CLARK, COWLITZ, SW LEWIS
Geographic Response Plan

(CCSWL GRP)
# SPILL RESPONSE CONTACT SHEET

## Required Notifications for Oil Spills & Hazardous Substance Releases

<table>
<thead>
<tr>
<th>Notification Type</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Notification - National Response Center</td>
<td>(800) 424-8802*</td>
</tr>
<tr>
<td>State Notification - Washington Emergency Management Division</td>
<td>(800) 258-5990*</td>
</tr>
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## - Other Contact Numbers -

### U.S. Environmental Protection Agency

<table>
<thead>
<tr>
<th>Region 10 - Spill Response</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>- Washington Ops Office</td>
<td>(360) 753-9437</td>
</tr>
<tr>
<td>- RCRA/CERCLA Hotline</td>
<td>(800) 424-9346</td>
</tr>
<tr>
<td>- Public Affairs</td>
<td>(206) 553-1203</td>
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### U.S. Coast Guard

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<tr>
<th>Sector Columbia River</th>
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<tr>
<td>- Command Center</td>
<td>(503) 861-6211*</td>
</tr>
<tr>
<td>- Watchstander</td>
<td>(503) 861-2242*</td>
</tr>
<tr>
<td>- Incident Management Division</td>
<td>(503) 861-6477</td>
</tr>
<tr>
<td>- Marine Safety Unit Portland</td>
<td>(503) 240-9310</td>
</tr>
<tr>
<td>- MSU Portland Marine Env Response</td>
<td>(503) 240-9370</td>
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### 13th Coast Guard District

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<tr>
<th>National Strike Force Coordination Center</th>
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<tr>
<td>- Pacific Strike Team</td>
<td>(252) 331-6000</td>
</tr>
<tr>
<td>- Other Contact Numbers</td>
<td>(415) 883-3311</td>
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### National Oceanic Atmospheric Administration

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<tr>
<th>Scientific Support Coordinator</th>
<th>Contact Information</th>
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<tr>
<td>Weather (NWS Portland)</td>
<td>(509) 244-0110</td>
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### Other Federal Agencies

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<tr>
<td>U.S. Department of Interior</td>
<td>(503) 326-2489</td>
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### Pipeline Companies, Railroads, & Dams

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<tr>
<td>BP Olympic Pipeline</td>
<td>(888) 271-8880*</td>
</tr>
<tr>
<td>Burlington Northern Santa Fe Railway</td>
<td>(800) 832-5452*</td>
</tr>
<tr>
<td>Columbia and Cowlitz Railroad</td>
<td>(360) 636-6535</td>
</tr>
<tr>
<td>Lewis and Clark (Columbia Basin) Railroad</td>
<td>(509) 349-8102</td>
</tr>
<tr>
<td>Pacificorp (Merwin Dam)</td>
<td>(503) 813-6657</td>
</tr>
<tr>
<td>Tacoma Public Utilities (Mayfield Dam)</td>
<td>(253) 502-8530</td>
</tr>
<tr>
<td>Union Pacific Railroad</td>
<td>(888) 877-7267*</td>
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### Response Contractors (OSRO & PRC)

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<tr>
<td>Cowlitz Clean Sweep</td>
<td>(888) 423-6316*</td>
</tr>
<tr>
<td>Global Diving and Salvage</td>
<td>(206) 623-0621*</td>
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<tr>
<td>NRC Environmental Services</td>
<td>(800) 337-7455*</td>
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### Washington State

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<tr>
<td>Dept Archaeology &amp; Historic Preservation</td>
<td>(360) 586-3065</td>
</tr>
<tr>
<td>Dept of Ecology</td>
<td></td>
</tr>
<tr>
<td>- Headquarters (Lacey)</td>
<td>(360) 407-6000</td>
</tr>
<tr>
<td>- Southwest Regional Office (Lacey)</td>
<td>(509) 454-7829</td>
</tr>
<tr>
<td>Dept of Fish and Wildlife</td>
<td></td>
</tr>
<tr>
<td>- Oil Spill Team (24hour Pager)</td>
<td>(360) 534-8233*</td>
</tr>
<tr>
<td>- Region 5 (Vancouver)</td>
<td>(360) 696-6211</td>
</tr>
<tr>
<td>- Emergency HPA Assistance</td>
<td>(360) 902-2537*</td>
</tr>
<tr>
<td>Dept of Health (Drinking Water)</td>
<td>(800) 521-0323</td>
</tr>
<tr>
<td>- After normal business hours</td>
<td>(877) 481-4901</td>
</tr>
<tr>
<td>Dept of Natural Resources</td>
<td>(360) 902-1064</td>
</tr>
<tr>
<td>Dept of Transportation</td>
<td>(360) 705-7000</td>
</tr>
<tr>
<td>Washington State Parks and Recreation</td>
<td>(360) 902-8613</td>
</tr>
<tr>
<td>Washington State Patrol (District 5)</td>
<td>(360) 449-7909</td>
</tr>
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### Tribal Contacts

<table>
<thead>
<tr>
<th>Tribe</th>
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<tr>
<td>Chehalis Confederated Tribes</td>
<td>(360) 273-5911</td>
</tr>
<tr>
<td>- Cultural Resources</td>
<td>Ext. 1304</td>
</tr>
<tr>
<td>- Natural Resources</td>
<td>Ext. 1606</td>
</tr>
<tr>
<td>- Public Safety</td>
<td>(360) 273-7051</td>
</tr>
<tr>
<td>Cowlitz Indian Tribe</td>
<td>(360) 575-3300</td>
</tr>
<tr>
<td>Grand Ronde Confederated Tribes</td>
<td>(503) 879-2424</td>
</tr>
<tr>
<td>Yakama Nation</td>
<td>(509) 865-5121 x6032</td>
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### Local Government

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Contact Information</th>
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<tr>
<td>City of Castle Rock (Police)</td>
<td>(360) 274-4711</td>
</tr>
<tr>
<td>City of Kalamal (Police)</td>
<td>(360) 673-2165</td>
</tr>
<tr>
<td>City of Kelso (Police)</td>
<td>(360) 423-1270</td>
</tr>
<tr>
<td>City of Longview (Fire)</td>
<td>(360) 442-5503</td>
</tr>
<tr>
<td>City of Winlock (Police)</td>
<td>(360) 785-3891</td>
</tr>
<tr>
<td>City of woodland (Police)</td>
<td>(360) 225-6965</td>
</tr>
<tr>
<td>Clark County - CRESA</td>
<td></td>
</tr>
<tr>
<td>- Police/Fire Dispatch (county-wide)</td>
<td>(360) 696-4461*</td>
</tr>
<tr>
<td>- Dispatch (non-emergency)</td>
<td>(360) 693-3111*</td>
</tr>
<tr>
<td>- CRESA Duty Officer</td>
<td>(360) 562-0130*</td>
</tr>
<tr>
<td>Cowlitz County (Emergency Services)</td>
<td>(360) 577-3130</td>
</tr>
<tr>
<td>Lewis County (Emergency Management)</td>
<td>(360) 740-1151</td>
</tr>
</tbody>
</table>

* Contact Numbers staffed 24-hour/day
Before you print this document

Chapter 4 with appendices (Pages 27-502) and Appendix 6A (Pages 519-520) of this document are provided in “landscape” page orientation; all other chapters and appendices are oriented in “portrait.” The appendices in Chapter 4 (Pages 127-502) 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 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

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<td>3/2003</td>
<td>N/A</td>
<td>Original Release of CC GRP</td>
<td>N/A</td>
</tr>
<tr>
<td>6/2015</td>
<td>CCSWL-001</td>
<td>Updated Chapter 4 and original release of all other chapters. Name of plan changed to include Southwest Lewis County (CCSWL GRP).</td>
<td>H. Chichester, M. Gordon, S. Nishikawa</td>
</tr>
<tr>
<td>10/2015</td>
<td>CCSWL-002</td>
<td>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.</td>
<td>H. Chichester</td>
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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 GRP planning 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 form and information provided in the appendix of this chapter.

The GRP planning area fully resides within Clark, Cowlitz, and Lewis counties. It includes over 13 miles of the Coweman River, 51 miles of the Cowlitz River, 12 miles of the Kalama River, 17 miles of the Lewis River (including 16 miles of the East Fork), 2.6 miles of the Little Kalama River, and more than 8 miles of the Toutle River. Fully or partially, the cities of Castle Rock, Kalama, Kelso, Longview, Ridgefield, Vancouver, Winlock, and Woodland fall within the boundaries of this plan. The planning area also includes portions of Water Resource Inventory Area 23 (WRIA-23, Upper Chehalis), WRIA 25 (Grays/Elochoman), WRIA 26 (Cowlitz), WRIA 27 (Lewis), and WRIA 28 (Salmon-Washougal). The Clark, Cowlitz, and SW Lewis GRP planning area is bordered by the Chehalis GRP to the north and the Lower Columbia River GRP to the south and southwest.

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 planning 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 Description
Chapter 3 Response Options and Considerations
Chapter 4 Response Strategies and Priorities
Appendix 4A Response Strategies (2-Pagers)
Appendix 4B Notification Strategies (2-Pagers)
Appendix 4C Staging Areas (2-Pagers)
Appendix 4D Boat Launch Locations (2-Pagers)
Chapter 5 Reserved
Chapter 6 Resources at Risk
Appendix 6A List of Economic Resources

1.2 GEOGRAPHIC RESPONSE PLAN DEVELOPMENT PROCESS

GRPs are part of the Northwest Area Contingency Plan, 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.
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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

Today’s Date: ____________________________
Your Name: ______________________________
Title: ________________________________
Company/Agency: ________________________
Address: ________________________________
City: ________________________________
State/Province: __________________ Zip: ________________
Email: ________________________________ Ph: __________________
GRP Page Number: ____________________ Section or Paragraph: ______________
Comment(s): __________________________

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
CHAPTER 2

SITE DESCRIPTION

2.1 CHAPTER INTRODUCTION

This chapter provides a description of the area’s physical features, hydrology, climate and winds. It includes an overview of oil spill risks in vulnerable sections of Clark and Cowlitz Counties, and a portion of southwestern Lewis County. The planning area extends from Vancouver, WA to just north of Winlock (following the border of HWY 12) and inland of the Lower Columbia River from Longview southeastward to Battle Ground. In the northern half of the planning area, the GRP also follows the Cowlitz River from near its confluence with the Columbia River to the Mayfield Dam. North to South, the planning area includes the towns or cities of Winlock, Castle Rock, Kelso, Longview, Kalama, Woodland, La Center, Ridgefield, Battle Ground and Vancouver. Portions of Water Resource Inventory Area 23 (WRIA-23, Upper Chehalis), WRIA 25 (Grays/Elochoman), WRIA 26 (Cowlitz), WRIA 27 (Lewis), and WRIA 28 (Salmon-Washougal); and includes the Coweman, Cowlitz River, Kalama, Lewis, Little Kalama, and Toutle Rivers, as well as a number of smaller tributary streams. The Clark, Cowlitz, and SW Lewis GRP planning area is bordered by the Chehalis GRP to the north and the Lower Columbia River GRP to the south and southwest.

2.2 PHYSICAL FEATURES

The geographic features of the land in the Clark, Cowlitz, and SW Lewis planning area are defined by their location between the eastern flanks of the Willapa Hills/Columbia River and the western foothills of the Cascade Mountain Range. This geographic depression is a portion of the larger corridor that is part of the larger area known as the Willamette Valley-Puget Trough that runs north to British Columbia, Canada and south to Oregon.\(^1\) Significant transportation systems in the corridor include highway, rail and pipelines routes, as well as ocean accessible ports on the Columbia River. The southern portion of the planning area is part of the greater Portland metropolitan area, other industrial centers include Longview and Kelso, surrounding industrial terrain is primarily forested with mixed farmland.

The Puget Lowland was shaped by the Cordilleran Ice Sheet, of which the Puget Lobe stretched to just south of Olympia. Since the extent of the glacier was located north of the planning area, the impacts of glacial retreat created a distinguishing mark between the planning area and the Puget

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Lowland. This is predominately noted by the beginning of the glacially carved Puget Sound to the north.\(^2\)

Glacial activity also played a prominent role in shaping the southern portion of the GRP area in the Portland Basin. The floods resulting from the breaking of the ice dam of ancient Lake Missoula 12,700 to 15,300 years ago (which carved out the Columbia River Gorge) also impacted the area. Through multiple cataclysmic flood events, water inundating the land and deposited large swaths of sand, clay and gravel.\(^3\) As a result, the topography of the land in this section of the planning area is made up of ancient flood plains, which are tiered from the multiple events.

Another major catalyst for geomorphology in the area is the historical impact of the volcanoes (in particular, Mount St. Helens). Volcanic events have resulted in much sediment distribution in the planning area through lahar flows along the rivers that run from the Cascades to the Columbia. The most recent example of this was the 1980 eruption of Mount St. Helens, of which the impacts of the alluvial deposits are still being mitigated.

2.3 HYDROLOGY

The planning area is predominantly rain-dependent, with the major river systems described below all being tributaries and sub-tributaries to the Columbia River.

Toutle River is a 17.2 mile long tributary of the Cowlitz. Beginning at the confluence of the North and South forks of the river at an elevation of 440 feet, it flows into the Cowlitz by Castle Rock having dropped to an elevation of 46 feet.\(^4\) The average discharge is 2,095 cubic feet/second.\(^5\) The river and its upstream headwaters were significantly impacted by the eruption of Mount St. Helens in 1980, which resulted in massive sediment displacement. A sediment retention dam was constructed by the U.S. Army Corps of Engineers following the eruption. This installation reduces alluvial deposits downstream and addresses the increased flood and navigational risks as a result of the deposits.\(^6\)

Cowlitz River encompasses the northern half of the planning area, running on a north-south axis along the Interstate 5 corridor. The planning area for this GRP begins upstream of the river at the


Mayfield Dam. The water from the dam’s reservoir (when full) starts at an elevation of 425 feet. After its confluence with the Toutle, the Cowlitz further drops to an elevation of 10 feet where it meets the Columbia River at Longview/Kelso. Average discharge at the Castle Rock monitoring station is at 9,122 cubic feet/second. As a tributary of the Cowlitz, sediment from the Toutle River creates a significant impact downstream. It was reported that after 33 years, 2013 marked the first year the Cowlitz flushed out more sediment than was introduced to it by the Toutle since the Mount St. Helens eruption. Despite this, sediment flow management will be an ongoing issue as the sediment loads are not expected to decline significantly in the future.

Coweeman River is a tributary that joins the Cowlitz just upstream of its confluence with the Columbia. The headwaters for the river are at Coweeman Lake, located just to the west of Mount St. Helens at an elevation of 3,965 feet. At its confluence with the Cowlitz, the river’s elevation is 23 feet. The average discharge is 603 cubic feet/second. While the Coweeman is not sediment laden like the Toutle, its mouth has the potential to be impacted by sediment through its confluence with the Cowlitz.

Kalama River is a tributary of the Columbia. The river’s confluence is located south of the Cowlitz’s mouth and just north of the town of Kalama. Its headwaters originate in the Cascade Mountains in the Mount St. Helens National Volcanic Monument. Since the river originates at the Kalama Spring (elevation 2,890 ft) on the south side of Mount St. Helens, it does not experience the same sediment issues as the north side tributaries (due to impact from the north side lateral volcanic blast). The river’s mouth meets the Columbia at an elevation of 10 feet.

Lewis River is a tributary of the Columbia originating in the Cascade Mountains. It drains into the Columbia north of Vancouver across the river from the town of St. Helens in Oregon. The GRP planning area covers the Lewis River upstream to the Merwin Dam. Just upstream of the confluence with the Columbia, the East Fork Lewis River meets the Lewis River. The East Fork heads upstream southeast towards Battle Ground. The Lewis River has an average discharge of 6,125 cubic feet/second.

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Water Resource Inventory Areas (WRIAs): Portions of WRIA 25 (Grays-Elochman), WRIA 26 (Cowlitz), WRIA 27 (Lewis), and WRIA 28 (Salmon-Washougal) fall within the planning area. Most of the precipitation within all four WRIAs arrives during the winter months, when water demands are the lowest. During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest.

2.4 CLIMATE AND WINDS

The Clark, Cowlitz, and SW Lewis GRP planning area falls within the East Olympic-Cascade Foothills climate zone of the state. The average temperatures in January range from a high of 38 to 45 degrees (F) to a low of 25 to 32 degrees (F). In July, the average high ranges from 75 to 80 degrees (F) to a low of around 50 degrees (F). Snowfall is generally low, with an average of less than 10 inches annually in the valley. This total increases greatly with altitude in the surrounding foothills and mountains.\(^\text{16}\)

Prevailing winds in the area are generally from the north to northwest in the summer, and south and south-southeast in the winter.\(^\text{12}\) Average wind speed for the airports in the area is 4-5 mph. There is little variation throughout the year with monthly averages staying generally within a 1 mph gradation.\(^\text{13}\)

2.5 TIDES AND CURRENTS

Flow in some sections of the rivers and streams in this plan are impacted by tides, such as the Kalama River which is tidally influenced up to Modrow Bridge (River Mile 2.8). The Lewis River and the East Fork Lewis River are also tidally influenced inland of Interstate-5. The Cowlitz and the Coweeman Rivers are tidally influenced from their mouths up through downtown Longview/Kelso.\(^\text{14}\) Currents for the rivers are dictated by the season, precipitation and flow control (as is the case of the dams on the Cowlitz, Toutle, and Lewis rivers).


2.6 RISK ASSESSMENT

The Clark, Cowlitz, and SW Lewis planning 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, oil pipelines, aircraft, recreational boating, and other oil spill risks. This section briefly discusses these risks and how they could impact the area if a spill were to occur.

Road Transportation

Vehicle traffic on roadways pose an oil spill risk. 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 Interstate-5 or on one of the numerous bridge crossings in the area 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 harden surfaces into streams, creeks, wasteways, or storm water systems, ultimately impacting the local rivers and streams. Highway bridges, such as those on Interstate 5 in Centralia/Chehalis, 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.

Rail Transportation

BNSF owns tracks that enter the planning area from the north and pass through Winlock, Vader, Castle Rock and Kelso, following and crossing the Cowlitz River. From the confluence of the Cowlitz and the Columbia Rivers, the tracks run along the Columbia through Kalama, Woodland, Ridgefield and Vancouver. 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 Tar Sands oil can also cross the Canadian border in Blaine and travel south to Tacoma or beyond. Each loaded tank car typically contains 30,000 gallons of crude oil. Unit trains typically carry 100 or more of these tank cars of crude. Therefore, each full unit train poses a spill risk of 3 million gallons of crude oil, and as much as 10,000 gallons of fuel for each diesel locomotive. Tanker cars carrying crude oil are also transported in smaller numbers, mixed among boxcars and tankers carrying other products. In May 2015, BNSF reported 8 to 12 trains carrying one million gallons or more of Bakken crude traversing Clark, Cowlitz and Lewis counties each week. 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.
Oil Pipelines

Much of the Olympic Pipeline runs either through or along the extent of the planning area on its north-south axis. The pipeline carries a range of petroleum products including gasoline, diesel, and aviation turbine fuel. The pipeline has a pumping station in Castle Rock and several valve control structures in or near the planning area. If the pipeline were to leak or rupture, impact to sensitive resources in the area could be substantial. Oil spill control points previously identified by the Olympic Pipeline Company were visited during the GRP update process, and many are now included in this plan as GRP response strategies.

Aircraft

There is always a potential for aircraft failures during inbound and outbound flights that could result in fuel releases to water. State managed, general aviation airports within the planning area include: Ed Carlson Memorial Field - South Lewis (near Toledo), Southwest Washington Regional Airport (near Kelso), and Woodland State Airport. All three are immediately adjacent to either the Cowlitz or Lewis rivers. In addition, the planning area includes at least a dozen small, private, unpaved air strips which are frequently near or adjacent to waterways.

Recreational Boating

Accidents involving recreational boats and other craft on local rivers, creeks, or streams could result in spills of a few gallons of fuel to several dozen gallons. Accidents could include a vessel grounding, fire, sinking, or explosion. The unintentional discharge of oily bilge waste is also a concern and could impact sensitive resources in the planning area if released.

Other Spill Risks

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

2.7 REFERENCES


## CHAPTER 3

### RESPONSE OPTIONS AND CONSIDERATIONS

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### Potential Response Options

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### Considerations

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<td>Oil Movement by Rail in Area</td>
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<tr>
<td>Oil Pipeline(s) in Area</td>
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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](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 Accustomed areas). Early coordination with tribal governments is highly recommended during a response, regardless of the spill location or potential impact areas.

**Note 8:** No pre-approved locations for in-situ burning fall within this GRP area.

**Note 9:** No pre-approved locations for use of dispersants fall within this GRP area.
CLARK / COWLITZ
GEOGRAPHIC RESPONSE PLAN

(CCSWL GRP)

CHAPTER 4

RESPONSE STRATEGIES AND PRIORITIES

October 2015
4.1 CHAPTER INTRODUCTION

This chapter provides information on GRP response strategies and the order (priority) they should be implemented based on Potential Oil Spill Origin Points (POSOPs), and the proximity of sensitive resources to them. Area maps, sector maps, and information on staging areas and boat launch locations are also provided in this chapter. During a spill incident, GRP response strategies should be implemented as soon as possible. Unless circumstances unique to a particular spill situation dictate otherwise, the priority tables in Section 4.3 should be used to decide the order that GRP strategies are deployed. The movement of oil and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting implementation priorities. Response equipment type and location information can be found on the Western Response Resource List (WRRL). The WRRL is available online at http://www.wrrl.us. Information on shoreline countermeasures can be found in the Northwest Area Shoreline Countermeasures Manual (NWACP Section 9420). The Northwest Area Contingency Plan (NWACP) is available online at http://www.rrt10nwac.com/NWACP/Default.aspx.

The GRP strategies provided in this chapter have been created to reduce spilled oil's impact on sensitive resources. They are not everything that should or could be done during a response to lessen the chance of injury to natural, cultural, and economic resources at risk from oil spills. Although designed to be implemented during the initial phase of an oil spill, GRP strategies may continue to be used throughout a response at the discretion of the Incident Commander or Unified Command.

4.1.1 On-site Considerations:

Before Deploying a GRP Strategy: (Questions to Ask)

- Are conditions safe? Response managers and responders must first determine if efforts to implement a response strategy would pose an undue risk to worker safety or the public, based on conditions present during the time of the emergency. No strategy should be implemented if doing so would threaten public safety or present an unreasonable risk to the safety of responders.

- Has initial control and containment been sufficiently achieved? Source control and containment of the spill at or near the source of a spill are always higher priorities than the deployment of GRP response strategies, especially when concurrent response activities are not possible.

- How far downstream or out into the lake or marine environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?
• Are emergency permits required? Consult the Northwest Area Contingency Plan Permit Summary Table (NWACP Section 9401) for information specific to your location and circumstance.

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

  o Washington State Patrol (District 5 - Vancouver): (360) 449-7909
  o Washington State Patrol (Chehalis Detachment): (360) 748-2194
  o Washington State Patrol (Kelso Detachment): (360) 578-4147
  o Clark County Emergency Services (CRESA) (Emergency Dispatch for all of Clark County and Vancouver) (360) 696-4461
  o Cowlitz County Sheriff: (360) 577-3092
  o Lewis County Sheriff: (360) 748-9286
  o City of Castle Rock Police (360) 274-4711
  o City of Kalama Police (360) 673-2165
  o City of Kelso Police (360) 423-1270
  o City of Longview Police (360) 442-5800
  o City of Winlock Police (360) 785-3891
  o City of Woodland Police (360) 225-6965
During Strategy Implementation (Things to Remember)

- On-scene conditions (weather, currents, tides, waves, river speed, and debris) may require that strategies be modified in order to be effective. There is a significant chance that weather and conditions experienced at a particular strategy location during an actual spill event will be different from that when data was gathered during field visits. Response managers and responders must remain flexible and modify the strategies provided in this chapter as needed to meet the challenges experienced during an actual response.

- Certain strategies may call for access points or staging areas that are not easily reached at all times of the year or in all conditions.

- Oil containment boom must be free of twists, gaps, and debris in order to remain effective.

- The GRP response strategies provided in this chapter were designed for use with persistent heavy oils that float on water and may not be suitable for other petroleum products or hazardous substances.

After Strategy Implementation (Things to Understand)

- Oil containment boom should be maintained and periodically monitored to ensure its effectiveness. Changes in river or current speed will likely require modifications to boom deflection angles (see Table 4-9). Depending on conditions, some booming strategies may require around-the-clock tending.

- Although designed for implementation during the initial phase of an oil spill, GRP strategies may continue to be deployed and implemented throughout the entire lifespan of a response, as determined appropriate and necessary by the Incident Commander or Unified Command.

Water Speed and Boom Deflection Angle

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

Streamflow data from U.S. Geological Survey (USGS) was used to determine the mean monthly discharge for rivers and streams in the planning area. Stream discharge is recorded in cubic feet per second (cfs); velocities in miles per hour (mph) or nautical miles per hour (knots) are not available. Table 4.1 provides information that can be used to calculate local river velocities on-site, based on the time it takes a floating object to drift 100 feet downstream from any given point in a river or creek. Additional information for USGS gage stations in the planning area are provided below (hyperlinked column headers), and may include real-time or near real-time streamflow data. The USGS National Water System Mapper is useful for locating gage stations of interest, and is available online at http://maps.waterdata.usgs.gov/mapper/index.html.

Table 4-1: Water Speed Drift Measurement Table

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<tr>
<th>Time to Drift 100 Feet (seconds)</th>
<th>Velocity (ft/sec)</th>
<th>Velocity (m/sec)</th>
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<th>Max Boom Deflection Angle (degrees)</th>
<th>Boom required for 100-foot Profile to Current (feet)</th>
<th>Anchors needed if Placed Every 50 feet (number)</th>
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*Source: Oil Spill Response in Fast Currents. A Field Guide. U.S. Coast Guard Research and Development Center. October, 2001*
Table 4-2: Historic stream flow for Cowlitz, Lewis, and Toutle Rivers

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<thead>
<tr>
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<th>Toutle River at Tower Road USGS 14242580</th>
<th>Lewis River at Ariel USGS 14220500</th>
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Figure 4-1: Historic Streamflow for Cowlitz, Lewis, and Toutle Rivers
4.2 AREA OVERVIEW MAPS

The following maps provide a geographic overview of the Clark, Cowlitz, and SW Lewis 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 POSOPs. Detailed information for each location can be found in the matrices of Section 4.5 or in the chapter appendices. Priority tables for potential oil spill origin points can be found in Section 4.3.2.

The following area maps are provided for reference:

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

Figure 4-2: Response strategy locations in area
CHAPTER 4

Figure 4-3: Notification strategy locations in area

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

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,
Figure 4-5: Boat launch locations in area
Potential Oil Spill Locations

Figure 4-6: Potential oil spill origin points in area
4.3 STRATEGY AND RESPONSE PRIORITIES

4.3.1 General Response Priorities

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

1. **Safety is always the number one priority.** Do not implement GRP strategies or take actions that will unduly jeopardize public, worker, or personal safety.
2. Notify local public health and safety personnel.
3. Control and contain the source of the spill; mobilize resources to the spill location. Source control and containment are always a higher priority than the implementation of GRP strategies.
4. Determine the priority or order GRP strategies should be implemented based on the location of the spill or affected area. Priorities based on POSOPs are included in this chapter and should be used unless the situation or circumstances dictate otherwise (see Section 4.3.2).
5. As response resources become available, implement the GRP Strategies in order of priority.
6. In Washington State, if strategy implementation reduces, interrupts, or diverts the flow of water in streams, including the installation of a culvert block or underflow dam, an Emergency HPA must be obtained from WDFW (24-hour pager: (360) 534-8233). Other permits may also be required; see the Northwest Area Contingency Plan (Section 9401) Permit Summary Table for information.

4.3.2 Strategy Priorities based on Potential Oil Spill Origin Points

The following tables provide the strategy implementation order for Potential Oil Spill Origin Points (POSOPs) in the planning area. These points are displayed on area overview and sector maps as red boxes. In establishing response priorities, or selecting an appropriate POSOP, the downstream movement of spilled oil and the time it takes to mobilize and deploy response resources must be considered. Generally, GRP strategies should first be implemented downstream, well beyond the furthest extent of the spill, and then continued upstream towards the spill source.

