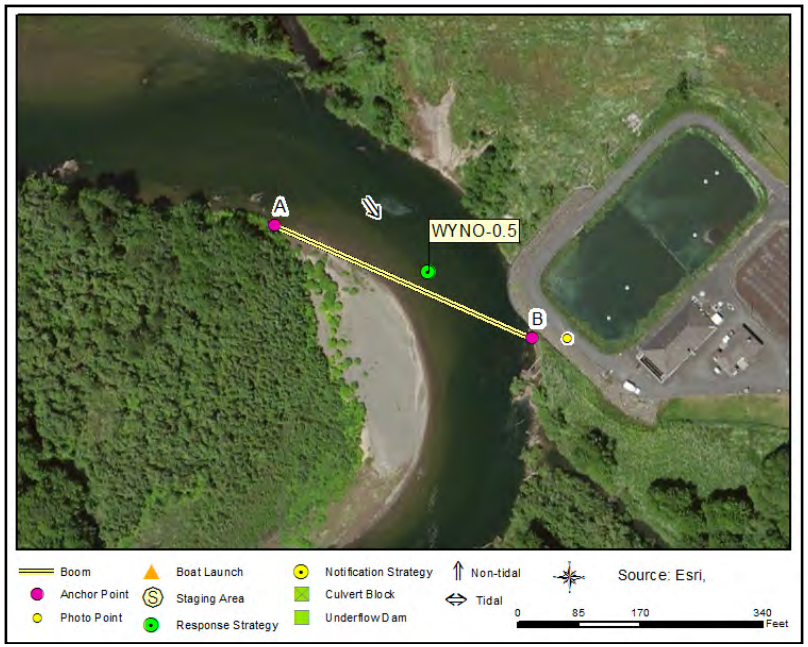
.
To access site from staging area:
1. Head north on Keys Rd (0.5 mi)
2. Take the first right onto Wenzel Slough Rd (0.8 mi)
3. Site is bridge over Wenzel Slough ~722 Wenzel Slough Rd Elma 98541

<< Go Back

Wynoochee River - Montesano Treatment Plant WYNO-0.5

Position - Location:	46° 58.069', -123° 36.504'	46° 58' 4.1", -123° 36' 30.3"	46.96782, -123.60841	Montesano

Strategy Objective:	Collection : Collect oil moving downstream on the Wynoochee River
Implementation:	Using workboat, anchor one end of 500ft length of boom near A (46.968, -123.6093). Then extend boom ~450ft SE and secure remaining boom end to shore near B (46.9676, -123.6078). Use additional anchoring systems to keep boom secure in water. Adjust anchor points and angles as needed for conditions. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Cut fence to collect oil.
Staging Area:	Remote: Use South Montesano Boat Launch for staging (SA-CHER-13.3R) and boat ramp (BL-CHER-13.3R).
Site Safety:	Razor Wire; Slips, Trips, Falls; Water Hazard; Floating Debris; Muddy Shorelines; Overgrown Vegetation
Field Notes:	Wastewater Treatment Plant. Some staff onsite but not 24/7, fire/police have keys. High rip-rap bank with paved road on top of berm.
Watercourse:	River - Without a Dam - Wynoochee River
Resources at Risk:	Downstream Resources, Resident Fish, Salmonids, Waterfowl Concentrations



Recommended Equipment

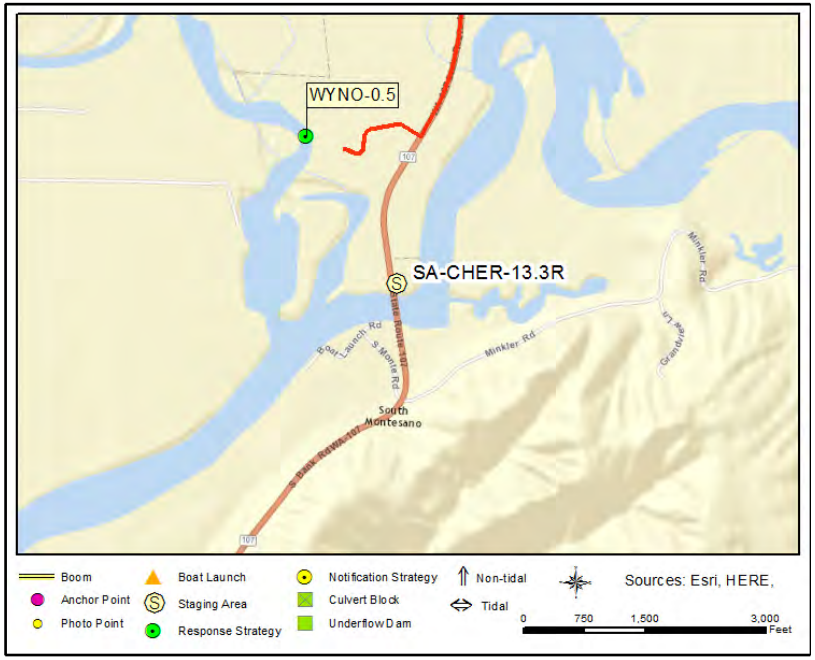
9	Kit	Anchoring System(s) - (anchor, lines, floats)
2	Kit	Anchoring System(s)- Shoreside
1	Each	Bolt Cutters
400	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Heaving Line(s)
1	Each	Vac Truck or Skimmer and Storage
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Wynoochee River - Montesano Treatment Plant WYNO-0.5

WYNO-0.5 Photo: From Wynoochee River left at Wastewater Plant, looking west from road at rip-rap and fence bank. Taken mid-November, 1000 cfs/4.4 f at Wynoochee Montesano gage.



Site Contact

City of Montesano Public Works
Land/Property Owner :
112 N Main Street
Montesano, WA 98563
360-249-3939

Nearest Address

50 Washington 107
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia head to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (10 miles)
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond (0.25 miles)
6. Turn left on S Main St (0.15 miles)
7. Continue on WA-107 (State Route 107) (0.18 miles)
8. Across from Mary's River Lumber (the big green building), turn right at private crossing sign. Follow dirt/gravel road to plant.

APPENDIX 4B

Notification Strategy 2-Pagers

NOTIFICATION STRATEGIES – LIST

WDFW Chehalis Basin Hatcheries BING-17.7-N

Position - Location:	47° 2.533', -123° 31.196'	47° 2' 32.0", -123° 31' 11.8"	47.04222, -123.51993	Elma

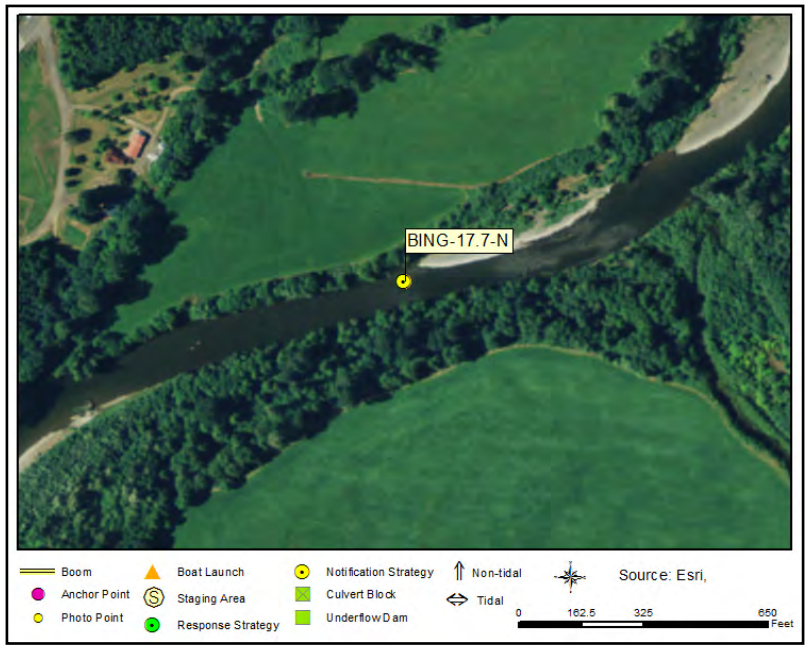
Strategy Objective: Notification : Inform WDFW hatcheries of oil spill in area so that release of fish won't coincide with ongoing spill response

Implementation: Notify WDFW Region 6 Hatchery Manager. Call 360-249-1203. Hatcheries to be notified include: Bingham Creek, Skookumchuck, and Lake Aberdeen. Release locations include Skookumchuck River (Centralia), Satsop River (Satsop), Wynoochee (Montesano) and Elliot Slough (Aberdeen).

Field Notes: Skookumchuck Hatchery is just downriver of Skookumchuck Dam (TransAlta). Bingham Creek's major intake is Bingham Creek, downstream of Outlet Creek, fed by Nahwatzel. Bingham Creek also has an intake from the East Fork Satsop River.

Watercourse: Creek - Skookumchuck River; Bingham Creek to East Fork Satsop River; Wynoochee River; Elliot Slough

Resources at Risk: Salmon (Coho, Chinook and Chum), Steelhead



Communication Process and Action:

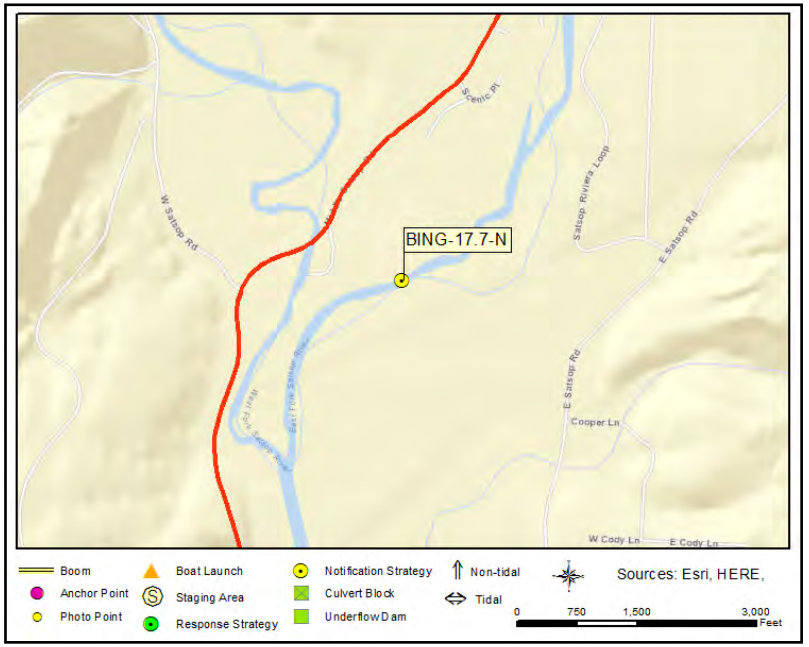
Call Washington Department of Fish & Wildlife Region 6 Hatchery Manager and explain the situation regarding the oil spill. The following numbers (in order) can be used until someone at the hatcheries is reached:

1. 360-249-1203 - Region 6 Manager
2. 360-426-2369 - Bingham Creek Hatchery
3. 360-264-2112 - Skookumchuck Hatchery
4. 360-533-1663 - Lake Aberdeen Hatchery
5. 360-532-3686 - Lake Aberdeen #2
6. 360-589-1296 - Lake Aberdeen Cell

Note: WDFW will make the decision whether or not the scheduled release of fish from the hatchery should be delayed because of the spill. Release locations include the Skookumchuck River, Bingham Creek, the Wynoochee River and Van Winkle Creek. The Skookumchuck River drains into the Chehalis River at Centralia. Bingham Creek drains into the East Fork Satsop River, which combines with the West Fork northeast of Montesano before emptying into the Chehalis River. The Wynoochee River drains into the Chehalis River near Montesano. Van Winkle Creek drains into Elliot Slough which is connected to the Chehalis River in Aberdeen near Junction City.

WDFW Chehalis Basin Hatcheries BING-17.7-N

BING-17.7-N Photo: Water diversion dam at WDFW Bingham Creek Fish Hatchery.



Site Contact

WDFW Bingham Creek Hatchery
Primary Contact :
360-426-2369

WDFW Region 6
Alternate Contact : Property Manager
360-249-4628

Nearest Address

3914 W Fish Hatchery Rd
Elma, WA 98541

Driving Directions

1. From US-12 in Elma, turn right onto Monte Brady Rd (at Brady).
2. In 0.3 mi continue straight through stop sign onto Middle Satsop Rd.
3. In 7.6 mi road name changes to W Matlock Brady Rd.
4. In 5.7 mi bear right onto W Fish Hatchery Rd.
5. Hatchery is at road's end in 3.8 mi.

City of Centralia Pump Station CHER-75.1R-N

Position - Location:	46° 39.166', -122° 58.907'	46° 39' 10.0", -122° 58' 54.4"	46.65276, -122.98179	Chehalis

Strategy Objective: Notification : Shut down pump station.

Implementation: Inform City of Centralia Public Works that a spill has occurred and to consider shutting down the pump station. Call (360) 740-7536 M-F 8:30-4:30 or afterhours (360) 740-1105.

Field Notes: This pump station is rarely in operation and is not on a standard schedule.

Watercourse: River - Without a Dam - Chehalis River - generally low flow in this area

Resources at Risk: Pump Station

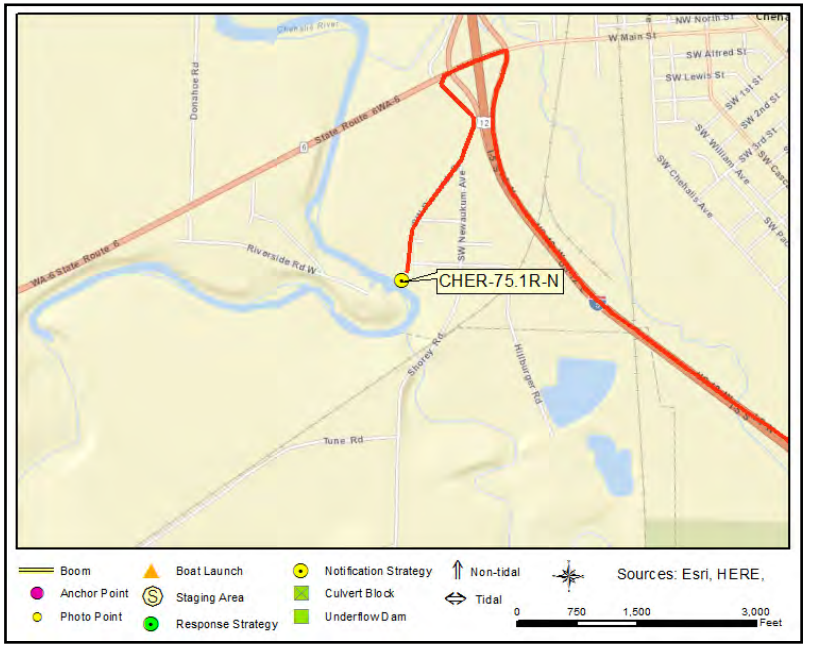
Communication Process and Action:

Call City of Centralia Public Works Department and explain the situation regarding the spill. If the emergency pump station is active, recommend they deactivate especially if the spill is on the Newaukum (or a tributary) or upriver of Chehalis.

Phone numbers:
After-hours/Emergency: (360) 740-1105
Daytime: (360) 740-7536

City of Centralia Pump Station CHER-75.1R-N

CHER-75.1R-N Photo: City of Centralia emergency water pump station on Chehalis River, across from Alexander Park, just downriver of Newaukum Confluence.



Site Contact

City of Chehalis Public Works Department
Municipality (County/City) : Owner

Chehalis, WA
360-740-1105

Nearest Address

585 SW Riverside Dr
Chehalis, WA 98532

Driving Directions

1. From I-5, take exit 77. Then take ramp right for WA-6 West toward Pe Ell / Raymond.
2. Head west on WA-6, and then turn left onto SW Riverside Dr.
3. In 0.3 mi keep right to stay on SW Riverside Dr.
4. In 0.3 mi arrive at pump station.

Satsop Springs Hatchery EFSTSP-14.3-N

Position - Location:	47° 2.517', -123° 31.262'	47° 2' 31.0", -123° 31' 15.7"	47.04194, -123.52103	Elma

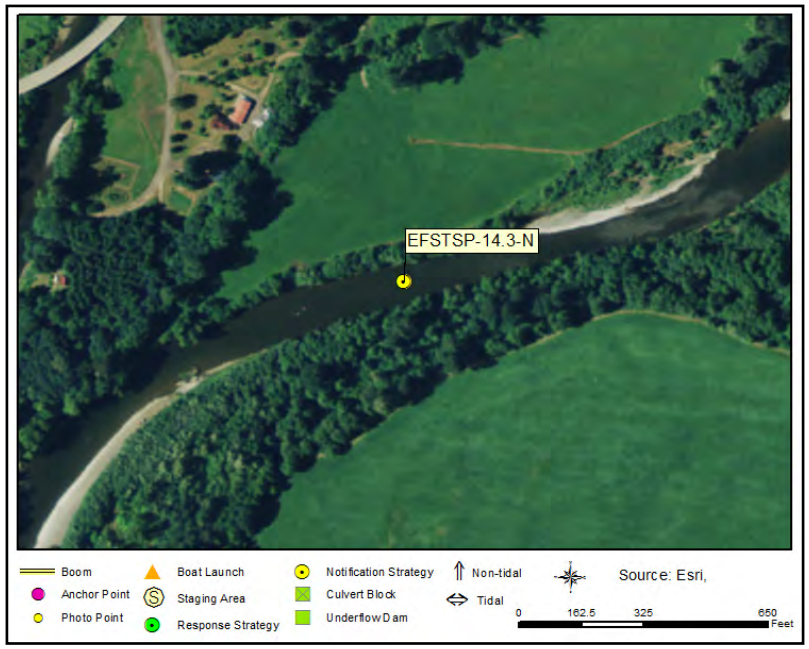
Strategy Objective: Notification : Notify hatchery of oil spill.

Implementation: Call 360-482-3364 to inform the Chehalis Basin Fisheries Task Force that a spill has occured. If the spill is on the East Fork Satsop River, advise they shut down their water intake. Ask them to notify all projects that also release salmon in the Chehalis basin.

Field Notes: Other release sites include Carlisle Lake on the South Fork Newaukum River and Friends Landing on Quigg Lake just off the Chehalis at Montesano.

Watercourse: River - Without a Dam - South Fork Newaukum River, East Fork Satsop River, Quigg Lake

Resources at Risk: Salmon (Coho, Chinook and Chum), Steelhead



Communication Process and Action:

Call the Chehalis Basin Fisheries Task Force and explain the situation regarding the oil spill. If the spill is on the East Fork Satsop River upstream of their facility, advise they consider shutting down their water intake.

Request that in addition to the Satsop Springs Hatchery, they also inform any projects they are affiliated with who may release fish to the Chehalis or its tributaries.

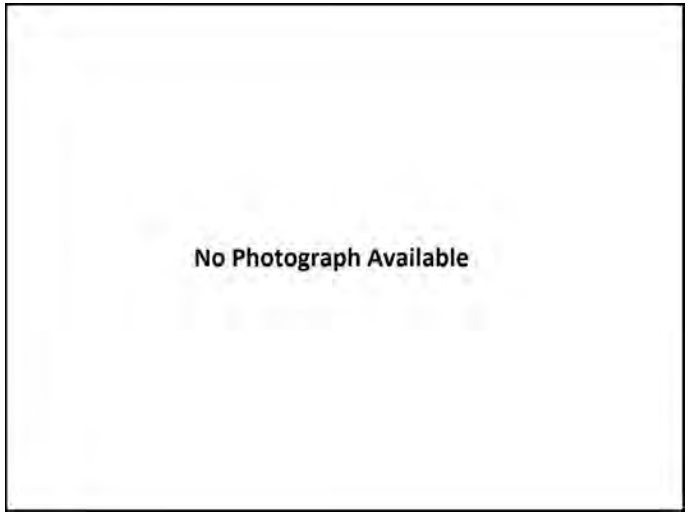
Call the following numbers in order until the hatchery is reached:

1. 360-482-3364 - Satsop Springs Hatchery
2. 360-482-2347 - CBFTF Office

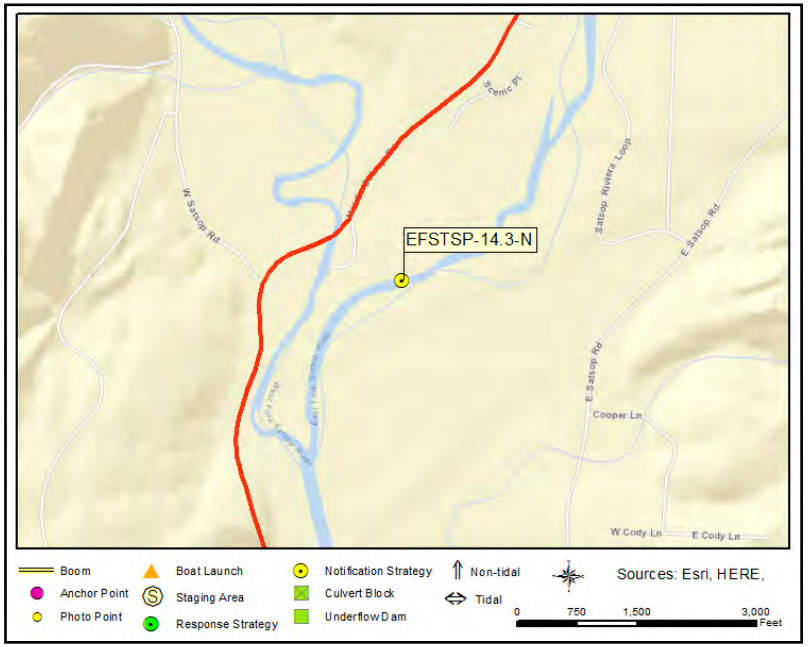
Note: CBFTF will make the decision whether or not the scheduled release of fish should be delayed because of the spill.

Release locations include the South Fork Newaukum River, East Fork Satsop River, the and Quigg Lake. The South Fork Newaukum River is connected to the Chehalis River at Chehalis. The East Fork Satsop River empties into the Chehalis east of Montesano. Quigg Lake drains to the Chehalis River between Cosmopolis and Montesano.

Satsop Springs Hatchery EFSTSP-14.3-N



EFSTSP-14.3-N Photo: photograph currently available for this strategy location.



Site Contact

Chehalis Basin Fisheries Task Force
Primary Contact : Fisheries Manager
2090 West Beerbower Rd
Elma, WA 98563
360-482-2347

Nearest Address

2060 West Beerbower Road
Elma, WA 98541

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (5.96 miles)
5. Turn right on Monte Brady Rd (0.28 miles)
6. Continue on Middle Satsop Rd (7.6 miles)
7. Continue on W Matlock Brady Rd (0.01 miles)
8. Turn right on W Schafer Park Rd (1.03 miles)
9. Turn left on W Beerbower Rd (2.03 miles)
10. Finish at 2060 West Beerbower Road, 98541, on the right

Skookumchuck Dam SKOO-22.2-N

Position - Location:	46° 47.759', -122° 51.889'	46° 47' 45.6", -122° 51' 53.4"	46.79599, -122.86482	Tenino

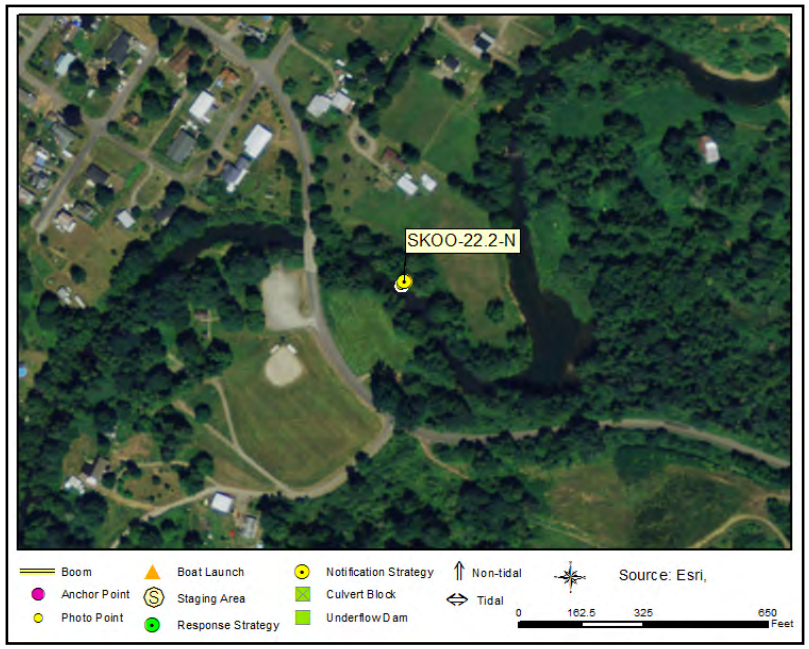
Strategy Objective: Notification : Inform Skookumchuck Dam of oil spill in area so that release of fish won't coincide with ongoing spill

Implementation: Call 360 330 8316 to notify Dam Hydro Operator that a spill has occurred and to delay any fish releases.

Field Notes: Actual location is 46.784818,-122.717371

Watercourse: River - Below a Dam - Skookumchuck River

Resources at Risk: Steelhead



Communication Process and Action:

Call the following numbers in order and explain the situation regarding the oil spill:

Skookumchuck Dam Hydro Operator
360 330 8316
360 264 2624

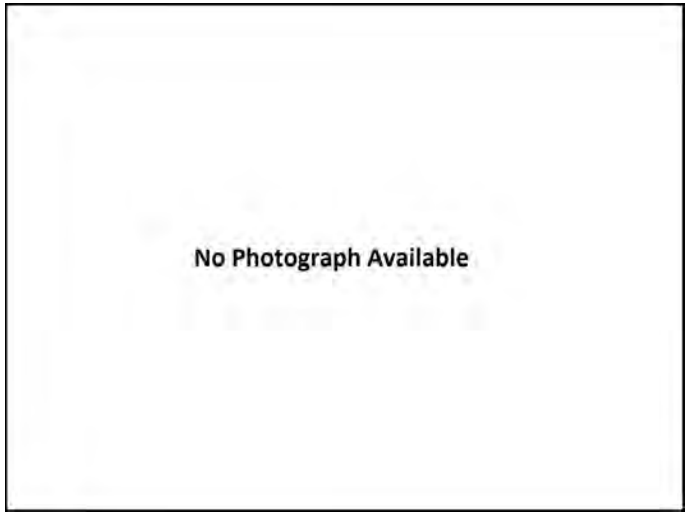
TransAlta Centralia Generation Unit #1 Control Operator (24/7)
360 330 2321

Skookumchuck Dam Hydro Supervisor
360 807 8020
360 508 0059

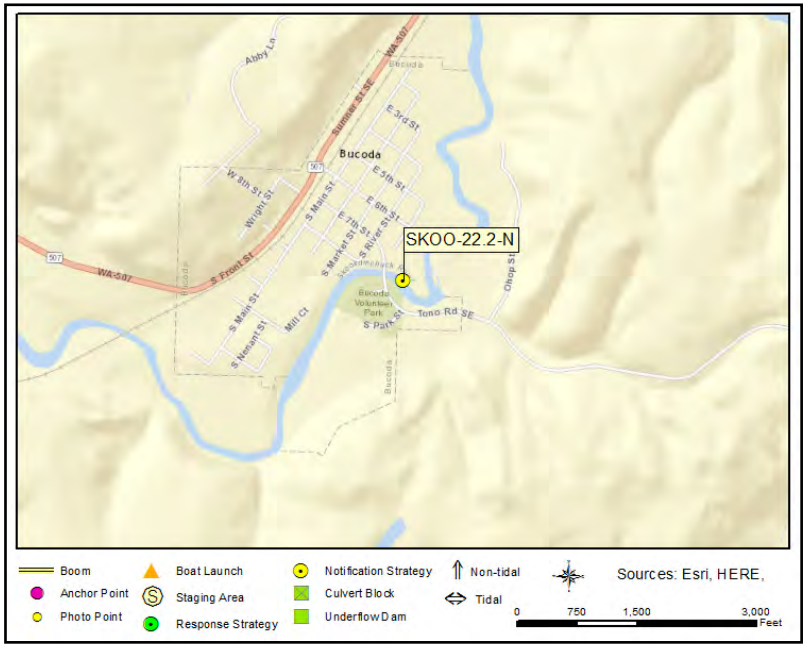
Alternate Skookumchuck Dam Hydro Supervisor
360 330 2362

Note: Skookumchuck Dam/TransAlta staff will make the decision whether or not the scheduled release of fish should be delayed because of the spill. Release location is the Skookumchuck River, which drains into the Chehalis River at Centralia.

Skookumchuck Dam SKOO-22.2-N



SKOO-22.2-N Photo: No photograph currently available for this strategy location.



Site Contact

TransAlta - Skookumchuck Dam
Emergency Contact :
10540 Skookumchuck Rd SE
Tenino, WA 98589
360-330-8316

Nearest Address

10540 Skookumchuck Rd SE
Tenino, WA 98589

Driving Directions

1. From I-5, take exit 88
2. Take ramp right toward Tenino / Oakville / Rochester
3. Turn right onto Old Highway 99 SW
4. In 7.6 mi, turn right onto WA-507
5. In 2.2 mi, turn left onto 184th Ave SW
6. In 0.6 mi, road name changes to Skookumchuck Rd SE
7. In 1.8 mi, turn left to stay on Skookumchuck Rd SE
8. In 5 mi, the WDFW Skookumchuck Fish Hatchery will be on your left.
9. Contact TransAlta dam security office for escort to facility.

APPENDIX 4C

Staging Area 2-Pagers

STAGING AREAS – LIST

SA-3-GH SA-BLKR-0.9 SA-BLUS-1.1 SA-CHER-10.3L

SA-CHER-10.9R SA-CHER-13.3R SA-CHER-20.4R SA-CHER-33.5L

SA-CHER-42.3R SA-CHER-66.7R SA-SKOO-4.5

Cosmopolis - Chehalis River Boat Launch SA-3-GH

Staging Area

Position - Location:	46° 57.453', -123° 46.275'	46° 57' 27.2", -123° 46' 16.5"	46.95755, -123.77125	Cosmopolis

Comments: Ensure property owner (Cosmo Specialty Fibers) is notified before staging equipment at this location; call (360) 500-4604.

Location Information

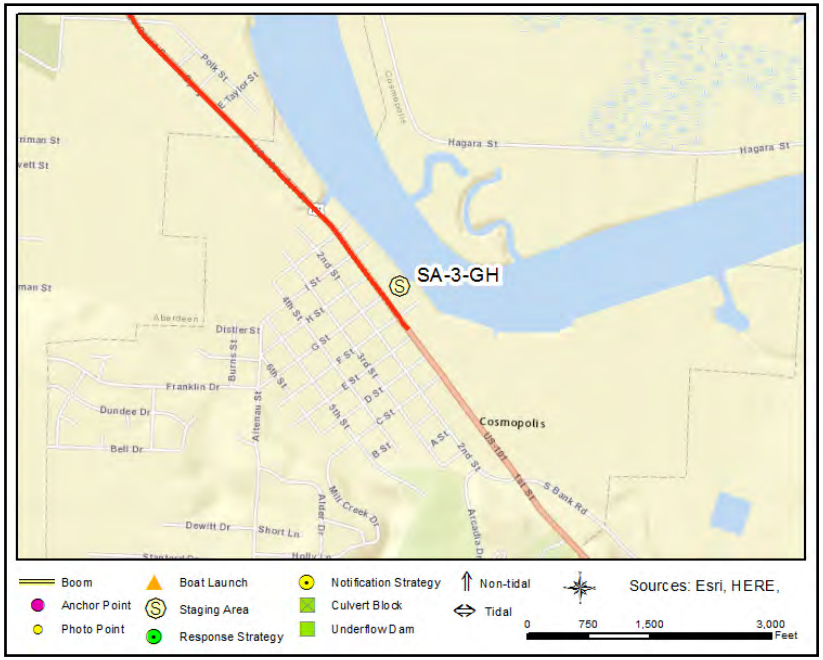
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	1
Boat Ramp(s)	Asphalt	1 7-deg slope
Cell Phone Coverage	Yes	
Estimated Lot Size		65000
Parking - Car	Gravel	50
Parking - Trailer	Gravel	50
Power	No	
Restroom	Restroom - None	
Telephone	No	
User Fee	No	Private Property
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-4.2R, CHER-4.4R, CHER-5.2L, CHER-4.7R, CHER-4.5R

Cosmopolis - Chehalis River Boat Launch SA-3-GH

SA-3-GH Photo: At boat ramp on river left of the Chehalis River, looking



Site Contact

Cosmo Specialty Fibers
Private Owner : Owner
1101 1st Street
Cosmopolis, WA 98537
360-500-4604

Nearest Address

1101 1st Street
Cosmopolis, WA 98537

Driving Directions

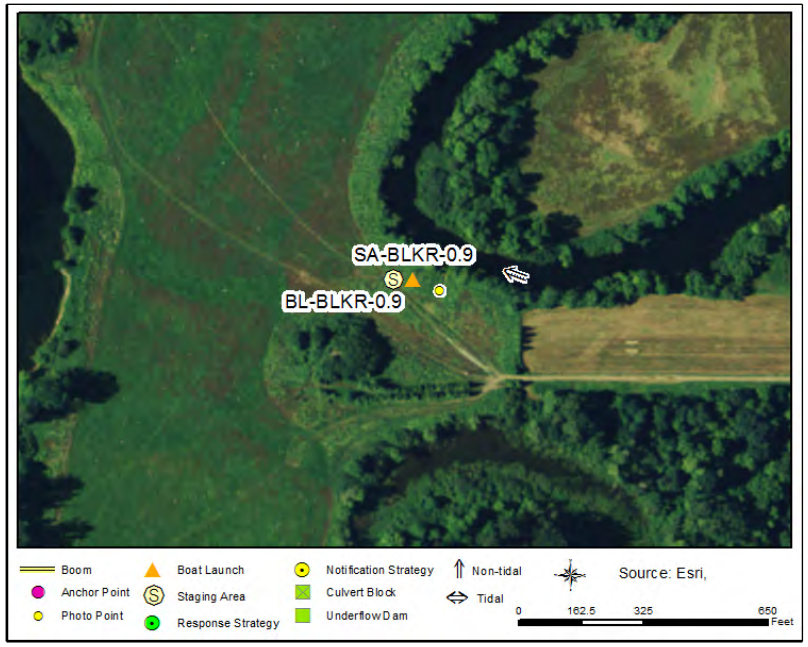
1. Enter Aberdeen from west on Hwy 12 and follow signs for Hwy 101 South towards Westport & Raymond
2. Cross Wishkah River Bridge (first bridge in Aberdeen), stay in left lane, and travel on Hwy12 for 0.2 miles before turning left onto South "H" Street (Hwy 101 South).
3. Travel on Hwy 101 South, over the South Aberdeen Bridge, staying in the middle or left lane of bridge.
4. Turn left at first stop light immediately after bridge to stay on Hwy101 South towards Cosmopolis
5. After turn, travel on Hwy 101 South for 2.0 miles before turning left onto "F" Street in Cosmopolis.
6. Follow "F" Street (~300ft) into boat ramp parking area. If gate is chained or locked, contact Cosmo Specialty Fibers for access; call (360) 500-4604.

Chehalis Tribe Black River Boat Launch SA-BLKR-0.9

Staging Area

Position - Location:	46° 49.191', -123° 12.888'	46° 49' 11.5", -123° 12' 53.3"	46.81986, -123.21480	Oakville

Comments: Large gravel lot, no facilities.



GRP Response Strategies Served:

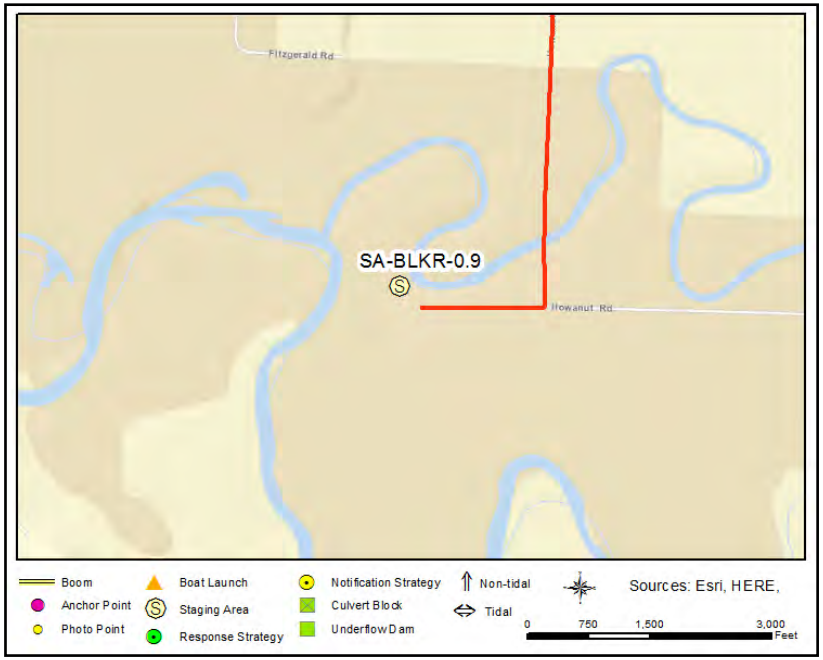
CHER-52.9L, BLKR-0.9

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1 10-degrees
Cell Phone Coverage	Unknown	
Covered Spaces	No	
Estimated Lot Size		20000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	15
Parking - Trailer	Gravel	5
Power	No	
Restroom	None	
User Fee	No	Tribal members except emergency
Waste Disposal	None	
Water (potable)	No	

Chehalis Tribe Black River Boat Launch SA-BLKR-0.9

SA-BLKR-0.9 Photo: From Black River left at the top of the Chehalis Tribe boat ramp, looking north. Taken mid-November.



Site Contact

Chehalis Tribe Department of Natural Resources
Land/Property Owner : Property owner

Oakville, WA 98568
360-273-5911

Nearest Address

116 Howanut Rd
Oakville, WA 98568

Driving Directions

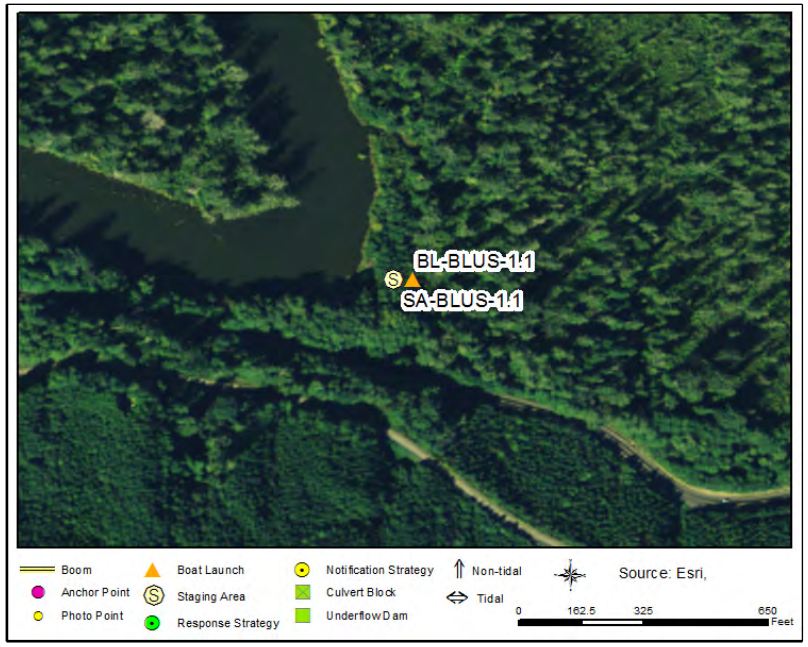
1. At exit 88, take ramp right for US-12 West toward Aberdeen / Tenino
2. Turn right onto US-12.
3. In 9.1 mi, just after the WDFW Oakville boat launch, turn left onto Elma Gate Br Rd.
4. Take an immediate right onto Elma Gate Rd E.
5. In 0.9 mi, turn left onto Howanut Rd.
6. In 0.8 mi at the dead-end, turn right into the boat ramp entrance.