*Source control and containment are a higher priority than GRP strategy implementation*
Table 4-3: Strategy Implementation Priorities for Point "CC-A"

"CC-A" (Olequa Creek in Winlock)

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Table 4-5: Strategy Implementation Priorities for Point "CC-C"

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Table 4-8: Strategy Implementation Priorities for Point "CC-F"

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## Table 4-10: Strategy Implementation Priorities for Point "CC-H"

"CC-H" *(Cowee man River upstream from Interstate-5)*

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Table 4-11: Strategy Implementation Priorities for Point "CC-I"

"CC-I" *(Kalama River upstream from Interstate-5)*

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Table 4-12: Strategy Implementation Priorities for Point "CC-J"

"CC-J"  *(Lewis River below Merwin Dam)*

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<td>69</td>
<td>107</td>
<td>375</td>
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<tr>
<td>3</td>
<td>LKRVR-10.8</td>
<td>NA</td>
<td>NA</td>
<td>345</td>
<td>Lower Columbia River GRP</td>
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Table 4-16: Strategy Implementation Priorities for Point "CC-N"

<table>
<thead>
<tr>
<th>Priority</th>
<th>Strategy Number</th>
<th>Sector Map</th>
<th>Strategy Matrix</th>
<th>Strategy Details</th>
<th>Remarks</th>
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<tr>
<td>1</td>
<td>BRBRC-6.2</td>
<td>69</td>
<td>71</td>
<td>131</td>
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<td>2</td>
<td>BRBRC-6.3</td>
<td>69</td>
<td>72</td>
<td>133</td>
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<td>BRBRC-6.4</td>
<td>69</td>
<td>72</td>
<td>135</td>
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<td>4</td>
<td>BRBRC-6.5</td>
<td>69</td>
<td>73</td>
<td>137</td>
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</table>
4.4 SECTOR MAPS (STRATEGY LOCATIONS)

Figure 4-7: Sector Map "CC-1"

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.
Figure 4-8: Sector Map "CC-2"
Figure 4-9: Sector Map "CC-3"
Figure 4-11: Sector Map "CC-5"
Figure 4-12: Sector Map "CC-6"

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.
Figure 4-13: Sector Map "CC-7"
Figure 4-14: Sector Map "CC7a"
Figure 4-15: Sector Map "CC-8"
Figure 4-16: Sector Map "CC-9"
Figure 4-17: Sector Map "CC-9a"
Figure 4-19: Sector Map "CC10a"
Figure 4-20: Sector Map

Legend:
- Green circle: Response Strategy Locations
- Orange triangle: Boat Launch Locations
- Yellow circle: Notification Strategy Locations
- Red square: Potential Oil Spill Points
- Blue circle: Staging Area Locations

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.
Figure 4-21: Sector Map "CC-12"
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:

- **ALNC** = Allen Creek
- **BURKC** = Burke Creek
- **BRBRC** = Burnt Bridge Creek
- **BYBEC** = Bybee Creek
- **CANYC** = Canyon Creek
- **COLCS** = Coal Creek Slough
- **COUGC** = Cougar Canyon Creek
- **CWMMR** = Coweeman River
- **CWMRT** = Coweeman River Unnamed Tributary
- **CWLZRT** = Cowlitz River Unnamed Tributary
- **DAVSC** = Davis Creek
- **ELEWR** = Lewis River East Fork
- **FOSTC** = Foster Creek
- **GEEC** = Gee Creek
- **GEECT** = Gee Creek Unnamed Tributary
- **HILLC** = Hill Creek
- **KLMAR** = Kalama River
- **LCMSC** = Lacamas Creek
- **LEWR** = Lewis River
- **MCMRC** = McMurphy Creek
- **MILLC** = Mill Creek
- **OLQAC** = Olequa Creek
- **OSTRC** = Ostrander Creek
- **SALMC** = Salmon Creek
- **SLMNC** = Salmon Creek
- **SAURC** = Sauer Creek
- **SCHSC** = Schoolhouse Creek
- **TTLR** = Totten River
- **USCC** = Unnamed Stream
- **WPPLC** = Whipple Creek

- **N** = Notification Strategy (suffix)
- **SA** = Staging Area (prefix)
- **BL** = Boat Launch (prefix)
- **R** = River/Creek Right (suffix)
- **L** = River/Creek Left (suffix)
- **M** = River/Creek Middle (suffix)
### 4.5.2 Response Strategy Matrices

<table>
<thead>
<tr>
<th>Strategy Name</th>
<th>Location</th>
<th>Strategy Type</th>
<th>Boom Length</th>
<th>Boat Req?</th>
<th>Staging Area</th>
<th>Resources At Risk</th>
<th>Comments</th>
<th>Sector Map (Page#)</th>
<th>Strategy Details (Page#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALNC-1.8</td>
<td>Allen Creek - NW Allen Canyon Road 45.84972 -122.72007</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage work truck on shoulder of roadway; Space limited - NO TRAILERS</td>
<td>Downstream Resources, Freshwater Wildlife, Salmon - Chinook, Salmon - Coho, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is very limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.</td>
<td>66</td>
</tr>
<tr>
<td>BRBRC-6.2</td>
<td>Burnt Bridge Creek at Alki Road 45.66129 -122.67218</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage on dirt road SW of bridge over creek off Alki Road - NO TRAILERS</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email <a href="mailto:jwigen@prestigecare.com">jwigen@prestigecare.com</a>.</td>
<td>69</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
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<tr>
<td>BRBRC-6.3</td>
<td>Burnt Bridge Creek Greenway Bridge</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage on dirt road SW of bridge over creek off Alki Road - NO TRAILERS</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email <a href="mailto:jwigen@prestigecare.com">jwigen@prestigecare.com</a>.</td>
<td>69</td>
</tr>
<tr>
<td>BRBRC-6.4</td>
<td>Burnt Bridge Creek at NE 2nd Avenue</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage in grassy area to the right (east side of road) before the creek/trail - NO TRAILERS.</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email <a href="mailto:jwigen@prestigecare.com">jwigen@prestigecare.com</a>.</td>
<td>69</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<tr>
<td>BRBRC-6.5</td>
<td>Burnt Bridge Creek at NE Hazel Dell Avenue 45.66143 -122.66853</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on NE 2nd Avenue in grassy area before the creek/trail - NO TRAILERS.</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility’s business manager; call 360-693-1474 or email <a href="mailto:jwigen@prestigecare.com">jwigen@prestigecare.com</a>.</td>
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<tr>
<td>BRBRC-7.1</td>
<td>Burnt Bridge Creek at NE Leverich Park Way 45.65530 -122.66269</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage in cul-de-sac immediately west of strategy location</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
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<td>BRBRC-7.3</td>
<td>Burnt Bridge Creek at Leverich Park 45.65295 -122.66141</td>
<td>Collection</td>
<td>Boom 300ft, Sorbent 400ft</td>
<td>No</td>
<td>Onsite Stage in Park’s lower parking area off Leverich Park Way</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Upper parking area is too high for vac-truck to effectively pull suction - use lower parking area off Leverich Park Way instead. Notify Parks at 360-487-8337 before staging; inform CRESA dispatch after-hours at 360-693-3111.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
<td>Strategy Details (Page#)</td>
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<tr>
<td><strong>BRBRC-10.2</strong></td>
<td>Burnt Bridge Creek at E 18th Street&lt;br&gt;45.63464 -122.62408</td>
<td>Collection, Underflow Dam</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite&lt;br&gt;Stage on shoulder of E 18th Street (south side of roadway east of creek) or in Unitarian Church Parking Lot</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>The aggressive use of sorbents may be an adequate enough for smaller spills. May be able to stage equipment at Unitarian Church immediately east of creek; call 360-695-1891.</td>
<td>69</td>
<td>143</td>
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<tr>
<td><strong>BRBRC-10.4</strong></td>
<td>Burnt Bridge Creek at Thunderbird Village&lt;br&gt;45.63379 -122.62076</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite&lt;br&gt;Stage along east side of roadway before the bridge (near walking trail)</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>VAC-TRUCKS SHOULD NOT CROSS BRIDGE due to weight restrictions. Inform/coordinate response activities with nearby property owners as needed. The aggressive use of sorbents may be an adequate enough response for smaller spills to creek at this site.</td>
<td>69</td>
<td>145</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<td>BRBRC-10.8</td>
<td>Burnt Bridge Creek at N Devine Road 45.63443 -122.61513</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder or on pull-off near SW corner of the bridge structure.</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>69</td>
<td>147</td>
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<td>BRBRC-11.6</td>
<td>Burnt Bridge Creek near NE Andresen Road 45.63454 -122.59860</td>
<td>Sorbent</td>
<td>Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage in small parking area off NE Andresen Road, immediately south of bridge over creek on west side.</td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Notify Vancouver Parks Department before implementation; call 360-487-8337 or CRESA dispatch after-hours at 360-693-3111.</td>
<td>69</td>
<td>149</td>
</tr>
<tr>
<td>BRBRC-12.6a</td>
<td>Burnt Bridge Creek at NE Burton Road 45.63957 -122.58206</td>
<td>Collection, Sorbent</td>
<td>Boom 100ft, Sorbent 500ft</td>
<td>No</td>
<td>Onsite Stage on gated property immediately SW of NE Burton Road Bridge over creek (City Property)</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>No Information</td>
<td>69</td>
<td>151</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
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<tr>
<td>BRBRC-12.6b</td>
<td>Burnt Bridge Creek downstream of NE Burton Road 45.63914 -122.58220</td>
<td>Collection, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage off road in front of PUD substation on SW Corner of NE Burton Road at NE 90th Avenue</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Alternative staging is at NE 19th Circle, ~0.3mi south of NE Burton Road on NE 92nd Avenue.</td>
<td>69</td>
<td>153</td>
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<td>BRBRC-13.0</td>
<td>Burnt Bridge Creek west of NE 93rd Avenue 45.64467 -122.57844</td>
<td>Collection, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage at turnaround at end of at end of NE 93rd Avenue in front of closed park gate.</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>Strategy location is across field to the NW at confluence of unnamed tributary with Burnt Bridge Creek.</td>
<td>69</td>
<td>155</td>
</tr>
<tr>
<td>BRBRCT-0.2</td>
<td>Burnt Bridge Creek Tributary at Hwy 99 45.66336 -122.66555</td>
<td>Sorbent</td>
<td>Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on east side shoulder/grassy area of NE Highway 99 about 150ft south of rail overpass.</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Use caution crossing busy roadway. Be alert to occupied camp sites in woods near strategy location. Don’t encroach on federal property along east side of Hwy 99. Waders or hip boots recommended.</td>
<td>69</td>
<td>157</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
<td>Strategy Details (Page#)</td>
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<tr>
<td>BURKC-0.7</td>
<td>Burke Creek at South Cloverdale and Burke Roads 45.94537 -122.77774</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 400ft</td>
<td>No</td>
<td>Onsite Stage at pull out (circle) at intersection of South Cloverdale and Burke Roads</td>
<td>Downstream Resources, Salmon - Coho</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Cowlitz County Public Works may be able to provide support if underflow dam needed; call 360-673-2175.</td>
<td>64</td>
<td>159</td>
</tr>
<tr>
<td>BYBEC-0.8</td>
<td>Bybee Creek at South Cloverdale Road 45.97281 -122.81118</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage trailer at SA-SCHSC-0.6 (Old Pacific Highway near I-5 Exit 27). Work truck only at Strategy Location.</td>
<td>Salmon - Coho, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6.</td>
<td>64</td>
<td>161</td>
</tr>
<tr>
<td>CANYC-0.2</td>
<td>Canyon Creek at South Cloverdale Road 45.95471 -122.79287</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of roadway near culvert.</td>
<td>Downstream Resources, Steelhead</td>
<td>Wide gravel shoulder at this location. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>64</td>
<td>163</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
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</tr>
<tr>
<td>COLCS-12.1</td>
<td>Coal Creek Slough at 34th Avenue 46.15348 -122.97261</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite  Stage on grassy area near SW corner of roadway at slough or on roadway shoulder.</td>
<td>Downstream Resources, Freshwater Wildlife, Waterfowl</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td></td>
<td>61</td>
</tr>
<tr>
<td>COLCS-13.1a</td>
<td>Coal Creek Slough near 32nd Avenue 46.14906 -122.96675</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite  Stage on grassy area on north side of railroad tracks or along roadway shoulder. Parking lot also nearby.</td>
<td>Downstream Resources, Freshwater Wildlife, Waterfowl</td>
<td>Rail line is operated by Columbia and Cowlitz Railway; notify them at 360-501-2182 or 855-258-4514 before strategy implementation; reference Longview Washington at 32nd Avenue.</td>
<td></td>
<td>61</td>
</tr>
<tr>
<td>COLCS-13.1b</td>
<td>Coal Creek Slough near Ocean Beach Highway 46.14869 -122.96679</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite  Stage in parking lot at NW corner of Ocean Beach Hwy and 32nd Avenue or on grassy area next to waterway.</td>
<td>Downstream Resources, Freshwater Wildlife, Waterfowl</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td></td>
<td>61</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>COLCS-13.3</td>
<td>Coal Creek Slough at Michigan Street 46.14704 -122.96683</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of Michigan Street near waterway or on grassy area adjacent to waterway.</td>
<td>Downstream Resources, Freshwater Wildlife, Waterfowl</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>61</td>
<td>171</td>
</tr>
<tr>
<td>COLCS-13.4</td>
<td>Coal Creek Slough at Maple Street 46.14525 -122.96681</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of Maple Street west of waterway or on grassy area adjacent to waterway.</td>
<td>Downstream Resources, Freshwater Wildlife</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>61</td>
<td>173</td>
</tr>
<tr>
<td>COLCS-13.8</td>
<td>Coal Creek Slough at William Street 46.14225 -122.96730</td>
<td>Collection, Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of William Street near waterway</td>
<td>Downstream Resources, Freshwater Wildlife</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>61</td>
<td>175</td>
</tr>
<tr>
<td>COUGC-0.5</td>
<td>Cougar Canyon Creek at NW 119th Street 45.70750 -122.68289</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of NW 119th Street near strategy location. Can also use Salmon Creek Regional Park (SA-SALMC-5.6)</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy location is adjacent to Salmon Creek Trail - Contact Clark County Parks and Recreation for access support; call 360-737-6118 or 360-397-2285.</td>
<td>69</td>
<td>177</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>COUGC-1.6</td>
<td>Cougar Canyon Creek at Columbia River High School 45.69319 -122.67627</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage at Columbia River High School; SE corner of parking lot near creek.</td>
<td>Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Creek property and fish ladders maintained by Clark County; call public works at 360-397-6118 x4944. Inform Columbia River High School if parking lot used for staging during school hours; call 360-313-3900.</td>
<td>69</td>
<td>179</td>
</tr>
<tr>
<td>COUGC-2.4</td>
<td>Cougar Canyon Creek at NE Hazel Dell Avenue 45.68404 -122.67314</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage at Fire Station located ~600ft north of strategy location (call 360-576-1195) or at Target across street.</td>
<td>Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>There is no on-street parking at or near this strategy location. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>69</td>
<td>181</td>
</tr>
<tr>
<td>COUGC-2.5</td>
<td>Cougar Canyon Creek at NE 83rd Street 45.68275 -122.66801</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on side of NE 83rd Street near creek or in private driveway adjacent creek's west side.</td>
<td>Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Strategy is on private property - coordinate with local property owner before strategy implementation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>69</td>
<td>183</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
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<tr>
<td><strong>CWLZR-1.3</strong></td>
<td>Cowlitz River at the mouth of the Coweeman River</td>
<td>Exclusion</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Launch boat upstream and tow boom to site</td>
<td>62</td>
<td>187</td>
</tr>
<tr>
<td><strong>CWLZR-1.45</strong></td>
<td>Gerhardt Gardens</td>
<td>Deflection</td>
<td>Boom 800ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources</td>
<td>Site is an old boat ramp at Gerhardt Gardens Dog Park.</td>
<td>62</td>
<td>189</td>
</tr>
<tr>
<td><strong>CWLZR-1.65</strong></td>
<td>Cowlitz River at north end of Gerhart Gardens Park</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Collection strategy just north of the boat ramp.</td>
<td>62</td>
<td>191</td>
</tr>
<tr>
<td><strong>CWLZR-4.3</strong></td>
<td>Cowlitz River near Mill St</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Boat and boom can be launched at a nearby boat launch. A portable skimmer could be</td>
<td>61</td>
<td>193</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td>CWLZR-5.2</td>
<td>Cowlitz River - Longview Pump Station 46.15021 -122.91446</td>
<td>Exclusion</td>
<td>Boom 200ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Economic Resource, Water Intakes</td>
<td>Nearest suitable boat launch is 3.6mi downstream at Gerhart Gardens Park (BL-CWLZR-1.6). Once implemented, notify City of Longview Stormwater Division at 360-442-5299, 360-957-2720, or 360-442-5209. After hours call 360-578-0900.</td>
<td>61</td>
<td>195</td>
</tr>
<tr>
<td>CWLZR-5.6</td>
<td>Cowlitz River at Division St 46.15560 -122.91296</td>
<td>Collection</td>
<td>Boom 800ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Access from the north at Cowlitz Garden Road through a gate, which was not locked but had a pin for a padlock, and onto a narrow gravel road. Follow this for a mile until you see a small two story building surrounded by a fence. GRP site is on a sand beach on the opposite side of an abandoned building.</td>
<td>61</td>
<td>197</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td>CWLZR-6.3</td>
<td>Cowlitz River at SR 411 46.16595 -122.91558</td>
<td>Collection</td>
<td>Boom 600ft</td>
<td>Yes</td>
<td>Onsite Stage equipment in gravel lot. Approximately 190'x60'</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Access is from a gravel parking lot off a main paved road.</td>
<td>60</td>
<td>199</td>
</tr>
<tr>
<td>CWLZR-7.25</td>
<td>Cowlitz river along Westside Hwy 46.17780 -122.90843</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite Stage equipment on gravel lot; approximately 12,000sqft.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Gravel lot of to the side of a busy road. Easy access and lots of room for parking. Down to the river was a steep bank with gravel and vegetation.</td>
<td>60</td>
<td>201</td>
</tr>
<tr>
<td>CWLZR-7.4</td>
<td>Cowlitz River near Pacific Ave N 46.17717 -122.90430</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite Stage equipment in grass field adjacent to railroad track.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Chained off entrance to road leading down to a field near a railroad track.</td>
<td>60</td>
<td>203</td>
</tr>
<tr>
<td>CWLZR-14.1</td>
<td>Cowlitz River at Pleasant Hill Rd 46.24025 -122.88892</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite Stage equipment on gravel road leading to river</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>There is a small sand beach that could be reached by boat. It is possible to get down to the river, but would be a safety hazard trying to carry equipment down.</td>
<td>60</td>
<td>205</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<tr>
<td>CWLZR-15.8L</td>
<td>Cowlitz River at Lions Pride Park S&lt;br&gt;46.26365-122.89933</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite&lt;br&gt;Stage equipment in gravel lot</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td></td>
<td>59</td>
<td>207</td>
</tr>
<tr>
<td>CWLZR-15.8R</td>
<td>Cowlitz River near Cook Ferry Rd&lt;br&gt;46.26261-122.90073</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite&lt;br&gt;Staging available onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td></td>
<td>59</td>
<td>209</td>
</tr>
<tr>
<td>CWLZR-15.9</td>
<td>Cowlitz River near Huntington Ave S&lt;br&gt;46.26466-122.90097</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite&lt;br&gt;Stage equipment in parking lot</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Large gravel lot (apx. 40,000 sqft) with bathroom, rv dump, and lots of parking.</td>
<td>59</td>
<td>211</td>
</tr>
<tr>
<td>CWLZR-17.2</td>
<td>Cowlitz River along Castle Rock bike path&lt;br&gt;46.27234-122.91555</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite&lt;br&gt;Stage equipment along bike path</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Bike path runs along levee. Steep bank to the river. Inform/coordinate response activities with nearby property owners as needed.</td>
<td>59</td>
<td>213</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td>CWLZR-17.4</td>
<td>Cowlitz River near A St Bridge 46.27512 -122.91265</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Must navigate a steep turn up a gravel road and up onto the jogging path. It would be very difficult for larger trucks to make this turn. Transport boom by water</td>
<td>59</td>
<td>215</td>
</tr>
<tr>
<td>CWLZR-17.75</td>
<td>Cowlitz River near Front Ave NW 46.27938 -122.90883</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Rip-rap bank poses difficulties in launching equipment. Transport boom by water and use a vacuum truck at the top of the dike to collect product. Due to the length and height of the dike, an inline pump may be needed.</td>
<td>59</td>
<td>217</td>
</tr>
<tr>
<td>CWLZR-18.0</td>
<td>Cowlitz River near North County Sports Complex 46.28265 -122.91108</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Steep bank poses safety issue, bring equipment over by boat.</td>
<td>59</td>
<td>219</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td>CWLZR-23.6</td>
<td>Cowlitz River - Westside Highway Downstream of RR 46.35284 -122.93655</td>
<td>Collection</td>
<td>Boom 600ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Stage off roadway near top of vacant lot south of bridge over Rock Creek</td>
<td>Downstream Resources, Freshwater Wetlands, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Launch jet-boat from BL-CWLZR-24.7 (located ~1.1mi upstream) to support strategy implementation. Nearest downstream launch is BL-CWLZR-17.6 (~6.0mi away). Boat operator must know the river well in order to avoid sandbars and other obstructions.</td>
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<tr>
<td>CWLZR-24.7</td>
<td>Cowlitz River - WDFW Water Access Site 46.36833 -122.93466</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Location is at WDFW Water Access Site &quot;Olequa Creek&quot; and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Location is at WDFW Water Access Site &quot;Olequa Creek&quot; and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<tr>
<td>CWLZR-26.0</td>
<td>Cowlitz River near Imboden Road 46.36847 -122.93217</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Stage on dirt roadway/pullout off Imboden Road (~250ft from strategy) or on shoulder of road closer to site.</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Stage equipment on-site but launch work boat (jet drive) from BL-CWLZR-24.7 (~1.3mi downstream). Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
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<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<td>Resources At Risk</td>
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<td>CWLZR-26.5</td>
<td>Cowlitz River near Mandy Road &lt;br&gt;46.39269 -122.93151</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Stage equipment on-site but launch work boat (jet drive) from BL-CWLZR-24.7 (~1.8mi downstream). Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>57</td>
<td>227</td>
</tr>
<tr>
<td>CWLZR-27.4</td>
<td>Cowlitz River - Upstream of Vader Water Intakes &lt;br&gt;46.40710 -122.93261</td>
<td>Collection</td>
<td>Boom 700ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead, Water Intakes</td>
<td>For access assistance or permission to cut lock and enter, call Lewis County Public Works at 360-740-1123, Emergency Management at 360-740-1151, or the Sheriff's Office at 360-748-9286.</td>
<td>57</td>
<td>229</td>
</tr>
<tr>
<td>CWLZR-28.4</td>
<td>Cowlitz River at Mouth of Foster Creek &lt;br&gt;46.40182 -122.91587</td>
<td>Exclusion, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on/near roadway. Shoulder very limited - NO TRAILERS. If needed, trailers can be staged at SA-CWLZR-29.8 (WDFW I-5 Water Access).</td>
<td>57</td>
<td>231</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<tr>
<td>CWLZR-29.9</td>
<td>Cowlitz River at Interstate-5 46.41422 -122.89060</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Location is at WDFW Water Access Site &quot;I-5&quot; and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<tr>
<td>CWLZRTC-0.3</td>
<td>Unnamed tributary to Cowlitz River at Evergreen Rd 46.17996 -122.89628</td>
<td>Underflow Dam</td>
<td>Boom 300ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife</td>
<td>Culvert off of the side of the road leads north under the road and along the side of a private driveway.</td>
<td></td>
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<tr>
<td>CWLZRTE-0.15</td>
<td>Unnamed Creek along Pleasant Hill Rd 46.23776 -122.88829</td>
<td>Underflow Dam</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Remote</td>
<td>Freshwater Wildlife, Salmon - Coho</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td></td>
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</tr>
<tr>
<td>CWLZRTF-0.2</td>
<td>Unnamed tributary to Cowlitz River at Pleasant Hill Rd 46.24316 -122.88729</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Steep hill with vegetation leading down to creek and culvert</td>
<td></td>
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<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td><strong>CWMR-0.2</strong></td>
<td>Coweeman River at mouth</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Deploy strategy by a boat launched at a different</td>
<td>62</td>
<td>241</td>
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<td></td>
<td>46.10787 -122.88967</td>
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<tr>
<td><strong>CWMR-0.1</strong></td>
<td>Coweeman River at Coweeman Park Drive</td>
<td>Exclusion</td>
<td>Boom 300ft, Sorbent 300ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Marshy conditions around booming location. The site is not easily accessible by foot/truck.</td>
<td>62</td>
<td>243</td>
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<td>46.10758 -122.88791</td>
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<td><strong>CWMR-0.15</strong></td>
<td>Coweeman River at Talley Way</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Gain access to the dike path by unlocking the gate at the gravel lot</td>
<td>62</td>
<td>245</td>
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<td>46.10735 -122.88845</td>
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<tr>
<td><strong>CWMR-0.2</strong></td>
<td>Coweeman River along dike path</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td></td>
<td>62</td>
<td>247</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>CWMR-0.35</td>
<td>Coweeman River near Coweeman Park Drive 46.11077 -122.88495</td>
<td>Exclusion</td>
<td>Boom 200ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Use workboat to tow boom to site</td>
<td>62</td>
<td>249</td>
</tr>
<tr>
<td>CWMR-0.5</td>
<td>Coweeman River along dike trail 46.11275 -122.88750</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>It would be possible to hand launch boom and/or small skiff. To collect product a skimmer could be carried by hand to the collection point on the river.</td>
<td>62</td>
<td>251</td>
</tr>
<tr>
<td>CWMR-1.15</td>
<td>Coweeman River along Dike path 46.12261 -122.89111</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed.</td>
<td>62</td>
<td>253</td>
</tr>
<tr>
<td>CWMR-1.3</td>
<td>Coweeman River near Grade St 46.13258 -122.90053</td>
<td>Collection</td>
<td>Boom 200ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Access from a paved jogging path. Steep bank with grass and/or rip-rap</td>
<td>62</td>
<td>255</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<tr>
<td>CWMR-1.4</td>
<td>Coweeman River at 13th Ave 46.13587 -122.90106</td>
<td>Collection</td>
<td>Boom 300ft, Sorbent 400ft</td>
<td>Yes</td>
<td>Onsite Stage equipment in parking lot on the north side of the road</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Access via jogging path. Site is located off a well-used public road. Possible to secure boom to a tree on the east bank, might need to pound stakes or some sort of ground anchor to secure boom on the west bank.</td>
<td>62</td>
<td>257</td>
</tr>
<tr>
<td>CWMR-1.6</td>
<td>Coweeman River at Coweeman Drive 46.13719 -122.89817</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite Room for a vacuum truck or other equipment to collect product.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Gravel parking area under the bridge is large enough to stage some trucks and equipment.</td>
<td>62</td>
<td>259</td>
</tr>
<tr>
<td>CWMR-1.75</td>
<td>Coweeman River near Manasco Drive 46.13856 -122.89668</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite Stage equipment in parking lot approximately 400ft north.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>62</td>
<td>261</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<tr>
<td>CWMR-2.0</td>
<td>Coweeman River at O'Shanter Park</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Duckbill water discharges on the shore, river right, with signs warning of sudden discharge.</td>
<td>62</td>
<td>263</td>
</tr>
<tr>
<td>CWMRT-0.35</td>
<td>Unnamed Tributary to Coweeman River</td>
<td>Culvert Block</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife</td>
<td>Road is busy, not much room. Culvert is accessible.</td>
<td>62</td>
<td>265</td>
</tr>
<tr>
<td>CWMRTB-0.6</td>
<td>Tributary to Coweeman River near Allen Street Road</td>
<td>Culvert Block</td>
<td>Boom 200ft, Sorbent 400ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway. Culvert hard to access due to high water.</td>
<td>61</td>
<td>267</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>DAVSC-1.8</td>
<td>Davis Creek on Rose Valley Rd 46.09332 -122.86004</td>
<td>Underflow Dam</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage equipment on the side of the road. Can park several trucks.</td>
<td>Freshwater Wildlife</td>
<td>Creek has a relatively strong current here. With a strong current you would want to make an underflow dam. Easiest spot to make a dam was approximately 100ft upstream from culvert where depth and current is less.</td>
<td>61</td>
<td>269</td>
</tr>
<tr>
<td>ELEWR-0.2</td>
<td>East Fork Lewis River mouth 45.86585 -122.71621</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite Stage equipment at small parking lot at site.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed.</td>
<td>67</td>
<td>271</td>
</tr>
<tr>
<td>FOSTC-1.8</td>
<td>Foster Creek at Jackson Highway South 46.40690 -122.88765</td>
<td>Collection, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of roadway (NE corner has small pullout) - Work Truck Only - NO TRAILERS.</td>
<td>Downstream Resources, Salmon - Coho, Steelhead</td>
<td>Fiber Optic Cable crosses Foster Creek on upstream/east side of roadway. Contact Sprint before digging in area; call 1-800-521-0579. Limited shoulder - NO TRAILERS; if needed, stage trailer at WDFW “I-5” Water Access Site (SA-CWLZR-29.8).</td>
<td>57</td>
<td>273</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<tr>
<td>GEEC-3.8</td>
<td>Gee Creek - N Main Avenue</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage on small pull-out on east side of roadway near site at start of private driveway.</td>
<td>Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Chinook</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is very limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.</td>
<td>68</td>
<td>275</td>
</tr>
<tr>
<td>GEEC-4.7</td>
<td>Gee Creek - Abrams Park</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage in parking area near entrance of Abrams Park (near bridge)</td>
<td>Downstream Resources, Freshwater Wildlife, Salmon - Chinook</td>
<td>Contact City of Ridgefield for After-Hours Access: call 360-518-8146</td>
<td>68</td>
<td>277</td>
</tr>
<tr>
<td>GEEC-6.9</td>
<td>Gee Creek at NW Royle Road</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage on shoulder of road or field access dirt road (just west of strategy site) - NO TRAILERS</td>
<td>Downstream Resources, Freshwater Wildlife, Salmon - Chinook</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is extremely limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.</td>
<td>68</td>
<td>279</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>GEECTG-1.1</td>
<td>Gee Creek Tributary - Interstate-5 Rest Area (North) 45.77667 -122.66966</td>
<td>Sorbent</td>
<td>Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Freshwater Wildlife, Salmon - Chinook</td>
<td>Rest Area maintained by WSDOT Southwest Region - Maintenance (Area 1); 360-905-2240 or 360-905-2136. WSDOT Environmental/Hazmat at 360-905-2186.</td>
<td>68  281</td>
<td></td>
</tr>
<tr>
<td>HILLC-0.9</td>
<td>Hill Creek at Miekler Road 46.36731 -122.92933</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site; stage trailers at SA-CWLZR-24.7 (end of Miekler Rd). Follow WSDOT work zone traffic control guidelines.</td>
<td>58  283</td>
<td></td>
</tr>
<tr>
<td>HILLC-2.1</td>
<td>Hill Creek at Barnes Drive 46.37829 -122.91412</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines - limited shoulder area, DO NOT BRING AN EQUIPMENT TRAILER to this site; they can be staged at corner of Barnes Drive and Rogers Road (1.0mi NE of site).</td>
<td>58  285</td>
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</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>KLMAR-1.5</td>
<td>Kalama River near Camp Kalama RV Park, 46.03886 -122.85442</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Large grass field, but on private property.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead, Waterfowl, Winter Steelhead</td>
<td>Charlene DesRosier. 360.673.2456. Camp Kalama RV Park</td>
<td>63</td>
</tr>
<tr>
<td>LCMSC-0.3</td>
<td>Lacamas Creek at Highway 506, 46.41175 -122.92610</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage work truck on north shoulder of roadway before or after bridge; limited shoulder space - NO TRAILERS.</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited. Slope down to creek left is steep; use 1/2” line for safe descent if needed.</td>
<td>57</td>
</tr>
<tr>
<td>LCMSC-4.2</td>
<td>Lacamas Creek at Drews Prairie Road, 46.45339 -122.87984</td>
<td>Collection, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Stage on shoulder of road before bridge.</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Waders or hip boots recommended. Depending on flow, equipment can be lower to creek left from bridge using line or crane truck, but must follow WSDOT work zone traffic control guidelines for lane closure.</td>
<td>57</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
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<tr>
<td>LEWR-1.9</td>
<td>Lewis River - NW Lancaster Road 45.86454 -122.74977</td>
<td>Collection</td>
<td>Boom 700ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead, Wetland Habitat</td>
<td>Entry is gated and may be locked (or appear locked); If locked, notify BNSF at 800-832-5452 before entry. This site is located below RR Bridge on south side of Lewis River in Washington State at BNSF Rail Mile 119 on the Seattle Line (52).</td>
<td>67</td>
<td>303</td>
</tr>
<tr>
<td>LEWR-2.3</td>
<td>Lewis River along Dike road 45.87190 -122.74127</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Use workboat to tow boom to site</td>
<td>67</td>
<td>305</td>
</tr>
<tr>
<td>LEWR-3.4</td>
<td>Lewis River - WDFW Water Access Site &quot;Martin&quot; 45.86686 -122.72372</td>
<td>Collection</td>
<td>Boom 900ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Upstream side of strategy is along &quot;Two Rivers&quot; development off NW Pekin Ferry Road. Downstream side of strategy lands on upstream side of boat ramp at WDFW Water Access Site &quot;Martin&quot; (open year round).</td>
<td>67</td>
<td>307</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
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<tr>
<td>LEWR-4.1</td>
<td>Lewis River</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Use workboat to tow boom to site. Lots of open farmland on the west side of the bank. Room to park equipment.</td>
<td>67</td>
<td>309</td>
</tr>
<tr>
<td>LEWR-5.0</td>
<td>Lewis River along dike path</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed.</td>
<td>67</td>
<td>311</td>
</tr>
<tr>
<td>LEWR-11.5</td>
<td>Lewis River - North of NW 15th Avenue</td>
<td>Exclusion</td>
<td>Boom 200ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy location is on river left at entrance to side channel about ~0.9mi downstream from Lewis River Golf Club Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4). Use caution - pilings present at side channel entrance.</td>
<td>65</td>
<td>313</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>LEWR-11.7</td>
<td>Lewis River at WDFW Water Access Site &quot;Island&quot; 45.93895 -122.68205</td>
<td>Collection</td>
<td>Boom 400ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Site located at WDFW &quot;Island&quot; Water Access Site. Location is open year round; for more information contact WDFW Region 5 at 360-696-6211 or <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<td>LEWR-11.8</td>
<td>Lewis River - Northwest of NW Polar Drive 45.93804 -122.68008</td>
<td>Deflection</td>
<td>Boom 200ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy location is on river right at entrance to side channel about ~0.6mi downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4).</td>
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<tr>
<td>LEWR-12.2</td>
<td>Lewis River - Fish Pens at Side Channel Entrance 45.93773 -122.67012</td>
<td>Deflection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Fish Pens</td>
<td>Strategy location is on river right about ~200ft upstream of fish pens, ~0.2mi downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4).</td>
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<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td>LEWR-12.3a</td>
<td>Lewis River - Downstream from Lewis River Golf Course 45.93652 -122.66736</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy shoreline location (Point B) is on river right about ~400ft downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4). Dirt road that leads NW from ramp will take you to strategy shoreline location.</td>
<td>65</td>
<td>321</td>
</tr>
<tr>
<td>LEWR-12.3b</td>
<td>Lewis River - Downstream from Lewis River Golf Course 45.93700 -122.66833</td>
<td>Deflection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)</td>
<td>Fish Pens</td>
<td>Strategy shoreline location (Point A) is on river right about ~500ft downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4). Trail at end of dirt road that leads NW from ramp will take you to strategy shoreline location.</td>
<td>65</td>
<td>323</td>
</tr>
<tr>
<td>LEWR-12.5</td>
<td>Lewis River at the Lewis River Golf Course 45.93533 -122.66541</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Site is located about 275ft down slope from parking lot at Club House for Lewis River Golf Course; with a 26ft drop. Use of vac-truck from parking area not recommended.</td>
<td>65</td>
<td>325</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<td>LEWR-13.8</td>
<td>Lewis River - West of 434th Street</td>
<td>Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Remote Stage in parking lot of Lewis River - Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7)</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy is located on river left about ~0.9mi downstream from Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7).</td>
<td>65</td>
<td>329</td>
</tr>
<tr>
<td>LEWR-14.9</td>
<td>Lewis River - Upstream from Happa Boat Launch</td>
<td>Deflection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote Stage in parking lot of Lewis River - Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7)</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy is located on river right about ~0.2mi upstream from Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7).</td>
<td>65</td>
<td>331</td>
</tr>
<tr>
<td>LEWR-15.5a</td>
<td>Lewis River Fish Hatchery - Downstream Water Intake</td>
<td>Exclusion</td>
<td>Boom 200ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Remote Stage at WDFW Water Access Point &quot;Cedar&quot; (SA-LEWR-15.5). Use boat launch BL-LEWR-15.5.</td>
<td>Water Intakes</td>
<td>Strategy location is at downstream water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.</td>
<td>65</td>
<td>333</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td><strong>LEWR-15.5b</strong></td>
<td>Lewis River at WDFW Water Access Site &quot;Cedar Creek&quot; 45.93668 -122.61998</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Site located at WDFW &quot;Cedar Creek&quot; Water Access Site. Location is open year round; for more information contact WDFW Region 5 at 360-696-6211 or <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>65</td>
<td>335</td>
</tr>
<tr>
<td><strong>LEWR-15.6a</strong></td>
<td>Lewis River off NE Etna Road 45.93585 -122.61815</td>
<td>Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Site is located about ~700ft upstream from boat launch BL-LEWR-15.5; backwater area just upstream from Cedar Creek Fork entrance across from Lewis River Fish Hatchery.</td>
<td>65</td>
<td>337</td>
</tr>
<tr>
<td><strong>LEWR-15.6b</strong></td>
<td>Lewis River - Cedar Creek Fork 45.93609 -122.61875</td>
<td>Exclusion</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Site is located about ~500ft upstream from boat launch BL-LEWR-15.5, downstream of Etna Road Bridge over Cedar Creek Fork.</td>
<td>65</td>
<td>339</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
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<tr>
<td>LEWR-16.1a</td>
<td>Lewis River at Old Lewis River Road</td>
<td>Collection</td>
<td>Boom 300ft</td>
<td>Yes</td>
<td>Remote</td>
<td>Downstream Resources, Fish Hatchery, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Strategy location is immediately upstream of water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.</td>
<td>65</td>
<td>341</td>
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<td></td>
<td>45.93845 -122.60995</td>
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<td></td>
<td>Stage equipment on-site. Launch work boat from Cedar Creek Boat Launch (BL-LEWR-15.5)</td>
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<tr>
<td>LEWR-16.1b</td>
<td>Lewis River Fish Hatchery - Upstream Water Intakes</td>
<td>Exclusion</td>
<td>Boom 200ft, Sorbent 200ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Water Intakes</td>
<td>Strategy location is at upstream water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.</td>
<td>65</td>
<td>343</td>
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<td></td>
<td>45.93815 -122.61042</td>
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<td></td>
<td>Stage equipment on-site. Launch work boat from Cedar Creek Boat Launch (BL-LEWR-15.5)</td>
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<tr>
<td>MCMRC-0.2</td>
<td>McMurphy Creek at Annonen Road</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Salmon - Chum, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines must be followed. If needed, underflow dam on private property (west of roadway) may be installed but access/activity must be coordinated with property owner.</td>
<td>57</td>
<td>347</td>
</tr>
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<td></td>
<td>46.40714 -122.96321</td>
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<td>Stage work truck on partial shoulder and roadway; NO TRAILERS.</td>
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<td>Strategy Name</td>
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<td>Strategy Type</td>
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<tr>
<td>MILLC-0.3</td>
<td>Mill Creek at South Cloverdale Road 45.96056 -122.80147</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Remote</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6</td>
<td>64</td>
<td>349</td>
</tr>
<tr>
<td>MILLC-1.1</td>
<td>Mill Creek at Martins Bluff Road 45.96248 -122.78683</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6</td>
<td>64</td>
<td>351</td>
</tr>
<tr>
<td>OLQAC-0.5</td>
<td>Olequa Creek off Old Olequa Crossing Road 46.37295 -122.94271</td>
<td>Collection</td>
<td>Boom 200ft, Sorbent 300ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Fish barrier is part of WDFW-Cowlitz Evaluation Project; inform WDFW before strategy implementation; call 360-864-6133, 360-623-0622, 360-791-4690, or 206-245-9971.</td>
<td>58</td>
<td>353</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
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<tr>
<td>OLQAC-2.6</td>
<td>Olequa Creek at Enchanted Valley Country Club</td>
<td>Collection</td>
<td>Boom 200ft</td>
<td>Yes</td>
<td>Onsite</td>
<td>Onsite</td>
<td>Notify property owner in advance of strategy implementation; call/leave message at 509-995-5439, 509-990-0925, or email <a href="mailto:ralphchilders@yahoo.com">ralphchilders@yahoo.com</a>.</td>
<td>57</td>
<td>355</td>
</tr>
<tr>
<td>OLQAC-3.7</td>
<td>Olequa Creek at 7th Street (Highway 506)</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Onsite</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Waders or hip boots recommended. Access creek right from trail behind guardrail near SW corner of bridge.</td>
<td>57</td>
<td>357</td>
</tr>
<tr>
<td>OLQAC-4.8</td>
<td>Olequa Creek at Annonen Road</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Onsite</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Slope down to creek right under bridge is steep; use 1/2” line for safe descent if needed.</td>
<td>57</td>
<td>359</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<tr>
<td>OLQAC-7.9</td>
<td>Olequa Creek at Ferrier Road 46.44560 -122.96232</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site. Waders or hip boots recommended.</td>
<td>57</td>
<td>361</td>
</tr>
<tr>
<td>OLQAC-10.9</td>
<td>Olequa Creek at near Winlock Wastewater Treatment 46.48183 -122.94612</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow trail along south fence line for Winlock Waste Water Treatment Plant to trail leading down to creek left. Waders or hip boots recommended.</td>
<td>57</td>
<td>363</td>
</tr>
<tr>
<td>OLQAC-12.4</td>
<td>Olequa Creek at NW Kerron Street 46.50036 -122.93725</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Waders or hip boots recommended.</td>
<td>56</td>
<td>365</td>
</tr>
<tr>
<td>OSTRC-0.15</td>
<td>Ostrander Creek culvert under W Stock Road 46.19499 -122.89687</td>
<td>Collection</td>
<td>Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway</td>
<td>60</td>
<td>367</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<td>OSTRC-0.2</td>
<td>Ostrander Creek 46.19474 -122.89546</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage equipment on side of road</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Culvert has two channels, both approximately 8ft wide</td>
<td>60</td>
<td>369</td>
</tr>
<tr>
<td>OSTRC-0.35</td>
<td>Ostrander Creek at Pacific Highway N 46.19471 -122.89311</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage equipment on side of road.</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Heavy vegetation and steep bank</td>
<td>60</td>
<td>371</td>
</tr>
<tr>
<td>SALMC-2.2</td>
<td>Salmon Creek at NW 36th Avenue (Hwy-501) 45.72262 -122.70678</td>
<td>Collection</td>
<td>Boom 200ft, Sorbent 300ft</td>
<td>Yes</td>
<td>Onsite Stage on wide shoulder of roadway near SE corner of NW 36th Avenue Bridge.</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>In-line booster pump needed if using Vac-Truck from roadway shoulder. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>69</td>
<td>373</td>
</tr>
<tr>
<td>SALMC-5.6</td>
<td>Salmon Creek - Klineline Pond (Salmon Creek Park) 45.70684 -122.65798</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage in parking lot of Salmon Creek Park near the pedestrian bridge over creek (SA-SALMC-5.6).</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead</td>
<td>Contact Clark County Parks and Recreation for access support, and notify them before implementation; call 360-737-6118 or 360-397-2285; If spill/sheen impacts observed on Klineline Pond notify WDFW at 360-902-2700.</td>
<td>69</td>
<td>375</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
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<tr>
<td><strong>SAURC-0.75</strong></td>
<td>Sauer Creek at Cloverdale Rd 45.98902 -122.81790</td>
<td>Culvert Block</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage equipment on side of road</td>
<td>Freshwater Wildlife</td>
<td>Modify strategy as needed, based on stream flow conditions. Downstream side of the culvert is most easily accessible, SW side of road.</td>
<td>63</td>
<td>377</td>
</tr>
<tr>
<td><strong>SAURC-0.9</strong></td>
<td>Sauer Creek at Paradise Acres Road 45.98975 -122.81510</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Remote Ask permission to stage equipment from property owners</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Follow WSDOT Traffic Safety Guidelines</td>
<td>63</td>
<td>379</td>
</tr>
<tr>
<td><strong>SCHSC-0.3</strong></td>
<td>Schoolhouse Creek at Robb Rd 45.98102 -122.82142</td>
<td>Underflow Dam</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Roadway near strategy location</td>
<td>Dirt road, surrounded by private property, parking on the side of the road only</td>
<td>63</td>
<td>381</td>
<td></td>
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<tr>
<td><strong>SCHSC-1.3</strong></td>
<td>Schoolhouse Creek near Cloverdale Road 45.98539 -122.81352</td>
<td>Collection, Underflow Dam</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Remote Stage on shoulder of roadway near creek; Follow WSDOT Traffic Safety Guidelines.</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Access culvert from grass field (private property). Coordinate access with property owner before implementation if possible.</td>
<td>63</td>
<td>383</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
<td>Strategy Details (Page#)</td>
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<tr>
<td>SLMNC-0.35</td>
<td>Salmon Creek at Pleasant Hill Rd</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Down a paved road to private property, then through a gate and onto a grass field that leads to the creek. Grass field gets very muddy. 4x4 with good tires recommended.</td>
<td>59</td>
<td>385</td>
</tr>
<tr>
<td>SLMNC-0.7</td>
<td>Salmon Creek near Huntington Ave S</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Bank leading down to the culvert is very steep and covered in overgrown vegetation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>59</td>
<td>387</td>
</tr>
<tr>
<td>SLMNC-2.3</td>
<td>Salmon Creek along Dougherty Drive</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Remote</td>
<td>Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>Bank leading down to the culvert is very steep and covered in overgrown vegetation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>59</td>
<td>389</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
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<tr>
<td>TTLR-1.0</td>
<td>Toutle River off Old Pacific Hwy N 46.31715 -122.90667</td>
<td>Collection</td>
<td>Boom 500ft</td>
<td>Yes</td>
<td>Onsite Stage in upper dirt/gravel lot at strategy location</td>
<td>Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead</td>
<td>If needed, launch jet-boat from BL-CWLZR-17.6 (located about ~3.4m downstream) to support the implementation of this strategy - but boat operator must know the river well in order to avoid sandbars and other obstructions.</td>
<td>58</td>
<td>391</td>
</tr>
<tr>
<td>TTLRTA-1.1</td>
<td>Toutle River - Unnamed Tributary at Kroll Road 46.31150 -122.88589</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage work truck on shoulder of roadway; Space limited - NO TRAILERS</td>
<td>Downstream Resources</td>
<td>Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder parking is very limited at this location - DO NOT BRING AN EQUIPMENT TRAILER to this site.</td>
<td>58</td>
<td>393</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
<td>Resources At Risk</td>
<td>Comments</td>
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<tr>
<td><strong>USCCA-0.5</strong></td>
<td>Unnamed Creek at Old Pacific Highway S</td>
<td>Collection, Underflow Dam, Sorbent</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife</td>
<td>Culvert under paved road. Limited parking. The creek is approximately 10 ft in width but will vary seasonally. Stream is mostly dry in the summer. Shoreline composition is mostly grass with some mud, river rock. Downstream side of the culvert is most easily accessible, SW side of road.</td>
<td></td>
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</tr>
<tr>
<td><strong>USCCA-0.8</strong></td>
<td>Unnamed Creek at Cloverdale Road</td>
<td>Culvert Block, Sorbent</td>
<td>Boom 100ft, Sorbent 100ft</td>
<td>No</td>
<td>Onsite</td>
<td>Freshwater Wildlife</td>
<td>Culvert under paved road. Limited parking. Shoreline composition is mostly grass with vegetation. Robert Palmer is the property owner on the west side of the culvert and was very cooperative. Culvert has easy access off the side of the road but has a wire fence around it. Robert (Ken) Palmer, 360.673.2200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Boom Length</td>
<td>Boat Req?</td>
<td>Staging Area</td>
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<tr>
<td>USCCB-0.8</td>
<td>Unnamed Stream at Burcham Street 46.15007 -122.89821</td>
<td>Culvert Block</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Onsite Stage equipment on hill above the site. Follow WSDOT Traffic Safety Guidelines.</td>
<td>Freshwater Wildlife</td>
<td>Creek has intermittent flow. Modify strategy as needed, based on stream flow conditions. Install Underflow Dam if time allows.</td>
<td>61</td>
<td>399</td>
</tr>
<tr>
<td>USCCC-0.0</td>
<td>Unnamed Creek at Washburn Rd 46.20753 -122.89756</td>
<td>Collection</td>
<td>Boom 100ft, Sorbent 200ft</td>
<td>No</td>
<td>Remote No staging onsite.</td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
<td>Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.</td>
<td>60</td>
<td>401</td>
</tr>
<tr>
<td>WPPLC-2.3</td>
<td>Whipple Creek near NW 179th Street (Wood Bridge) 45.75049 -122.71678</td>
<td>Sorbent</td>
<td>Sorbent 100ft</td>
<td>No</td>
<td>Onsite Stage off NW 179th Street before wooden bridge on unnamed roadway.</td>
<td>Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
<td>May be able to temporarily park equipment trailer at Clark County Sheriff’s Office (West Precinct), 505 NW 179th Street, ~2mi east of strategy site (before I-5) on south side of roadway; call 360-397-2211.</td>
<td>68</td>
<td>403</td>
</tr>
</tbody>
</table>
### 4.5.3 Notification Strategy Matrices