DNR Blue Slough Hand Launch SA-BLUS-1.1

Staging Area

Position - Location:	46° 56.429', -123° 43.134'	46° 56' 25.7", -123° 43' 8.1"	46.94048, -123.71890	Montesano

Comments: Small gravel lot with portable toilet.



Location Information

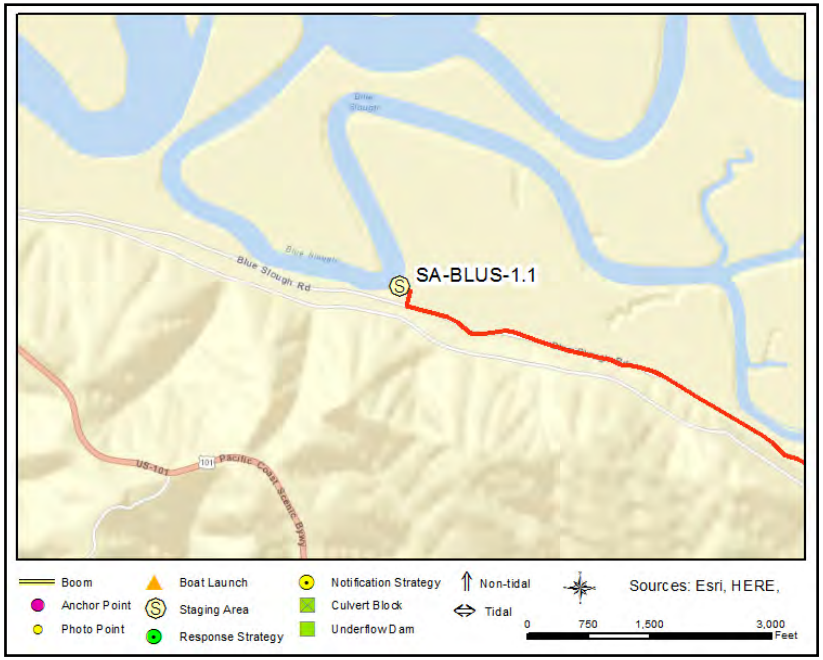
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 - 10" squares
Covered Spaces	No	
Estimated Lot Size		3000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	2
Power	No	
Restroom	Restroom - Portable	1 May to November only
User Fee	No	
Waste Disposal	Trash Receptacle	1
Water (potable)	No	

GRP Response Strategies Served:

PRCS-0.1, BLUS-0.1

DNR Blue Slough Hand Launch SA-BLUS-1.1

SA-BLUS-1.1 Photo: From Blue Slough, looking W at hand-launch ramp. Mid-low tide (4ft at Montesano gage) on 10/14/14.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Blue Slough Rd
Montesano, WA 98563

Driving Directions

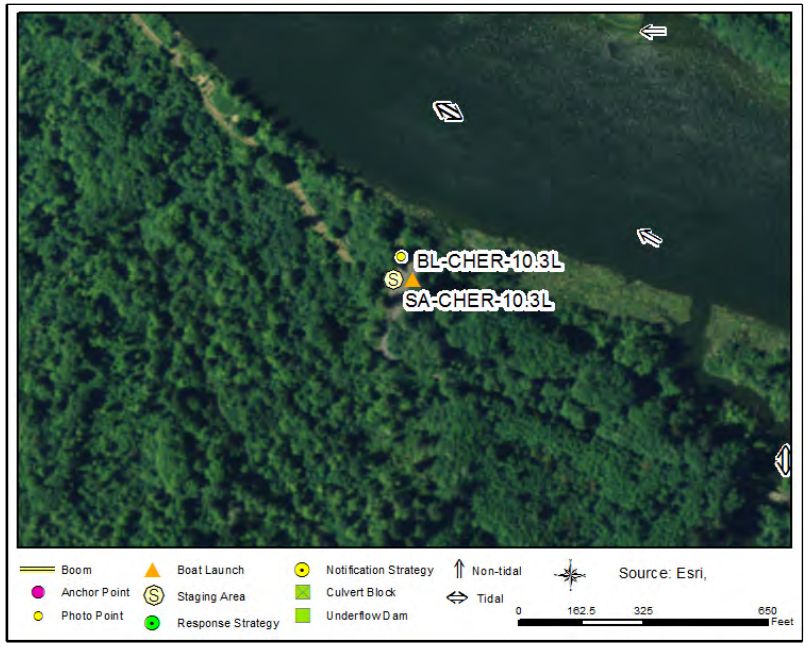
1. From I-5 take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen 5.9 mi.
3. Keep left onto WA-8 W for 21.0 mi.
4. Road name changes to US-12 W, stay straight for10.0 mi.
5. Take ramp right toward Raymond / Montesano.
6. At stop sign, turn left onto S Main St, then keep straight onto WA-107 / S Main St.
7. In 5.0 mi, bear right onto Blue Slough Rd.
8. In 2.4 mi turn right into the parking lot.

DNR Preacher's Slough Boat Launch SA-CHER-10.3L

Staging Area

Position - Location:	46° 56.821', -123° 39.297'	46° 56' 49.2", -123° 39' 17.8"	46.94701, -123.65495	Montesano

Comments: Small gravel lot with portable restroom.



Location Information

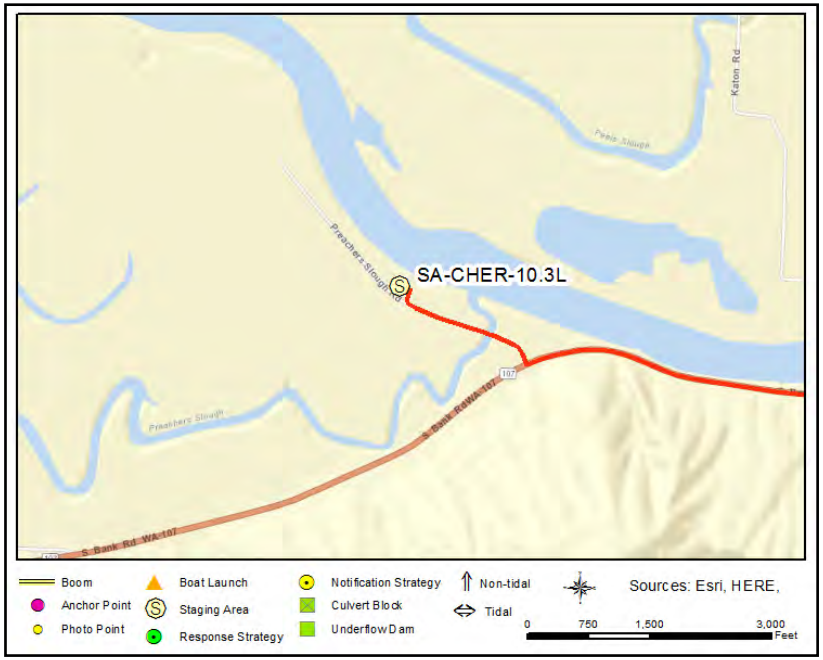
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 - 10" square stones
Covered Spaces	No	
Estimated Lot Size		7400 Sq Ft
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	20
Parking - Trailer	Gravel	5
Power	No	
Restroom	Restroom - Portable	1 May to November only
User Fee	No	
Waste Disposal	Trash Receptacle	1 20-gal. can
Water (potable)	No	

GRP Response Strategies Served:

CHER-10.0R, CHER-10.4R

DNR Preacher's Slough Boat Launch SA-CHER-10.3L

SA-CHER-10.3L Photo: DNR Preacher's Slough hand-launch ramp. Looking from gravel entrance towards ramp and Chehalis River, wheelchair guard rail on left side of ramp.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Preacher's Slough Rd
Montesano, WA 98563

Driving Directions

1. From I-5 in Olympia, head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles
3. Continue on WA-8 toward Montesano/Aberdeen
4. Continue on US-12
5. Take ramp on the right toward Montesano/Jct Wa-107/Raymond
6. Turn left on S Main St
7. Continue on WA-107 (State Route 107)
8. Turn right on Preachers Slough Rd
9. The boat launch parking area is 0.5 miles down on the right.

Friends Landing Boat Launch SA-CHER-10.9R

Staging Area

Position - Location:	46° 56.782', -123° 38.402'	46° 56' 46.9", -123° 38' 24.1"	46.94636, -123.64003	Montesano

Comments: Large gravel lot adjoining private campground with full facilities.

GRP Response Strategies Served:

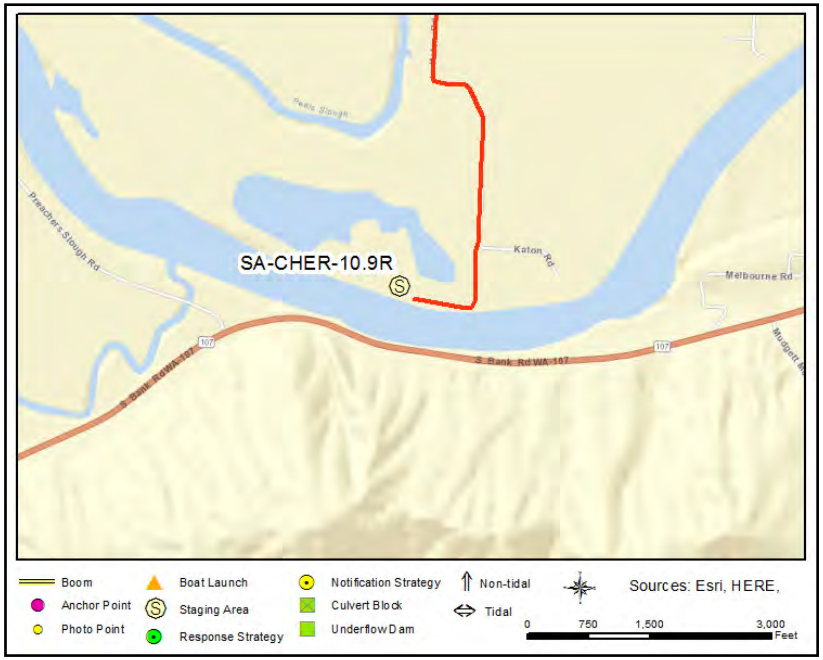
CHER-9.4L, CHER-8.0L, CHER-10.4L, CHER-9.4R, CHER-8.7R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2 Small floating dock 700' downriver
Boat Ramp(s)	Concrete, Solid	1 Grooved
Covered Spaces	Yes	1 Small onsite. More at campground
Estimated Lot Size		49000 Sq Ft
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	50
Power	Yes	At campground
Restroom	Restroom - Portable	1 At launch site
Restroom	Restroom - with Showers	4 At campground
Waste Disposal	Dump Station	1 At campground
Waste Disposal	Trash Receptacle	1 At site
Water (potable)	Yes	At campground

Friends Landing Boat Launch SA-CHER-10.9R

SA-CHER-10.9R Photo: Friends Landing boat ramp. Photo from parking lot looking down ramp at Chehalis River.



Site Contact

Friends Landing
Land/Property Owner : Property owner

Montesano, WA 98563
360-249-5117

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

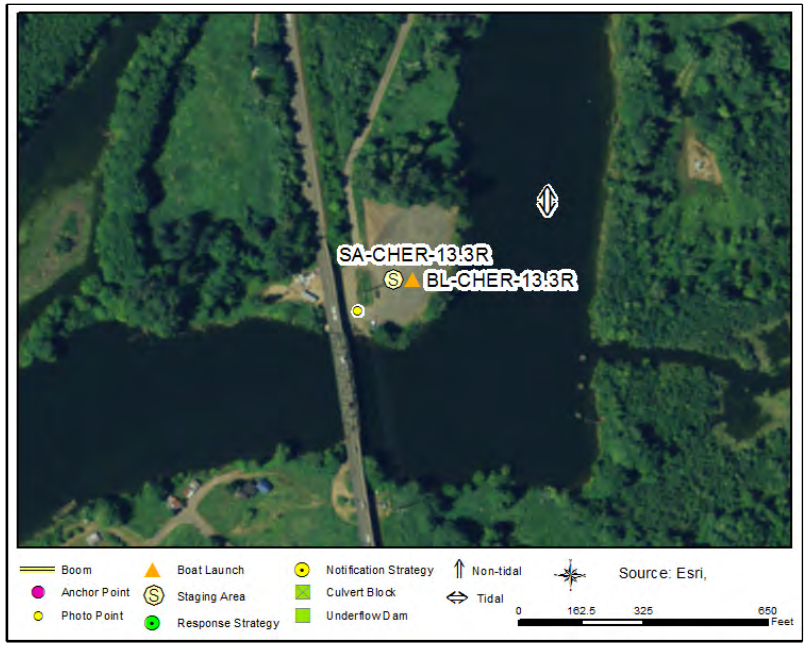
1. From I-5 take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

WDFW South Montesano Boat Launch SA-CHER-13.3R

Staging Area

Position - Location:	46° 57.776', -123° 36.184'	46° 57' 46.6", -123° 36' 11.0"	46.96294, -123.60306	Montesano

Comments: Large gravel lot with pit toilet and no other facilities.



GRP Response Strategies Served:

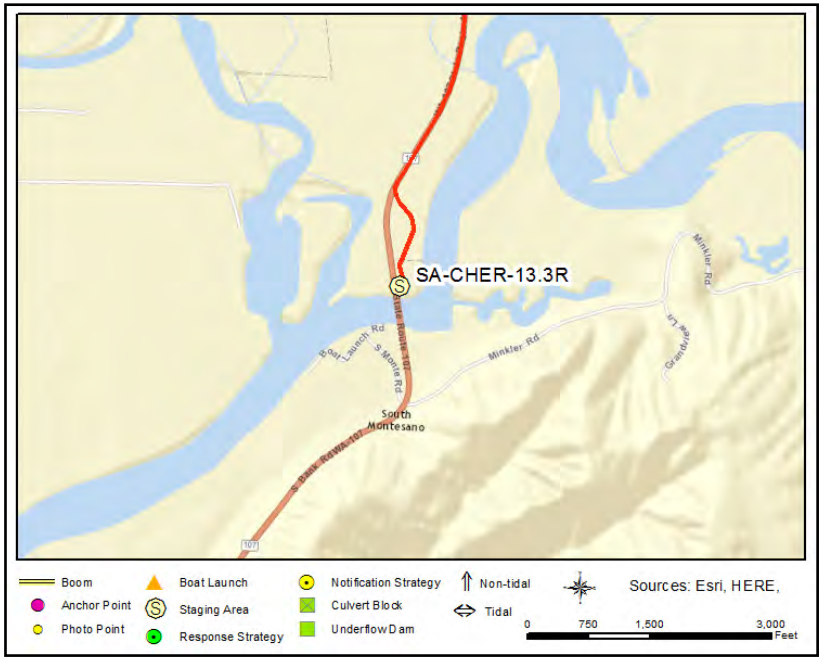
CHER-13.4R, WYNO-0.5

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	3
Covered Spaces	Yes	Small - under bridge
Estimated Lot Size		46900 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	150
Parking - Trailer	Gravel	75
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

WDFW South Montesano Boat Launch SA-CHER-13.3R

SA-CHER-13.3R Photo: WDFW South Montesano boat ramp. Top of 3 side-by-side boat ramps looking down at Chehalis River.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

75 WA-107
Montesano, WA 98563

Driving Directions

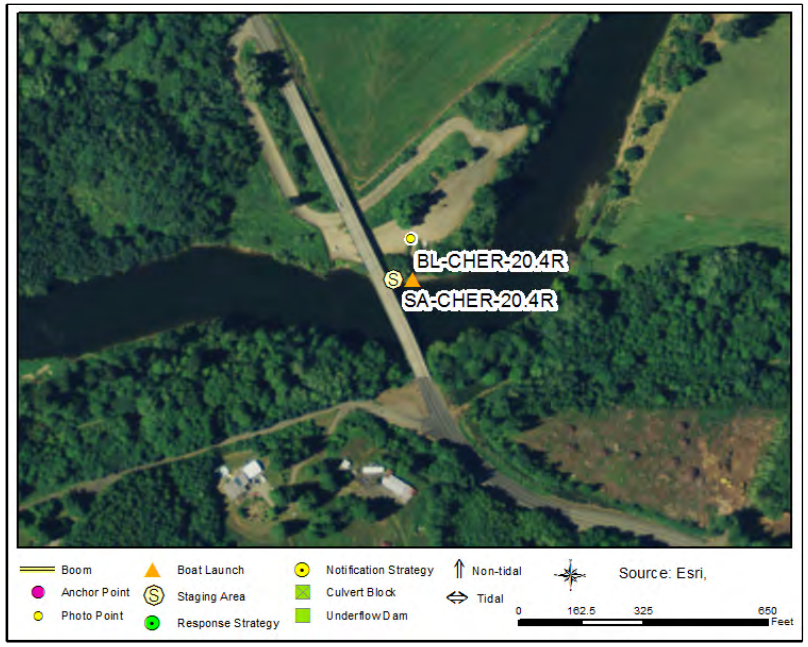
1. From I-5, take exit 104. Follow ramp right for US-101 North toward Port Angeles / Aberdeen
2. In 5.9 mi, keep left onto WA-8 W.
3. In 21.0 mi, road name changes to US-12 W.
4. In 10.0 mi, take ramp right toward Raymond / Montesano.
5. At stop sign, turn left onto S Main St.
6. Keep straight onto WA-107 / S Main St
7. In 0.7 mi, turn left at the signs for Mary's River Lumber Office/Truck Entrance and Public Fishing sign.
8. Follow road 0.2 miles to large gravel lot under bridge.

WDFW Fuller Bridge Boat Launch SA-CHER-20.4R

Staging Area

Position - Location:	46° 58.720', -123° 28.726'	46° 58' 43.2", -123° 28' 43.6"	46.97867, -123.47876	Elma

Comments: Large gravel lot, small pit toilet.



Location Information

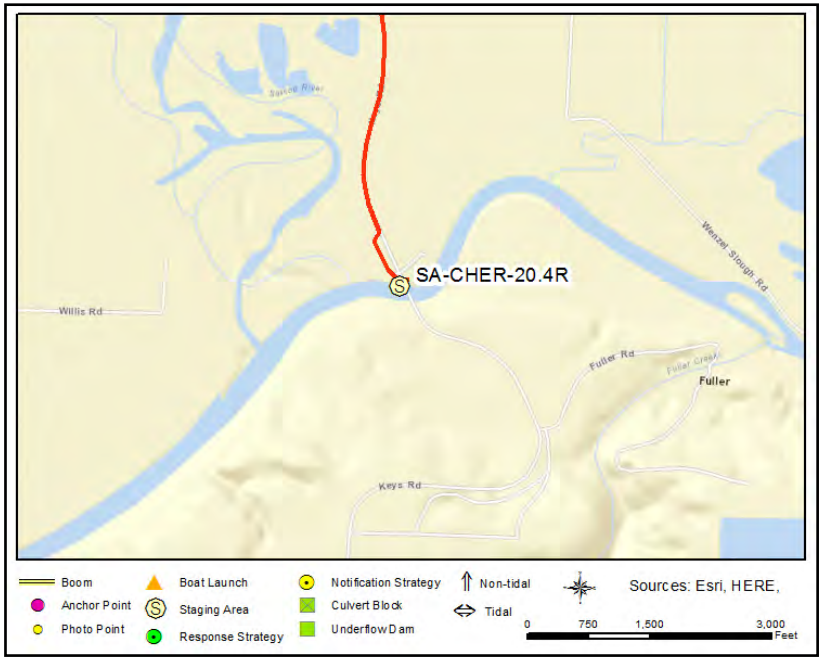
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 12-Degree grade
Covered Spaces	Yes	Under bridge
Estimated Lot Size		44500 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	150
Parking - Trailer	Gravel	70
Power	No	
Restroom	Restroom - Vault	1 Small pit toilet
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-23.2R, CHER-23.3R, CHER-17.5L, STSP-0.5

WDFW Fuller Bridge Boat Launch SA-CHER-20.4R

SA-CHER-20.4R Photo: WDFW Fuller Bridge boat ramp. Looking from top of ramp down to Chehalis River.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

164 Keys Rd
Elma, WA 98541

Driving Directions

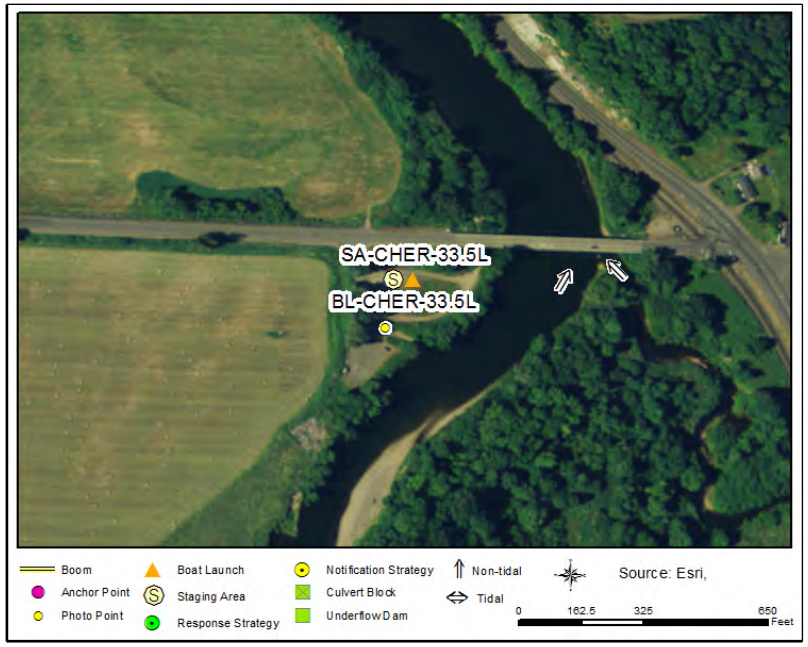
1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.3 miles)
7. Turn right into WDFW parking area.

WDFW Porter Bridge Boat Launch SA-CHER-33.5L

Staging Area

Position - Location:	46° 56.338', -123° 18.916'	46° 56' 20.3", -123° 18' 54.9"	46.93896, -123.31526	Elma

Comments: Large gravel and grass lot with pit toilet, no other facilities.



Location Information

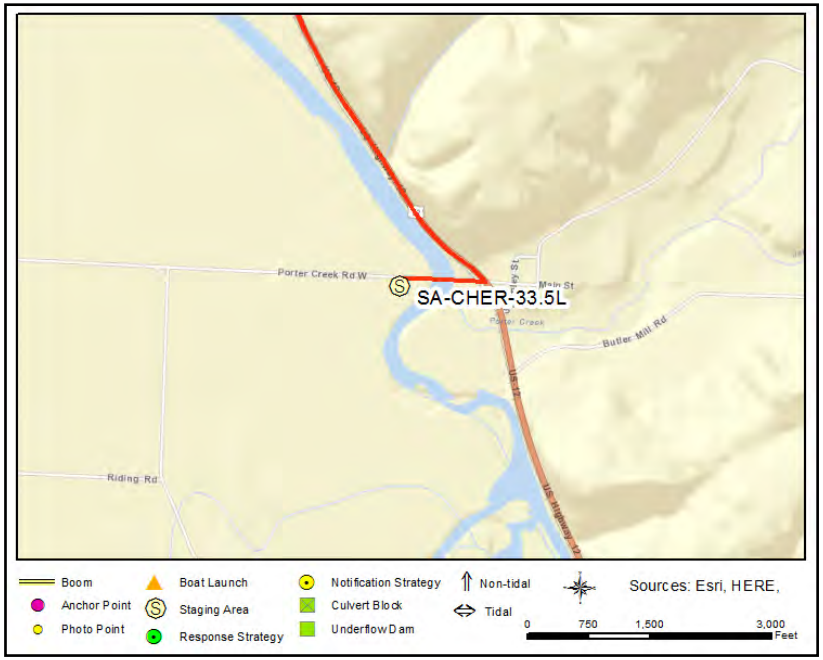
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1
Covered Spaces	No	
Estimated Lot Size		41000 Sq Ft
Lot Cover (Primary)	Gravel	60 %, rest grass/dirt
Parking - Car	Gravel	120
Parking - Trailer	Gravel	60
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-33.3R, CHER-35.7R, CHER-34.3R

WDFW Porter Bridge Boat Launch SA-CHER-33.5L

SA-CHER-33.5L Photo: From Chehalis River left at top of ramp looking SE. Taken mid-August in low water.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

41 Porter Creek Rd W
Elma, WA 98541

Driving Directions

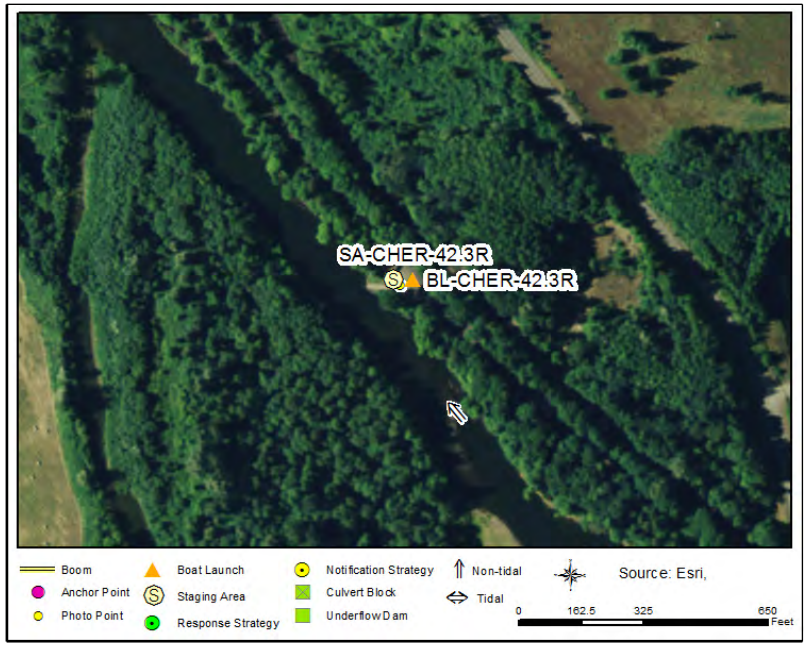
1. From I-5 in Olympia, take exit 104 and follow ramp right for US-101 North toward Port Angeles / Aberdeen
2. In 5.9 mi, keep left onto WA-8 W.
3. Take ramp right for US-12 East toward Oakville / Centralia
4. In 20.6 mi, take ramp right for US-12 East toward Oakville / Centralia
5. At end of ramp turn left onto US-12.
6. In 6.0 mi, turn right onto Porter Creek Rd W
7. In 0.2 mi, just after the bridge, turn left into the boat launch parking lot.

WDFW Oakville Boat Launch SA-CHER-42.3R

Staging Area

Position - Location:	46° 51.010', -123° 15.179'	46° 51' .6", -123° 15' 10.7"	46.85016, -123.25299	Oakville

Comments: Gravel lot, no facilities.



Location Information

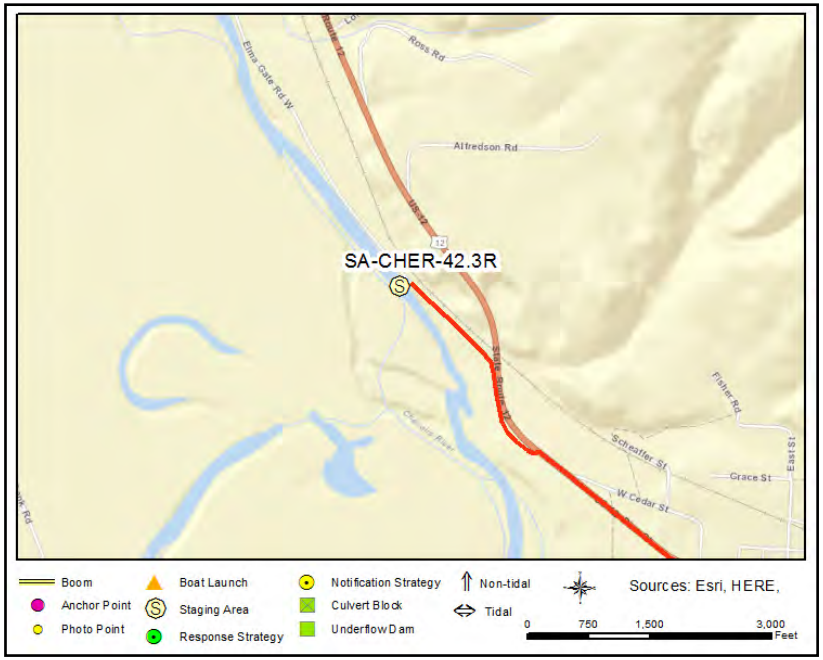
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 11-deg angle
Cell Phone Coverage	Yes	
Covered Spaces	No	
Estimated Lot Size		9000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	14
Parking - Trailer	Gravel	7
Power	No	
Restroom	None	
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-42.3R, CHER-40.3L

WDFW Oakville Boat Launch SA-CHER-42.3R

SA-CHER-42.3R Photo: WDFW Oakville boat ramp. On river right looking NW downstream. Taken 2/13/15, above avg water 10K cfs/14ft at Porter gage.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager
360-249-4628

Nearest Address

113 Elma Gate Rd W
Oakville, WA 98568

Driving Directions

1.From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (12.03 miles)
4. Bear left on Elma Gate Rd W (0.52 miles)
5. Oakville #2 Boat Launch is at 113 Elma Gate Rd W, 98568, on the left.

Fort Borst Park Boat Launch SA-CHER-66.7R

Staging Area

Position - Location:	46° 43.176', -122° 59.134'	46° 43' 10.5", -122° 59' 8.0"	46.71960, -122.98556	Centralia

Comments: Small gravel lot in large public park, full facilities nearby.

GRP Response Strategies Served:

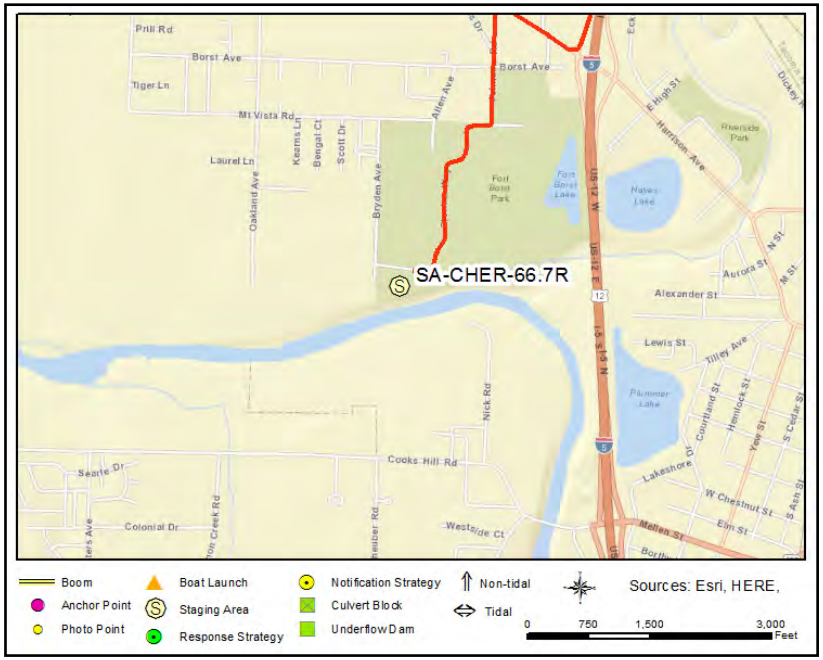
CHER-59.9R

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 10-degree slope
Covered Spaces	Yes	Throughout park
Estimated Lot Size		10000 Sq Ft
Lot Cover (Primary)	Dirt/Gravel	100 %
Parking - Car	Gravel	10 More in park
Parking - Trailer	Gravel	5 Room for more in park
Power	Yes	Throughout park
Restroom	Restroom - Flush	4 Throughout park
User Fee	No	
Waste Disposal	Trash Receptacle	1 onsite. Dump stations in park.
Water (potable)	Yes	Throughout park

Fort Borst Park Boat Launch SA-CHER-66.7R

SA-CHER-66.7R Photo: City of Centralia Fort Borst Park boat ramp. View from top of ramp looking down at Chehalis River.



Site Contact

City of Centralia Parks and Rec
Land/Property Owner : Property Owner

Centralia, WA 98531
360-330-7688

Nearest Address

2560 Pioneer Way
Centralia, WA 98531

Driving Directions

1. From I-5, take exit 82.
2. Take ramp right for Harrison Ave toward Factory Outlet Way.
3. Turn west onto Harrison Ave.
4. In a quarter mile, at the second light, turn left onto Johnson Rd.
5. In 0.3 miles at the dead-end, turn right onto Pioneer Way.
6. Follow Pioneer south a half-mile through the ball fields and turn right at the dead-end. The boat launch is immediately to the left.

Schaefer Park SA-SKOO-4.5

Staging Area

Position - Location:	46° 45.137', -122° 56.282'	46° 45' 8.2", -122° 56' 16.9"	46.75229, -122.93804	Centralia

Comments: County park with lots of facilities and large parking lot.

GRP Response Strategies Served:

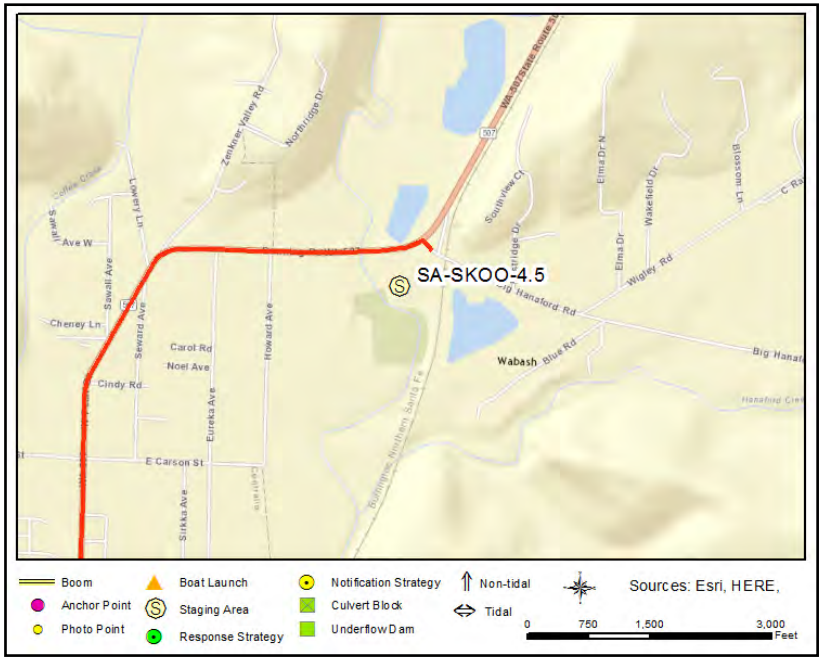
SHNFC-0.1

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Natural (Grass/Dirt)	1 Hand-launch possible
Cell Phone Coverage	Yes	
Covered Spaces	Yes	1 Large picnic shelter
Estimated Lot Size		58000 Sq Ft
Lot Cover (Primary)	Asphalt	100
Parking - Car	Marked	100
Parking - Trailer	Not Marked	50
Power	Yes	
Restroom	Restroom - Flush	2 Seasonal - 1 vault in winter
User Fee	No	
Waste Disposal	Dump Station	1
Water (potable)	Yes	

Schaefer Park SA-SKOO-4.5

SA-SKOO-4.5 Photo: Entrance to Schaefer Park in the offseason. Large grassy area plus large parking lot, facilities, covered spaces.



Site Contact

Lewis County
Municipality (County/City) : Property Owner
351 NW North St
Chehalis, WA 98532
360-740-1192

Nearest Address

106 Big Hanford Rd
Centralia, WA 98531

Driving Directions

1. From I-5 in Olympia head S towards exit 82.
2. At exit 82 take ramp on the right to Harrison Ave toward Factory Outlet Way (0.26 miles)
3. At fork keep right (0.03 miles)
4. Bear right on Harrison Ave (0.08 miles)
5. Turn right on Belmont Ave (0.47 miles)
6. Turn right on W Reynolds Ave (1.23 miles)
7. Turn left on WA-507 (N Pearl St) (1.88 miles)
8. Turn right on Big Hanaford Rd (0.03 miles)
9. Take the next right into Schaefer Park.

APPENDIX 4D

Boat Launch 2-Pagers

BOAT LAUNCHES – LIST

BL-3-GH BL-BLKR-0.9 BL-BLKR-4.1 BL-BLKR-8.4 BL-BLUS-1.1

BL-CHER-10.3L BL-CHER-10.9R BL-CHER-13.3R BL-CHER-20.4R BL-CHER-33.5L

BL-CHER-42.3R BL-CHER-66.7R

Cosmopolis - Chehalis River Boat Launch BL-3-GH

Boat Launch Location

Position - Location:	46° 57.453', -123° 46.275'	46° 57' 27.2", -123° 46' 16.5"	46.95755, -123.77125	Cosmopolis

Comments: Owner of boat ramp and parking area is Cosmo Specialty Fibers; call 360-500-4604 if needed.

Location Information

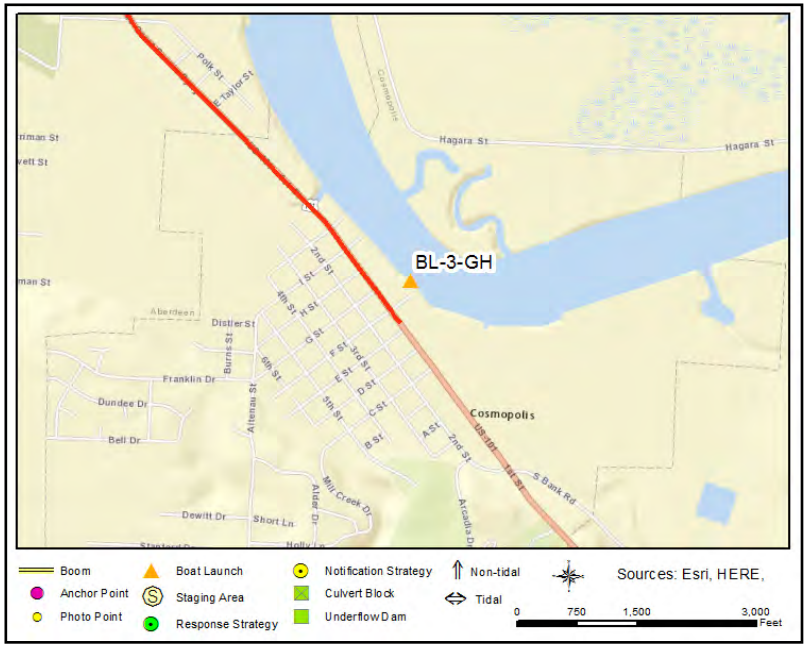
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	1
Boat Ramp(s)	Asphalt	1 7-deg slope
Cell Phone Coverage	Yes	
Estimated Lot Size		65000
Parking - Car	Gravel	50
Parking - Trailer	Gravel	50
Power	No	
Restroom	Restroom - None	
Telephone	No	
User Fee	No	Private Property
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-4.2R, CHER-4.4R, CHER-5.2L, CHER-4.7R, CHER-4.5R

Cosmopolis - Chehalis River Boat Launch BL-3-GH

SA-3-GH Photo: At boat ramp on river left of the Chehalis River, looking



Site Contact

Cosmo Specialty Fibers
Private Owner : Owner
1101 1st Street
Cosmopolis, WA 98537
360-500-4604

Nearest Address

1101 1st Street
Cosmopolis, WA 98537

Driving Directions

1. Enter Aberdeen from west on Hwy 12 and follow signs for Hwy 101 South towards Westport & Raymond
2. Cross Wishkah River Bridge (first bridge in Aberdeen), stay in left lane, and travel on Hwy12 for 0.2 miles before turning left onto South "H" Street (Hwy 101 South).
3. Travel on Hwy 101 South, over the South Aberdeen Bridge, staying in the middle or left lane of bridge.
4. Turn left at first stop light immediately after bridge to stay on Hwy101 South towards Cosmopolis
5. After turn, travel on Hwy 101 South for 2.0 miles before turning left onto "F" Street in Cosmopolis.
6. Follow "F" Street (~300ft) into boat ramp parking area. If gate is chained or locked, contact Cosmo Specialty Fibers for access; call (360) 500-4604.