<table>
<thead>
<tr>
<th>Strategy Name</th>
<th>Location</th>
<th>Strategy Type</th>
<th>Resources at Risk</th>
<th>Implementation</th>
<th>Comments</th>
<th>Sector Map (Page#)</th>
<th>Strategy Details (Page#)</th>
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</thead>
<tbody>
<tr>
<td>CWLZR-4.7-N</td>
<td>Cowlitz River - Kelso Ranney Collector (Water Intakes)</td>
<td>Notification</td>
<td>Water Intakes</td>
<td>During Normal Business Hours call City of Kelso Public Works at 360-577-3360 or contact the city's water treatment plant directly at 360-577-1085. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream or downstream of the Ranney Collector/Water Intake. After hours, contact Kelso Police at 360-423-1270 and ask that the on-duty public works person return your call.</td>
<td>Notify City of Kelso so they can take action to protect their water intakes</td>
<td>61</td>
<td>407</td>
</tr>
<tr>
<td>CWLZR-5.2-N</td>
<td>Cowlitz River - Longview Water Intakes</td>
<td>Notification</td>
<td>Economic Resource, Water Intakes</td>
<td>During Normal Business Hours (Monday through Thursday 7am-6pm) call City of Longview Stormwater Division at 360-442-5299, 360-957-2720, or 360-442-5209. After hours call 360-578-0900.</td>
<td>Notify City or Longview so they can take action to protect their water intakes</td>
<td>61</td>
<td>409</td>
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<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
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<td>Implementation</td>
<td>Comments</td>
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<tr>
<td>CWLZR-22.3-N</td>
<td>Cowlitz River - Castle Rock Water Intakes 46.33403 -122.93194</td>
<td>Notification</td>
<td>Economic Resource, Water Intakes</td>
<td>During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility. If the business number is inoperative, or for afterhours assistance, call the city’s answering service at 360-751-7478.</td>
<td>Notify City of Castle Rock so they can take action to protect their water intakes</td>
<td>58</td>
<td>411</td>
</tr>
<tr>
<td>CWLZR-27.3-N</td>
<td>Cowlitz River - Vader Water Intakes 46.40608 -122.93336</td>
<td>Notification</td>
<td>Water Intakes</td>
<td>During Normal Business Hours call Lewis County Public Works at 360-740-1123 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility. After hours call Lewis County Emergency Management at 360-740-1151 or the Sheriff’s Office at 360-748-9286 for assistance.</td>
<td>Notify Lewis County so they can take action to protect the City of Vader's water intakes</td>
<td>57</td>
<td>413</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Resources at Risk</td>
<td>Implementation</td>
<td>Comments</td>
<td>Sector Map (Page#)</td>
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<tr>
<td>CWLZR-49.8-N</td>
<td>Cowlitz River - Salmon and Trout Hatcheries (WDFW) 46.51134 -122.62946</td>
<td>Notification</td>
<td>Fish Hatchery</td>
<td>Notify WDFW Cowlitz River Salmon Hatchery of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River or downstream waters. CALL 360-864-6135. Notify WDFW Cowlitz River Hatcheries so they can take action to protect their fish resources</td>
<td>55</td>
<td>415</td>
<td></td>
</tr>
<tr>
<td>CWMR-13.3-N</td>
<td>Coweeman River - Rearing Pond 46.15566 -122.78136</td>
<td>Notification</td>
<td>Salmon, Steelhead</td>
<td>Notify Coweeman River Rearing Pond of any significant oil spill or potential spill that impacts or threatens to impact the river or downstream waters. CALL 360-577-0602. Notify Coweeman Rearing Pond so they can take action to protect their fish resources</td>
<td>61</td>
<td>417</td>
<td></td>
</tr>
<tr>
<td>KLMAR-2.6-N</td>
<td>Kalama River - Kalama Ranney Collector (Water Intakes) 46.04361 -122.83902</td>
<td>Notification</td>
<td>Water Intakes</td>
<td>During Normal Business Hours call City of Kalama Public Works at 360-673-3706 or contact the city’s water treatment plant directly at 360-673-4047. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Kalama River upstream of the Ranney Collector/Water Intake. After hours, contact Kalama Police/Dispatch at 360-577-3090 and ask that the on-duty public works person return your call. Notify City of Kalama so they can take action to protect their water intakes</td>
<td>63</td>
<td>419</td>
<td></td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Strategy Type</td>
<td>Resources at Risk</td>
<td>Implementation</td>
<td>Comments</td>
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<tr>
<td>KLMAR-10.8-N</td>
<td>Kalama River - Kalama Falls Hatchery (WDFW)</td>
<td>Notification</td>
<td>Salmon</td>
<td>Notify WDFW Kalama Falls Hatchery of any significant spill or potential oil spill that impacts or threatens to impact the Kalama River, Toutle River, Cowlitz River, Lewis River, or downstream waters. CALL 360-673-4825 or 360-864-6135.</td>
<td>Notify WDFW Kalama Falls Hatchery so they can take action to protect their fish resources</td>
<td>63</td>
<td>421</td>
</tr>
<tr>
<td>LEWR-7.0-N</td>
<td>Lewis River - Woodland Ranney Collector (Water Intakes)</td>
<td>Notification</td>
<td>Water Intakes</td>
<td>Call the City of Woodland Public Works at 360-606-1191, 360-608-1417, or 360-607-0968. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Lewis River upstream of the Ranney Collector/Water Intake.</td>
<td>Notify City of Woodland so they can take action to protect their water intakes</td>
<td>64</td>
<td>425</td>
</tr>
<tr>
<td>LEWR-19.0-N</td>
<td>Lewis River - Merwin Hatchery (WDFW)</td>
<td>Notification</td>
<td>Salmon</td>
<td>Notify WDFW Merwin Hatchery of any significant oil spill or potential spill that impacts or threatens to impact the Lewis River or downstream waters. CALL 360-225-4390.</td>
<td>Notify WDFW Merwin Hatchery so they can take action to protect their fish resources</td>
<td>64</td>
<td>427</td>
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### 4.5.4 Staging Area Matrices

<table>
<thead>
<tr>
<th>Strategy Name</th>
<th>Location</th>
<th>Position</th>
<th>Nearest Address</th>
<th>Contact</th>
<th>Strategies Served</th>
<th>Comments</th>
<th>Sector Map (Page#)</th>
<th>Strategy Details (Page#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA-CWLZR-1.6</td>
<td>Cowlitz River - Gerhart Gardens Park</td>
<td>46.11136 -122.89552</td>
<td>200 Freedom Way Longview, WA 98632</td>
<td>City of Vancouver Parks and Recreation 415 Sixth Street Vancouver, WA 98660 360-487-8337</td>
<td>LCR-65.9R</td>
<td>Gerhart Gardens Park belongs to the City of Longview. Coordinate staging with Parks Department; call 360-487-8337.</td>
<td>62</td>
<td>433</td>
</tr>
<tr>
<td>SA-CWLZR-6.35</td>
<td>Cowlitz River - Carnival Market</td>
<td>46.16564 -122.91561</td>
<td>829 Westside Hwy Kelso, WA 98626</td>
<td>No Information</td>
<td></td>
<td>Carnival Market</td>
<td>60</td>
<td>435</td>
</tr>
<tr>
<td>SA-CWLZR-16.1</td>
<td>Cowlitz River - Camelot Beach</td>
<td>46.26569 -122.90451</td>
<td>213 Camelot Spur Castle Rock, WA 98611</td>
<td>No Information</td>
<td></td>
<td>Gravel lot</td>
<td>59</td>
<td>437</td>
</tr>
<tr>
<td>SA-CWLZR-17.6</td>
<td>Cowlitz River - Castle Rock Sports Complex</td>
<td>46.27830 -122.91185</td>
<td>5018 Westside Hwy Castle Rock, WA 98611</td>
<td>City of Castle Rock - Public Works 360 “A” Street SW - P.O. Box 370 Castle Rock, WA 98611 360-703-0167</td>
<td>CWLZR-18.0</td>
<td>During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of the need to use the Sports Complex/Memorial Park boat launch parking area for staging. If the business number is inoperative, or for after-hours assistance, call the city’s answering service 360-751-7478.</td>
<td>59</td>
<td>439</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Location</td>
<td>Position</td>
<td>Nearest Address</td>
<td>Contact</td>
<td>Strategies Served</td>
<td>Comments</td>
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<tr>
<td>SA-CWLZR-24.7</td>
<td>Cowlitz River - WDFW Water Access Site &quot;Olequa Creek&quot;</td>
<td>46.36778 -122.93431</td>
<td>271 Miekle Rd Castle Rock, WA  98611</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>CWLZR-24.7 HILLC-0.9</td>
<td>WDFW Water Access Site &quot;Olequa Creek&quot; is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>58</td>
<td>441</td>
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<tr>
<td>SA-CWLZR-29.8</td>
<td>Cowlitz River - WDFW &quot;I-5&quot; Water Access Site</td>
<td>46.41364 -122.89102</td>
<td>275 Mandy Rd Toledo, WA 98591</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>CWLZR-29.9</td>
<td>WDFW &quot;I-5&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>57</td>
<td>443</td>
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<tr>
<td>SA-CWMR-1.0</td>
<td>Coweeman River - Cowlitz County SAR</td>
<td>46.13140 -122.89765</td>
<td>1809 Grade St Kelso, WA 98626</td>
<td>No Information</td>
<td></td>
<td>Search and Rescue station across street from boat launch</td>
<td>62</td>
<td>445</td>
</tr>
<tr>
<td>SA-KLMAR-2.8</td>
<td>Kalama River - WDFW Water Access &quot;Modrow Bridge&quot;</td>
<td>46.04735 -122.83712</td>
<td>150 Modrow Rd Kalama, WA 98625</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td></td>
<td>WDFW Water Access Site &quot;Modrow Bridge&quot; is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>63</td>
<td>449</td>
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<td>Strategy Name</td>
<td>Location</td>
<td>Position</td>
<td>Nearest Address</td>
<td>Contact</td>
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<tr>
<td>SA-LEWR-3.3</td>
<td>Lewis River - WDFW Water Access Site &quot;Martin&quot;</td>
<td>45.86799 -122.72479</td>
<td>1242 S Pekin Rd Woodland, WA 98674</td>
<td>Washington Department of Fish and Wildlife Region 5 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-3.4</td>
<td>WDFW Water Access Site &quot;Martin&quot; is open year round; For extended use, contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>67</td>
<td>457</td>
</tr>
<tr>
<td>SA-LEWR-11.7</td>
<td>Lewis River - WDFW &quot;Island&quot; Water Access Site</td>
<td>45.93933 -122.68185</td>
<td>3020 Lewis River Rd Woodland, WA 98674</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-11.7</td>
<td>WDFW &quot;Island&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td>65</td>
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<tr>
<td>SA-LEWR-12.4</td>
<td>Lewis River Golf Club Boat Launch</td>
<td>45.93622 -122.66598</td>
<td>3209 Old Lewis River Rd Woodland, WA 98674</td>
<td>Lewis River Golf Course 3209 Lewis River Road Woodland, WA 98674 360-225-8566</td>
<td>LEWR-11.5 LEWR-11.8 LEWR-12.2 LEWR-12.3a LEWR-12.3b LEWR-12.5</td>
<td>Lewis River Golf Club Boat Launch parking area can be used for staging. Coordinate use of parking area with golf course administration and operations office; call 360-225-8566 or 360-225-8254.</td>
<td>65</td>
<td>461</td>
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<td>Comments</td>
<td>Sector Map (Page#)</td>
<td>Strategy Details (Page#)</td>
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<tr>
<td>SA-LEWR-14.7</td>
<td>Lewis River - Haapa Boat Launch</td>
<td>45.93589 -122.63767</td>
<td>43309 NE Haapa Rd Woodland, WA 98674</td>
<td>Clark County Parks and Trails 360-397-2285 CRESA Clark Regional Emergency Services Agency 360-696-4461</td>
<td>LEWR-13.3 LEWR-13.8 LEWR-14.9</td>
<td>Haapa Park is open daily from 7AM to dusk. Contact Clark County Dispatch (CRESA) for after-hours access assistance; call 360-693-3111. Clark County Sheriff's Department and WDFW Enforcement Officers have a 24-hour access key to park.</td>
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<tr>
<td>SA-LEWR-15.5</td>
<td>Lewis River - WDFW &quot;Cedar Creek&quot; Water Access Site</td>
<td>45.93643 -122.62050</td>
<td>5100 NE Etna Rd Woodland, WA 98674</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-15.5a LEWR-15.5b LEWR-15.6a LEWR-15.6b</td>
<td>WDFW &quot;Cedar Creek&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<tr>
<td>SA-SALMC-5.6</td>
<td>Staging Area - Klineline Pond (Salmon Creek Region)</td>
<td>45.70654 -122.65817</td>
<td>1717 NE 117th St Vancouver, WA 98686</td>
<td>Clark County Parks and Trails 4700 NE 78th Street Vancouver, WA 98665 360-397-2285</td>
<td>SALMC-5.6</td>
<td>Contact Clark County Parks and Recreation for access support; call 360-737-6118 or 360-397-2285. Normal park hours are 7AM to dusk.</td>
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<tr>
<td>Strategy Name</td>
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<td>Comments</td>
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<tr>
<td>SA-SCHSC-0.6</td>
<td>Schoolhouse Creek - Old Pacific Highway near I-5</td>
<td>45.98127</td>
<td>200 Robb Rd</td>
<td>No Information</td>
<td>BYBEC-0.8</td>
<td>Location is gravel parking area off Old Pacific Highway South. Equipment trailer can be staged at this location so work trucks can be loaded and sent to deploy nearby strategies that have limited access or shoulder areas.</td>
<td>63</td>
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## 4.5.5 Boat Launch Matrices

<table>
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<tr>
<th>Strategy Name</th>
<th>Name</th>
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<th>Strategies Served</th>
<th>Comments</th>
<th>Sector Map (Page#)</th>
<th>Strategy Details (Page#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL-CWLZR-1.6</td>
<td>Cowlitz River - Gerhart Gardens Park</td>
<td>46.11136-122.89552</td>
<td>200 Freedom Way Longview, WA 98632</td>
<td>City of Vancouver Parks and Recreation 415 Sixth Street Vancouver, WA 98660 360-487-8337</td>
<td>CWLZR-1.0  CWLZR-1.3  CWLZR-1.65  CWMR-0.02  CWMR-0.1  CWMR-0.15  CWMR-0.2  CWMR-0.35  CWMR-0.5  LCR-65.9R  LCR-66.2R</td>
<td>Gerhart Gardens Park belongs to the City of Longview. Coordinate use of boat launch with Parks Department; call 360-487-8337.</td>
<td>62</td>
<td>473</td>
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<tr>
<td>BL-CWLZR-6.35</td>
<td>Cowlitz River - Carnival Market</td>
<td>46.16564-122.91561</td>
<td>829 Westside Hwy Kelso, WA 98626</td>
<td>No Information</td>
<td>CWLZR-4.3  CWLZR-5.2  CWLZR-5.6  CWLZR-7.25  CWLZR-7.4</td>
<td>Carnival Market - Small boats only</td>
<td>60</td>
<td>475</td>
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<tr>
<td>BL-CWLZR-16.1</td>
<td>Cowlitz River - Camelot Beach</td>
<td>46.26569-122.90451</td>
<td>213 Camelot Spur Castle Rock, WA 98611</td>
<td>No Information</td>
<td>CWLZR-14.1  CWLZR-15.8L  CWLZR-15.8R  CWLZR-15.9</td>
<td>Camelot Beach boat launch - small boats only</td>
<td>59</td>
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<tr>
<td>BL-CWLZR-17.6</td>
<td>Cowlitz River - Castle Rock Sports Complex</td>
<td>46.27830-122.91185</td>
<td>5018 Westside Hwy Castle Rock, WA 98611</td>
<td>City of Castle Rock - Public Works 360 &quot;A&quot; Street SW - P.O. Box 370 Castle Rock, WA 98611 360-703-0167</td>
<td>CWLZR-17.2  CWLZR-17.4  CWLZR-17.75  CWLZR-18.0</td>
<td>During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of the need to use the Sports Complex/Memorial Park boat launch. If the business number is inoperative, or for after-hours assistance, call the city's answering service at 360-751-7478.</td>
<td>59</td>
<td>479</td>
</tr>
<tr>
<td>Strategy Name</td>
<td>Name</td>
<td>Position</td>
<td>Nearest Address</td>
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<td>Strategies Served</td>
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<tr>
<td>BL-CWLZR-24.7</td>
<td>Cowlitz River - WDFW Water Access Site &quot;Olequa Cre</td>
<td>46.36778 -122.93431</td>
<td>271 Miekler Rd Castle Rock, WA 98611</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>CWLZR-23.6 CWLZR-24.7 CWLZR-26.0 CWLZR-26.5</td>
<td>WDFW Water Access Site &quot;Olequa Creek&quot; is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<td>481</td>
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<tr>
<td>BL-CWLZR-29.8</td>
<td>Cowlitz River - WDFW &quot;I-5&quot; Water Access Site</td>
<td>46.41364 -122.89102</td>
<td>275 Mandy Rd Toledo, WA 98591</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>CWLZR-27.4 CWLZR-29.9</td>
<td>WDFW &quot;I-5&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<td>483</td>
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<tr>
<td>BL-CWMR-1.0</td>
<td>Coweeman River - Cowlitz County SAR</td>
<td>46.13140 -122.89765</td>
<td>1809 Grade St Kelso, WA 98626</td>
<td>No Information</td>
<td>CWMR-1.15 CWMR-1.3 CWMR-1.4 CWMR-1.6 CWMR-1.75 CWMR-2.0</td>
<td>Boat launch on private property</td>
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<td>BL-KLMAR-2.8</td>
<td>Kalama River - WDFW Water Access &quot;Modrow Bridge&quot;</td>
<td>46.04735 -122.83712</td>
<td>150 Modrow Rd Kalama, WA 98625</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td></td>
<td>WDFW Water Access Site &quot;Modrow Bridge&quot; is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<td>Strategy Name</td>
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<tr>
<td><strong>BL-LEWR-1.8</strong></td>
<td>Lewis River - NW Lancaster Road Boat Launch</td>
<td>45.86340 -122.75020</td>
<td>33301 NW Lancaster Rd Ridgefield, WA 98642</td>
<td>No Information</td>
<td>LEWR-1.9</td>
<td>Lower portion of boat ramp is washed out but ramp should be usable during periods of higher water, or for hand-launching a workboat. Entry is gated and may be locked (or appear locked); notify BNSF at 800-832-5452 before entry. This site is located below RR Bridge on south side of Lewis River in Washington State at BNSF Rail Mile 119 on the Seattle Line (52).</td>
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<tr>
<td><strong>BL-LEWR-3.3</strong></td>
<td>Lewis River - WDFW Water Access Site &quot;Martin&quot;</td>
<td>45.86799 -122.72479</td>
<td>1242 S Pekin Rd Woodland, WA 98674</td>
<td>Washington Department of Fish and Wildlife Region 5 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-3.4</td>
<td>WDFW Water Access Site &quot;Martin&quot; is open year round; For extended use, contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<tr>
<td><strong>BL-LEWR-11.7</strong></td>
<td>Lewis River - WDFW &quot;Island&quot; Water Access Site</td>
<td>45.93933 -122.68185</td>
<td>3020 Lewis River Rd Woodland, WA 98674</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-11.7</td>
<td>WDFW &quot;Island&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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<tr>
<td><strong>BL-LEWR-12.4</strong></td>
<td>Lewis River Golf Club Boat Launch</td>
<td>45.93622 -122.66598</td>
<td>3209 Old Lewis River Rd Woodland, WA 98674</td>
<td>Lewis River Golf Course 3209 Lewis River Road Woodland, WA 98674 360-225-8566</td>
<td>LEWR-11.5 LEWR-11.8 LEWR-12.2 LEWR-12.3a LEWR-12.3b LEWR-12.5</td>
<td>Coordinate use of Lewis River Golf Club Boat Launch with golf course administration and operations office; call 360-225-8566 or 360-225-8254. Shallow ramp - jet drive work boat recommended.</td>
<td></td>
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</tr>
<tr>
<td><strong>BL-LEWR-14.7</strong></td>
<td>Lewis River - Haapa Boat Launch</td>
<td>45.93589 -122.63767</td>
<td>43309 NE Haapa Rd Woodland, WA 98674</td>
<td>Clark County Parks and Trails 360-397-2285 CRESA Clark Regional Emergency Services Agency 360-696-4461</td>
<td>LEWR-13.3 LEWR-13.8 LEWR-14.9</td>
<td>Haapa Park is open daily from 7AM to dusk. Contact Clark County Dispatch (CRESA) for after-hours access assistance; call 360-693-3111. Clark County Sheriff's Department and WDFW Enforcement Officers have a 24-hour access key to park.</td>
<td></td>
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<tr>
<td><strong>BL-LEWR-15.5</strong></td>
<td>Lewis River - WDFW &quot;Cedar Creek&quot; Water Access Site</td>
<td>45.93643 -122.62050</td>
<td>5100 NE Etna Rd Woodland, WA 98674</td>
<td>WDFW Region 5 Vancouver 2108 Grand Boulevard Vancouver, WA 98661 360-696-6211</td>
<td>LEWR-15.5a LEWR-15.5b LEWR-15.6a LEWR-15.6b LEWR-16.1b LEWR-16.1a</td>
<td>WDFW &quot;Cedar Creek&quot; Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
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Appendix 4A

Response Strategy 2-Pagers
## RESPONSE STRATEGIES – LIST

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<th>Response Strategies</th>
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<td>ALNC-1.8</td>
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<td>BRBRC-6.3</td>
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<td>COLCS-13.1a</td>
<td>CWLZR-15.8L</td>
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**Response strategies from LCR-GRP that are included in this appendix**
### Allen Creek - NW Allen Canyon Road  
**Position - Location:** 45° 50.983', -122° 43.204'  
**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Visibility, Ice); Heavy Vegetation  
**Staging Area:** Onsite: Stage work truck on shoulder of roadway; Space limited - NO TRAILERS  
**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is very limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.  
**Watercourse:** Creek - Allen Creek  
**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Salmon - Chinook, Salmon - Coho, Steelhead  

#### Implementation:
On downstream (west) side of roadway, deploy hard boom from creek left downstream to creek right. Deploy multiple lengths of sorbent boom within hard boom area to collect product moving downstream. Use line and anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site.

#### Recommended Equipment

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<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>4 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 3/8” poly line</td>
</tr>
</tbody>
</table>

#### Recommended Personnel

- 2 Laboratory
- 1 Supervisor
Allen Creek - NW Allen Canyon Road

ALNC-1.8 Photo: Aerial image of strategy location with creek, strategy, and roadway depicted. Hard boom in red; sorbent boom in white; site area in yellow circle.

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<th>Site Contact</th>
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<tr>
<td>32624 NW Pekin Ferry Rd</td>
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<td>Ridgefield, WA 98642</td>
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<th>Driving Directions</th>
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<tr>
<td>1. Head south on Interstate-5 and Take Exit 16 (NW La Center Road towards La Center)</td>
</tr>
<tr>
<td>2. Turn right at the end of exit ramp to travel west on NW 319th St/NW Pekin Ferry Rd</td>
</tr>
<tr>
<td>3. After 0.4mi, turn right onto NW 41st Avenue</td>
</tr>
<tr>
<td>4. After 0.2mi, turn left onto NW 324th St/NW Pekin Ferry Rd</td>
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<tr>
<td>5. After 0.3mi, turn left onto NW Allen Canyon Road</td>
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<tr>
<td>6. After 0.6mi, strategy location will be on your right. Stage on roadway shoulder; WORK TRUCKS ONLY—NO TRAILERS.</td>
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### Burnt Bridge Creek at Alki Road

<table>
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<th>Position - Location:</th>
<th>45° 39.677', -122° 40.331'</th>
<th>45° 39' 40.6&quot;, -122° 40' 19.8&quot;</th>
<th>45.66129, -122.67218</th>
<th>Vancouver</th>
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</thead>
</table>

**Strategy Objective:** Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Deploy hard boom on upstream/east side of small bridge over creek at Alki Road. Deploy multiple lengths of sorbent boom on upstream side of hard boom and on downstream/west of roadway bridge. Use anchor posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from walking/bike trail on creek right or roadway near bridge.

**Staging Area:** Onsite: Stage on dirt road SW of bridge over creek off Alki Road - NO TRAILERS

**Site Safety:** Slips, Trips, Falls; Water Hazard; Narrow Roadway/Limited Shoulder Areas; Bike/Pedestrian Traffic; Vegetation

**Field Notes:** If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email jwigen@prestigecare.com.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

### Recommended Equipment

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<tr>
<th>Item</th>
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<tr>
<td>Anchoring System(s)</td>
<td>6 Each</td>
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</tr>
<tr>
<td>Boom - B3 (River Boom)</td>
<td>100 Feet</td>
<td>or equivalent</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s)</td>
<td>1 Each</td>
<td>Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
<td></td>
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### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
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</table>
Burnt Bridge Creek at Alki Road

**BRBRC-6.2** Photo: At strategy location looking upstream (east) on Burnt Bridge Creek from Alki Road.

### Site Contact

**Clark County Public Works Parks Division**  
Primary Contact:  
WA  
360-397-2446 ext. 1657

### Nearest Address

5298 Alki Rd  
Vancouver, WA 98663

### Driving Directions

1. Head south on interstate-5 and Take Exit 3 to merge onto Main Street  
2. At first intersection, turn right onto NE Hazel Dell Avenue  
3. After 0.3mi, turn left onto Alki Road  
4. After 0.3mi, you have reached the strategy location. Stage on dirt road to the left/west just before the bridge - NO TRAILERS. If needed, temporarily stage trailer at Discovery Nursing and Rehab Center at 201 Alki Road.
Burnt Bridge Creek Greenway Bridge  

**Position - Location:** 45° 39.684', -122° 40.282'  
**Position - Location:** 45° 39' 41.0", -122° 40' 16.9"  
**Position - Location:** 45.66140, -122.67137  
**Position - Location:** Vancouver

**Strategy Objective:** Collection: Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Deploy hard boom on upstream/east side of pedestrian bridge over creek, about 200ft east of Alki Road. Deploy multiple lengths of sorbent boom on upstream side of hard boom and on downstream/west side of pedestrian bridge. Use anchor posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use skimmer/portable storage for collection from walking/bike trail.

**Staging Area:** Onsite: Stage on dirt road SW of bridge over creek off Alki Road - NO TRAILERS

**Site Safety:** Slips, Trips, Falls; Water Hazard; Bike/Pedestrian Traffic; Vegetation

**Field Notes:** If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email jwigen@prestigecare.com.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>100 Feet Boom</td>
<td>B3 (River Boom) or equivalent</td>
<td></td>
</tr>
<tr>
<td>200 Feet Boom</td>
<td>Sorbent</td>
<td></td>
</tr>
<tr>
<td>1 Each Bridle(s)</td>
<td>Hand (appropriately sized for boom)</td>
<td></td>
</tr>
<tr>
<td>1 Each Heaving Line(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Feet Line</td>
<td>1/2&quot; poly line</td>
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</tr>
<tr>
<td>6 Each Shore Connect System</td>
<td>(posts, driver, anchor, chain, line)</td>
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**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Laborer</td>
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<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Burnt Bridge Creek Greenway Bridge

No Photograph Available

BRBRC-6.3 Photo: No photograph currently available

Site Contact

Clark County Public Works Parks Division
Municipality (County/City): WA
360-397-2446 ext. 1657

Nearest Address

5298 Alki Rd
Vancouver, WA 98663

Driving Directions

1. Head south on Interstate-5 and Take Exit 3 to merge onto Main Street
2. At first intersection, turn right onto NE Hazel Dell Avenue
3. After 0.3mi, turn left onto Alki Road.
4. After 0.3mi, stage truck on dirt road to the left just before the bridge - NO TRAILERS. Follow walking trail upstream/east about ~200ft and you’ll have reached the strategy location at the pedestrian bridge. If needed, temporarily stage trailer at Discovery Nursing and Rehab Center at 201 Alki Road.
Burnt Bridge Creek at NE 2nd Avenue

**Position - Location:** 45° 39’ 00.0” N, 122° 40’ 10.0” W

**Hazard:** Slip, Trip, Fall; Water Hazard; Narrow Roadway/Limited Shoulder Areas; Bike/Pedestrian Traffic; Vegetation

**Implementation:** Deploy hard boom on downstream/west side of small bridge over creek on NE 2nd Avenue. Deploy multiple lengths of sorbent boom on downstream side of hard boom and on upstream/east side of roadway bridge. Use anchor posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vacuum truck or skimmer/portable storage for collection from walking/bike trail on creek right or roadway near bridge.

**Staging Area:** Onsite: Stage in grassy area to the right (east side of road) before the creek/trail - NO TRAILERS.

**Field Notes:** If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email jwigen@prestigecare.com.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

**Recommended Equipment**

- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Bridle(s) - Hand (appropriately sized for boom)
- 1 Heaving Line(s)
- 100 Feet Line - 1/2" poly line
- 6 Shore Connect System (posts, driver, anchor, chain, line)

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor

APPENDIX 4A

135
Burnt Bridge Creek at NE 2nd Avenue

BRBRC-6.4 Photo: At strategy location at NE 2nd Avenue in Vancouver, looking downstream on Burnt Bridge Creek from roadway bridge.

**Site Contact**

Clark County Public Works Parks Division  
Municipality (County/City): WA  
360-397-2446 ext. 1657

**Nearest Address**

5400 NE 2nd Ave  
Vancouver, WA 98663

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 3 to merge onto Main Street
2. At first intersection, turn right onto NE Hazel Dell Avenue
3. After 0.3mi, turn left onto Alki Road.
4. After 300ft, turn right onto NE Second Avenue.
5. After 300ft, you have reached the strategy location. Stage truck/equipment on grassy area to the right (east side of road) just before the creek and trail - NO TRAILERS. If needed, temporarily stage trailer at Discovery Nursing and Rehab Center at 201 Alki Road.
# Burnt Bridge Creek at NE Hazel Dell Avenue

**Position - Location:** 45° 39.686', -122° 40.112'  
**45° 39' 41.2", -122° 40' 6.7"**  
**45.66143, -122.66853**  
**Vancouver**

**Strategy Objective:** Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Deploy hard boom on downstream/west side of roadway over creek at NE Hazel Dell Avenue. Deploy multiple lengths of sorbent boom on upstream side of hard boom. Use posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use skimmer/portable storage for collection from walking/bike trail on creek left.

**Staging Area:** Onsite: Stage on NE 2nd Avenue in grassy area before the creek/trail - NO TRAILERS.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Traffic/Limited Shoulder Areas; Bike/Pedestrian Traffic; Vegetation

**Field Notes:** If needed, trailer can be temporarily staged at Discovery Nursing and Rehab Center at 201 Alki Road after receiving permission from facility's business manager; call 360-693-1474 or email jwigen@prestigecare.com.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

<table>
<thead>
<tr>
<th><strong>Recommended Equipment</strong></th>
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<tbody>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 1/2&quot; poly line</td>
</tr>
<tr>
<td>6 Each</td>
<td>Shore Connect System (posts, driver, anchor, chain, line)</td>
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</table>

<table>
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<tr>
<th><strong>Recommended Personnel</strong></th>
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<tbody>
<tr>
<td>2 Laborer</td>
<td></td>
</tr>
<tr>
<td>1 Supervisor</td>
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</tbody>
</table>
Burnt Bridge Creek at NE Hazel Dell Avenue

Site Contact
Clark County Public Works Parks Division
Municipality (County/City): WA
360-397-2446 ext. 1657

Nearest Address
5400 NE Hazel Dell Ave
Vancouver, WA 98663

Driving Directions
1. Head south on Interstate-5 and Take Exit 3 to merge onto Main Street
2. At first intersection, turn right onto NE Hazel Dell Avenue
3. After 0.3mi, turn left onto Alki Road.
4. After 300ft, turn right onto NE Second Avenue.
5. After 300ft, pull off road and stage equipment in grassy area to the right (east side of road) just before the creek and trail - NO TRAILERS. Follow walking trail upstream/east about ~200ft and you’ll have reached the strategy location (NE Hazel Dell Avenue). If needed, temporarily stage trailer at Discovery Nursing and Rehab Center at 201 Alki Road.
**Burnt Bridge Creek at NE Leverich Park Way**

**Position - Location:** 45° 39.318', -122° 39.761'  
45° 39' 19.1", -122° 39' 45.7"  
45.65530, -122.66269  
Vancouver

**Strategy Objective:** Collection: Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Secure end of 100ft length of boom to bank on creek right near Point A (45.655312, -122.662681; south side of roadway east of cul-de-sac). Using line, extend boom west about ~20ft to creek right and secure to bank near Point B (45.655288, -122.662739). Form Point B, extend remaining boom downstream along creek left, securing it to NE corner of culverts at/near Point C (45.655346, -122.662719). Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

**Staging Area:** Onsite: Stage in cul-de-sac immediately west of strategy location

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation.

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
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<td>Anchoring System(s)</td>
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<td>or equivalent</td>
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<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
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</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1</td>
<td></td>
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**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Burnt Bridge Creek at NE Leverich Park Way

BRBRC-7.1 Photo: At strategy location on creek right at NE Leverich Park Way in Vancouver, looking slightly upstream and across to creek left. Cul-de-sac in background where truck is parked.

### Site Contact

**City of Vancouver Operations Center**  
Primary Contact: 360-487-8177

**City of Vancouver - Afterhours**  
After Hours and Weekends Contact: 360-693-9302

### Nearest Address

1006 NE Leverich Park Way  
Vancouver, WA 98663

### Driving Directions

1. Head south on Interstate-5 and take Exit 2 (WA-500 East/39th Street)  
2. At end of ramp, turn right onto E 39th Street  
3. After 0.2mi, turn left onto NE Leverich Park Way  
4. After 0.5mi strategy location will be on the right; stage in cul-de-sac immediately west of creek. Follow WSDOT work zone traffic control guidelines when working on or near the roadway.
## Burnt Bridge Creek at Leverich Park

<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>45° 39.177', -122° 39.684'</th>
<th>45° 39' 10.6&quot;, -122° 39' 41.1&quot;</th>
<th>45.65295, -122.66141</th>
<th>Vancouver</th>
</tr>
</thead>
</table>

**Strategy Objective:** Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Install multiple lengths of hard and sorbent boom across the creek throughout the park so product moving downstream can be collected or snared in sorbent materials. Use vac-truck or skimmer & storage for collection, as needed. Responders are encouraged to seek out and find the best locations within the park to establish collection strategies based on stream-flow conditions and environmental factors. The exact placement of boom within the park has not been established for this strategy.

**Staging Area:** Onsite: Stage in Park's lower parking area off Leverich Park Way

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vehicle Hazard in Parking Area; Vegetation.

**Field Notes:** Upper parking area is too high for vac-truck to effectively pull suction - use lower parking area off Leverich Park Way instead. Notify Parks at 360-487-8337 before staging; inform CRESA dispatch after-hours at 360-693-3111.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

### Recommended Equipment

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

### Recommended Personnel

- 3 Laborer
- 1 Supervisor
Burnt Bridge Creek at Leverich Park

BRBRC-7.3 Photo: At strategy location in Leverich Park in Vancouver, looking downstream at creek left from creek right. Location is tree covered but has good access to creek.

Site Contact
City of Vancouver Operations Center
Land/Property Contact:
360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact:
360-693-9302

Nearest Address
4299 NE Leverich Park Way
Vancouver, WA 98663

Driving Directions
1. Head south on Interstate-5 and take Exit 2 (WA-500 East/39th Street)
2. At end of ramp, turn right onto E 39th Street
3. After 0.2mi, turn left onto NE Leverich Park Way
4. After 0.3mi (before crossing the creek and going up the hill) turn right into the lower parking area for at Leverich Park; stage towards the NE corner of the parking area, close to the creek. Notify Vancouver Parks and Recreation at 360-487-8337 or CRESA dispatch after-hours at 360-693-3111.
Burnt Bridge Creek at E 18th Street

Position - Location: 45° 38.079', -122° 37.445'

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

Implementation: Secure end of 100ft length of boom to bank on creek left near Point C (45.634676, -122.624132; west side of creek on south side of E 18th Street). Using roadway, extend boom across to creek right about ~25ft and secure to bank near Point B (45.634691, -122.624029). Using line, extend remaining boom upstream and back across to creek left securing it near Point A (45.634608, -122.624102). Use multiple layers of sorbent boom and/or sweep across creek upstream and downstream of boom. If time allows, consider installation of underflow dam. Use vac-truck or skimmer and storage for collection.

Staging Area: Onsite: Stage on shoulder of E 18th Street (south side of roadway east of creek) or in Unitarian Church Parking Lot

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

Field Notes: The aggressive use of sorbents may be an adequate enough for smaller spills. May be able to stage equipment at Unitarian Church immediately east of creek; call 360-695-1891.

Watercourse: Creek - Burnt Bridge Creek

Resources at Risk: Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

Recommended Equipment

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

Recommended Personnel

- 2 Laborer
- 1 Supervisor
Burnt Bridge Creek at E 18th Street

BRBRC-10.2 Photo: At strategy location on E 18th Street in Vancouver looking south towards downstream side of creek.

Site Contact
City of Vancouver Operations Center
Primary Contact:
360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact:
360-693-9302

Nearest Address
4215 E 18th Street
Vancouver, WA 98661

Driving Directions
1. Head south on Interstate-5 and take Exit 1C (Washington 501/ Mill Plain Boulevard)
2. At end of ramp, turn left onto E Mill Plain Blvd
3. After 1.9mi, turn left onto Brandt Road
4. After 0.5mi, turn right onto E 18th Street
5. After 0.3mi, strategy location will be on your right. Stage on shoulder of roadway, immediately east of creek
Follow WSDOT work zone traffic control guidelines when working on or near roadway.
**Burnt Bridge Creek at Thunderbird Village**

**Position - Location:** 45° 38.027', -122° 37.246'

**Strategy Objective:** Collection: Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Secure end of 100ft length of boom to bank on creek left near Point C (45.633735, -122.620803; south side of creek on east side of roadway). Using roadway, extend boom across to creek right about ~30ft and secure to bank near Point B). Using line, extend remaining boom upstream under walking bridge and back across to creek left securing it near Point A (45.633755, -122.620662). Use multiple layers of sorbent boom across creek within boomed area and upstream. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/storage for collection at path on creek right.

**Staging Area:** Onsite: Stage along east side of roadway before the bridge (near walking trail)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** VAC-TRUCKS SHOULD NOT CROSS BRIDGE due to weight restrictions. Inform/coordinate response activities with nearby property owners as needed. The aggressive use of sorbents may be an adequate enough response for smaller spills to creek at this site.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

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**Recommended Equipment**

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<th>Item</th>
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<tr>
<td>Anchoring System(s)</td>
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<td>100 Feet</td>
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<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
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<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
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<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
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</table>

**Recommended Personnel**

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<tr>
<th>Role</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
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</tbody>
</table>
Burnt Bridge Creek at Thunderbird Village

BRBRC-10.4 Photo: At strategy location on creek left, immediately south of bridge in Thunderbird Village off E 18th Street in Vancouver, looking north across to creek right.

Site Contact

City of Vancouver Operations Center
Primary Contact:
360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact:
360-693-9302

Nearest Address

4515 E 18th St
Vancouver, WA 98661

Driving Directions

1. Head south on Interstate-5 and take Exit 1C (Washington 501/ Mill Plain Boulevard)
2. At end of ramp, turn left onto E Mill Plain Blvd
3. After 1.9mi, turn left onto Brandt Road
4. After 0.5mi, turn right onto E 18th Street
5. After 0.4mi, turn right onto roadway for Thunderbird Village
6. After 400ft strategy location will be at the bridge. Stage along east side of roadway before the bridge (near walking trail). Follow WSDOT work zone traffic control guidelines when working on or near roadway.

VAC-TRUCKS SHOULD NOT CROSS BRIDGE at strategy location due to weight restrictions.
Burnt Bridge Creek at N Devine Road  

**Position - Location:** 45° 38.066', -122° 36.908'  

**Strategy Objective:** Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** From roadway, secure end of 100ft length of river boom to bank on creek right near Point A (45.634438, -122.615185). Extend boom across to creek left (about ~25ft from Point A) and secure to bank near Point B (45.634391, -122.615163). Use multiple layers of sorbent boom and/or sweep across creek within boomed area (between boom and culverts). River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer with storage for collection.

**Staging Area:** Onsite: Stage on shoulder or on pull-off near SW corner of the bridge structure.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation.

**Field Notes:** Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

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**Recommended Equipment**

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<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
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<tr>
<td>Anchoring System(s) - Shoreside</td>
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<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
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<td>B3 (River Boom)</td>
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<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td>Sorbent</td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
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<td>Poly line</td>
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<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td>Storage</td>
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**Recommended Personnel**

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<th>Role</th>
<th>Quantity</th>
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<tbody>
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<td>Laborer</td>
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<tr>
<td>Supervisor</td>
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</table>
Burnt Bridge Creek at N Devine Road

BRBRC-10.8 Photo: At strategy location on N Devine Road in Vancouver on creek left, looking at culverts on west side of roadway and across to creek right.