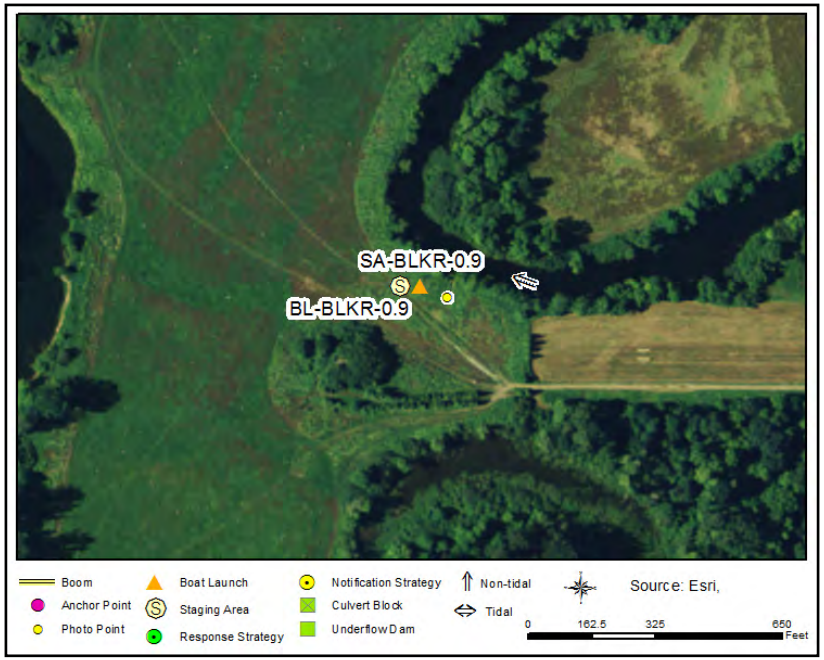
<< Go Back

Chehalis Tribe Black River Boat Launch BL-BLKR-0.9

Boat Launch Location

Position - Location:	46° 49.191', -123° 12.888'	46° 49' 11.5", -123° 12' 53.3"	46.81986, -123.21480	Oakville

Comments: New concrete ramp with large gravel turnaround near mouth of Black River.



Location Information

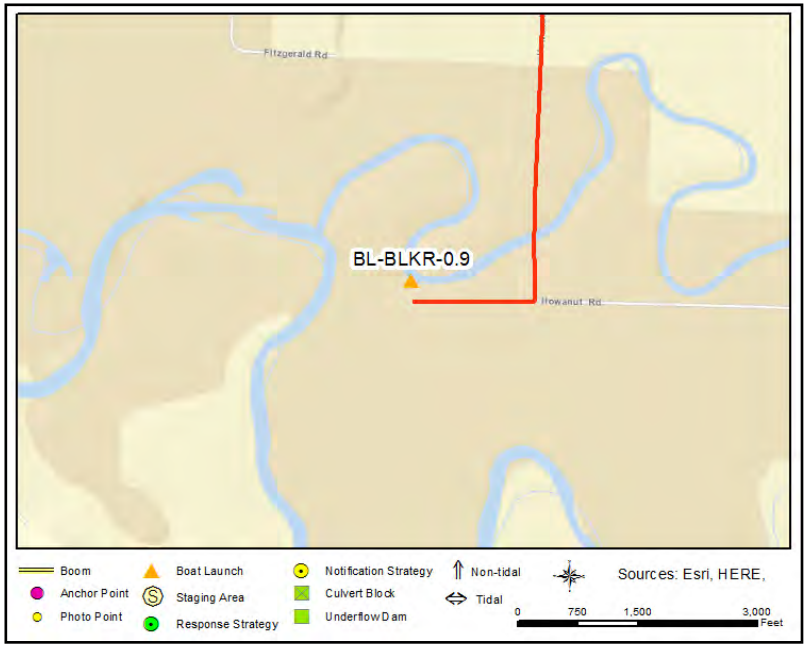
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Solid	1 10-degrees
Cell Phone Coverage	Unknown	
Covered Spaces	No	
Estimated Lot Size		20000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	15
Parking - Trailer	Gravel	5
Power	No	
Restroom	None	
User Fee	No	Tribal members except emergency
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-52.9L, BLKR-0.9, CHER-52.0L

Chehalis Tribe Black River Boat Launch BL-BLKR-0.9

SA-BLKR-0.9 Photo: From Black River left at the top of the Chehalis Tribe boat ramp, looking north. Taken mid-November.



Site Contact

Chehalis Tribe Department of Natural Resources
Land/Property Owner : Property owner

Oakville, WA 98568
360-273-5911

Nearest Address

116 Howanut Rd
Oakville, WA 98568

Driving Directions

1. At exit 88, take ramp right for US-12 West toward Aberdeen / Tenino
2. Turn right onto US-12.
3. In 9.1 mi, just after the WDFW Oakville boat launch, turn left onto Elma Gate Br Rd.
4. Take an immediate right onto Elma Gate Rd E.
5. In 0.9 mi, turn left onto Howanut Rd.
6. In 0.8 mi at the dead-end, turn right into the boat ramp entrance.

WDFW Oakville Boat Launch BL-BLKR-4.1

Boat Launch Location

Position - Location:	46° 49.798', -123° 11.145'	46° 49' 47.9", -123° 11' 8.7"	46.82997, -123.18576	Oakville

Comments: Gravel lot with concrete planks, gradual descent and quiet water.

Location Information

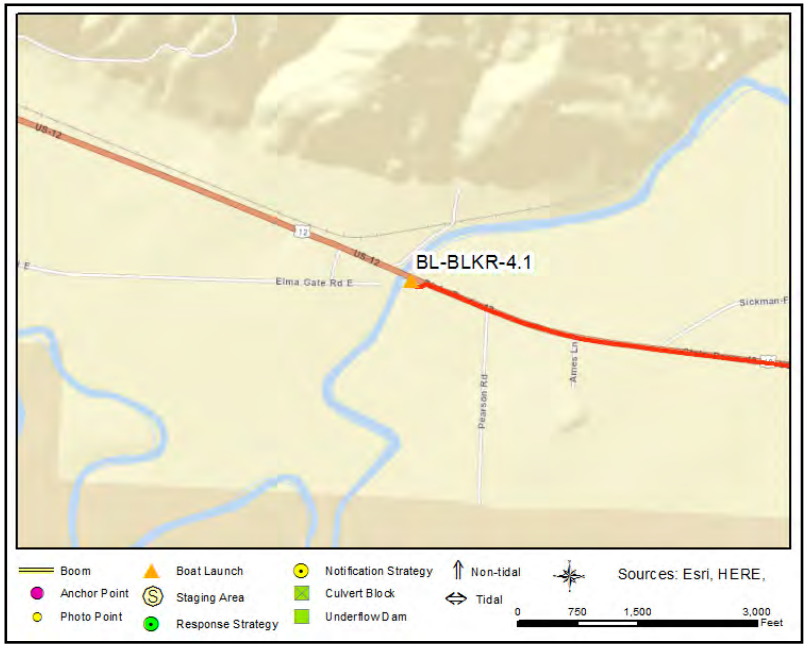
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 12-degree grade
Cell Phone Coverage	Yes	
Covered Spaces	No	
Estimated Lot Size		9300 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	20
Parking - Trailer	Gravel	10
Power	No	
Restroom	None	
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

BLKR-4.1

WDFW Oakville Boat Launch BL-BLKR-4.1

SA-BLKR-4.1 Photo: WDFW Oakville Boat Launch off Elma Gate Branch Road, standing in lot looking towards ramp to Black River.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

7310 US-12
Oakville, WA 98568

Driving Directions

1. From I-5, take exit 88 for US-12 W toward Tenino/ Aberdeen.
2. Turn right onto US-12 W.
3. Drive for 8.9 mi. Entrance to WDFW Oakville Boat Launch is on the left.

WDFW Black River Gate Boat Launch BL-BLKR-8.4

Boat Launch Location

Position - Location:	46° 49.759', -123° 8.029'	46° 49' 45.5", -123° 8' 1.7"	46.82931, -123.13381	Rochester

Comments: Gravel, easy grade, no amenities, quiet water, lots of vegetation.

Location Information

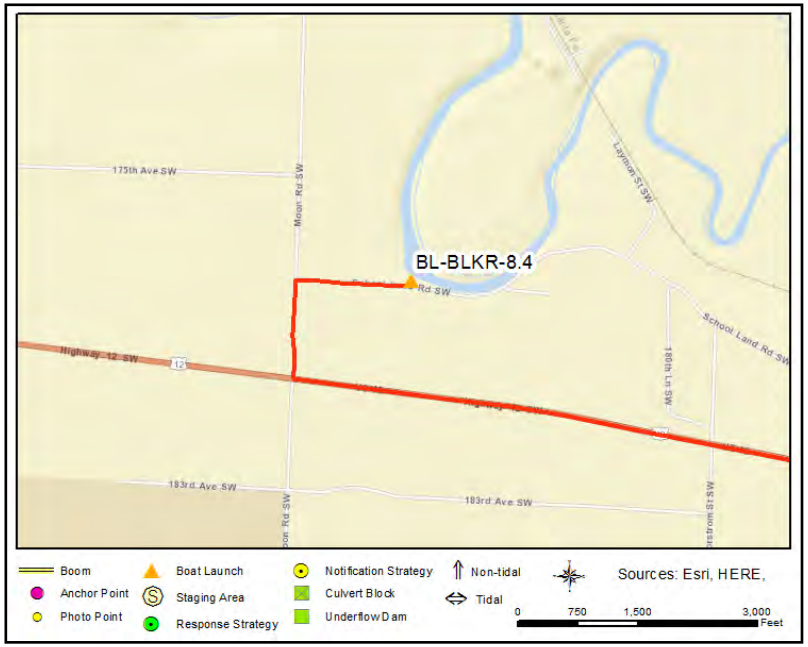
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Gravel	1 6-degree grade
Cell Phone Coverage	Yes	
Covered Spaces	No	
Estimated Lot Size		6300 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	5
Power	No	
Restroom	None	
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

BLKR-8.4

WDFW Black River Gate Boat Launch BL-BLKR-8.4

SA-BLKR-8.4 Photo: WDFW Black River Gate Boat Launch. Standing at water's edge looking up towards parking lot.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

11878 School Land Rd SW
Rochester, WA 98579

Driving Directions

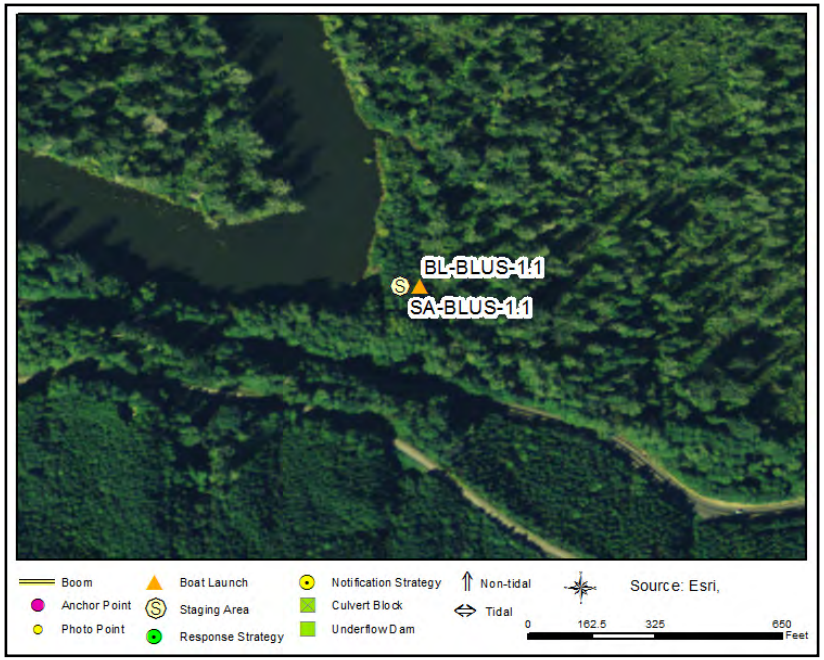
1. From I-5 take exit 88
2. Take ramp right for US-12 West toward Aberdeen / Tenino
3. Turn right onto US-12
4. After 6.7 mi, turn right onto Moon Rd SW
5. In 0.2 mi, turn right onto School Land Rd SW
6. In 0.3 mi the ramp is on your left. If you reach Maridale Ln SW, you've gone too far.

DNR Blue Slough Hand Launch BL-BLUS-1.1

Boat Launch Location

Position - Location:	46° 56.429', -123° 43.134'	46° 56' 25.7", -123° 43' 8.1"	46.94048, -123.71890	Montesano

Comments: Intended for hand-launch but bollards can be removed or cut (contact DNR before/after) and small motorized boat could be launched. Wheelchair guard rail on left side of ramp.



Location Information

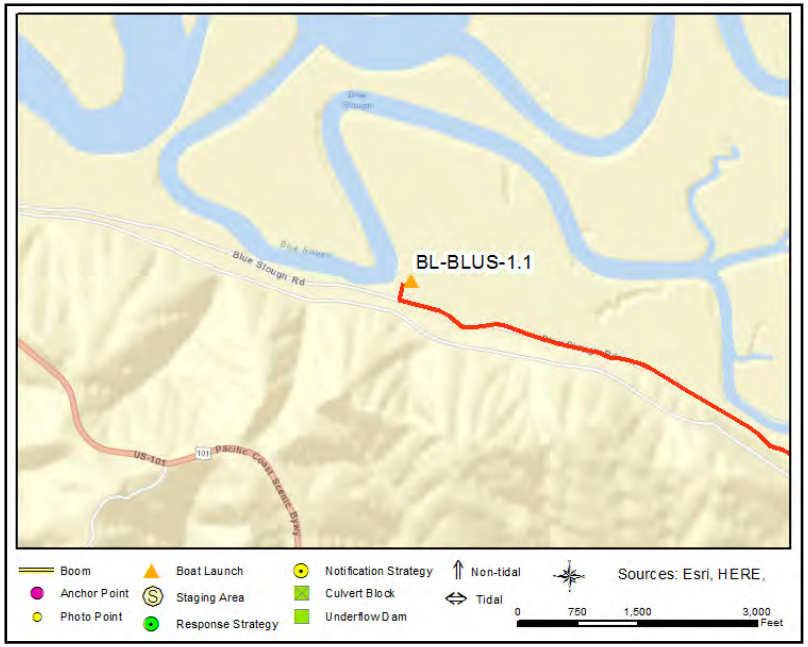
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 - 10" squares
Covered Spaces	No	
Estimated Lot Size		3000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	2
Power	No	
Restroom	Restroom - Portable	1 May to November only
User Fee	No	
Waste Disposal	Trash Receptacle	1
Water (potable)	No	

GRP Response Strategies Served:

PRCS-0.1, BLUS-0.1

DNR Blue Slough Hand Launch BL-BLUS-1.1

SA-BLUS-1.1 Photo: From Blue Slough, looking W at hand-launch ramp. Mid-low tide (4ft at Montesano gage) on 10/14/14.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Blue Slough Rd
Montesano, WA 98563

Driving Directions

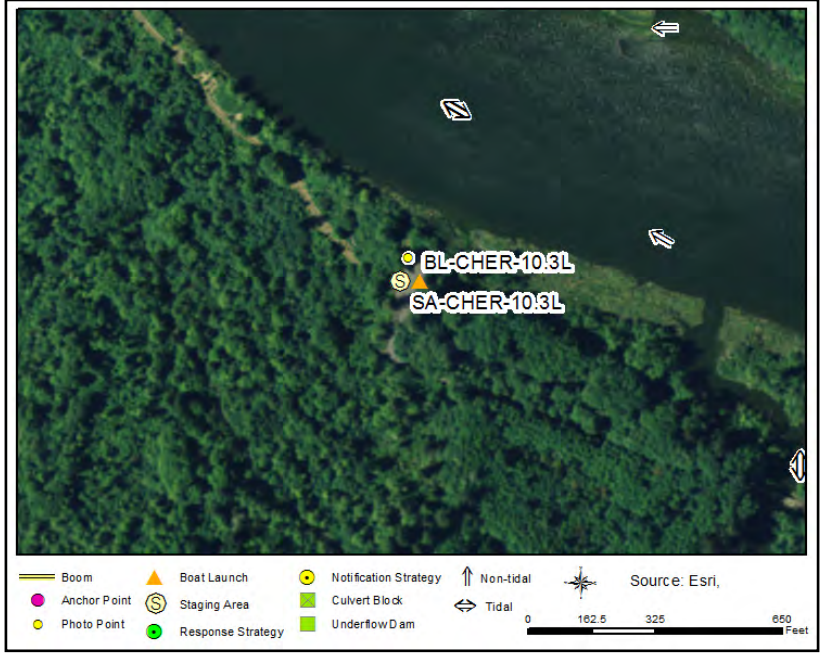
1. From I-5 take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen 5.9 mi.
3. Keep left onto WA-8 W for 21.0 mi.
4. Road name changes to US-12 W, stay straight for10.0 mi.
5. Take ramp right toward Raymond / Montesano.
6. At stop sign, turn left onto S Main St, then keep straight onto WA-107 / S Main St.
7. In 5.0 mi, bear right onto Blue Slough Rd.
8. In 2.4 mi turn right into the parking lot.

DNR Preacher's Slough Boat Launch BL-CHER-10.3L

Boat Launch Location

Position - Location:	46° 56.821', -123° 39.297'	46° 56' 49.2", -123° 39' 17.8"	46.94701, -123.65495	Montesano

Comments: Intended for hand launch with wheelchair rail on side. Can cut padlocks on bollards to access with trailer, notify DNR before/after. Could probably launch small motored boats.



Location Information

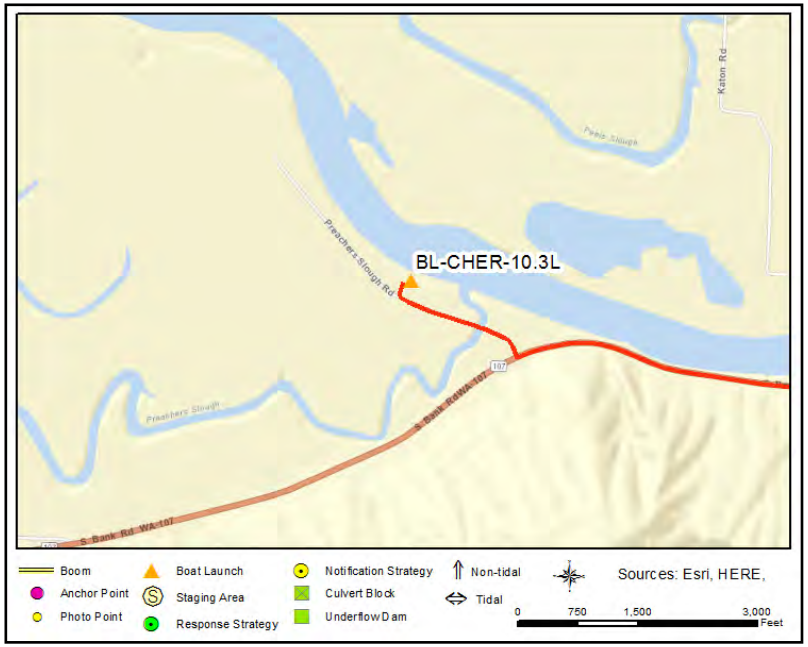
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 - 10" square stones
Covered Spaces	No	
Estimated Lot Size		7400 Sq Ft
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	20
Parking - Trailer	Gravel	5
Power	No	
Restroom	Restroom - Portable	1 May to November only
User Fee	No	
Waste Disposal	Trash Receptacle	1 20-gal. can
Water (potable)	No	

GRP Response Strategies Served:

CHER-10.0R, CHER-10.4R

DNR Preacher's Slough Boat Launch BL-CHER-10.3L

SA-CHER-10.3L Photo: DNR Preacher's Slough hand-launch ramp. Looking from gravel entrance towards ramp and Chehalis River, wheelchair guard rail on left side of ramp.