Site Contact

City of Vancouver Operations Center
Primary Contact: 360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact: 360-693-9302

Nearest Address

1707 N Devine Rd
Vancouver, WA 98661

Driving Directions

1. Head south on Interstate-5 and take Exit 1C (Washington 501/ Mill Plain Boulevard)
2. At end of ramp, turn left onto E Mill Plain Blvd
3. After 1.9mi, turn left onto Brandt Road
4. After 0.5mi, turn right onto E 18th Street
5. After 0.7mi, turn right onto N Devine Road
6. After 250ft strategy location will be on the right at the bridge structure. Stage on shoulder or pullout near SW corner of bridge. Follow WSDOT work zone traffic control guidelines when working on or near roadway.
<table>
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<th>Burnt Bridge Creek near NE Andresen Road</th>
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<tr>
<td><strong>Position - Location:</strong></td>
<td>45° 38.072', -122° 35.916'</td>
</tr>
<tr>
<td><strong>Strategy Objective:</strong></td>
<td>Sorbent: Use sorbent boom to collect oil moving downstream on Burnt Bridge Creek</td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td>Use walking bridge over creek to deploy multiple lengths of sorbent boom on creek, upstream and downstream of bridge. Area is likely to be overgrown with vegetation, so use of hard-boom is not recommended because of access limitations. Replace saturated sorbents as needed. Use line to secure ends of sorbent boom to bridge railings/structures.</td>
</tr>
<tr>
<td><strong>Staging Area:</strong></td>
<td>Onsite: Stage in small parking area off NE Andresen Road, immediately south of bridge over creek on west side.</td>
</tr>
<tr>
<td><strong>Site Safety:</strong></td>
<td>Slips, Trips, Falls; Water Hazard; Road/Trail Hazards; Heavy Vegetation near Creek.</td>
</tr>
<tr>
<td><strong>Field Notes:</strong></td>
<td>Notify Vancouver Parks Department before implementation; call 360-487-8337 or CRESA dispatch after-hours at 360-693-3111.</td>
</tr>
<tr>
<td><strong>Watercourse:</strong></td>
<td>Creek - Burnt Bridge Creek</td>
</tr>
<tr>
<td><strong>Resources at Risk:</strong></td>
<td>Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead</td>
</tr>
</tbody>
</table>

### Recommended Equipment

<table>
<thead>
<tr>
<th>200 Feet</th>
<th>Boom - Sorbent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 3/8&quot; poly line</td>
</tr>
</tbody>
</table>

### Recommended Personnel

| 2 Laborer |
| 1 Supervisor |
Burnt Bridge Creek near NE Andresen Road

BRBRC-11.6 Photo: On creek left, south of walking bridge over creek, looking north towards bridge and trail beyond.

Site Contact

City of Vancouver Operations Center
Primary Contact:
360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact:
360-693-9302

Nearest Address

1720 NE Andresen Road
Vancouver, WA 98661

Driving Directions

1. Head south on interstate-5 and take Exit 1C (Washington 501/ Mill Plain Boulevard)
2. At end of ramp, turn left onto E Mill Plain Blvd
3. After 1.9mi, turn left onto Brandt Road
4. After 0.5mi, turn right onto E 18th Street
5. After 1.4mi, turn right onto NE Andresen Road
6. After 0.1mi (immediately after crossing over creek), turn right onto path for parking area. Stage in parking area. Follow path/trail to strategy location; E/SE 400ft then N/NE 200ft. 250ft strategy location will be on the right at the bridge structure. Notify City of Vancouver Parks Department; call 360-487-8337.
**Burnt Bridge Creek at NE Burton Road**

**Position - Location:** 45° 38.374', -122° 34.924'  
45° 38' 22.5", -122° 34' 55.4"  
45.63957, -122.58206  
Vancouver

**Strategy Objective:** Collection, Sorbent: Use sorbent boom to collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Deploy multiple lengths of sorbent boom on upstream and downstream sides of NE Burton Road Bridge. Use line to secure ends of sorbent boom to bridge railings/structures, anchoring posts, or existing structures. Replace saturated sorbents as needed. Area is likely to be overgrown with vegetation, so use of hard-boom downstream of sorbents depends on safe and timely access to creek.

**Staging Area:** Onsite: Stage on gated property immediately SW of NE Burton Road Bridge over creek (City Property)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation; Bank Condition Unknown

**Field Notes:** No Information

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
<td>Bolt Cutters</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>1 Each</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>1 Each</td>
<td>500 Feet</td>
</tr>
<tr>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td>200 Feet</td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>200 Feet</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Burnt Bridge Creek at NE Burton Road

BRBRC-12.6a Photo: At strategy location on NE Burton Road in Vancouver. Bridge over creek in background beyond truck. Ecology truck stationed on roadway facing east, downstream side of creek, creek right.

### Site Contact

**City of Vancouver Operations Center**
Primary Contact: 360-487-8177

**City of Vancouver - Afterhours**
After Hours and Weekends Contact: 360-693-9302

### Nearest Address

8717 NE Burton Rd
Vancouver, WA 98662

### Driving Directions

1. Head south on interstate-5 and take Exit2 (Hwy 500 East/39th Street)
2. At end of ramp, turn right onto 39th Street
3. After 0.4mi, stay straight in the center lane for ramp onto Hwy500 East (towards Interstate-205)
4. After 2.3mi, take the NE Andresen Road Exit. Keep right within the exit ramp to continue towards NE Andresen Road
5. At end of ramp, turn right onto NE Andresen Road
6. After 0.5mi, turn left onto NE 25th Street (becoming NE Burton Road after 0.1mi).
7. After 0.8mi, the strategy location will be at the bridge over the Burnt Bridge Creek. Pull-off roadway immediately before bridge, into gated lot near SW corner of bridge (owned by the City of Vancouver). Gate may be locked or appear locked, but there should be room for one truck (without a trailer) before the gate.
Burnt Bridge Creek downstream of NE Burton Road

**Position - Location:** 45° 38.348', -122° 34.932'  
45° 38' 20.9", -122° 34' 55.9"  
45.63914, -122.58220  
Vancouver

**Strategy Objective:** Collection, Sorbent  
Collect oil moving downstream on Burnt Bridge Creek

**Implementation:** Deploy multiple lengths of sorbent boom on Burnt Bridge Creek at site, located about ~150ft downstream from NE Burton Road Bridge. Use anchor posts, trees, or existing structures to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed. Area is likely to be overgrown with vegetation, so use of hard-boom downstream of sorbents depends on safe and timely access to creek.

**Staging Area:** Onsite: Stage off road in front of PUD substation on SW Corner of NE Burton Road at NE 90th Avenue

**Site Safety:** Slips, Trips, Falls; Water Hazard; Trail Hazards; Heavy Vegetation near Creek, Mud/Muddy.

**Field Notes:** Alternative staging is at NE 19th Circle, ~0.3mi south of NE Burton Road on NE 92nd Avenue.

**Watercourse:** Creek - Burnt Bridge Creek

**Resources at Risk:** Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

---

**Recommended Equipment**

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

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Burnt Bridge Creek downstream of NE Burton Road

BRBRC-12.6b Photo: Aerial image of strategy location with creek, staging, strategy, and path to site depicted.

Site Contact

City of Vancouver Operations Center
Primary Contact: 360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact: 360-693-9302

Nearest Address

8717 NE Burton Rd
Vancouver, WA 98662

Driving Directions

1. Head south on Interstate-5 and take Exit 2 (Hwy 500 East/39th Street)
2. At end of ramp, turn right onto 39th Street
3. After 0.4mi, stay straight in the center lane for ramp onto Hwy 500 East (towards Interstate-205)
4. After 2.3mi, take the NE Andresen Road Exit. Keep right within the exit ramp to continue towards NE Andresen Road
5. At end of ramp, turn right onto NE Andresen Road
6. After 0.5mi, turn left onto NE 25th Street (becoming NE Burton Road after 0.1mi). After 0.9mi, turn right onto NE 90th Avenue; stage in front of PUD Sub-Station on your right immediately after the turn. Follow path on NE Burton Road to field on right (west side of path). Strategy location is just beyond the northwestern extent of the field, about 150ft downstream from NE Burton Road Bridge over creek.
Position - Location: 45° 38.680', -122° 34.706'  45° 38' 40.8", -122° 34' 42.4"  45.64467,-122.57844  Vancouver

Strategy Objective: Collection, Sorbent  :  Collect oil moving downstream on Burnt Bridge Creek

Implementation: Deploy multiple lengths of sorbent boom on Burnt Bridge Creek near NW corner of Meadowbrook Park North, adjacent to NE 93rd Avenue in Vancouver. Use anchor posts, trees, or existing structures to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed. Area is likely to be overgrown with vegetation, so use of hard-boom downstream of sorbents depends on safe and timely access to creek.

Staging Area: Onsite: Stage at turnaround at end of at end of NE 93rd Avenue in front of closed park gate.

Site Safety: Slips, Trips, Falls; Water Hazard; Trail Hazards; Heavy Vegetation near Creek, Mud/Muddy.

Field Notes: Strategy location is across field to the NW at confluence of unnamed tributary with Burnt Bridge Creek.

Watercourse: Creek - Burnt Bridge Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

Recommended Equipment

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

Recommended Personnel

- 2 Laborer
- 1 Supervisor
Burnt Bridge Creek west of NE 93rd Avenue

BRBRC-13.0 Photo: Aerial image of strategy location with creek, staging, strategy, and path to site depicted.

Site Contact

City of Vancouver Operations Center
Land/Property Contact: 360-487-8177

City of Vancouver - Afterhours
After Hours and Weekends Contact: 360-693-9302

Nearest Address

3017 NE 93rd Ave
Vancouver, WA 98662

Driving Directions

1. Head south on Interstate-5 and take Exit2 (Hwy 500 East/39th Street)
2. At end of ramp, turn right onto 39th Street
3. After 0.4mi, stay straight in the center lane for ramp onto Hwy500 East (towards Interstate-205)
4. After 2.3mi, take the NE Andresen Road Exit. Keep right within the exit ramp to continue towards NE Andresen Road
5. At end of ramp, turn right onto NE Andresen Road
6. After 0.5mi, turn left onto NE 25th Street (becoming NE Burton Road after 0.1mi).
7. After 1.1mi, turn left onto NE 93rd Avenue; stage at turnaround at end of road in front of closed park gate to the field. Strategy location is across field to the NW at confluence of unnamed tributary with Burnt Bridge Creek.
**Burnt Bridge Creek Tributary at Hwy 99**  

<table>
<thead>
<tr>
<th>Strategy Objective:</th>
<th>Sorbent: Collect oil moving downstream on tributary to Burnt Bridge Creek using sorbents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong></td>
<td>45° 39.802', -122° 39.933' 45° 39' 48.1&quot;, -122° 39' 56.0&quot; 45.66336, -122.66555 Vancouver</td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td>Deploy multiple lengths of sorbent boom on unnamed tributary to Burnt Bridge Creek at site, located on west side of NE Highway 99 at bottom of path in wooded area. Use anchor posts or trees to secure ends of sorbent boom to banks of tributary. Replace saturated sorbents as needed. NOTE: Strategy location is on west side of Highway 99 but the only place to park vehicle is on shoulder along east side of the highway.</td>
</tr>
<tr>
<td><strong>Staging Area:</strong></td>
<td>Onsite: Stage on east side shoulder/grassy area of NE Highway 99 about 150ft south of rail overpass.</td>
</tr>
<tr>
<td><strong>Site Safety:</strong></td>
<td>Slips, Trips, Falls; Water Hazard; Roadway Traffic and Crossing Hazard; Vegetation; Steep Grade on Trail; Mud/Muddy</td>
</tr>
<tr>
<td><strong>Field Notes:</strong></td>
<td>Use caution crossing busy roadway. Be alert to occupied camp sites in woods near strategy location. Don’t encroach on federal property along east side of Hwy 99. Waders or hip boots recommended.</td>
</tr>
<tr>
<td><strong>Watercourse:</strong></td>
<td>Creek - Unnamed Tributary to Burnt Bridge Creek</td>
</tr>
<tr>
<td><strong>Resources at Risk:</strong></td>
<td>Freshwater Wildlife, Salmon - Coho, Steelhead</td>
</tr>
</tbody>
</table>

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Burnt Bridge Creek Tributary at Hwy 99

BRBRCT-0.2 Photo: View of path on west side of Hwy 99 leading down to the creek/strategy location.

**Site Contact**

**Nearest Address**

5582 NE Hwy 99
Vancouver, WA 98665

**Driving Directions**

1. Head south on Interstate-5 and take Exit 3 to merge onto Main Street.
2. At first intersection, turn left onto NE Main Street (becoming NE Highway 99 after 0.4mi).
3. After 0.5mi, pull over onto the shoulder of highway about 150ft south of rail overpass. Strategy location is on other side (west side) of highway down well established path. Use caution when crossing busy highway; high visibility safety vests should be worn. Do not encroach on Bonneville Power Administration property (federal property) along east side of highway.
Burke Creek at South Cloverdale and Burke Roads

**Position - Location:**
- Onsite: Stage at pull out (circle) at intersection of South Cloverdale and Burke Roads
- Staging Area: Onsite: Stage at pull out (circle) at intersection of South Cloverdale and Burke Roads
- Implementation: On downstream side of Burke Road, deploy hard boom across creek in front of roadway culvert. Deploy multiple lengths of sorbent boom upstream and downstream of hard boom. Also deploy multiple lengths of sorbent boom on upstream side of culvert ~70ft east of Burke Road, and across creek on upstream and downstream sides of S Cloverdale Road. Replace saturated sorbents as needed. Secure boom to banks using anchoring posts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection. Install underflow dam at Burke Road if time allows.

**Site Safety:**
- Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation; Mud/Muddy

**Field Notes:**
- Follow WSDOT work zone traffic control guidelines when working on or near roadway. Cowlitz County Public Works may be able to provide support if underflow dam needed; call 360-673-2175.

**Watercourse:**
- Creek - Burke Creek

**Resources at Risk:**
- Downstream Resources, Salmon - Coho

---

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>10 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - B3 (River Boom)</td>
<td>100 Feet</td>
<td>or equivalent</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>400 Feet</td>
<td></td>
</tr>
<tr>
<td>Assort Equipment</td>
<td>1 Assort</td>
<td>(shovels, pickaxes, tamper bars, sledge hammers)</td>
</tr>
<tr>
<td>Fill material</td>
<td>1 Assort</td>
<td>(sand, earth, gravel, sandbags)</td>
</tr>
<tr>
<td>Line - 3/8” poly line</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Pipe(s), PVC (8 inch x 8ft)</td>
<td>10 Each</td>
<td></td>
</tr>
<tr>
<td>Plastic Sheeting</td>
<td>1 Roll</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Burke Creek at South Cloverdale and Burke Roads

**BURKC-0.7 Photo:** At strategy location on Burke Creek looking downstream/SW towards South Cloverdale Road.

**Site Contact**

No Information
Not Determined:

**Nearest Address**

124 N Burke Rd
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, turn right onto Todd Road
4. After 0.6mi, turn right onto S Cloverdale Road
5. After 1.5mi, stay to right to remain on S Cloverdale Road
6. After ~1.5mi you have reached the strategy location. Stage trucks/equipment in circle at intersection of South Cloverdale Road at Burke Road. Creek crosses under Burke Road about ~180ft north of the circle.
Bybee Creek at South Cloverdale Road

Position - Location: 45° 58.368', -122° 48.671'  45° 58' 22.1", -122° 48' 40.2"  45.97281, -122.81118

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

Implementation: On upstream/east side of roadway, deploy hard boom across creek in front of roadway culvert. Deploy multiple lengths of sorbent boom upstream and downstream from hard boom. Also deploy multiple lengths of sorbent boom across creek on downstream/west side of road. Use line and anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection. If time allows, consider installation of underflow dam.

Staging Area: Onsite: Stage trailer at SA-SCHSC-0.6 (Old Pacific Highway near I-5 Exit 27). Work truck only at Strategy Location.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Shoulder); Vegetation

Field Notes: Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6.

Watercourse: Creek - Bybee Creek

Resources at Risk: Salmon - Coho, Steelhead

Recommended Equipment

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

Recommended Personnel

- 2 Laborer
- 1 Supervisor
BYBEC-0.8 Photo: From shoulder of South Cloverdale Road, looking east/upstream towards strategy location on Bybee Creek (upstream side of roadway culvert).

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest Address</td>
</tr>
</tbody>
</table>
| 1631 S Cloverdale Rd  
Kalama, WA 98625 |

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, at the intersection of Robb Road with Todd Road and Old Pacific Highway, stage equipment trailer at the gravel lot on the left/north side of roadway (Staging Area SA-SCHSC.0.6). Only use work truck to deliver equipment/personnel to site because space along shoulder is very limited at strategy location.
4. From SA-SCHSC.0.6, head SE on Todd Road.
5. After 0.6mi, turn right onto S Cloverdale Road
6. After 0.4mi you have reach the strategy location. Stage work truck on shoulder of roadway on/near dirt road/driveway (cabled) on left/east side of roadway about ~100ft north of creek.
Canyon Creek at South Cloverdale Road  

**Position - Location:** 45° 57.282', -122° 47.572'  
**Implementation:** On upstream/east side of roadway, deploy hard boom across creek in front of culvert. Deploy multiple lengths of sorbent boom on upstream side of hard boom. Use anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection.

**Staging Area:** Onsite: Stage on shoulder of roadway near culvert.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation

**Field Notes:** Wide gravel shoulder at this location. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Canyon Creek

**Resources at Risk:** Downstream Resources, Steelhead

<table>
<thead>
<tr>
<th>Recommended Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Each Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>100 Feet Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>100 Feet Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>100 Feet Line - 3/8&quot; poly line</td>
</tr>
<tr>
<td>1 Each Machete(s) - (or other vegetation cutting tool)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>
Canyon Creek at South Cloverdale Road

CANYC-0.2 Photo: At strategy location on Canyon Creek at culvert on upstream/NE side of S Cloverdale Road looking SE.

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest Address</td>
</tr>
</tbody>
</table>
| 2101 Cloverdale Rd  
Kalama, WA 98625 |

Driving Directions

1. Head south on Interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, turn right onto Todd Road
4. After 0.6mi, turn right onto S Cloverdale Road
5. After 1.5mi, stay to right to remain on S Cloverdale Road
6. After ~0.7mi the strategy location will be on the left (wooded area beyond shoulder). Stage trucks/equipment on shoulder near culvert. If needed, there is a wide turn-around at end of S Cloverdale Road (~1.0mi SE).
Coal Creek Slough at 34th Avenue

Position - Location: 46° 9.209', -122° 58.357'  46° 9' 12.5", -122° 58' 21.4"  46.15348, -122.97261

Strategy Objective: Collection, Exclusion : Collect oil on Coal Creek Slough and keep oil out of slough west of 34th Avenue

Implementation: On east side of 34th Avenue, deploy hard boom across waterway in front of culvert at an angle from Point A (46.153597, -122.972232, NE) to Point B (46.153476, -122.972392, SW). Deploy multiple lengths of sorbent boom on both sides of hard boom, and in front of culvert on west side of road. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from parking lot or grassy area next to waterway.

Staging Area: Onsite: Stage on grassy area near SW corner of roadway at slough or on roadway shoulder.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation

Field Notes: Follow WSDOT work zone traffic control guidelines when working on or near roadway.

Watercourse: Slough - Coal Creek Slough

Resources at Risk: Downstream Resources, Freshwater Wildlife, Waterfowl

Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet Boom - B3 (River Boom) or equivalent</td>
<td></td>
</tr>
<tr>
<td>200 Feet Boom - Sorbent</td>
<td></td>
</tr>
<tr>
<td>1 Each Bridle(s) - Hand (appropriately sized for boom)</td>
<td></td>
</tr>
<tr>
<td>1 Each Heaving Line(s)</td>
<td></td>
</tr>
<tr>
<td>100 Feet Line - 3/8&quot; poly line</td>
<td></td>
</tr>
<tr>
<td>6 Each Shore Connect System (posts, driver, anchor, chain, line)</td>
<td></td>
</tr>
</tbody>
</table>

Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Laborer</td>
<td></td>
</tr>
<tr>
<td>1 Supervisor</td>
<td></td>
</tr>
</tbody>
</table>
Coal Creek Slough at 34th Avenue

COLCS-12.1 Photo: At strategy location looking SW on Coal Creek Slough towards culvert and 34th Avenue in Longview.

Site Contact

Nearest Address

2280 34th Ave
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (WA-4 – Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA-4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.5mi, turn right onto 34th Avenue
7. After 0.2mi, strategy location will be on the right. Stage equipment on grassy area along the south side of waterway or on shoulder of roadway.
Coal Creek Slough near 32nd Avenue

**Position - Location:** 46° 8.944', -122° 58.005'  
46° 8' 56.6", -122° 58' .3"  
46.14906, -122.96675  
Longview

**Strategy Objective:** Collection, Exclusion: Collect oil on Coal Creek Slough and keep oil out of slough north of railroad tracks

**Implementation:** Deploy hard boom across waterway in front of culvert at an angle from Point A (46.14903, -122.966881, SW) to Point B (46.149296, -122.966625, NE). Deploy multiple lengths of sorbent boom on both sides of hard boom. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from parking lot or grassy area next to waterway.

**Staging Area:** Onsite: Stage on grassy area on north side of railroad tracks or along roadway shoulder. Parking lot also nearby.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation; Railroad Hazard; Mud/Muddy

**Field Notes:** Rail line is operated by Columbia and Cowlitz Railway; notify them at 360-501-2182 or 855-258-4514 before strategy implementation; reference Longview Washington at 32nd Avenue.

**Watercourse:** Slough - Coal Creek Slough

**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Waterfowl

---

**Recommended Equipment**

- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Bridle(s) - Hand (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 100 Feet Line - 3/8" poly line
- 6 Each Shore Connect System (posts, driver, anchor, chain, line)

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Coal Creek Slough near 32nd Avenue

COLCS-13.1a Photo: At strategy location looking NW on Coal Creek Slough towards culvert off 32nd Avenue, on north side of railroad tracks.

Site Contact

**Columbia and Cowlitz Railway**
Land/Property Owner: Emergency: 855-258-4514
3401 Industrial Way
Longview, WA 98632
360-501-2182

Nearest Address

2257 32nd Ave
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (WA-4 – Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.1mi, turn right onto 32nd Avenue
7. After 450ft (immediately after railroad tracks), strategy location will be on the left/west side of road, set back about ~180ft. Stage on grassy area on north side of railroad tracks or along roadway shoulder. Parking lot at NW corner of Ocean Beach Hwy and 32nd Avenue can also be used to stage equipment, if needed.
**Coal Creek Slough near Ocean Beach Highway**  
**COLCS-13.1b**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 8.921', -122° 58.007'</th>
<th>46° 8' 55.3&quot;, -122° 58'.4&quot;</th>
<th>46.14869, -122.96679</th>
<th>Longview</th>
</tr>
</thead>
</table>

**Strategy Objective:** Collect, Exclusion: Collect oil on Coal Creek Slough and keep oil out of slough south of Ocean Beach Highway

**Implementation:** Deploy hard boom across waterway in front of culvert at an angle from Point A (46.148675, -122.966712, SE) to Point B (46.148827, -122.966803, NW). Deploy multiple lengths of sorbent boom on both sides of hard boom. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from parking lot or grassy area next to waterway.

**Staging Area:** Onsite: Stage in parking lot at NW corner of Ocean Beach Hwy and 32nd Avenue or on grassy area next to waterway.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway/Parking Lot Hazard; Vegetation; Railroad Tracks Nearby

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Slough - Coal Creek Slough

**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Waterfowl

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
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</thead>
<tbody>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 3/8&quot; poly line</td>
</tr>
<tr>
<td>6 Each</td>
<td>Shore Connect System (posts, driver, anchor, chain, line)</td>
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</table>

**Recommended Personnel**

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<tr>
<th>Quantity</th>
<th>Role</th>
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<tbody>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Coal Creek Slough near Ocean Beach Highway

COLCS-13.1b Photo: At strategy location looking SW on Coal Creek Slough towards culvert and parking lot at NW corner of Ocean Beach Hwy and 32nd Avenue.

Site Contact

Nearest Address

3202 Ocean Beach Hwy
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (WA-4 – Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.1mi, turn right onto 32nd Avenue
7. After 180ft (1/2 block - before railroad tracks), strategy location will be on the left/west side of road. Stage in parking lot at NW corner of Ocean Beach Hwy and 32nd Avenue, or on grassy area next to waterway.
### Coal Creek Slough at Michigan Street

**Position - Location:** 46° 8.822', -122° 58.010'  
46° 8' 49.3", -122° 58' .6"  
46.14704, -122.96683  
Longview

**Strategy Objective:** Collection, Exclusion: Collect oil on Coal Creek Slough and keep oil out of slough south of Michigan Street

**Implementation:** Deploy hard boom across waterway in front of gated culvert on south side of road at an angle from Point A (46.146733, -122.966744, SE) to Point B (46.14697, -122.966909, NW). Deploy multiple lengths of sorbent boom on both sides of hard boom. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from shoulder or grassy area adjacent to waterway.

**Staging Area:** Onsite: Stage on shoulder of Michigan Street near waterway or on grassy area adjacent to waterway.

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

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Slough - Coal Creek Slough

**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Waterfowl

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
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<tr>
<td>100 Feet</td>
<td>Line - 3/8&quot; poly line</td>
</tr>
<tr>
<td>4 Each</td>
<td>Shore Connect System (posts, driver, anchor, chain, line)</td>
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**Recommended Personnel**

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<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Coal Creek Slough at Michigan Street

**COLCS-13.3**

**Sit**

**Site Contact**

**Nearest Address**

2121 32nd Ave
Longview, WA 98632

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 39 (WA-4 – Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA-4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.1mi, turn left onto 32nd Avenue
7. After 330ft (1 block), turn right onto Michigan Street. Strategy location will be immediately on your left.

Stage on shoulder of road or on grassy area adjacent to waterway.

**COLCS-13.3 Photo**: At strategy location looking NW on Coal Creek Slough towards gated culvert and Michigan Street in Longview.
## Coal Creek Slough at Maple Street

### Position - Location:

<table>
<thead>
<tr>
<th>Coordinates</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>46° 8.715', -122° 58.009'</td>
<td>Location 1</td>
</tr>
<tr>
<td>46° 8' 42.9&quot;, -122° 58' 5&quot;</td>
<td>Location 2</td>
</tr>
<tr>
<td>46.14525, -122.96681</td>
<td>Longview</td>
</tr>
</tbody>
</table>

### Strategy Objective:

Collect oil on Coal Creek Slough and keep oil out of slough south of Maple Street.

### Implementation:

Deploy hard boom across waterway in front of box culvert on north side of road at an angle from Point A (46.145364, -122.966709, SE) to Point B (46.145538, -122.966852, NW). Deploy multiple lengths of sorbent boom on both sides of hard boom, and in front of box culvert on south side of road. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from shoulder or grassy area adjacent to waterway.

### Staging Area:

Onsite: Stage on shoulder of Maple Street west of waterway or on grassy area adjacent to waterway.

### Site Safety:

Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation

### Field Notes:

Follow WSDOT work zone traffic control guidelines when working on or near roadway.

### Watercourse:

Slough - Coal Creek Slough

### Resources at Risk:

Downstream Resources, Freshwater Wildlife

### Recommended Equipment

- **100 Feet** Boom - B3 (River Boom) or equivalent
- **200 Feet** Boom - Sorbent
- **1 Each** Bridle(s) - Hand (appropriately sized for boom)
- **1 Each** Heaving Line(s)
- **100 Feet** Line - 3/8" poly line
- **6 Each** Shore Connect System (posts, driver, anchor, chain, line)

### Recommended Personnel

- **2 Laborer**
- **1 Supervisor**
Coal Creek Slough at Maple Street

COLCS-13.4 Photo: Looking north on Coal Creek Slough from strategy location on Maple Street in Longview.

Site Contact

Nearest Address

3216 Maple St
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (WA-4 – Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.1mi, turn left onto 32nd Avenue
7. After 0.2mi, turn right onto Maple Street. Strategy location will be immediately on your right. Stage on shoulder of road or on grassy area adjacent to waterway.
## Coal Creek Slough at William Street

### Position - Location:
46° 8.353', -122° 58.038' to 46° 8' 32.1", -122° 58' 2.3"

### COLCS-13.8

### Strategy Objective:
Collection, Exclusion: Collect oil on Coal Creek Slough and keep oil out of slough south of William Street.

### Implementation:
Deploy hard boom across waterway in front of culvert on north side of road. Deploy multiple lengths of sorbent boom on both sides of hard boom, and in front of culvert on south side of road. Use anchoring posts or existing structures to secure hard boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection from roadway shoulder.

### Staging Area:
Onsite: Stage on shoulder of William Street near waterway.

### Site Safety:
Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

### Field Notes:
Follow WSDOT work zone traffic control guidelines when working on or near roadway.

### Watercourse:
Slough - Coal Creek Slough

### Resources at Risk:
Downstream Resources, Freshwater Wildlife

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>200 Feet Boom - Sorbent</td>
<td>200 Feet</td>
</tr>
<tr>
<td>1 Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
</tr>
<tr>
<td>1 Heaving Line(s)</td>
<td>1 Each</td>
</tr>
<tr>
<td>6 Shore Connect System (posts, driver, anchor, chain, line)</td>
<td>6 Each</td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>

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**Diagram**

- **Booms**
- **Anchor Points**
- **Staging Areas**
- **Response Strategy**
- **Notification Strategies**
- **Culvert Block**
- **Underflow Dam**
- **Tide**
- **Source: EIR**

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**APPENDIX 4A**

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**175**
Coal Creek Slough at William Street

COLCS-13.8 Photo: Looking north on Coal Creek Slough from strategy location on William Street in Longview.

Site Contact

Nearest Address

3215 William St
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (WA-4 - Kelso)
2. Turn right at the end of exit ramp to travel west on highway WA-4/Allen Street
3. After 0.5mi, turn right onto 5th Avenue North
4. After 0.1mi, turn left onto Cowlitz Way
5. After 0.8mi, turn right onto Ocean Beach Highway (WA-4 W)
6. After 2.1mi, turn left onto 32nd Avenue
7. After 0.4mi, turn right onto William Street. Strategy location will be about 200ft down the road where it crosses over Coal Creek Slough. Stage equipment off north side of road near the waterway.
Cougar Canyon Creek at NW 119th Street

**Position - Location:** 45° 42.450’, -122° 40.974’

**Strategy Objective:** Collect oil moving downstream on Cougar Creek

**Implementation:** Deploy hard boom from creek right (east/trail side of creek) upstream to creek left allowing a suitable collection pocket to be formed on creek right. Deploy multiple lengths of sorbent boom on upstream and downstream sides of hardboom. Use posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use skimmer/portable storage for collection on creek right.

**Staging Area:** Onsite: Stage on shoulder of NW 119th Street near strategy location. Can also use Salmon Creek Regional Park (SA-SALMC-5.6)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Heavy Traffic on Roadway; Steep Banks on Creek Left; Heavy Vegetation

**Field Notes:** Strategy location is adjacent to Salmon Creek Trail. Contact Clark County Parks and Recreation for access support; call 360-737-6118 or 360-397-2285.

**Watercourse:** Creek - Cougar Creek

**Resources at Risk:** Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Bridle(s) - Hand (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 100 Feet Line - 1/2” poly line
- 6 Each Shore Connect System (posts, driver, anchor, chain, line)

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
**Cougar Canyon Creek at NW 119th Street**

**COUGC-0.5**

COUGC-0.5 Photo: View of strategy location from Salmon Creek Trail immediately NW of gate on north side of NW 119th Street. Salmon Creek in background beyond trees.

### Site Contact

Clark County Parks
Municipality (County/City): Frenchman’s Bar Park
9612 NW Lower River Road
Vancouver, WA 98660
360-397-2285

### Nearest Address

908 NW 119th St
Vancouver, WA 98685

### Driving Directions

1. Head south on Interstate-5 and at Exit 7 keep right to stay on Interstate-205 (Salem)
2. On Interstate-205 take Exit 36 (NE 134th Street)
3. At end of ramp, turn left onto NE 134th Street
4. After 0.1mi, turn right onto NE Hwy 99/Pacific Hwy
5. After 0.9mi, turn right onto NE 117th Street (becoming NW 119th St after 1.3mi)
6. After 1.6mi, the strategy location will be on your right; Park on shoulder and stage equipment on Salmon Creek Trail adjacent to the strategy location. Can also stage equipment trailer at Salmon Creek Regional Park (SA-SALMC-5.6) and just drive a work truck to site.
### Cougar Canyon Creek at Columbia River High School

**Position - Location:**
- 45° 41.591', -122° 40.576'
- 45° 41' 35.5", -122° 40' 34.6"
- 45.69319, -122.67627

**Strategy Objective:** Sorbent: Collect oil moving downstream on Cougar Creek using sorbents

**Implementation:**
Deploy multiple lengths of sorbent boom across each tier of the fish ladder on Cougar Creek, immediately adjacent to Columbia River High School. Use anchor posts, trees, or existing structures to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed. Area is likely to be overgrown with vegetation and has steep banks so the use of hard-boom and vac-truck or skimmer/storage is not recommended.

**Staging Area:**
Onsite: Stage at Columbia River High School; SE corner of parking lot near creek.

**Site Safety:**
- Slips, Trips, Falls; Water Hazard; Heavy Traffic on Roadway; Parking Lot Traffic; Steep Banks; Heavy Vegetation

**Field Notes:**
Creek property and fish ladders maintained by Clark County; call public works at 360-397-6118 x4944. Inform Columbia River High School if parking lot used for staging during school hours; call 360-313-3900.

**Watercourse:**
Creek - Cougar Creek

**Resources at Risk:**
Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Anchoring Post(s)</td>
<td>2 Each</td>
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<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
</tr>
<tr>
<td>Line - 1/2&quot; poly line</td>
<td>100 Feet</td>
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### Recommended Personnel

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<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cougar Canyon Creek at Columbia River High School

COUGC-1.6 Photo: At Strategy location on Cougar Creek, from outfall looking downstream towards fish ladder.

**Site Contact**

Clark County Public Works
Municipality (County/City): 1300 Franklin St
Vancouver, WA 98660
360-397-6118 ext. 4944

**Nearest Address**

800 NW 99th St
Vancouver, WA 98685

**Driving Directions**

1. Head south on Interstate-5 and take Exit 5 (NE 99th Street)
2. At end of ramp, turn right onto NE 99th Street
3. After 0.8mi, turn right into the parking lot for Columbia River High School. Stage in SE corner of parking lot after informing school office (if on-site during school hours); call 360-313-3900.
### Cougar Canyon Creek at NE Hazel Dell Avenue

**Position - Location:** 45° 41.042', -122° 40.388'  
**Position - Location:** 45° 41.25", -122° 40.23"  
**Location:** 45.68404, -122.67314  
**City:** Vancouver

**Strategy Objective:** Collect oil moving downstream on Cougar Creek using sorbents

**Implementation:** Deploy multiple lengths of sorbent boom on Cougar Canyon Creek at site, located about ~600ft down the road from Fire District 6 Station 1 Fire House. Use anchor posts, trees, or existing structures to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed. Area is likely to be overgrown with vegetation and has steep banks so the use of hard-boom is not recommended.

**Staging Area:** Onsite: Stage at Fire Station located ~600ft north of strategy location (call 360-576-1195) or at Target across street.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Heavy Roadway Traffic; Limited Parking; Steep Banks; Heavy Vegetation

**Field Notes:** There is no on-street parking at or near this strategy location. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Cougar Canyon Creek

**Resources at Risk:** Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
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<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
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**Recommended Personnel**

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</tr>
<tr>
<td>Supervisor</td>
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</tbody>
</table>
COUGC-2.4 Photo: Aerial image of strategy location with creek, strategy site, and staging depicted. Sorbent boom in white with strategy location circled in yellow.

**Site Contact**

**Nearest Address**

8800 NE Hazel Dell Ave
Vancouver, WA 98665

**Driving Directions**

To Fire District 6 - Station 1 (located ~600ft north of strategy location)
8800 NE Hazel Dell Ave, Vancouver, WA 98665

1. Head south on Interstate-5 and take Exit 5 (NE 99th Street)
2. At end of ramp, turn right onto NE 99th Street
3. After 0.4mi, turn left onto NE Hazel Dell Avenue
4. After ~0.5mi, the fire station will be on your right. Park equipment well away from emergency vehicle exits and check-in with on-duty personnel. If station unable to accommodate equipment, temporarily park across the street near Target Store.
Cougear Canyon Creek at NE 83rd Street  

**Position - Location:** 45° 40.965', -122° 40.081'  
**Position - Location:** 45° 40.57.9', -122° 40' 4.8''  
**Position - Location:** 45.68275, -122.66801  
Vancouver

**Strategy Objective:** Collection: Collect oil moving downstream on Cougar Creek

**Implementation:** Deploy hard boom from creek right to creek left on upstream side of small walking bridge on private property, downstream/north of NE 83rd Street. Extend boom upstream on creek right, as needed to create a suitable collection pocket on creek left at/near bridge. Deploy multiple lengths of sorbent boom downstream of bridge and on downstream side of culvert at NE 83rd Street. Use posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. Use vac-truck or skimmer/storage for collection on creek left at/near walking bridge.

**Staging Area:** Onsite: Stage on side of NE 83rd Street near creek or in private driveway adjacent creek’s west side.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Traffic; Limited Parking; Vegetation

**Field Notes:** Strategy is on private property - coordinate with local property owner before strategy implementation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Cougar Creek

**Resources at Risk:** Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Salmon - Coho, Steelhead

<table>
<thead>
<tr>
<th><strong>Recommended Equipment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet</td>
</tr>
<tr>
<td>200 Feet</td>
</tr>
<tr>
<td>1 Each</td>
</tr>
<tr>
<td>1 Each</td>
</tr>
<tr>
<td>100 Feet</td>
</tr>
<tr>
<td>4 Each</td>
</tr>
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</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th><strong>Recommended Personnel</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>
Cougar Canyon Creek at NE 83rd Street

Cougar Canyon Creek at NE 83rd Street

COUGC-2.5 Photo: Aerial image of strategy location with creek, strategy site, and staging depicted. Hard boom in red, sorbent boom in white, strategy location circled in yellow.

Site Contact

<table>
<thead>
<tr>
<th>Nearest Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>304 NE 83rd St</td>
</tr>
<tr>
<td>Vancouver, WA 98665</td>
</tr>
</tbody>
</table>

Driving Directions

1. Head south on Interstate-5 and take Exit 5 (NE 99th Street)
2. At end of ramp, turn right onto NE 99th Street
3. After 0.4 mi, turn left onto NE Hazel Dell Avenue
4. After 0.7 mi, turn left onto NE 83rd Street
5. After ~300 ft, the strategy location will be on your left. Park on side of street near creek or coordinate with private property owner for temporary use of driveway on creek’s west side off roadway.
### BNSF Rail Yard (WA)

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 6.266', -122° 53.475'</th>
<th>46° 6' 15.9&quot;, -122° 53' 28.5&quot;</th>
<th>46.10443, -122.89124</th>
</tr>
</thead>
</table>

| Strategy Objective: | Collection | Collect oil coming downstream on the Cowlitz River to prevent it from entering the Columbia River |

### Implementation:
From BL-CWLZR-1.6, Crew 2 launch workboat to BNSF rail yard. Crew 1 stage 1000ft. boom in BNSF yard and attach line to end of boom. Crew 1 pass line to Crew 2, and Crew 2 use line to pull boom across to center highway bridge piling. Anchor boom to piling to create steeply angled collection pocket. Anchor every 100-150ft. along boom length to maintain angle. Upstream strategy CWLZR-1.45 will divert oil into collection pocket. Crew 1 anchor boom to shore using shoreside anchor posts at AP-1, approx. (46.104506,-122.891205). Collect oil with vac truck staged at BNSF rail yard.

### Staging Area:
Onsite: Stage at BNSF Rail Yard. Contact Longview Yard Master for access.

### Site Safety:
Active railroad track. Slips, trips, and falls. Rail yard with heavy equipment traffic and overhead cranes.

### Field Notes:
Expect trains on the track at any time/from either direction. Do not allow people/equipment within 25' of tracks. Site is BNSF rail yard at the confluence of the Cowlitz, Columbia, and Coweeman Rivers.

### Watercourse:
River - With Tidal Influence - Cowlitz River

### Resources at Risk:
Downstream Resources

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Anchor - Danforth (or other appropriate type)</td>
<td>8 Each</td>
<td></td>
</tr>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>1000 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s) - Bridge Pier (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Winch - Power Winch</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>4</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
**BNSF Rail Yard (WA)**

CWLZR-1.0 Photo: River left on Cowlitz River looking NW toward highway bridge

---

**Site Contact**

**Burlington Northern Santa Fe Railroad**  
Emergency Contact: Longview Yard Master  
3001 Talley Way  
Kelso, WA 98626  
360-578-2373

**Nearest Address**

3001 Talley Way  
Kelso, WA 98626

---

**Driving Directions**

From I-5 S, Kelso, WA  
3. At exit 36 bear right onto ramp to WA-432 W toward US-30/Longview/Kelso (0.46 miles)  
4. Continue on WA-432 (0.11 miles)  
5. Take ramp on the right toward Kelso Indust. Area 0.1 miles)  
6. Turn left on Coweeman Park Dr (0.14 miles)  
7. Turn left on Talley Way 0.1 miles)  
8. Turn right and cross railroad bridge to enter BNSF rail yard. Check in at BNSF offices or call BNSF Longview Yard Master to obtain access to site.
**Cowlitz River at the mouth of the Coweeman River**

**Position - Location:** 46° 6.472', -122° 53.408'  
46° 6’ 28.3”, -122° 53’ 24.5”  
46.10786, -122.89014  
Kelso

**Strategy Objective:** Exclude oil from the mouth of the Coweeman River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom downstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment in gravel lot

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:** Launch boat upstream and tow boom to site

**Watercourse:** River - Cowlitz River

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

### Recommended Equipment
- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s)- Shoreside
- 300 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
Cowlitz River at the mouth of the Coweeman River

CWLZR-1.3 Photo: Photo taken from river right looking East

Site Contact

Burlington Northern Santa Fe Railroad
Emergency Contact:
WA
800-832-5452

Nearest Address
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
4. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
5. Continue on WA-432 (0.32 miles)
6. Take ramp on the right toward Kelso Indus. Area (0.1 miles)
7. Turn left on Coweeman Park Dr (0.14 miles)
8. Turn right on Talley Way (0.23 miles)
9. Finish at 2514 Talley Way, 98626, on the right
Gerhardt Gardens  

**Position - Location:** 46° 6.548', -122° 53.596'  
46° 6’ 32.9”, -122° 53' 35.8”  
46.10914, -122.89327  
Longview  

**Strategy Objective:** Deflection: Deflect oil coming from upstream into downstream collection pocket  

**Implementation:** Launch workboat onsite at Gerhardt Gardens boat launch, BL-CWLZR-2.0. Angle boom downstream from decommissioned boat ramp to divert oil into collection pocket downstream. Anchor at AP-1 using shoreside anchor posts, and anchor at AP-2 using Danforth or other anchor. Anchor every 100-150ft. along boom length or as necessary for conditions.  

**Staging Area:** Onsite: Stage in old parking area at Gerhardt Gardens Park.  

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

**Field Notes:** Site is an old boat ramp at Gerhardt Gardens Dog Park.  

**Watercourse:** River - With Tidal Influence - Cowlitz River  

**Resources at Risk:** Downstream Resources  

---  

**Recommended Equipment**  
6 Each Anchor - Danforth (or other appropriate type)  
1 Each Anchoring System(s)- Shoreside  
800 Feet Boom - B3 (River Boom) or equivalent  
1 Each Line throwing gun(s) or device(s)  
1 Each Workboat(s) - of adequate size for type and amount of boom  

**Recommended Personnel**  
1 Boat Operator  
3 Laborer  
1 Supervisor
Gerhardt Gardens

CWLZR-1.45 Photo: River right on Cowlitz River at Gerhardt Gardens Park old boat ramp

**Site Contact**

City of Longview  
Land/Property Contact: Parks and Recreation  
2920 Douglas Street  
Longview, WA 98632  
360-442-5400

**Nearest Address**

200 Freedom Way  
Longview, WA 98632

**Driving Directions**

1. From Kalama, take I-5 N  
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)  
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)  
4. Continue on WA-432 (0.78 miles)  
5. Take ramp toward Dike Road (0.2 miles)  
6. Turn right on Tennant Way (Tennant Way Frontage Rd) (0.09 miles)  
7. Turn left on Freedom Rd (0.1 miles)  
8. Turn right into parking lot.
Cowlitz River at north end of Gerhart Gardens Park  CWLZR-1.65

**Position - Location:** 46° 6.698', -122° 53.758'  46° 6' 41.9", -122° 53' 45.5"  46.1163, -122.89597  Longview

**Strategy Objective:** Collection : Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment at Gerhart Gardens Park

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:** Collection strategy just north of the boat ramp.

**Watercourse:** River - Cowlitz River

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

**Recommended Equipment**

- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 300 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

APPENDIX 4A  191
Cowlitz River at north end of Gerhart Gardens Park

CWLZR-1.65 Photo: Photo taken from river right looking East

Site Contact
City of Longview
Municipality (County/City): Parks and Recreation
2920 Douglas Street
Longview, WA 98632
360-442-5400

Nearest Address
200 Freedom Way
Longview, WA 98632

Driving Directions
1. From Kalama, take I-5 N
2. At exit 36 take ramp on the right to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
4. Continue on WA-432 (0.78 miles)
5. Take ramp toward Dike Road (0.2 miles)
6. Turn right on Tennant Way (Tennant Way Frontage Rd) (0.09 miles)
7. Turn left on Freedom Rd (0.5 miles)
8. Turn right into parking lot.
### Cowlitz River near Mill St

**Position - Location:** 46° 8.254', -122° 54.962'  
46° 8' 15.2", -122° 54' 57.7"  46.13756, -122.91603  
Kelso

**Strategy Objective:** Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment outside of the ecology blocks

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** Boat and boom can be launched at a nearby boat launch. A portable skimmer could be

**Watercourse:** River - Cowlitz River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>3</td>
<td>- anchor, lines, floats</td>
</tr>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>300 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Workboat(s)</td>
<td>1</td>
<td>- of adequate size for type and amount of boom</td>
</tr>
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</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
**Cowlitz River near Mill St**

**APPENDIX 4A 194**

**CWLZR-4.3**

**Site Contact**

City of Kelso - Public Works  
Municipality (County/City):  
203 S Pacific Ave  
Kelso, WA 98626  
360-577-3360

**Nearest Address**

1007 Riverside Dr  
Kelso, WA 98626

**Driving Directions**

1. From Kalama, take I-5 N  
2. Take exit 39 to WA-4 W toward Kelso (0.3 miles)  
3. Turn left on WA-4 (Allen St) (0.4 miles)  
4. Turn left on 8th Ave S (0.18 miles)  
5. Turn right on Ash St (0.04 miles)  
6. Bear right on Grade St (0.03 miles)  
7. Bear left on Ash St (0.13 miles)  
8. Turn left on 5th Ave S (0.3 miles)  
9. Turn right on Mill St (0.25 miles)  
10. Bear left on Riverside Dr (0.03 miles)  
11. Finish at 1007 Riverside Dr, 98626, on the right

**CWLZR-4.3 Photo:** Photo taken on river left looking NW
**Cowlitz River - Longview Pump Station**

**Position - Location:** 46° 9.013′, -122° 54.867′

**Strategy Objective:** Exclusion: Keep oil away from pump station water intakes

**Implementation:** Secure end of 200ft length of boom to bank on river right about ~20ft north of pump house at/near Point A (46.150487, -122.914439). Using workboat, set anchor system in river at/near Point B (46.150327, -122.914271; about ~35ft out from the downstream side of the pump house). Then extend boom from Point A and secure to Point B before extending remaining boom towards Point C (46.150175, -122.914479 ~50ft south/downstream from pump house). Remove slack from boom and secure to bank at/near Point C. Anticipated total length of boom needed is ~150ft.

**Staging Area:** Onsite: Stage in grassy area on north side of pump house or across street at Longview Regional Water Plant

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

**Field Notes:** Nearest suitable boat launch is 3.6mi downstream at Gerhart Gardens Park (BL-CWLZR-1.6). Once implemented, notify City of Longview Stormwater Division at 360-442-5299, 360-957-2720, or 360-442-5209. After hours call 360-578-0900.

**Watercourse:** River - With Tidal Influence - Cowlitz River

**Resources at Risk:** Economic Resource, Water Intakes

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>1 Each</td>
<td>(anchor, lines, floats)</td>
</tr>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Bolt Cutters</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>2 Each</td>
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</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
<td></td>
</tr>
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</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cowlitz River - Longview Pump Station

CWLZR-5.2 Photo: At strategy location on north/upstream side of pump house on river right, looking east across Cowlitz River to river left.

Site Contact
City of Longview - Stormwater
Primary Contact:
1525 Broadway
Longview, WA 98632
360-442-5299

Nearest Address
101 Fishers Lane
Kelso, WA 98626

Driving Directions
1. Head south on Interstate-5 and Take Exit 39 (towards Kelso)
2. Turn right at the end of exit ramp, heading west on Hwy 4/Allen Street
3. After 0.9mi, just after the bridge over the Cowlitz River, turn right onto 1st Avenue NW
4. After 0.3 miles, the pump house will be on your right, adjacent to the river. Stage in small grassy area on north side of pump house, may need to remove or cut small cable blocking access. Additional parking available across street at Longview Regional Water Treatment Plant (101 Fishers Lane).
### Cowlitz River at Division St  
**Position - Location:** 46° 9.336', -122° 54.777'  
**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River  

### Implementation:
Using workboat, secure one end of 800ft length of boom to shore on the Cowlitz River near Point A. Then extend boom ~800ft NW and secure remaining boom end to shore near Point C. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

### Staging Area:
Onsite: Stage equipment in gravel field

### Site Safety:
Slips, Trips, Falls; Water Hazard; Vegetation.

### Field Notes:
Access from the north at Cowlitz Garden Road through a gate, which was not locked but had a pin for a padlock, and onto a narrow gravel road. Follow this for a mile until you see a small two story building surrounded by a fence. GRP site is on a sand beach on the opposite side of an abandoned building.

### Watercourse:
River - Cowlitz River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>2 Each</td>
<td>- (anchor, lines, floats)</td>
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<tr>
<td>Anchoring System(s)</td>
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<tr>
<td>Boom</td>
<td>800 Feet</td>
<td>B3 (River Boom) or equivalent</td>
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<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s)</td>
<td>1 Each</td>
<td>- of adequate size for type and amount of boom</td>
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### Recommended Personnel

<table>
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<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Boat Operator</td>
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<td>Laborer</td>
<td>3</td>
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<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cowlitz River at Division St

Site Contact

No Information
Not Determined:

Nearest Address

95 Cowlitz Gardens Lane
Kelso, WA 98626

Driving Directions

1. Start at I 5 Kelso
2. Go north on I-5 (7.44 miles)
3. At exit 40 bear right onto ramp to N Kelso Ave (0.28 miles)
4. Turn left on WA-431 (Kelso Ave N) (0.33 miles)
5. Turn right on Redpath St (0.28 miles)
6. Turn right on Pacific Ave N (0.94 miles)
7. Turn left on Cowlitz Gdns (Cowlitz Gardens Rd) (0.05 miles)
8. Turn left on Cowlitz Gardens Ln (Cowlitz Gdns Ln) (0.1 miles)
9. Continue south through a gate onto a gravel road and drive approximately 1 mile until you see a small building with a fence around it and another abandoned concrete building.
**Cowlitz River at SR 411**

<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>46° 9.957', -122° 54.935'</th>
<th>46° 9.574', -122° 54.561'</th>
<th>46.16595, -122.91558</th>
</tr>
</thead>
</table>

**Strategy Objective:** Collect oil moving downstream along the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment in gravel lot. Approximately 190’x60’

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

**Field Notes:** Access is from a gravel parking lot off a main paved road.

**Watercourse:** River - Cowlitz River

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
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<td>(anchor, lines, floats)</td>
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<tr>
<td>Anchoring System(s)- Shoreside</td>
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<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom)</td>
<td>600</td>
<td>(River Boom) or equivalent</td>
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<tr>
<td>Vac Truck or Skimmer and Storage</td>
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<td></td>
</tr>
<tr>
<td>Workboat(s)</td>
<td>1</td>
<td>of adequate size for type and amount of boom</td>
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</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cowlitz River at SR 411

CWLZR-6.3 Photo: Photo taken from staging area looking East

Site Contact

No Information
Not Determined:

Nearest Address

810 Westside Hwy
Kelso, WA 98626

Driving Directions

1. From Kalama, head N on I-5
2. Take exit 39 to WA-4 W toward Kelso (0.3 miles)
3. Turn left on WA-4 (Allen St) (0.73 miles)
4. Continue on Allen St Bridge (0.24 miles)
5. Turn right on WA-411 (1st Ave NW) (1.47 miles)
6. Finish at 810 Westside Hwy. Gravel lot is on the right.
### Cowlitz river along Westside Hwy

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 10.668', -122° 54.506'</th>
<th>46° 10' 40.1&quot;, -122° 54' 30.3&quot;</th>
<th>46.17780, -122.90843</th>
<th>Kelso</th>
</tr>
</thead>
</table>

#### Strategy Objective: Using workboat, secure one end of 300ft length of boom to shore on the Cowlitz River near Point A. Then extend boom ~300ft and secure remaining boom end near Point B. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

<table>
<thead>
<tr>
<th>Staging Area:</th>
<th>Onsite: Stage equipment on gravel lot; approximately 12,000 sqft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Safety:</td>
<td>Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.</td>
</tr>
</tbody>
</table>

#### Field Notes: Gravel lot of to the side of a busy road. Easy access and lots of room for parking. Down to the river was a steep bank with gravel and vegetation.

<table>
<thead>
<tr>
<th>Watercourse:</th>
<th>River - Cowlitz River</th>
</tr>
</thead>
</table>

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

#### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Anchoring System(s)- Shoreside</td>
</tr>
<tr>
<td>300 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

#### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cowlitz river along Westside Hwy

CWLZR-7.25 Photo: Photo taken from dike trail looking East

Site Contact

No Information
Not Determined:

Nearest Address

1229 Westside Hwy
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 North
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn left on Sparks Dr (0.42 miles)
4. Turn left on WA-411 (Westside Hwy) (0.59 miles)
5. Entrance to gravel lot is 0.5 miles on the left
## Cowlitz River near Pacific Ave N

### Position - Location:
- 46° 10.630', -122° 54.258'
- 46° 10.378", -122° 54.155"  

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

### Implementation:
- Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B.
- After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

### Staging Area:
Onsite: Stage equipment in grass field adjacent to railroad track.

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

### Field Notes:
Chained off entrance to road leading down to a field near a railroad track.

### Watercourse:
River - Cowlitz River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Each</td>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
<td></td>
</tr>
<tr>
<td>2 Each</td>
<td>Anchoring System(s)- Shoreside</td>
<td></td>
</tr>
<tr>
<td>500 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
<td></td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
<td></td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Cowlitz River near Pacific Ave N

CWLZR-7.4 Photo: Photo taken looking North

**Site Contact**

Cowlitz County
Emergency Contact: Emergency Management
WA
360-577-3130

**Nearest Address**

101 Pacific Avenue Spur
Kelso, WA 98626

**Driving Directions**

1. From Kalama, head north on I-5
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
4. Turn right on Sparks Dr (0.06 miles)
5. Turn right on Pacific Ave N (0.72 miles)
6. Chained entrance is on the right just past Pacific Ave Spur (Pacific Avenue Spur)
Cowlitz River at Pleasant Hill Rd  

**Position - Location:** 46° 14.15', -122° 53.335'  

**Strategy Objective:** Collection : Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment on gravel road leading to river

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

**Field Notes:** There is a small sand beach that could be reached by boat. It is possible to get down to the river, but would be a safety hazard trying to carry equipment down.

**Watercourse:** River - Cowlitz River

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

<table>
<thead>
<tr>
<th>Recommended Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Each Anchoring System(s) - (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 Each Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>300 Feet Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boat Operator</td>
</tr>
<tr>
<td>2 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>

CWLZR-14.1

APPENDIX 4A
Cowlitz River at Pleasant Hill Rd

CWLZR-14.1 Photo: Photo taken looking North

Site Contact
Burlington Northern Santa Fe Railroad
Not Determined:

WA
800-832-5452

Nearest Address
118 Horseshoe Bend Ests
Kelso, WA 98626

Driving Directions
1. From Kelso, take I-5 N
2. Take exit 46 to Headquarters Road toward Pleasant Hill Rd (0.34 miles)
3. Turn left on Headquarters Rd (0.2 miles)
4. Make sharp right on Pleasant Hill Rd (0.32 miles)
5. Turn left on Horseshoe Bend Est (0.06 miles)
6. Make a right onto gravel road just past the Railroad tracks.
Cowlitz River at Lions Pride Park S

Position - Location: 46° 15' 49.2", -122° 53' 57.6"

Strategy Objective: Collection: Collect oil moving downstream on the Cowlitz River

Implementation: Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

Staging Area: Onsite: Stage equipment in gravel lot

Site Safety: Slips, Trips, Falls; Water Hazard

Field Notes:

Watercourse: River - Cowlitz River

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

<table>
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<tbody>
<tr>
<td>5 Each Anchoring System(s) - (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 Each Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>500 Feet Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each Workboat(s) - of adequate size for type and amount of boom</td>
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</tbody>
</table>

<table>
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<tr>
<th>Recommended Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boat Operator</td>
</tr>
<tr>
<td>2 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>

APPENDIX 4A 207
Cowlitz River at Lions Pride Park S

CWLZR-15.8L Photo: Photo looking West

Site Contact
City of Castle Rock - Lion’s Pride Park
Municipality (County/City) :
360 "A" Street SW
Castle Rock, WA 98611
360-274-7478

Nearest Address
1779 Huntington Ave S
Castle Rock, WA 98611

Driving Directions
1. From Kelso, take I-5 N
2. Take exit 48 to I-5 Business Loop/ Castle Rock (0.26 miles)
3. Turn left on I-5 Business/Huntington Ave S (0.48 miles)
4. Entrance to Lion’s Pride Park will be on the left
5. Follow to end of parking lot
Cowlitz River near Cook Ferry Rd  

**Position - Location:** 46°15.756', -122°54.044'  
**46°15'45.4", -122°54'2.6"**  
46.26261, -122.90073  
Castle Rock

**Strategy Objective:** Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Staging available onsite

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

**Field Notes:**

**Watercourse:** River - Cowlitz River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Each</td>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>300 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
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</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Boat Operator</td>
</tr>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Cowlitz River near Cook Ferry Rd

CWLZR-15.8R Photo: Photo taken looking SE

Site Contact

Nearest Address

597 Cook Ferry Rd
Castle Rock, WA  98611

Driving Directions

1. From Kelso, take I-5 N (1.67 miles)
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn left on Sparks Dr (0.42 miles)
4. Turn right on WA-411 (Westside Hwy) (4.43 miles)
5. Turn right on Cook Ferry Rd (1.23 miles)
6. Continue to the end of the dirt road. Site is along river.
### Strategy Objective
Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:**
Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment in parking lot

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

**Field Notes:** Large gravel lot (apx. 40,000 sqft) with bathroom, rv dump, and lots of parking.

**Watercourse:** River - Cowlitz River

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

---

**Recommended Equipment**

- 4 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 400 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
- 3 Laborer
- 1 Supervisor
Cowlitz River near Huntington Ave S

CWLZR-15.9 Photo: Photo taken from river left looking NW

Site Contact
City of Castle Rock - Lion's Pride Park
Municipality (County/City): 360 "A" Street SW
Castle Rock, WA 98611
360-274-7478

Nearest Address
1779 Huntington Ave S
Castle Rock, WA 98611

Driving Directions
1. From Kelso, take I-5 N
2. Take exit 48 to I-5 Business Loop/ Castle Rock (0.26 miles)
3. Turn left on I-5 Business/Huntington Ave S (0.48 miles)
4. Lion’s Pride Park will be on the left
Cowlitz River along Castle Rock bike path

**Position - Location:**
- 46° 16.340', -122° 54.933'
- 46° 16' 20.4", -122° 54' 56.0"  
- 46.27234, -122.91555  

**Strategy Objective:** Collect oil moving downstream along the Cowlitz River

**Implementation:**
Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:**
- Onsite: Stage equipment along bike path

**Site Safety:**
- Slips, Trips, Falls; Water Hazard

**Field Notes:**
- Bike path runs along levee. Steep bank to the river. Inform/coordinate response activities with nearby property owners as needed.