Site Contact

Washington Department of Natural Resources
Land/Property Owner : Property owner

Olympia, WA
360-902-1064

Nearest Address

Preacher's Slough Rd
Montesano, WA 98563

Driving Directions

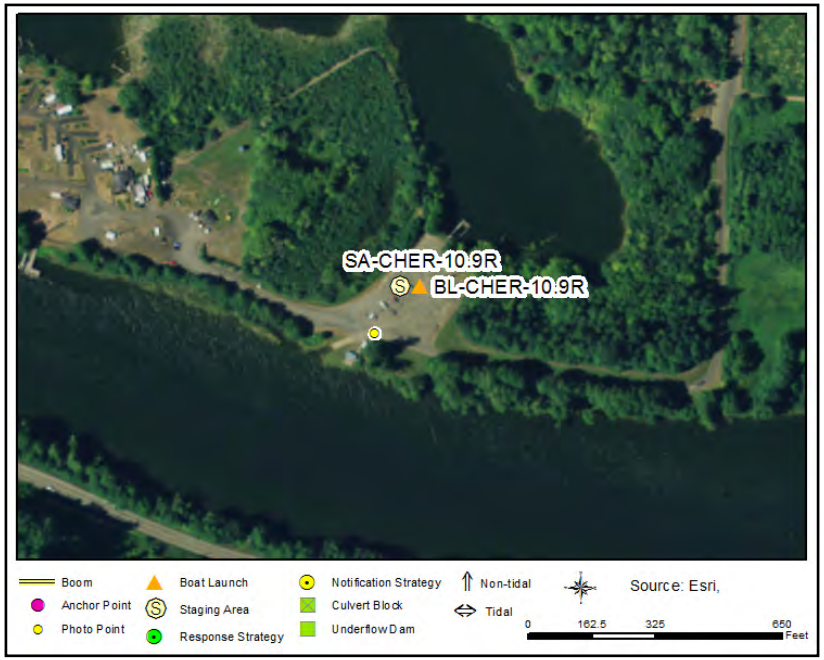
1. From I-5 in Olympia, head south to exit 104 to Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles
3. Continue on WA-8 toward Montesano/Aberdeen
4. Continue on US-12
5. Take ramp on the right toward Montesano/Jct Wa107/Raymond
6. Turn left on S Main St
7. Continue on WA-107 (State Route 107)
8. Turn right on Preachers Slough Rd
9. The boat launch parking area is 0.5 miles down on the right.

Friends Landing Boat Launch BL-CHER-10.9R

Boat Launch Location

Position - Location:	46° 56.782', -123° 38.402'	46° 56' 46.9", -123° 38' 24.1"	46.94636, -123.64003	Montesano

Comments: Be aware of abandoned pilings in area. Moorage space/dock just downriver at campground.



Location Information

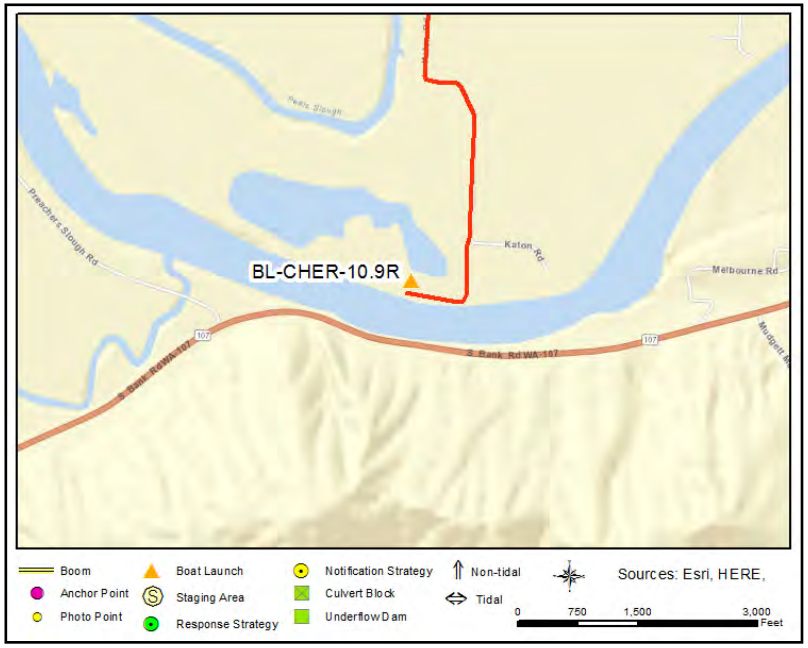
Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	2 Small floating dock 700' downriver
Boat Ramp(s)	Concrete, Solid	1 Grooved
Covered Spaces	Yes	1 Small onsite. More at campground
Estimated Lot Size		49000 Sq Ft
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Gravel	10
Parking - Trailer	Gravel	50
Power	Yes	At campground
Restroom	Restroom - Portable	1 At launch site
Restroom	Restroom - with Showers	4 At campground
Waste Disposal	Dump Station	1 At campground
Waste Disposal	Trash Receptacle	1 At site
Water (potable)	Yes	At campground

GRP Response Strategies Served:

CHER-9.4L, CHER-8.0L, CHER-10.4L, CHER-9.4R, CHER-8.7R

Friends Landing Boat Launch BL-CHER-10.9R

SA-CHER-10.9R Photo: Friends Landing boat ramp. Photo from parking lot looking down ramp at Chehalis River.



Site Contact

Friends Landing
Land/Property Owner : Property owner

Montesano, WA 98563
360-249-5117

Nearest Address

300 Katon Rd
Montesano, WA 98563

Driving Directions

1. From I-5 take exit 104.
2. Take ramp right for US-101 North toward Port Angeles / Aberdeen (5.9 mi).
3. Keep left onto WA-8 W (21.0 mi).
4. Road name changes to US-12 W (11.2 mi).
5. Take ramp right for JCT OLD WA-401 toward Montesano / Devonshire Rd.
6. At bottom of ramp, turn right onto Pioneer Ave W.
7. Take an immediate right onto Devonshire Rd (1.3 mi).
8. At dead-end, turn left onto Katon Rd (1.5 mi).
9. Take Katon to boat launch parking area.

<< Go Back

WDFW South Montesano Boat Launch BL-CHER-13.3R

Boat Launch Location

Position - Location:	46° 57.776', -123° 36.184'	46° 57' 46.6", -123° 36' 11.0"	46.96294, -123.60306	Montesano

Comments: Three side-by-side concrete plank boat ramps, large gravel lot.

Location Information

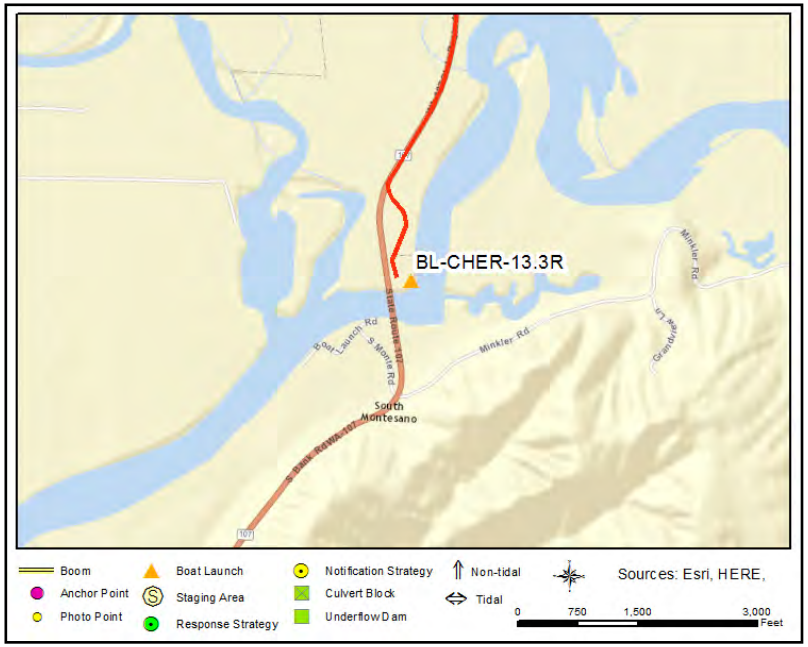
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	3
Covered Spaces	Yes	Small - under bridge
Estimated Lot Size		46900 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	150
Parking - Trailer	Gravel	75
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-15.0L, CHER-13.4R, WYNO-0.5

WDFW South Montesano Boat Launch BL-CHER-13.3R

SA-CHER-13.3R Photo: WDFW South Montesano boat ramp. Top of 3 side-by-side boat ramps looking down at Chehalis River.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

75 WA-107
Montesano, WA 98563

Driving Directions

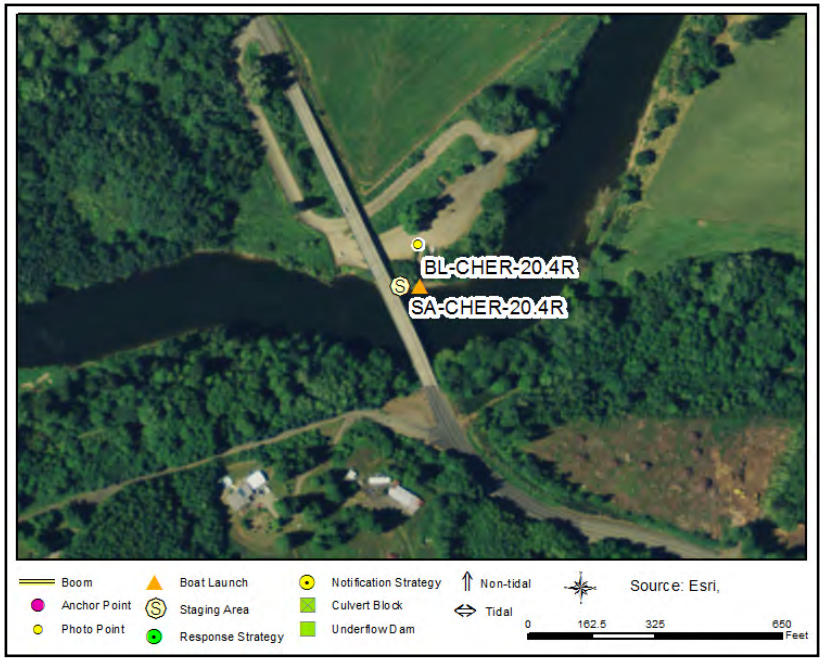
1. From I-5, take exit 104. Follow ramp right for US-101 North toward Port Angeles / Aberdeen
2. In 5.9 mi, keep left onto WA-8 W.
3. In 21.0 mi, road name changes to US-12 W.
4. In 10.0 mi, take ramp right toward Raymond / Montesano.
5. At stop sign, turn left onto S Main St.
6. Keep straight onto WA-107 / S Main St
7. In 0.7 mi, turn left at the signs for Mary's River Lumber Office/Truck Entrance and Public Fishing sign.
8. Follow road 0.2 miles to large gravel lot under bridge.

WDFW Fuller Bridge Boat Launch BL-CHER-20.4R

Boat Launch Location

Position - Location:	46° 58.720', -123° 28.726'	46° 58' 43.2", -123° 28' 43.6"	46.97867, -123.47876	Elma

Comments: Large gravel lot, concrete plank boat ramp, minimal amenities.



Location Information

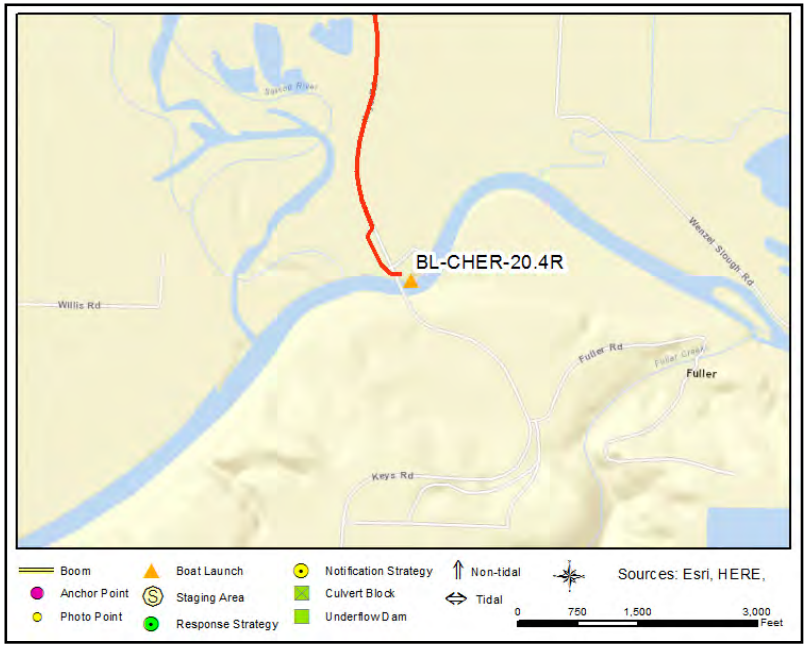
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 12-Degree grade
Covered Spaces	Yes	Under bridge
Estimated Lot Size		44500 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	150
Parking - Trailer	Gravel	70
Power	No	
Restroom	Restroom - Vault	1 Small pit toilet
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-23.2R, CHER-23.3R, CHER-17.5L, STSP-0.5

WDFW Fuller Bridge Boat Launch BL-CHER-20.4R

SA-CHER-20.4R Photo: WDFW Fuller Bridge boat ramp. Looking from top of ramp down to Chehalis River.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

164 Keys Rd
Elma, WA 98541

Driving Directions

1. From I-5 in Olympia head south to exit 104/Aberdeen.
2. At exit 104 bear right onto ramp and go on US-101 N toward Aberdeen/Port Angeles (5.93 miles)
3. Continue on WA-8 toward Montesano/Aberdeen (21.03 miles)
4. Continue on US-12 (4.35 miles)
5. Turn left (0.02 miles)
6. Continue on Keys Rd (1.3 miles)
7. Turn right into WDFW parking area.

WDFW Porter Bridge Boat Launch BL-CHER-33.5L

Boat Launch Location

Position - Location:	46° 56.338', -123° 18.916'	46° 56' 20.3", -123° 18' 54.9"	46.93896, -123.31526	Elma

Comments: Single concrete plank ramp, large gravel and grass lot.

Location Information

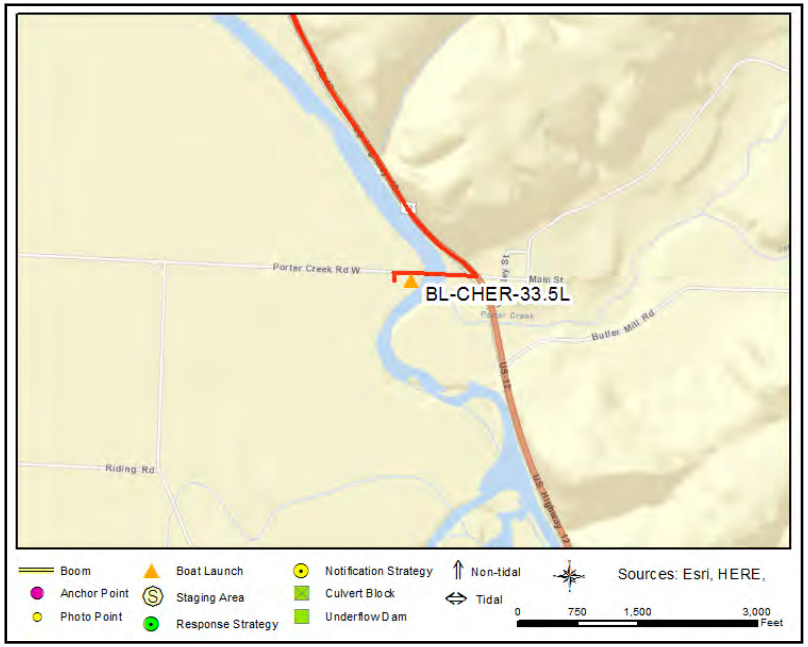
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1
Covered Spaces	No	
Estimated Lot Size		41000 Sq Ft
Lot Cover (Primary)	Gravel	60 %, rest grass/dirt
Parking - Car	Gravel	120
Parking - Trailer	Gravel	60
Power	No	
Restroom	Restroom - Vault	1
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-33.3R, CHER-35.7R, CHER-33.5L, CHER-34.3R

WDFW Porter Bridge Boat Launch BL-CHER-33.5L

SA-CHER-33.5L Photo: From Chehalis River left at top of ramp looking SE. Taken mid-August in low water.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager

48 Devonshire Road, Montesano, WA 98563
360-249-4628

Nearest Address

41 Porter Creek Rd W
Elma, WA 98541

Driving Directions

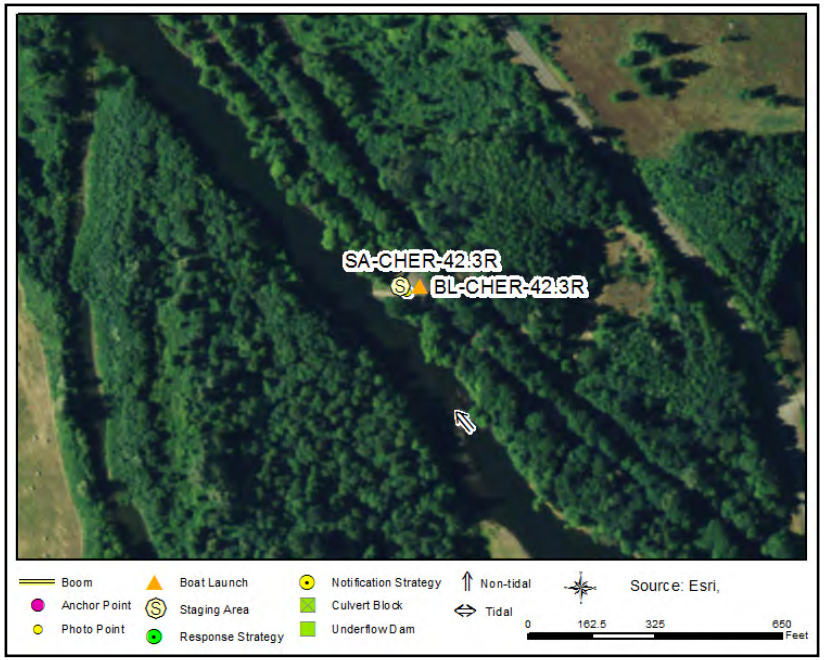
1. From I-5 in Olympia, take exit 104 and follow ramp right for US-101 North toward Port Angeles / Aberdeen
2. In 5.9 mi, keep left onto WA-8 W.
3. Take ramp right for US-12 East toward Oakville / Centralia
4. In 20.6 mi, take ramp right for US-12 East toward Oakville / Centralia
5. At end of ramp turn left onto US-12.
6. In 6.0 mi, turn right onto Porter Creek Rd W
7. In 0.2 mi, just after the bridge, turn left into the boat launch parking lot.

WDFW Oakville Boat Launch BL-CHER-42.3R

Boat Launch Location

Position - Location:	46° 51.010', -123° 15.179'	46° 51' .6", -123° 15' 10.7"	46.85016, -123.25299	Oakville

Comments: Concrete plank boat ramp, 11-degree angle.



Location Information

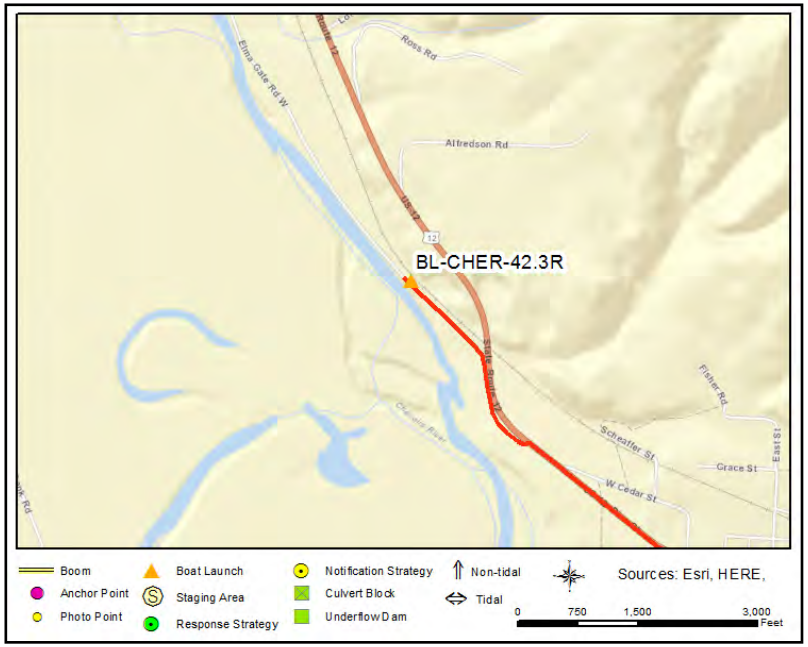
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 11-deg angle
Cell Phone Coverage	Yes	
Covered Spaces	No	
Estimated Lot Size		9000 Sq Ft
Lot Cover (Primary)	Gravel	100 %
Parking - Car	Gravel	14
Parking - Trailer	Gravel	7
Power	No	
Restroom	None	
User Fee	No	Discover Pass (non-emergency)
Waste Disposal	None	
Water (potable)	No	

GRP Response Strategies Served:

CHER-42.3R, CHER-40.3L

WDFW Oakville Boat Launch BL-CHER-42.3R

SA-CHER-42.3R Photo: WDFW Oakville boat ramp. On river right looking NW downstream. Taken 2/13/15, above avg water 10K cfs/14ft at Porter gage.



Site Contact

WDFW Region 6
Land/Property Owner : Property Manager
360-249-4628

Nearest Address

113 Elma Gate Rd W
Oakville, WA 98568

Driving Directions

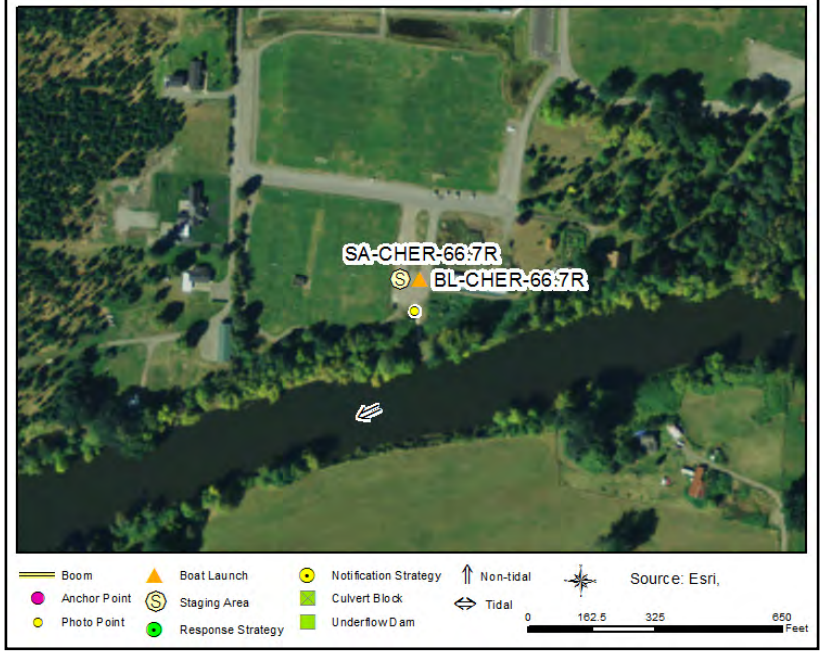
1.From I-5 in Olympia, head south to exit 88.
2. At exit 88 take ramp on the right to US-12 W toward Aberdeen/Tenino (0.34 miles)
3. Turn right on US-12 (Hwy 99 SW) (12.03 miles)
4. Bear left on Elma Gate Rd W (0.52 miles)
5. Oakville #2 Boat Launch is at 113 Elma Gate Rd W, 98568, on the left.

Fort Borst Park Boat Launch BL-CHER-66.7R

Boat Launch Location

Position - Location:	46° 43.176', -122° 59.134'	46° 43' 10.5", -122° 59' 8.0"	46.71960, -122.98556	Centralia

Comments: Concrete plank launch 8-deg slope, small gravel/paved lot but inside a large park.



Location Information

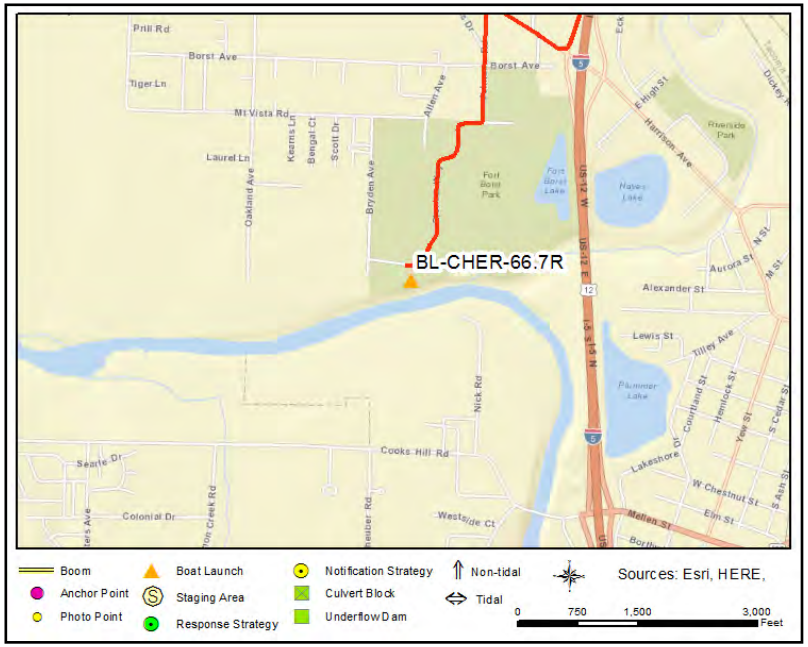
Asset	Type/Status	Amount/Number
Boat Dock(s)	No	
Boat Ramp(s)	Concrete, Plank	1 10-degree slope
Covered Spaces	Yes	Throughout park
Estimated Lot Size		10000 Sq Ft
Lot Cover (Primary)	Dirt/Gravel	100 %
Parking - Car	Gravel	10 More in park
Parking - Trailer	Gravel	5 Room for more in park
Power	Yes	Throughout park
Restroom	Restroom - Flush	4 Throughout park
User Fee	No	
Waste Disposal	Trash Receptacle	1 onsite. Dump stations in park.
Water (potable)	Yes	Throughout park

GRP Response Strategies Served:

CHER-72.4R, CHER-59.9R, CHER-66.8R

Fort Borst Park Boat Launch BL-CHER-66.7R

SA-CHER-66.7R Photo: City of Centralia Fort Borst Park boat ramp. View from top of ramp looking down at Chehalis River.



Site Contact

City of Centralia Parks and Rec
Land/Property Owner : Property Owner

Centralia, WA 98531
360-330-7688

Nearest Address

2560 Pioneer Way
Centralia, WA 98531

Driving Directions

1. From I-5, take exit 82.
2. Take ramp right for Harrison Ave toward Factory Outlet Way.
3. Turn west onto Harrison Ave.
4. In a quarter mile, at the second light, turn left onto Johnson Rd.
5. In 0.3 miles at the dead-end, turn right onto Pioneer Way.
6. Follow Pioneer south a half-mile through the ball fields and turn right at the dead-end. The boat launch is immediately to the left.

CHAPTER 5

(Reserved)

This page was intentionally left blank.

CHAPTER 6

Resources at Risk

6. 1 CHAPTER INTRODUCTION

This chapter provides a summary of natural, cultural, and economic resources at risk in the Chehalis River area. It provides general information on habitat, fish, and wildlife resources, and locations in the area where sensitive natural resource concerns exist. It offers a summary of cultural resources that include fundamental procedures for the discovery of cultural artifacts and human skeletal remains. General information about flight restrictions, hazing, and oiled wildlife can be found near the end of this chapter. A list of economic resources in the area is provided in the chapter's appendix.

This chapter is purposely broad in scope and should not be considered comprehensive. Some of the sensitive resources provided in this chapter are listed because they could not be addressed in Chapter 4 (Response Strategies and Priorities). Additional information from private organizations or federal, state, tribal, and local government agencies should also be sought during spills and considered.

The information provided in this chapter can be used in:

- Assisting the Environmental Unit (EU) and Operations in developing additional response strategies beyond those found in Chapter 4.
- Providing resource-at-risk "context" to responders, clean-up workers, and others during the initial phase of a spill response in the GRP area.
- Briefing responders and incident command staff that may be unfamiliar with sensitive resource concerns in the GRP area.
- Providing background information for personnel involved in media presentations and public outreach during a spill incident.

6. 2 NATURAL RESOURCES AT RISK - SUMMARY

Most biological communities are susceptible to the effects of oil spills. Plant communities on land, eelgrass and marsh grasses in estuaries, and kelp beds in the ocean; microscopic plants and animals; and larger animals, such as fish, amphibians and reptiles, birds, mammals, and a wide variety of invertebrates, are all potentially at risk from smothering, acute toxicity, and/or the chronic long-term effects that may result from being exposed to spilled oil.

The Chehalis River subbasin affords a wide variety of aquatic, riparian, and upland habitats. These varied habitats support a complex diversity of wildlife species, including large and small mammals; songbirds, birds of prey, upland birds, and waterfowl; reptiles; and amphibians. Some species are resident throughout the year; others are migratory either within the subbasin or, in many cases, seasonally migrate outside the subbasin. Many wildlife species found in the sub basin are classified as threatened, endangered, sensitive, or of special concern under the federal Endangered Species Act or

Washington State guidelines. Classification types are listed below, with the abbreviation of each type provided in the brackets (to the right of the classification).

- Federal Endangered (FE)
- Federal Threatened (FT)
- Federal Candidate (FC)
- Federal Species of Concern (FCo)
- State Endangered (SE)
- State Threatened (ST)
- State Candidate (SC)
- State Monitored (SM)
- State Sensitive (SS)

Sensitive species that may occur within this area, at some time of year, include the following federal and state listed species.

Birds:

- Bald eagle [FCo/SS],
- Black swift [FCo],
- Caspian tern [FCo],
- Fox Sparrow [FCo],
- Golden eagle [SC],
- Long-billed curlew [FCo/],
- Marbled godwit [FCo],
- Marbled murrelet [FT/ST],
- Northern spotted owl [FT/SE],
- Olive-sided flycatcher [FCo],
- Oregon vesper sparrow [FCo],
- Peregrine falcon [FCo/SS],
- Purple finch [FCo],
- Purple martin [SC],
- Rufous hummingbird [FCo],
- Short-billed dowitcher [FCo],
- Short-eared owl [FCo],
- Steaked horned lark [FT/SE],
- Vaux's swift [SC],
- Western grebe [SC],

- Willow flycatcher [FCo],
- Yellow-billed cuckoo [FT/SC].

Mammals:

- Mazama pocket gopher (including Olympic, Tenino and Yelm subspecies) [FT/ST],
- Townsend's big-eared bat [SC],
- Western gray squirrel [ST].

Fish/Shellfish:

- Bull trout [FT/SC]
- Olympic mudminnow [SS],

Amphibian/Reptile:

- Dunn's salamander [SC],
- Oregon spotted frog [FT/SE],
- Western toad [SC]

Insects:

- Mardon skipper [FCo/SE],
- Taylor's checkerspot [FE/SE],
- Valley silverspot [SC].

Plants:

- Golden paintbrush [FT],
- Kincaid's lupine [FT],
- Nelson's checker-mallow [FT],
- Water howellia [FT],

6.2.1 General Resource Concerns

6.2.1a Habitats:

- **Riparian areas** serve as transitional zones between the uplands and the rivers and consequently are heavily used by a variety of wildlife. They also contribute to fish habitat by providing shade, cover, and food.
- **Side channels and impounded areas** provide feeding and resting areas for waterfowl and herons and are important rearing areas for juvenile fish.
- **Islands** provide important nesting habitat for a variety of bird species, as well as habitat for a variety of mammals.

- **Stream mouths** are concentration areas for fish and are important feeding areas for a variety of birds.
- **Wetlands** in the lower reaches of this region are tidally influenced. Freshwater wetlands range from seasonal open marshes to forested swamps along rivers and streams. All wetland types support a diverse array of amphibian, bird, insect, fish, and wildlife species.

6.2.1b Fish and Shellfish:

- Salmonids species are present throughout the basin, including *Bull trout [FT/SC],* Coho, spring/summer/fall Chinook, fall chum, Rainbow, Summer/winter steelhead, Coastal/resident cutthroat trout.
- *Various resident fish* present in rivers, lakes, and streams, including Bridge lip sucker, Crappie, Largemouth bass, Northern pike minnow, *Olympic mud minnow [SS]*, Pacific/western brook lamprey, Perch, Redside shiner, Sculpin, Speckled dace, and Starry flounder (in tidally influenced waters.
- *Fresh water mussels (Western floaters, Western pearlshell, and Western ridgemussel*) are found throughout most of the region.

6.2.1c Wildlife:

- Wintering *waterfowl concentrations*, (primarily ducks, geese and swans) are present along the main stem of the Chehalis. Field size, flood conditions, weather, and crop rotations of any given year help to determine the actual waterfowl distribution.
- *Great blue and Green herons,* along with *Bald eagles [FCo/SS]* and *Ospreys,* nest and forage year-round along waterways throughout the region.
- *Marbled Murrelet [FT/ST]* nesting areas known to be present in vicinity of river and associated uplands.
- *Mammals* common to the region include beaver, muskrat, river otter, mink and raccoon. All of these small mammals are vulnerable to contact with spilled oil because of their habitat preferences. Western gray squirrel [ST] and Mazama pocket gopher [ST/ST] presence documented at locations throughout drainage. Larger mammals (deer, elk, etc.) are also present throughout this area.

Chehalis River Tributaries

Wynoochee River (~ Chehalis RM 13). Bald eagle [FCo/SS] nesting ~ Wynoochee RM 10. Harlequin duck breeding area upstream from about RM 5. Waterfowl concentration between RM 0 and RM 1. Salmonid presence includes Coho, fall Chinook, fall chum, summer/ winter steelhead, coastal/resident cutthroat. Olympic mudminnow [SS] and typical resident fish present.

Satsop River (~ Chehalis RM 20). Waterfowl concentrations from mouth to ~ Satsop RM 6. Western toad [SC] documented in same reach. Salmonid presence includes Coho, fall chum, summer/fall Chinook, winter steelhead, coastal cutthroat. Olympic mudminnow [SS] and typical resident fish present.

Black River (~ Chehalis RM 47). Waterfowl concentrations and Bald eagle [FCo/SS] and Osprey nesting near mouth of the river. Harlequin breeding habitat throughout this drainage. Townsend's big-eared bat [SC] observed throughout this area. Western gray squirrel [ST] detected throughout the reach. Salmonid presence includes Coho, fall Chinook, winter steelhead, fall chum, coastal/resident cutthroat trout. Olympic mudminnow [SS] documented in small tributaries. Typical resident fish presence. Tribal lands south of river in lower reaches. Black River Management Area located ~ Black River RM 11.

Scatter Creek (~ Chehalis RM 55). Wood duck breeding throughout the reach. Oregon vesper sparrow [FCo/SC] occurrence west and south of the City of Tenino. Extensive Mazama pocket gopher [FT/ST] usage throughout this area. Salmonid presence includes Coho, fall Chinook, coastal/resident cutthroat trout. Typical resident fish present. Scatter Creek Wildlife Area located ~RM 5-7. There is extensive presence of Mardon skipper [FCo/SE], Valley silverspot [SC], and Taylor's checkerspot [FE/SE] butterflies near the City of Tenino.

Lincoln Creek (~ Chehalis RM 62). Elk winter range. Western gray squirrel [ST] documented in vicinity of ~ Lincoln Creek RM 3.5. Salmonid presence includes Coho, winter steelhead, and coastal cutthroat trout.

Skookumchuck River (~ Chehalis RM 67). Waterfowl concentration at mouth of river. Additional waterfowl concentration (associated with agricultural lands) and extensive Harlequin duck breeding area above ~RM 4.5. Purple martin [SC] and Vaux's swift [SC] near the mouth of the river. Salmonid presence includes Coho, spring/fall Chinook, winter steelhead, coastal/resident cutthroat trout. Olympic mudminnow [SS] documented in small tributaries. Typical resident fish present. WDFW game farm with extensive riparian habitat located near river mouth.

Hanaford Creek (~ Skookumchuck RM 4). - Includes portions of North Hanaford Creek and South Hanaford Creek. Elk winter range. Salmonid presence includes Coho, winter steelhead, coastal/resident cutthroat trout. Olympic mudminnow [SS] presence is documented. Typical resident fish present.

Newaukum River (~ Chehalis RM 75). Bald eagle [FCo/SS] nesting ~ RM 6. Waterfowl concentrations near the mouth of river. Salmonid presence includes Coho, spring/fall Chinook, winter steelhead, coastal/resident cutthroat. Olympic mudminnow [SS] documented and is likely to occur in small tributaries and oxbow lakes.

South Fork Chehalis River (~ Chehalis RM 88). Bald eagle [FCo/SS] nesting near RM 5. Extensive elk winter range. Olympic mudminnow [SS] presence documented. Salmonid presence includes Coho, spring/fall Chinook, winter steelhead, coastal/resident cutthroat trout

6.2.2 Specific Geographic Areas of Concern.

1) **Ferbrache Unit, Chehalis Wildlife Area at mouth of Wynoochee River (~ Chehalis RM 13).** Waterfowl concentration area. Bald eagle [FCo/SS] nesting. Salmonid spawning and rearing habitat. Resident fish include Olympic mudminnow [SS].

2) **Ferbrache Unit, Chehalis Wildlife Area (~ Chehalis RM 18).** Unit is 114 acres, located five miles southeast of Montesano. Maintained for wintering waterfowl forage, fishing access and a pheasant release site for fall hunting. Raptors, shorebirds, herons, and upland game birds also present. Deer, elk, and small mammal presence.

3) **Satsop Unit, Chehalis Wildlife Area, (~ Chehalis RM 20).** The unit is 1,432 acres near the confluence of the Satsop River and the Chehalis River. This unit is maintained as floodplain habitat. General waterfowl concentration area. Salmonid spawning and rearing habitat. Resident fish include Olympic mudminnow [SS]. Western toad [SC] presence. Bald eagle [FCo/SS] nesting. Other raptors, shorebirds, herons, and upland game birds also present. Deer, elk, and small mammal presence.

4) **Chehalis Wildlife Area, (~ Chehalis RM 22)**. This area is 531 acres located southwest of Elma. General waterfowl concentration area. The unit is maintained for waterfowl habitat and associated recreation. Wood duck nesting/brooding and significant shorebird usage (vicinity of Wenzel Slough/Vance Creek Park). Primarily open wetland, riparian shrub habitat, or meadow/field habitat. Bald eagle [FCo/SS] nesting. Other wildlife species known to exist in the area include the Olympic mudminnow [SS], mink, shorebirds, wood duck, waterfowl, trumpeter swan, and osprey.