**Watercourse:**
- River - Cowlitz River

**Resources at Risk:**
- Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead

**Recommended Equipment**
- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 300 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
- 1 Laborer
- 1 Supervisor
Cowlitz River along Castle Rock bike path

CWLZR-17.2: Photo taken from river left looking West

Site Contact
City of Castle Rock - Public Works
Municipality (County/City): 360 "A" Street SW - P.O. Box 370
Castle Rock, WA 98611
360-703-0167

Nearest Address
Dike Road
Castle Rock, WA 98611

Driving Directions
1. From Kelso, take I-5 N
2. Take exit 48 to I-5 Business Loop/ Castle Rock (0.26 miles)
3. Turn left on I-5-Business/Huntington Ave S) (1.15 miles)
4. Turn left on Front Ave SW (0.04 miles)
5. Bear left on Dike Rd SW (0.33 miles)
6. Access the bike path at the Castle Rock BMX Track, on the left.
Cowlitz River near A St Bridge  

**Position - Location:** 46° 16.507', -122° 54.759'  

**Strategy Objective:** Collection: Collect oil moving downstream on Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment onsite

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

**Field Notes:** Must navigate a steep turn up a gravel road and up onto the jogging path. It would be very difficult for larger trucks to make this turn. Transport boom by water

**Watercourse:** River - Cowlitz River

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

---

**Recommended Equipment**

- 4 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 400 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
Cowlitz River near A St Bridge

**Site Contact**
City of Castle Rock - Public Works
Municipality (County/City):
360 "A" Street SW - P.O. Box 370
Castle Rock, WA 98611
360-703-0167

**Nearest Address**
101 3rd Ave SW
Castle Rock, WA 98611

**Driving Directions**
1. From Kelso, take I-5 N
2. Take exit 49 to WA-411 S/WA-504 E toward Castle Rock/Toutle (0.33 miles)
3. Turn left on I-5-BL (Mt St Helens Way NE) (0.53 miles)
4. Bear right on Front Ave NW (0.19 miles)
5. Turn right on Shintaffer St NW (0.12 miles)
6. Bear left on Leaming Ave NW (0.11 miles)
7. Turn right on Cowlitz St W (0.03 miles)
8. Continue past 3rd Ave SW and onto gravel road behind house. (0.01 miles)
9. Make sharp left turn onto gravel path, site is on the right.

CWLZR-17.4 Photo: Photo taken from river left looking NW
Cowlitz River near Front Ave NW

**Position - Location:**
- CWLZR-17.75
- Castle Rock

**Strategy Objective:**
Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:**
Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:**
Onsite: Stage equipment in parking lot

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

**Field Notes:**
Rip-rap bank poses difficulties in launching equipment. Transport boom by water and use a vacuum truck at the top of the dike to collect product. Due to the length and height of the dike, an inline pump may be needed.

**Watercourse:**
River - Cowlitz River

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

**Recommended Equipment**
- Anchoring System(s) - (anchor, lines, floats)
- Anchoring System(s) - Shoreside
- Boom - B3 (River Boom) or equivalent
- Vac Truck or Skimmer and Storage
- Workboat(s) - of adequate size for type and amount of boom

**Recommended Personnel**
- Boat Operator
- Laborer
- Supervisor
Cowlitz River near Front Ave NW

CWLZR-17.75 Photo: Photo taken from river left looking NW

Site Contact
No Information
Not Determined :

Nearest Address
401 Front Ave NW
Castle Rock, WA 98611

Driving Directions
1. From Kelso, take I-5 N
2. Take exit 49 to WA-411 S/WA-504 E toward Castle Rock/Toutle (0.33 miles)
3. Turn left on I-5-BL (Mt St Helens Way NE) (0.53 miles)
4. Bear right on Front Ave NW (0.09 miles)
5. Parking lot is immediately on the left.
Cowlitz River near North County Sports Complex  

**Position - Location:** 46° 16.959′, -122° 54.665′  
**Position - Location:** 46° 16′ 57.6″, -122° 54′ 39.9″  
**Position - Location:** 46.28265, -122.91108  
Castle Rock

**Strategy Objective:** Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment at sports complex onsite (SA-CWLZR-17.6)

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

**Field Notes:** Steep bank poses safety issue, bring equipment over by boat.

**Watercourse:** River - Cowlitz River

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

**Recommended Equipment**

- 5 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each 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
Cowlitz River near North County Sports Complex

CWLZR-18.0 Photo: Photo taken from river right looking NE

Site Contact

North County Sports and Recreation Complex
Primary Contact: Grounds Keeper
Castle Rock, WA 98611
360-270-3409

Nearest Address
5140 Westside Hwy
Castle Rock, WA 98611

Driving Directions

1. Start at I-5 Kelso
2. Go north on I-5 (2.92 miles)
3. Take ramp on the right to I-5-BL (0.26 miles)
4. Turn left on I-5-BL (Huntington Ave S) (1.15 miles)
5. Turn left on Front Ave SW (0.04 miles)
6. Turn right at Dike Rd SW to stay on Front Ave SW (0.16 miles)
7. Turn left on Hibbard St SW (0.11 miles)
8. Turn right on 2nd Ave SW (0.05 miles)
9. Turn left on Warren St SW (0.05 miles)
10. Turn right on 3rd Ave SW (0.2 miles)
11. Turn left on WA-411 (A St SW) (0.53 miles)
12. Turn right to stay on WA-411 (Westside Hwy) (0.39 miles)
13. Finish at 5140 Westside Hwy, 98611, on the right
Cowlitz River - Westside Highway Downstream of RR

**Position - Location:** 46° 21.170', -122° 56.193'  
46° 21' 10.2", -122° 56' 11.6" 46.35284, -122.93655  
Castle Rock

**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:** Secure end of 600ft length of boom to bank on river right near Point C (46.352814, -122.937217). Then extend boom SE ~90ft, securing it to end of small peninsula near Point B (46.352578, -122.93712); use plywood sheets if ground excessively muddy. Use workboat to set anchor systems every 100ft (or as needed based on flow) in relatively straight line between Point B and Point A (46.353148, -122.935801; 450ft upstream and across to river left). Then extend boom to Point A, securing it to each anchor system as the boom is deployed. Use vac-truck or skimmer with storage for collection at Point B.

**Staging Area:** Onsite: Stage off roadway near top of vacant lot south of bridge over Rock Creek

**Site Safety:** Slips, Trips, Falls; Water Hazard/Snags Near Shore; Roadway Hazard; Vegetation; Mud/Muddy

**Field Notes:** Launch jet-boat from BL-CWLZR-24.7 (located ~1.1mi upstream) to support strategy implementation. Nearest downstream launch is BL-CWLZR-17.6 (~6.0mi away). Boat operator must know the river well in order to avoid sandbars and other obstructions.

**Watercourse:** River - Cowlitz River

**Resources at Risk:** Downstream Resources, Freshwater Wetlands, Salmon (Coho, Chinook and Chum), Steelhead

**Recommended Equipment**
- 5 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s)- Shoreside
- 600 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 2 Each Heaving Line(s)
- 4 Each Plywood sheets (4ft x 8ft)
- 1 Each Vac Truck or Skimmer and Storage (if collection)
- 1 Each Workboat(s) - (jet drive)

**Recommended Personnel**
- 1 Boat Operator
- 3 Laborer
- 1 Supervisor
Cowlitz River - Westside Highway Downstream of RR

CWLZR-23.6 Photo: On Cowlitz River (river right) looking ESE towards end of small peninsula and across to river right.

Site Contact
No Information
Not Determined:

Nearest Address
7578 Westside Hwy
Castle Rock, WA  98611

Driving Directions
1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA506.
3. After 3.0mi, turn left onto Westside Highway
4. After 3.8mi, the strategy location will be on your left after the bridge (small bridge) over Rock Creek. Turn left onto private/dirt roadway that leads down to river. Notify property owner by calling 360-560-2973 or email larry.hgc at gmail.com
**Cowlitz River - WDFW Water Access Site**  
**Position - Location:** 46° 22' 100", -122° 56' 08"  
**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (46.368897, -122.934742; river right near old railroad trestle support) and Point B (46.367708, -122.934552; downstream end of parking area on river left). After anchors are set, tow boom upstream and secure to anchor at Point A, then all remaining anchor points between Points A & B. At Point B secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point B.

**Staging Area:** Onsite: Location is at WDFW Water Access Site "Olequa Creek" and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

**Site Safety:** Slips, Trips, Falls; Water Hazard/Snags Near Shore; Vehicle Hazard (Parking Area); Vegetation

**Field Notes:** Location is at WDFW Water Access Site "Olequa Creek" and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

**Watercourse:** River - Cowlitz River

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

---

**Recommended Equipment**

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<tr>
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<th>Quantity</th>
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<td>Boom - B3 (River Boom) or equivalent</td>
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<td>Bridle(s) - Towing (appropriately sized for boom)</td>
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<td>Heaving Line(s)</td>
<td>2 Each</td>
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<tr>
<td>Vac Truck or Skimmer and Storage (if collection)</td>
<td>1 Each</td>
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<tr>
<td>Workboat(s) - (jet drive)</td>
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**Recommended Personnel**

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<td>Laborer</td>
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<tr>
<td>Supervisor</td>
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Cowlitz River - WDFW Water Access Site

CWLZR-24.7 Photo: At strategy location on the Cowlitz River (river left) looking upstream and across to river right.

**Site Contact**

**WDFW Region 5**

Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

**Nearest Address**

271 Miekler Rd
Castle Rock, WA 98661

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road
3. After ~0.1mi, turn left onto Barnes Drive
4. After 2.1mi, turn right onto Imboden Road
5. After 0.2mi, stay left to travel on Miekler Road
6. After ~0.3mi at end of road, you have reached the strategy location; WDFW Olequa Creek Water Access Site Strategy is co-located with SA-CWLZR-24.7 and BL-CWLZR-24.7. Stage equipment in parking area to the south, adjacent to river.
Cowlitz River near Imboden Road  CWLZR-26.0

Position - Location:  46° 23.188', -122° 55.930'  46° 23' 11.3", -122° 55' 55.8"  46.38647, -122.93217  Toledo

Strategy Objective:  Collection: Collect oil moving downstream on the Cowlitz River

Implementation:  Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (46.387076, -122.932229; mid-river upstream) and Point B (46.386062, -122.932014, 370ft downstream from Point A and 60ft out from river left). After anchors are set, tow boom upstream and secure to anchor at Point A, then all remaining anchor points between Points A & B as boom is deployed. From Point B, bring boom to shore securing it on river left near Point C (46.385806, -122.931813, about 110ft SW of Point B). Skimmer/portable storage collection at Point C.

Staging Area:  Onsite: Stage on dirt roadway/pullout off Imboden Road (~250ft from strategy) or on shoulder of road closer to site.

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

Field Notes:  Stage equipment on-site but launch work boat (jet drive) from BL-CWLZR-24.7 (~1.3mi downstream). Follow WSDOT work zone traffic control guidelines when working on or near roadway.

Watercourse:  River - Cowlitz River

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

Recommended Equipment

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<td>Feet Boom - B3 (River Boom) or equivalent</td>
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<tr>
<td>Each Bridle(s) - Towing (appropriately sized for boom)</td>
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<td>Each Heaving Line(s)</td>
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<td>Each Skimmer (appropriately sized) with Portable Storage</td>
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<td>Each Workboat(s) - (jet drive)</td>
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Recommended Personnel

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<td>Supervisor</td>
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Cowlitz River near Imboden Road

CWLZR-26.0 Photo: At strategy location on the Cowlitz River (river left - Point C) looking upstream towards the NNW and across to river right.

Site Contact

No Information
Not Determined:

Nearest Address
684 Imboden Rd
Toledo, WA 98591

Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, stay straight to remain on Mandy Road (westbound)
4. After ~0.7mi, pull off roadway onto shoulder/pullout area with concrete barriers blocking dirt road (about 250ft away from strategy location) Stage here or travel 250ft down roadway (near first group of large trees on your right) and stage on roadway/shoulder directly adjacent to strategy location on other side of small dirt hill.
Cowlitz River near Mandy Road

**Position - Location:** 46° 23.561', -122° 55.891'  
**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (46.393232, -122.931626; upstream towards river right) and Point B (46.392362, -122.93124, ~330ft downstream from Point A and 75ft out from river left). After anchors are set, tow boom upstream and secure to Point A, then all remaining anchor points between Points A & B as boom is deployed. From Point B, bring boom to shore, securing it on river left near Point C (46.392027, -122.930932, ~145ft SW of Point B). Vac-truck or skimmer/portable storage collection at Point C.

**Staging Area:** Onsite: Stage on dirt roadway/pullout adjacent to the river off Mandy Road

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation; Mud/Muddy Banks

**Field Notes:** Stage equipment on-site but launch work boat (jet drive) from BL-CWLZR-24.7 (~1.8mi downstream). Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** River - Cowlitz River

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

**Recommended Equipment**

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<tr>
<th>Item</th>
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<td>Anchoring System(s) - Shoreside</td>
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<td>Boom - B3 (River Boom) or equivalent</td>
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<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
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<td>Heaving Line(s)</td>
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<tr>
<td>Vac Truck or Skimmer and Storage (if collection)</td>
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<tr>
<td>Workboat(s) - (jet drive)</td>
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**Recommended Personnel**

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<td>Laborer</td>
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<tr>
<td>Supervisor</td>
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Cowlitz River near Mandy Road

No Photograph Available

CWLZR-26.5 Photo: No photograph currently available

Site Contact

No Information
Not Determined:

Nearest Address

684 Imboden Rd
Toledo, WA 98591

Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, stay straight to remain on Mandy Road (westbound)
4. After ~0.4mi, strategy location will be on your right, riverside of the dirt roadway/pullout area. Stage equipment on the dirt roadway/pullout.
Cowlitz River - Upstream of Vader Water Intakes

**Position - Location:** 46° 24.426', -122° 55.956'

**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River immediately upstream of Vader Water Intakes

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (46.407506, -122.93158; river left upstream) and Point B (46.406594, -122.933561, downstream river right). Then tow 700ft hard boom upstream and secure to bank on river left near Point A, before extending boom downstream and across to bank on river right near Point B. Secure boom to all anchor points between Points A and B as it is deployed. Secure boom to river banks using anchoring posts or existing structures. Vac-truck or skimmer collection at Point B.

**Staging Area:** Onsite: Stage on site at bottom of hill, >1100ft beyond gated entry off Hwy WA-506.

**Site Safety:** Slips, Trips, Falls; Water Hazard/Snags Near Shore; Heavy Vegetation

**Field Notes:** For access assistance or permission to cut lock and enter, call Lewis County Public Works at 360-740-1123, Emergency Management at 360-740-1151, or the Sheriff's Office at 360-748-9286.

**Watercourse:** River - Cowlitz River

**Resources at Risk:** Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead, Water Intakes

**Recommended Equipment**

- 5 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s) - Shoreside
- 1 Each Bolt Cutters
- 700 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 2 Each Heaving Line(s)
- 1 Each Vac Truck or Skimmer and Storage (if collection)
- 1 Each Workboat(s) - (jet drive)

**Recommended Personnel**

- 1 Boat Operator
- 3 Laborer
- 1 Supervisor
Cowlitz River - Upstream of Vader Water Intakes

CWLZR-27.4 Photo: No photograph currently available

Site Contact

Lewis County - Emergency Management
Municipality (County/City): 360-740-1151

Lewis County - Public Works
Municipality (County/City): 360-740-1123

Nearest Address

108 Willmar Ct
Vader, WA 98593

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (WA-506, Vader/Ryderwood)
2. At end of exit, turn left to head west on highway WA-506
3. After ~2.4mi, turn left onto dirt/gravel pullout with gate.
4. The strategy location is at the bottom of the hill about ~1100ft beyond gate. City of Vader’s Water Intakes are immediately downstream of this strategy location. Call 360-740-1123, 360-740-1151, or 360-748-9286 for access assistance.
### Cowlitz River at Mouth of Foster Creek

**Position - Location:** 46° 24.109', -122° 54.952'  
46° 24' 6.6", -122° 54' 57.1"  
46.40182, -122.91587  

**Strategy Objective:** Exclusion, Sorbent: Exclude oil from Foster Creek. Collect oil moving downstream on Foster Creek with sorbents.

**Implementation:** On downstream (north) side of roadway, deploy 100ft hard boom across the mouth of the creek. Place multiple lengths of sorbent boom on north and south sides of bridge, upstream of hard boom. May be able to quickly deploy boom from bridge but WSDOT work zone traffic control guidelines must be followed. Use line and anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks or bridge. Replace saturated sorbents as needed. Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site (use SA-CWLZR-29.8).

**Staging Area:** Onsite: Stage work truck on shoulder of roadway; space limited - NO TRAILERS.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Visibility, Limited Shoulder); Heavy Vegetation

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on/near roadway. Shoulder very limited - NO TRAILERS. If needed, trailers can be staged at SA-CWLZR-29.8 (WDFW I-5 Water Access).

**Watercourse:** River - Cowlitz River

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

![Map of Cowlitz River at Mouth of Foster Creek]

**Recommended Equipment**

- 4 Each: Anchoring System(s) - Shoreside
- 100 Feet: Boom - B3 (River Boom) or equivalent
- 200 Feet: Boom - Sorbent
- 1 Each: Bridle(s) - Hand (appropriately sized for boom)
- 1 Each: Heaving Line(s)
- 100 Feet: Line - 1/2" poly line

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Cowlitz River at Mouth of Foster Creek

CWLZR-28.4 Photo: On Cowlitz River (river left) at mouth of Foster Creek (creek left) looking NE across to creek right with bridge over creek and Mandy Road in background.

<table>
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<tr>
<th>Site Contact</th>
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<tbody>
<tr>
<td>Nearest Address</td>
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516 Mandy Rd
Toledo, WA 98591

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
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</table>

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, turn right onto Mandy Road
4. After 0.9mi, the strategy location will be at the bridge over Foster Creek near the bottom of the hill. Small shoulder available on both sides of the roadway immediately after the bridge. NO TRAILERS. If needed, trailers can be staged at WDFW I-5 Water Access Site (SA--CWLZR-29.8) about ~1.4mi down Mandy Road.
Cowlitz River at Interstate-5

**Position - Location:** 46° 24.853', -122° 53.436'  
46° 24' 51.2", -122° 53' 26.2"  
46.1422, -122.89060

**Strategy Objective:** Collection: Collect oil moving downstream on the Cowlitz River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (46.414719, -122.89; river right upstream of I-5 northbound bridge) and Point B (46.413725, -122.89126, upstream side of WDFW boat ramp on river left). Then tow 500ft hard boom upstream and secure to river right near Point A, before extending boom downstream and across to river left, securing it to all anchor points between Points A and B as boom is deployed. Secure boom to river banks using anchoring posts or existing structures. Vac-truck or skimmer collection at Point B.

**Staging Area:** Onsite: Staging Area SA-CWLZR-29.8 is on-site. Stage in parking area near boat ramp.

**Site Safety:** Slips, Trips, Falls; Water Hazard/Snags Near Shore; Vehicle Hazard (Parking Area); Vegetation

**Field Notes:** Location is at WDFW Water Access Site "I-5" and is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

**Watercourse:** River - Cowlitz River

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

**Recommended Equipment**

- 4 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s)- Shoreside
- 500 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 2 Each Heaving Line(s)
- 1 Each Vac Truck or Skimmer and Storage (if collection)
- 1 Workboat(s) - (jet drive)

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Cowlitz River at Interstate-5

CWLZR-29.9 Photo: At strategy location on the Cowlitz River at WDFW boat ramp (river left - Point B) looking upstream towards Interstate-5 bridge and river right.

Site Contact

WDFW Region 5
Land/Property Contact : Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

275 Mandy Rd
Toledo, WA 98591

Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, turn right onto Mandy Road
4. After 2.3mi, WDFW "I-5" Water Access Site will be on your left before passing under Interstate-5.
Unnamed tributary to Cowlitz River at Evergreen Rd

**Position - Location:**
- 46° 10.797', -122° 53.777'
- 46° 10' 47.8'', -122° 53' 46.6''
- 46.17996, -122.89628
  
**Strategy Objective:**
- Underflow Dam: Collect oil moving downstream

**Implementation:**
- Secure end of 100ft length of boom to bank on creek right near Point A. Using line, extend boom west about ~20ft to creek right and secure to bank near Point B. Form Point B, extend remaining boom downstream along creek left, securing it to NE corner of culverts at/near Point C. Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

**Staging Area:**
- Onsite: Stage equipment on shoulder of Evergreen Rd

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

**Field Notes:**
- Culvert off of the side of the road leads north under the road and along the side of a private driveway.

**Watercourse:**
- Creek - Unnamed tributary to Cowlitz River

**Resources at Risk:**
- Freshwater Wildlife

**Recommended Equipment**
- 6 Each Anchoring System(s)- Shoreside
- 300 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Assort Fill material (sand, earth, gravel, sandbags)

**Recommended Personnel**
- 2 Laborer
- 1 Supervisor
Unnamed tributary to Cowlitz River at Evergreen Rd  CWLZRTC-0.3

CWLZRTC-0.3 Photo: Photo taken upstream of culvert looking SE

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<td>1. From Kelso, take I-5 N</td>
</tr>
<tr>
<td>2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)</td>
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<tr>
<td>3. Turn right on Sparks Dr (0.06 miles)</td>
</tr>
<tr>
<td>4. Turn right on Pacific Ave N (0.35 miles)</td>
</tr>
<tr>
<td>5. Turn left on Evergreen Rd (0.33 miles)</td>
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<tr>
<td>6. Site is on the right 0.20 miles, before the railroad trestle.</td>
</tr>
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</table>
Position - Location: 46° 14.265', -122° 53.297'

Strategy Objective: Underflow Dam: Collect oil moving downstream

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. 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: Remote: No room to stage equipment.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation.

Field Notes: Follow WSDOT work zone traffic control guidelines when working on or near roadway.

Watercourse: Creek - Unnamed tributary to Cowlitz River

Resources at Risk: Freshwater Wildlife, Salmon - Coho

Recommended Equipment

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

Recommended Personnel

- Laborer
- 1 Supervisor
CWLZRTE-0.15 Photo: Photo taken downstream of culvert looking SW

**Site Contact**

**No Information**

Not Determined:

**Nearest Address**

5210 Pleasant Hill Rd
Kelso, WA 98626

**Driving Directions**

1. From Kelso, take I-5 N
2. Take exit 46 to Headquarters Road toward Pleasant Hill Rd (0.34 miles)
3. Turn left on Headquarters Rd (0.2 miles)
4. Make sharp right on Pleasant Hill Rd (0.3 miles)
5. Finish at 5210 Pleasant Hill Rd, 98626, on the right
Unnamed trib to Cowlitz River at Pleasant Hill Rd  CWLZRTF-0.2


Strategy Objective:  Collection : Collect oil moving downstream

Implementation:  Secure end of 100ft length of boom to bank on creek right near Point A. Using line, extend boom south about ~20ft to creek right and secure to bank near Point B. From Point B, extend remaining boom across to creek right, securing it to NE corner of culverts at/near Point C. Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

Staging Area:  Onsite: Stage equipment in gravel lots on both sides of road. Contact property owner before staging.

Site Safety:  Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation

Field Notes:  Steep hill with vegetation leading down to creek and culvert

Watercourse:  Creek - Unnamed tributary to Cowlitz River

Resources at Risk:  Freshwater Wildlife, Salmon - Coho, Steelhead

Recommended Equipment

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<td>100 Feet</td>
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<td>200 Feet</td>
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Recommended Personnel

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Unnamed trib to Cowlitz River at Pleasant Hill Rd

CWLZRTF-0.2 Photo: Photo taken from road looking East

Site Contact

Private Owner: Homeowner

WA
360-270-7164

Nearest Address

5410 Pleasant Hill Rd
Kelso, WA 98626

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 46 to Headquarters Road toward Pleasant Hill Rd (0.34 miles)
3. Turn left on Headquarters Rd (0.2 miles)
4. Make sharp right on Pleasant Hill Rd (0.66 miles)
5. Finish at 5410 Pleasant Hill Rd, 98626, on the right
**Coweeman River at mouth**


**Strategy Objective:** Collection: Collect oil moving downstream on the Coweeman River

**Implementation:** Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water.

**Staging Area:** Onsite: Stage equipment along gravel road

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:** Deploy strategy by a boat launched at a different point.

**Watercourse:** River - Coweeman River

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>300 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Coweeman River at mouth

CWMR-0.02 Photo: Photo taken from river right looking East

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington Northern Santa Fe Railroad</td>
</tr>
<tr>
<td>Primary Contact : WA</td>
</tr>
<tr>
<td>800-832-5452</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nearest Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>2514 Talley Way</td>
</tr>
<tr>
<td>Kelso, WA 98626</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From Vancouver, take I5 N</td>
</tr>
<tr>
<td>2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)</td>
</tr>
<tr>
<td>3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)</td>
</tr>
<tr>
<td>4. Continue on WA-432 (0.32 miles)</td>
</tr>
<tr>
<td>5. Take ramp on the right toward Kelso Indust. Area (0.1 miles)</td>
</tr>
<tr>
<td>6. Turn left on Coweeman Park Dr (0.14 miles)</td>
</tr>
<tr>
<td>7. Turn right on Talley Way (0.01 miles)</td>
</tr>
<tr>
<td>8. After bridge, turn left onto gravel road</td>
</tr>
<tr>
<td>9. Site is on the left</td>
</tr>
</tbody>
</table>
Coweeman River at Coweeman Park Dr

**Position - Location:**
- Coweeman River at Coweeman Park Dr
- 46° 6.455', -122° 53.274'
- 46° 6' 27.3'', -122° 53' 16.5''
- 46.10758, -122.88791

**Strategy Objective:**
Exclusion: Collect oil moving downstream on the Coweeman River

**Implementation:**
Using workboat, secure one end of boom to shore at Point A. Then extend boom across the mouth of the inlet to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Use the boat launch upstream to launch boat and boom.

**Staging Area:**
Remote: Stage equipment in parking lot

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:**
Marshy conditions around booming location. The site is not easily accessible by foot/truck.

**Watercourse:**
River - Coweeman River

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

**Recommended Equipment**
- Each Anchoring System(s) - Shoreside
- 300 Feet Boom - B3 (River Boom) or equivalent
- 300 Feet Boom - Sorbent
- Each Workboat(s) - of adequate size for type and amount of boom

**Recommended Personnel**
- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Coweeman River at Coweeman Park Dr

CWMR-0.1 Photo: Photo taken from river left looking East

Site Contact

No Information
Not Determined:

Nearest Address

Kelso, WA 98626

Driving Directions

1. From Vancouver, take I5 N
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
4. Continue on WA-432 (0.32 miles)
5. Take exit toward Talley Way/Kelso Indst. Area (0.1 miles)
6. Turn left on Coweeman Park Dr (0.02 miles)
7. Site is on the right
**Coweeman River at Talley Way**

| **Position - Location:** | 46° 6.441', -122° 53.307' | 46° 6' 26.4", -122° 53' 18.4" | 46.10735, -122.88845 | Kelso |

| **Strategy Objective:** | Collection: Collect oil moving downstream on the Coweeman River |

| **Implementation:** | Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Steep, cut bank would make it difficult to hand launch a boat. Use a boat launch upstream to launch boat and boom. |

| **Staging Area:** | Onsite: Stage equipment in gravel lot |

| **Site Safety:** | Slips, Trips, Falls; Water Hazard; Vegetation. |

| **Field Notes:** | Gain access to the dike path by unlocking the gate at the gravel lot |

| **Watercourse:** | River - Coweeman River |

| **Resources at Risk:** | Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead |

### **Recommended Equipment**

- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 300 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

---

*APPENDIX 4A*
Coweeman River at Talley Way

CWMR-0.15 Photo: Photo taken from river right looking East

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest Address</td>
</tr>
</tbody>
</table>
| 2600 Coweeman Park Dr  
Kelso, WA 98626 |

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From Vancouver, take I-5 N</td>
</tr>
<tr>
<td>2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)</td>
</tr>
<tr>
<td>3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)</td>
</tr>
<tr>
<td>4. Continue on WA-432 (0.32 miles)</td>
</tr>
<tr>
<td>5. Take exit toward Talley Way/Kelso Indust. Area (0.1 miles)</td>
</tr>
<tr>
<td>6. Turn left on Coweeman Park Dr (0.02 miles)</td>
</tr>
<tr>
<td>7. Site is on the right</td>
</tr>
</tbody>
</table>
### Coweeman River along dike path

**Position - Location:** 46° 6.585', -122° 53.243'  
46° 6' 35.1", -122° 53' 14.6"  
46.10975, -122.88738  
Kelso

**Strategy Objective:** Collect oil moving downstream on the Coweeman River

**Implementation:** Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Use boat launch upstream to launch boat and boom.