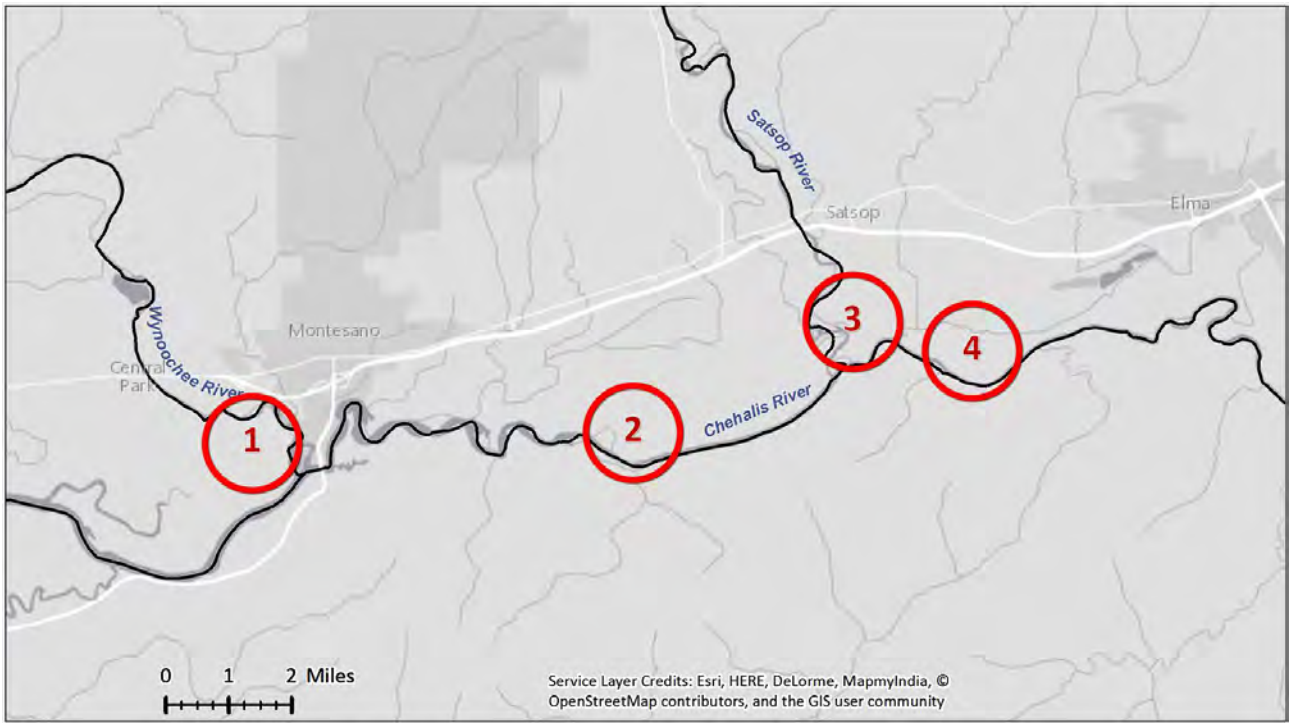


Figure 6-1: Chehalis River Geographic Areas of Concern (~RM 9 to ~RM 26)

5) **Hoxit Unit, Chehalis Wildlife Area, (~ Chehalis RM 34-37).** This 80-acre unit is located 1.5 miles south of Porter and is maintained for winter waterfowl habitat. Bald eagle [FCo/SS] nesting. Other raptors, shorebirds, herons, and upland game birds also present. Deer, elk, and small mammal presence.

6) **Davis Creek, Scatter Creek Wildlife Area (~ Chehalis RM 41-43).** Approximately 500 acres located just outside of the town of Oakville near State Hwy 12. Most of the land is characterized as open wetland, riparian shrub habitat, meadow/field habitat, and oak woodland. Waterfowl concentration area. Trumpeter swans, and a variety of salmon species are present. Other species known to exist in the area include Olympic mud minnows [SS], mink, shorebirds, elk, deer, fox, coyote, bobcat, and grouse.

7) **Mouth of Black River (~ Chehalis RM 47).** Waterfowl concentrations, Bald eagle [FCo/SS] and Osprey nesting near mouth of the river. Harlequin breeding habitat throughout this drainage. Townsend's big-eared bat [SC] observed throughout this area. Western gray squirrel [ST] detection throughout the reach. Salmonid spawning and rearing habitat. Olympic mudminnow [SS] documented in small tributaries. Tribal lands.

8) **Mouth of Scatter Creek (~ Chehalis RM 55).** Waterfowl concentration and wood duck nesting area. Extensive Mazama pocket gopher [FT/ST] usage throughout this area. Salmonid spawning and rearing habitat.

9) **Chehalis wetland complex, mouth of Skookumchuck River (~ Chehalis RM 67).** Scrub shrub and emergent wetlands support large concentrations of wintering waterfowl, cavity nesting ducks, and Canada goose nesting. Extensive Harlequin duck breeding area. Salmonid spawning and rearing habitat. Resident fish include Olympic mudminnow [SS]. WDFW game farm.

10) **Chehalis wetlands complex, mouth of the Newaukum River (~ Chehalis RM 75).** Waterfowl concentrations. Scrub shrub and emergent wetlands support large concentrations of wintering waterfowl, cavity nesting ducks, and Canada goose nesting. Bald eagle [FCo/SS] nesting area. Salmonid spawning and rearing habitat. Resident fish include Olympic mudminnow [SS].

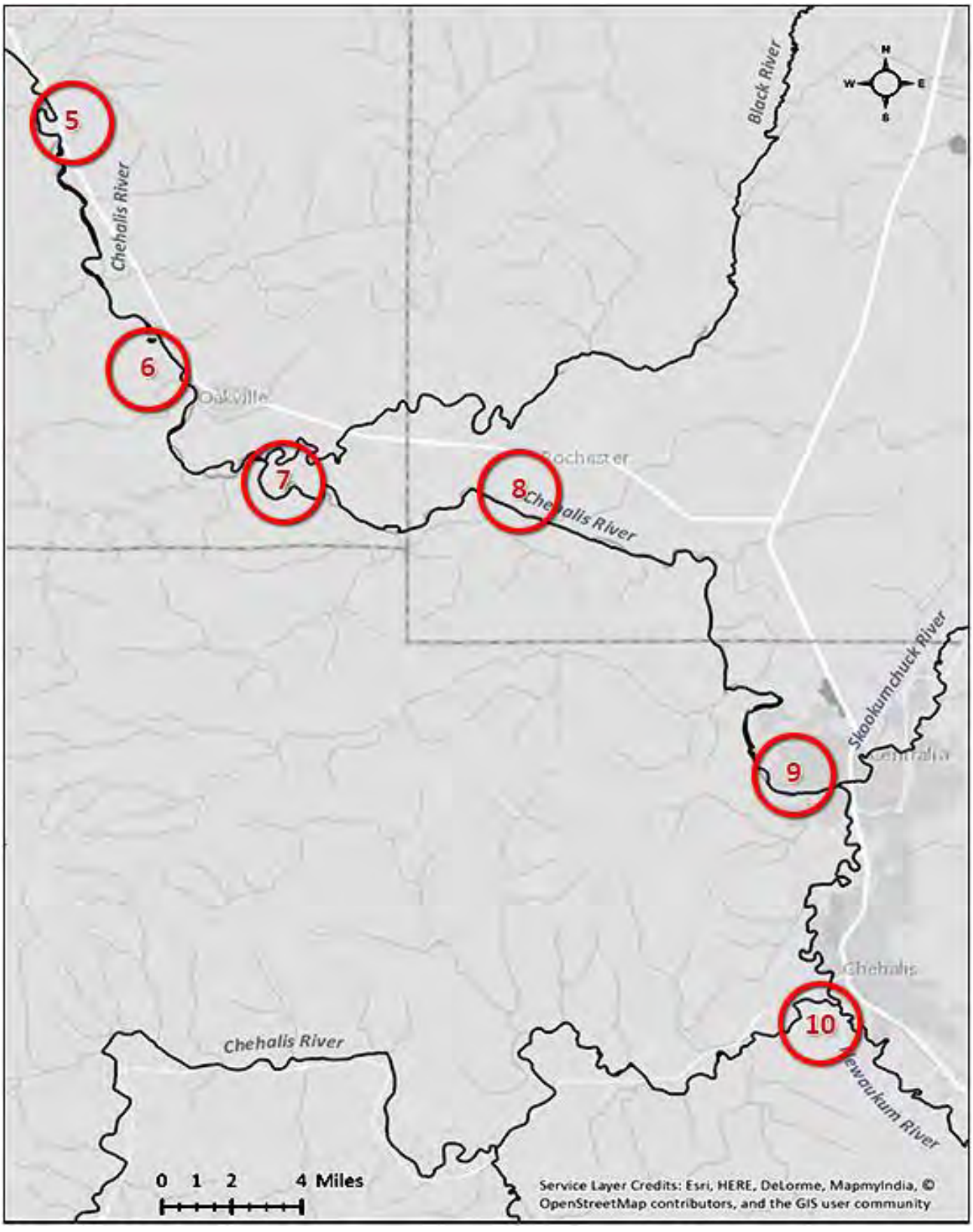


Figure 6-2: Chehalis River Geographic Areas of Concern (~RM 33 to ~RM 105)

6. 3 CULTURAL RESOURCES AT RISK - SUMMARY

Culturally sensitive sites are present within the Chehalis River area. Due to the sensitive nature of this information, details regarding the location and type of cultural resources present are not included in this document. However, in order to ensure that tactical response strategies do not inadvertently harm historical and culturally sensitive sites, Washington Department of Archeology and Historic Preservation (WDAHP) should be consulted before disturbing any soil or sediment during a response action. WDAHP may assign a person to monitor cleanup operations, or provide a list of professional archeologists that can be contracted to monitor response activities.

Information on the location of culturally sensitive sites is maintained by WDAHP and made available to Washington Department of Ecology for oil spill preparedness and response planning. The Chehalis Confederated Tribes, Quinault Nation, and Squaxin Island Tribes may also be able to provide information on cultural resources at risk in this GRP area and should be consulted. After the Unified Command is established, information related to specific archeological concerns will be coordinated through the Environmental Unit.

WDAHP:	(360) 586-3065	Rob.Whitlam@dahp.wa.gov
Chehalis Confederated Tribes:	(360) 273-5911 Ext. 1304	rbellon@chehalistribe.org
Quinault Nation:	(360) 276-8211 Ext. 245	jjames@quinault.org
Squaxin Island Tribe:	(360) 432-3850	rfoster@squaxin.us

6.3.1 Discovery of Human Skeletal Remains:

Any human remains, burial sites, or burial-related materials that are discovered during a spill response must be treated with respect at all times. Refer to Section 9403 of the Northwest Area Contingency Plan for National Historic Preservation Act Compliance Guidelines during an emergency response.

6.3.2 Procedures for the Discovery of Cultural Resources:

All work must be stopped immediately and the Incident Commander and Cultural Resource Specialist notified if any person monitoring work activities or involved in spill response believes that they have encountered cultural resources. The area of work stoppage must be adequate to provide for the security, protection, and integrity of the material or artifact(s) discovered.

Prehistoric Cultural Resources: (May include but not limited to any of the following items)

- Lithic debitage (stone chips and other tool-making byproducts)
- Flaked or ground stone tools
- Exotic rock, minerals, or quarries
- Concentrations of organically stained sediments, charcoal, or ash
- Fire-modified rock
- Rock alignments or rock structures

- Bone (burned, modified, or in association with other bone, artifacts, or features)
- Shell or shell fragments
- Petroglyphs and pictographs
- Fish weirs and traps
- Culturally modified trees
- Physical locations or features (traditional cultural properties)

Historic cultural material: (May include any of the following items over 50 years old)

- Bottles, or other glass
- Cans
- Ceramics
- Milled wood, brick, concrete, metal, or other building material
- Trash dumps
- Homesteads, building remains
- Logging, mining, or railroad features
- Piers, wharves, docks, bridges, dams

If WDAHP believes that the discovery is a cultural resource, the Incident Commander will take appropriate steps to protect the discovery site:

- The immediate area of the discovery site should be flagged. Vehicles or equipment must not be permitted to enter the discovery site. Work in the immediate area can not resume until treatment of the discovery has been completed.
- The Incident Commander (or representative) must contact WDAHP and arrange for the discovery to be evaluated by a professional archaeologist. The archaeologist will determine whether the discovery is potentially eligible for listing on the National Register of Historic Places. (36 CFR 60.4)
- The professional archaeologist will consult with WDAHP on the eligibility of the discovery for entry into the National Register. If WDAHP determines that the discovery is eligible, they will consult with the Incident Commander to determine an appropriate treatment for the discovery.
- If adverse impacts to an eligible site cannot be avoided, a treatment plan will be developed and implemented.

6. 4 ECONOMIC RESOURCES AT RISK SUMMARY

Socio-economic sensitive resources are facilities or locations that rely on a body of water to be economically viable. Because of their location, they could be severely impacted if an oil spill were to occur. Economically sensitive resources are separated into three categories: critical infrastructure, water dependent commercial areas, and water dependent recreation areas. Appendix “6A” of this chapter provides a list of economic resources for this GRP area.

6. 5 GENERAL INFORMATION

6.5.1 Flight restriction zones

Flight restriction zones may be recommended by the Environmental Unit (Planning Section) for the purpose of minimizing disturbance that could result in injury to wildlife during an oil spill. By keeping a safe distance or altitude from identified sensitive areas, pilots can minimize the risk of aircraft/ bird collisions, prevent the accidental hazing of wildlife into oiled areas, and avoid causing abandonment of nests. Implementation of Flight Restriction Zones will take place within the Air Operations Branch (Operations Section) after a Unified Command is formed. The Planning Section's Environmental Unit will work with the Air Ops Branch Director to resolve any potential conflicts with flight activities that are essential to the spill response effort. Typically, the area within a 1,500 ft radius and below 1,000 ft in altitude is restricted to flying in areas that have been identified as sensitive. However, some areas have more restrictive zones. In addition to restrictions associated with wildlife, Tribal authorities may also request notification when overflights are likely to affect culturally sensitive areas within reservations. See Section 9301.3.2 and Section 9301.3.3 of the Northwest Area Contingency Plan for more information on the use of aircraft and helicopters in open water and shoreline responses.

6.5.2 Hazing

The use of boats and watercraft are usually restricted within 200 yards of offshore National Wildlife Refuge sites or other sensitive areas. Response organizations should immediately request a waiver from National Marine Fisheries Service [NMFS] and/or U.S. Fish and Wildlife Service regarding the inadvertent approach or hazing of marine mammals that may be encountered during open water response operations. After a Unified Command is formed, the Wildlife Branch (Operations Section) in consultation with the appropriate trustee agencies and the Environmental Unit will evaluate and recommend hazing options for the purpose of keeping un-oiled birds and marine mammals away from oil during a spill. Hazing options might include the use of acoustic or visual deterrent devices, boats, aircraft or other situation-appropriate tools.

For more information see the Northwest Wildlife Response Plan (NWACP Section 9310) and Northwest Area Wildlife Deterrence Resources (NWACP Section 9311).

6.5.3 Oiled Wildlife

Attempting to capture oiled wildlife can be hazardous to both the animal and the person attempting the capture the animal. Response personnel should not approach or attempt to recover oiled wildlife. Responders should report their observations of oiled wildlife to the Wildlife Branch so appropriate action can be taken. Information provided should include the location, date, and time of the sighting, and the estimated number and kind of animals observed. Early on in the response, before a Unified Command is established, oiled wildlife sightings should be reported to Washington Emergency Management Division. For more information see the Northwest Wildlife Response Plan (NWACP Section 9310).

This page was intentionally left blank.

APPENDIX 6A

List of Economic Resources

Category	Name	Location	Lat	Long	Contact	Phone	Email
A1 - Drinking Water Intakes	City of Chehalis Pump Station	585 SW Riverside Dr, Chehalis, WA 98532	46.6525	-122.9820	City of Chehalis Public Works	360-740-1105	n/a
A2 - Energy/Power Generation Water Intakes	Skookumchuck Dam	10424 Skookumchuck Rd SE, Tenino, WA 98589	46.7830	-122.7182	TransAlta	360-330-8316	n/a
B6 - Fish Hatcheries	Bingham Creek Fish Hatchery	3914 W Fish Hatchery Rd Elma, WA 98541	47.1456	-123.4003	WDFW Region 6	360-426-2369	n/a
B6 - Fish Hatcheries	Carlisle Lake Rearing Facility	South Fork Newaukum River, Alexander Rd, Onalaska, WA 98570	46.5799	-122.7271	Chehalis Basin Fisheries Task Force	360-482-2347	n/a
B6 - Fish Hatcheries	Lake Aberdeen Fish Hatchery	4203 Lake Aberdeen Rd, Aberdeen, WA	46.9802	-123.7428	WDFW Region 6	360-533-1663	n/a
B6 - Fish Hatcheries	Quigg Lake	Friends Landing 300 Katon Rd Montesano WA	46.9479	-123.6442	Chehalis Basin Fisheries Task Force	360-482-2347	n/a
B6 - Fish Hatcheries	Satsop Springs Fish Hatchery	2060 West Beerbower Road, Elma, WA 98563	47.1139	-123.4377	Chehalis Basin Fisheries Task Force	360-482-3364	n/a
B6 - Fish Hatcheries	Skookumchuck Fish Hatchery	10500 Skookumchuck Rd SE, Tenino WA 98589	46.7899	-122.7251	WDFW Region 6	360-427-2188	n/a
C2 - Public Recreation Areas	Chehalis River Surge Plain	Cosmopolis - Chehalis River (RM 6)	46.9476	-123.6924	Department of Natural Resources	360-902-1064	n/a
C2 - Public Recreation Areas	Chehalis Wildlife Area - Chehalis	Elma - Chehalis River (RM 34)	46.9888	-123.4583	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Chehalis Wildlife Area - Febrache	Montesano - Chehalis River (RM 13 - 18)	46.9654	-123.5328	WDFW Region 6	360-426-2369	n/a

Category	Name	Location	Lat	Long	Contact	Phone	Email
C2 - Public Recreation Areas	Chehalis Wildlife Area - Hoxit	Porter - Chehalis River (RM 34-37)	46.9298	-123.3089	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Scatter Creek Wildlife Area - Black River	Rochester - Black River	46.8472	-123.0981	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Scatter Creek Wildlife Area - Davis Creek	Oakville - Chehalis River (RM 41-43)	46.8545	-123.2670	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Scatter Creek Wildlife Area - Glacial Heritage	Grand Mound - Black River	46.8709	-123.0449	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Scatter Creek Wildlife Area - Scatter Creek	Tenino - Scatter Creek	46.8357	-122.9979	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	Scatter Creek Wildlife Area - West Rocky Prairie	Tenino - Beaver Creek	46.8918	-122.9076	WDFW Region 6	360-426-2369	n/a
C2 - Public Recreation Areas	South Puget Sound Wildlife Area	Chehalis - Newaukum Mouth (CHER-75)	46.6328	-122.9927	WDFW Region 6	360-426-2369	n/a
C4 - Parks and Beaches	Alexander-Lintott Park	1101 Riverside Road West, Chehalis WA 98532	46.6525	-122.9820	City of Chehalis	360-748-0271	n/a
C4 - Parks and Beaches	Bucoda Volunteer Park	Skookumchuck River, Tonor Rd SE, Bucoda, WA 98531	46.7954	-122.8661	Volunteer Managed	n/a	n/a
C4 - Parks and Beaches	Fort Borst Park	2560 Pioneer Way, Centralia WA 98531 (CHER-66)	46.7217	-122.9846	City of Centralia	360-330-7688	n/a
C4 - Parks and Beaches	Rainbow Falls State Park	4008 State Hwy 6, Chehalis WA 98532 (CHER-97)	46.6308	-123.2335	WA Parks & Recreation Commission	360-291-3767	n/a
C4 - Parks and Beaches	Schaefer Park	106 Big Hanford Rd, Centralia WA 98531	46.7525	-122.9383	Lewis County	360-740-1192	n/a
C4 - Parks and Beaches	Stan Hedwell Park	141 Stan Hedwall Loop, Chehalis WA 98532 (NWKR)	46.6471	-122.9758	City of Chehalis	360-748-0271	n/a