### Staging Area:
Onsite: Stage equipment along dike path

### Site Safety:
Slips, Trips, Falls; Water Hazard; Vegetation.

### Watercourse:
River - Coweeman River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
<td>2 Each</td>
</tr>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>300 Feet</td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Coweeman River along dike path

CWMR-0.2 Photo: Photo taken from river right looking NE

Site Contact

No Information
Not Determined:

Nearest Address

2514 Talley Way
Kelso, WA 98626

Driving Directions

1. From Vancouver, take I-5 N
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)
4. Continue on WA-432 (0.32 miles)
5. Take exit toward Talley Way/ Kelso Indus. Area (0.1 miles)
6. Turn left on Coweeman Park Dr (0.14 miles)
7. Turn right on Talley Way (0.23 miles)
8. Immediately after bridge, turn right onto gravel road.
9. Follow dike path to site on the right.
<table>
<thead>
<tr>
<th><strong>Coweeman River near Coweeman Park Dr</strong></th>
<th><strong>CWMR-0.35</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong></td>
<td>46° 38.8&quot;, -122° 53.8&quot;</td>
</tr>
<tr>
<td></td>
<td>46° 6.646&quot;, -122° 53.097&quot;</td>
</tr>
<tr>
<td><strong>Strategy Objective:</strong></td>
<td>Exclusion: Exclude oil from entering marsh</td>
</tr>
</tbody>
</table>

**Implementation:**
Hand-launch small workboat from staging area and transport 300ft boom to site. Secure end of boom to bank on creek right near Point A. Extend boom SE across mouth of marsh, securing boom near Point B. Use shoreside anchoring posts, trees, or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:**
Onsite: Stage equipment on river right along dike path

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

**Field Notes:**
Use workboat to tow boom to site

**Watercourse:**
River - Coweeman River

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

---

**Recommended Equipment**

<table>
<thead>
<tr>
<th>2 Each</th>
<th>Anchoring System(s) - (anchor, lines, floats)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

| 1 Boat Operator    |
| 2 Laborer          |
| 1 Supervisor       |
Coweeman River near Coweeman Park Dr

CWMR-0.35 Photo: Photo taken from river right looking East towards site

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Information</td>
</tr>
<tr>
<td>Not Determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nearest Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelso, WA 98626</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Kalama, take I-5 N</td>
</tr>
<tr>
<td>3. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)</td>
</tr>
<tr>
<td>4. At fork keep left on WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)</td>
</tr>
<tr>
<td>5. Continue on WA-432 (0.32 miles)</td>
</tr>
<tr>
<td>6. Take ramp on the right toward Kelso Indust. Area (0.1 miles)</td>
</tr>
<tr>
<td>7. Turn right on Coweeman Park Dr (0.21 miles)</td>
</tr>
<tr>
<td>8. Finish at 2690 Coweeman Park Dr, 98626, on the right</td>
</tr>
</tbody>
</table>
### Coweeman River along dike trail

**Position - Location:** Coweeman River along dike trail

**Staging Area:** Onsite: Stage equipment along dike trail

**Field Notes:** It would be possible to hand launch boom and/or small skiff. To collect product a skimmer could be carried by hand to the collection point on the river.

**Watercourse:** Coweeman River

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

### Implementation

- Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Use boat launch upstream to launch boat and boom. River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. Use vac-truck or skimmer with storage for collection.

### Recommended Equipment

- **3 Each** Anchoring System(s) - (anchor, lines, floats)
- **2 Each** Anchoring System(s) - Shoreside
- **300 Feet** Boom - B3 (River Boom) or equivalent
- **1 Each** 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**
Coweeman River along dike trail

CWMR-0.5 Photo: Photo taken from river right looking NW

Site Contact

No Information
Not Determined:

Nearest Address

2510 Talley Way
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 36 to WA-432 toward WA-4/Longview/Long Beach (0.19 miles)
3. Take exit 36 to WA-432 toward WA-4/Longview/Long Beach (0.3 miles)
4. At fork keep left on WA-432 toward WA-4/Longview/Long Beach (0.3 miles)
5. Continue on WA-432 (0.32 miles)
6. Take ramp on the right toward Kelso Indus. Area (0.1 miles)
7. Turn left on Coweeman Park Dr (0.14 miles)
8. Turn right on Talley Way (0.32 miles)
9. Finish at 2510 Talley Way, 98626, on the right
**Coweeman River along Dike path**

**Position - Location:** 46° 7.357′, -122° 53.467′  
**Strategy Objective:** Collection: Collect oil moving downstream on the Coweeman River

**Implementation:** Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Use boat launch upstream to launch boat and boom. River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. Use vac-truck or skimmer with storage for collection.

**Staging Area:** Onsite: Stage equipment along dike trail

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:** Inform/coordinate response activities with nearby property owners as needed.

**Watercourse:** River - Coweeman River

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

---

**Recommended Equipment**

- 2 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s) - Shoreside
- 2 Each Anchoring System(s) - Shoreside
- 300 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
Coweeman River along Dike path

CWMR-1.15 Photo: Photo taken from river right looking NW

### Site Contact

**No Information**
Not Determined:

### Nearest Address

1809 Baker Way  
Kelso, WA 98626

### Driving Directions

1. From Kalama, take I-5 N  
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)  
3. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.3 miles)  
4. Continue on WA-432 (0.32 miles)  
5. Take ramp on the right toward Kelso Indust. Area (0.1 miles)  
6. Turn left on Coweeman Park Dr (0.14 miles)  
7. Turn right on Talley Way (0.02 miles)  
8. Make sharp right on Baker Way (0.19 miles)  
9. Finish at 1809 Baker Way, 98626, on the right
**Coweeuan River near Grade St**  
**CWMR-1.3**

<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>46° 7' 9.955&quot;, -122° 54.032'</th>
<th>46° 7' 57.3&quot;, -122° 54' 1.9&quot;</th>
<th>46.13258, -122.90053</th>
<th>Kelso</th>
</tr>
</thead>
</table>

**Strategy Objective:** Collect oil moving downstream on the Coweeuan River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment at pump house

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation

**Field Notes:** Access from a paved jogging path. Steep bank with grass and/or rip-rap

**Watercourse:** River - Coweeuan River

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>3 Each</td>
<td>(anchor, lines, floats)</td>
</tr>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Coweeman River near Grade St

**Site Contact**

No Information
Not Determined :

**Nearest Address**

1301 Elm Pl
Kelso, WA 98626

**Driving Directions**

1. From Vancouver, take I-5 N
2. Take exit 36 to Longview/ Long Beach/ WA32 W/ WA4
3. Keep right, follow signs for Kelso Dr/ Carrolls
4. Turn right onto S Kelso Dr (0.69 miles)
5. Turn left on Grade St (0.35 miles)
6. Turn left onto the bike path immediately past the bridge over the Coweeman River.
7. Follow path to gate.
### Coweeman River at 13th Ave

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 8.152', -122° 54.064'</th>
<th>46° 8' 9.1&quot;, -122° 54' 3.8&quot;</th>
<th>46.13587, -122.90106</th>
</tr>
</thead>
</table>

#### Strategy Objective:
Collect oil moving downstream on the Coweeman River

#### Implementation:
From jogging path, secure end of ~300ft length of river boom to bank on creek right near Point A. Extend boom across to river left and secure to bank near Point B. Use multiple layers of sorbent boom and/or sweep across creek within boomed area (between boom and culverts). River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer with storage for collection.

#### Staging Area:
Onsite: Stage equipment in parking lot on the north side of the road

#### Site Safety:
Slips, Trips, Falls; Water Hazard; Roadway Hazard

#### Field Notes:
Access via jogging path. Site is located off a well used public road. Possible to secure boom to a tree on the east bank, might need to pound stakes or some sort of ground anchor to secure boom on the west bank.

#### Watercourse:
River - Coweeman River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>2 Each</th>
<th>Anchoring System(s) - Shoreside</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>400 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

### Recommended Personnel

| 1 Boat Operator |
| 4 Laborer |
| 1 Supervisor |
Coweeman River at 13th Ave

**Site Contact**

No Information
Not Determined :

**Nearest Address**

1000 S 13th Ave
Kelso, WA 98626

**Driving Directions**

1. From Kalama, head north on I-5
2. At exit 39 bear right onto ramp to WA-4 W toward Kelso (0.3 miles)
3. Turn left on WA-4 (Allen St) (0.2 miles)
4. Turn left on Three Rivers Dr (0.1 miles)
5. Turn right (0.28 miles)
6. Turn right on Three Rivers Dr (0.05 miles)
7. Turn left on Grade St (0.25 miles)
8. Turn right on 13th Ave S (0.07 miles)
9. Turn left into parking lot
10. Access to dike path is through parking lot
11. Site is on the right just past the bridge
Coweeman River at Coweeman Dr

Position - Location: 46° 8.231', -122° 53.890' 46° 8.139", -122° 53.534" 46.13719, -122.89817 Kelso

Strategy Objective: Collection: Collect oil moving downstream on the Coweeman River

Implementation: From gravel lot under the I-5 bridge, secure end of ~300ft length of river boom to bank on creek right near Point A. Extend boom across to river right and secure to bank near Point C. Use multiple layers of sorbent boom and/or sweep across river within boomed area. River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer with storage for collection.

Staging Area: Onsite: Room for a vacuum truck or other equipment to collect product.

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

Field Notes: Gravel parking area under the bridge is large enough to stage some trucks and equipment.

Watercourse: River - Coweeman River

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

Recommended Equipment

1 Each Anchoring System(s) - (anchor, lines, floats)
2 Each Anchoring System(s) - Shoreside
300 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
Coweeman River at Coweeman Dr

Site Contact

No Information
Not Determined:

Nearest Address

1513 Coweeman Dr
Kelso, WA 98626

Driving Directions

1. Head South on I-5 to Kelso
2. Take exit 39 and bear right onto ramp to WA-4 (0.32 miles)
3. Turn right on WA-4 (Allen St) (0.12 miles)
4. Turn left on Three Rivers Dr (0.1 miles)
5. Turn right (0.28 miles)
6. Turn right (0.05 miles)
7. Turn left on Grade St (0.35 miles)
8. Turn left on Coweeman Dr (0.07 miles)
9. Staging area is under the I-5 bridge
**Coweeaman River near Manasco Drive**

**Position - Location:** 46° 8.313', -122° 53.801'  

**Strategy Objective:** Collection: Collect oil moving downstream on the Coweeaman River

**Implementation:** Using workboat, secure one end of 300ft length of boom to shore on Coweeaman River near Point A. Then extend boom ~300ft and secure remaining boom end to shore at/near Point B. Use shore-side anchoring posts, trees, or existing structures to secure boom to shore. Use additional anchoring systems (as needed) to keep boom secure in water.

**Staging Area:** Onsite: Stage equipment in parking lot approximately 400ft north.

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

**Field Notes:** Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** River - Coweeaman River

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

<table>
<thead>
<tr>
<th>Recommended Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Each</td>
</tr>
<tr>
<td>300 Feet</td>
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<tr>
<td>1 Each</td>
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<tr>
<td>1 Each</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boat Operator</td>
</tr>
<tr>
<td>3 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>
Coweeman River near Manasco Drive

**Site Contact**

No Information
Not Determined:

**Nearest Address**

658 Manasco Dr
Kelso, WA 98626

**Driving Directions**

1. Go south on I-5
2. At exit 39 bear right onto ramp to WA-4 toward Kelso (0.32 miles)
3. Turn left on WA-4 (Allen St) (0.08 miles)
4. Continue on Allen St (0.05 miles)
5. Turn right on Kelso Dr (0.36 miles)
6. Turn left on Tam Oshanter Way (0.02 miles)
7. Turn right on Manasco Dr (0.2 miles)
8. Staging area will be on the left
## Coweeman River at O'Shanter Park

**Position - Location:** 46° 8.385', -122° 53.617'  
46° 8' 23.1", -122° 53' 37.0"  
46.13975, -122.89362  
Kelso

### Strategy Objective:
Collecting: Collect oil moving downstream on the Coweeman River

### Implementation:
Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water. Use boat launch upstream to launch boat and boom.

### Staging Area:
Onsite: Stage equipment in park

### Site Safety:
Slips, Trips, Falls; Water Hazard; Vegetation.

### Field Notes:
Duckbill water discharges on the shore, river right, with signs warning of sudden discharge.

### Watercourse:
River - Coweeman River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Each Anchoring System(s) - (anchor, lines, floats)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Each Anchoring System(s) - Shoreside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 Feet Boom - B3 (River Boom) or equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Each Vac Truck or Skimmer and Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Each Workboat(s) - of adequate size for type and amount of boom</td>
<td></td>
<td></td>
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</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Coweeman River at O'Shanter Park

Site Contact
City of Kelso
Municipality (County/City): 203 S. Pacific #218
Kelso, WA 98626
360-423-1371

Nearest Address
Tam O'Shanter Way
Kelso, WA 98626

Driving Directions
1. From Kalama, take I5 N
2. Take exit 39 to WA-4 W toward Kelso (0.3 miles)
3. Turn right on Allen St (0.16 miles)
4. Turn right on Tam Oshanter Way (0.25 miles)
5. Site is just past baseball fields.

CWMR-2.0 Photo: Photo taken from discharge site facing East
Unnamed Tributary to Coweeman River  

**Position - Location:** 46° 6.574', -122° 52.772'  
**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Staging Area:** Onsite: Very limited room for equipment. Stage on shoulder of roadway near creek; Follow WSDOT Traffic Safety Guidelines.

**Watercourse:** Creek - Unnamed Tributary to Coweeman River

**Resources at Risk:** Freshwater Wildlife

**Implementation:** Use boom and sorbent on both sides of bridge for initial containment. If time allows, install culvert block at this location. 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).

**Field Notes:** Road is busy, not much room. Culvert is accessible.

**Recommended Equipment**

- 100 Feet Boom - Sorbent
- 1 Assort Fill material (sand, earth, gravel, sandbags)
- 1 Roll Plastic Sheeting
- 4 Each Plywood sheets (4ft x 4ft)
- 1 Each Vac Truck or Skimmer and Storage

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Unnamed Tributary to Coweeman River

CWMRT-0.35 Photo: Photo taken from above culvert looking West

<table>
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<th>Site Contact</th>
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<tbody>
<tr>
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</tr>
<tr>
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<table>
<thead>
<tr>
<th>Nearest Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>2601 S Kelso Dr</td>
</tr>
<tr>
<td>Kelso, WA 98626</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From Kelso, head south on I-5 toward 40 (3.86 miles)</td>
</tr>
<tr>
<td>2. At exit 36 bear right onto ramp to WA-432 W toward US-30/Longview/Kelso (0.46 miles)</td>
</tr>
<tr>
<td>3. Continue on WA-432 (0.11 miles)</td>
</tr>
<tr>
<td>4. Take ramp on the right toward Kelso Indus. Area (0.1 miles)</td>
</tr>
<tr>
<td>5. Turn left on Coweeman Park Dr (0.14 miles)</td>
</tr>
<tr>
<td>6. Turn left on Talley Way (0.17 miles)</td>
</tr>
<tr>
<td>7. Take ramp toward E (0.22 miles)</td>
</tr>
<tr>
<td>8. Continue on WA-432 (0.31 miles)</td>
</tr>
<tr>
<td>9. Continue on SR 432 S (0.14 miles)</td>
</tr>
<tr>
<td>10. Turn left toward Seattle (0.33 miles)</td>
</tr>
<tr>
<td>11. Turn right on Kelso Dr (0.05 miles)</td>
</tr>
<tr>
<td>12. Finish at 2601 S Kelso Dr, 98626, on the left</td>
</tr>
</tbody>
</table>
## Tributary to Coweeman River near Allen Street Road  
**CWMRTB-0.6**

**Position - Location:**  
46° 8.639', -122° 52.668'  
46° 8' 38.3", -122° 52' 40.1"  
46.14398, -122.87780  
Kelso

**Strategy Objective:**  
Culvert Block: Collect oil moving along tributary of Coweeman River and protect wetland

**Implementation:**  
Use boom and sorbent on both sides of culvert for initial containment. If time allows, install culvert block at this location. 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: Stage on shoulder of roadway near creek; Follow WSDOT Traffic Safety Guidelines.

**Site Safety:**  
Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:**  
Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway. Culvert hard to access due to high water.

**Watercourse:**  
Creek - Unnamed tributary to Coweeman River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>4 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>400 Feet</td>
<td></td>
</tr>
<tr>
<td>Plastic Sheeting</td>
<td>1 Roll</td>
<td></td>
</tr>
<tr>
<td>Plywood sheets (4ft x 4ft)</td>
<td>8 Each</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Tributary to Coweeman River near Allen Street Road

**Site Contact**

No Information
Not Determined:

**Nearest Address**

2700 Allen St
Kelso, WA 98626

**Driving Directions**

1. From Castle Rock, take I-5
2. Take exit 39 to WA-4 toward Kelso (0.32 miles)
3. Turn left on WA-4 (Allen St) (0.08 miles)
4. Continue on Allen St (0.89 miles)
5. Finish at GRP location, just past Corduroy Rd on the right
### Position - Location:
- Davis Creek on Rose Valley Rd: 46° 5.599', -122° 51.602'
- Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.
- Staging Area: Onsite: Stage equipment on the side of the road. Can park several trucks.
- Field Notes: Creek has a relatively strong current here. With a strong current you would want to make an underflow dam. Easiest spot to make a dam was approximately 100ft upstream from culvert where depth and current is less.
- Watercourse: Creek - Davis Creek
- Resources at Risk: Freshwater Wildlife

#### 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 approximately 100ft upstream from culvert where depth and current is less. 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.

#### Strategy Objective:
- Underflow Dam: Collect oil moving downstream on Davis Creek.

#### Staging Area:
- Onsite: Stage equipment on the side of the road. Can park several trucks.

#### Site Safety:
- Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

#### Field Notes:
- Creek has a relatively strong current here. With a strong current you would want to make an underflow dam. Easiest spot to make a dam was approximately 100ft upstream from culvert where depth and current is less.

### Recommended Equipment
- 4 Each Anchoring System(s)- Shoreside
- 100 Feet Boom - B2 (Contractor Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Assort Fill material (sand, earth, gravel, sandbags)
- 10 Each Pipe(s), PVC (8 inch x 8ft)
- 1 Each Vac Truck or Skimmer and Storage (if collection)

### Recommended Personnel
- 3 Laborer
- 1 Supervisor
Davis Creek on Rose Valley Rd

**Site Contact**

No Information
Not Determined:

**Nearest Address**

322 Rose Valley Rd
Kelso, WA 98626

**Driving Directions**

From Kelso, head south on I-5 toward 40 (3.83 miles)
3. At exit 36 bear right onto ramp to WA-432 W toward US-30/Longview/Kelso (0.46 miles)
4. Continue on WA-432 (0.11 miles)
5. Take ramp on the right toward Kelso Indus. Area (0.1 miles)
6. Turn left on Coweeman Park Dr (0.14 miles)
7. Turn left on Talley Way (0.17 miles)
8. Take ramp toward E (0.22 miles)
9. Continue on WA-432 (0.31 miles)
10. Continue on SR 432 S (0.14 miles)
11. Continue on Old Pacific Hwy S (Old Wa-99 S) (1.06 miles)
12. Turn left on Rose Valley Rd (0.46 miles)
13. Finish just past 322 Rose Valley Rd. Creek and staging will be on the right.

**DAVSC-1.8**

DAVSC-1.8 Photo: Photo taken from shoulder of road looking East. Creek is on the right.
**East Fork Lewis River mouth**

**Position - Location:**
- 45° 51.951', -122° 42.973'
- 45° 51.571', -122° 42.584'
- 45.86585, -122.71621
- Ridgefield

**Strategy Objective:**
Collect oil moving downstream on the East Fork Lewis River

**Implementation:**
Using workboat, secure one end of 300 ft length of boom to shore at Point A. Then extend boom across the river to Point B using shoreside anchoring points, trees, or existing structures to secure boom to shore. Use additional anchoring systems as needed to keep boom secure in water.

**Staging Area:**
Onsite: Stage equipment at small parking lot at site.

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Vegetation

**Field Notes:**
Inform/coordinate response activities with nearby property owners as needed.

**Watercourse:**
River - East Fork Lewis River

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

### Recommended Equipment

- 2 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s) - Shoreside
- 400 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
**East Fork Lewis River mouth**

**ELEWR - 0.2**

- **Photo**: Photo taken from river left looking North

### Site Contact

**No Information**
Not Determined :

### Nearest Address

33402 NW 41st Ave
Ridgefield, WA 98642

### Driving Directions

1. From Vancouver, take I-5 N
2. Take exit 16 to Nw La Center Rd toward La Center (0.34 miles)
3. Turn left on NW 319th St (NW La Center Rd) (0.54 miles)
4. Continue on NW 41st Ave (0.75 miles)
5. Turn left on NW Cd Hale Rd (-)
6. Turn left on NW Cd Hale Rd (-)
7. Follow NW Cd Hale Rd down the hill to the river.
Foster Creek at Jackson Highway South

**Position - Location:**
- 46° 24.414', -122° 53.259'
- 46° 24' 24.8", -122° 53' 15.5"
- 46.40690, -122.88765

**Strategy Objective:**
Collection, Sorbent: Collect oil moving downstream on Foster Creek

**Implementation:**
Deploy hard boom on upstream/east side of box culvert at Jackson Highway South. Deploy multiple lengths of sorbent boom on upstream side of hard boom and on downstream/west side of roadway. Use anchor posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage from roadway, but must follow WSDOT work zone traffic control guidelines for lane closure.

**Staging Area:**
Onsite: Stage on shoulder of roadway (NE corner has small pullout) - Work Truck Only - NO TRAILERS.

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Shoulder); Heavy Vegetation; Fiber Optic Cable Crossing

**Field Notes:**
Fiber Optic Cable crosses Foster Creek on upstream/east side of roadway. Contact Sprint before digging in area; call 1-800-521-0579. Limited shoulder - NO TRAILERS; if needed, stage trailer at WDFW "I-5" Water Access Site (SA-CWLZR-29.8).

**Watercourse:**
Creek - Foster Creek

**Resources at Risk:**
Downstream Resources, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>6 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 1/2&quot; poly line</td>
<td>100 Feet</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Foster Creek at Jackson Highway South

**FOSTC-1.8 Photo:** At strategy location off Jackson Highway South, downstream side of roadway on creek right looking towards box culvert and creek left. Roadway at top of photograph.

### Site Contact

**Nearest Address**

904 Jackson Hwy S  
Toledo, WA 98591

### Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)  
2. Turn left at the end of exit ramp to travel east on Rogers Road  
3. After 0.2mi, turn left to head north on Jackson Highway South  
4. After 1.4mi, you have reached the strategy location. Stage work truck on shoulder of roadway after creek at small pullout after guardrail – NO TRAILERS. If needed, trailer can be staged at WDFW "I-5" Water Access Site (SA-CWLZR-29.8) located about 1.2mi away (Left on Mandy Rd ~0.6mi down the road, then stay on Mandy Rd for 0.6mi and WDFW site will be on your right).
### Gee Creek - N Main Avenue

**Position - Location:** 45° 49.565', -122° 44.811'  
**45° 49' 33.9", -122° 44' 48.7"**  
45.82608, -122.74685  
Ridgefield

**Strategy Objective:** Collection  : Collect oil moving downstream on Gee Creek

**Implementation:** Using 100ft length of boom, line banks to form collection pocket on upstream/east side of roadway in front of culvert. Deploy multiple lengths of sorbent boom within hard boom area to collect product moving downstream. If needed, use vac-truck or skimmer with storage for collection. Use line to secure ends of boom to anchoring posts, trees, or existing structures. Replace saturated sorbents as needed. Use line to secure ends of sorbent boom to bridge, anchoring posts, or existing structures nearby. Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site.

**Staging Area:**  
Onsite: Stage on small pull-out on east side of roadway near site at start of private driveway.

**Site Safety:**  
Slips, Trips, Falls; Water Hazard; Roadway Hazard/Traffic; Heavy Vegetation; Mud/Muddy

**Field Notes:**  
Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is very limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.

**Watercourse:**  
Creek - Gee Creek

**Resources at Risk:**  
Downstream Resources, Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Chinook

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8” poly line</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage (if collection)</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Gee Creek - N Main Avenue

GEEC-3.8 Photo: At strategy location on east side of N Main Avenue in Ridgefield, looking upstream (SE) from roadway.

**Site Contact**

**No Information**
Not Determined:

**Nearest Address**

932 N Main Ave
Ridgefield, WA  98642

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 14 (Hwy 501 Ridgefield/Battle Ground)
2. Turn right at the end of exit ramp to travel west on NW269th Street/Pioneer Street
3. After 0.1mi, stay straight through the traffic circle to remain on NW269th Street/Pioneer Street (Hwy 501).
4. After 0.6mi, stay straight through the traffic circle to remain on NW269th Street/Pioneer Street (Hwy 501).
5. After 2.1mi, turn right onto N Main Avenue
6. After 0.8mi, the strategy location and pullout will be on your right. Follow WSDOT work zone traffic control guidelines. WORK TRUCK ONLY - NO TRAILERS.
### Gee Creek - Abrams Park

**GEEC-4.7**

### Position - Location:
- **Gee Creek - Abrams Park**
- **Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway/Bridge Hazard; Vegetation; Steep Banks/Concrete Structures
- **Staging Area:** Onsite: Stage in parking area near entrance of Abrams Park (near bridge)
- **Watercourse:** Creek - Gee Creek
- **Resources at Risk:** Downstream Resources, Freshwater Wildlife, Salmon - Chinook

### Implementation:
Secure end of 100ft length of boom to bank on creek left on downstream side of roadway bridge near Point A (45.81792, -122.738854) at entrance to park. Using line, extend boom across to creek right and secure to concrete bank wall near walking bridge and downstream (Point B). Use multiple layers of sorbent boom or sweep across creek within boomed area and upstream. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

### Staging Area:
- Onsite: Stage in parking area near entrance of Abrams Park (near bridge)

### Site Safety:
- Slips, Trips, Falls; Water Hazard; Roadway/Bridge Hazard; Vegetation; Steep Banks/Concrete Structures

### Field Notes:
Contact City of Ridgefield for After-Hours Access: call 360-518-8146

### Watercourse:
- Creek - Gee Creek

### Resources at Risk:
- Downstream Resources, Freshwater Wildlife, Salmon - Chinook

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>4 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - B3</td>
<td>100 Feet</td>
<td>(River Boom) or equivalent</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck / Skimmer and Storage</td>
<td>1 Each</td>
<td>(if collection)</td>
</tr>
</tbody>
</table>

### Recommended Personnel
- 2 Laborer
- 1 Supervisor
Gee Creek - Abrams Park

GEEC-4.7 Photo: At strategy location in Abrams Park, looking downstream/NW from roadway bridge near park entrance.

Site Contact

City of Ridgefield - Public Works
Land/Property Contact: Afterhours: 360-518-8146
301 N 3rd Avenue
Ridgefield, WA 98642
360-887-3897

Nearest Address

445 Abrams Park Rd
Ridgefield, WA 98642

Driving Directions

1. Head south on Interstate-5 and Take Exit 14 (Hwy 501 Ridgefield/Battle Ground)
2. Turn right at the end of exit ramp to travel west on NW 269th Street/Pioneer Street
3. After 0.1mi, stay straight through the traffic circle to remain on NW 269th Street/Pioneer Street (Hwy 501)
4. After 0.6mi, stay straight through the traffic circle to remain on NW 269th Street/Pioneer Street (Hwy 501)
5. After 2.0mi, turn right onto N 5th Avenue
6. After 0.2mi, turn right onto Division Street
7. After 0.2mi, at bottom of hill, you have reached the strategy site. Cross bridge into park and stage in parking area closest to bridge. Notify City of Ridgefield Public Works; call 360-887-3897 (after-hours call 360-518-8146).
Gee Creek at NW Royle Road

**Position - Location:** 45° 47' 981", -122° 42' 379"  
45° 47' 58.9", -122° 42' 22.8"  
45.79969, -122.70632  
Ridgefield

**Strategy Objective:** Sorbent: Collect oil moving downstream on Gee Creek using sorbents

**Implementation:** Deploy multiple lengths of sorbent boom on upstream/SE side of creek off NW Royle Road. Use line to secure ends of sorbent boom to anchoring posts, trees, or existing structures nearby. Replace saturated sorbents as needed.

**Staging Area:** Onsite: Stage on shoulder of road or field access dirt road (just west of strategy site) - NO TRAILERS

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard/Fast Traffic; Heavy Vegetation; Mud/Muddy

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Parking is extremely limited at this location and on the shoulder of the roadway - DO NOT BRING AN EQUIPMENT TRAILER to this site.

**Watercourse:** Creek - Gee Creek

**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Salmon - Chinook

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 3/8&quot; poly line</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

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<thead>
<tr>
<th>Quantity</th>
<th>Role</th>
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<tbody>
<tr>
<td>2</td>
<td>Laborer</td>
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<tr>
<td>1</td>
<td>Supervisor</td>
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</table>
Gee Creek at NW Royle Road

GEEC-6.9 Photo: On Royle Road near strategy location looking WSW. Parking extremely limited in area including roadway shoulder.

<table>
<thead>
<tr>
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</tr>
</thead>
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<tr>
<th>Nearest Address</th>
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<tbody>
<tr>
<td>1984 NW Royle Rd</td>
</tr>
<tr>
<td>Ridgefield, WA  98642</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head south on Interstate-5 and Take Exit 14 (Hwy 501 Ridgefield/Battle Ground)</td>
</tr>
<tr>
<td>2. Turn right at the end of exit ramp to travel west on NW 269th Street/Pioneer Street</td>
</tr>
<tr>
<td>3. After 0.1mi, stay straight through the traffic circle to remain on NW 269th Street/Pioneer Street (Hwy 501).</td>
</tr>
<tr>
<td>4. After 0.6mi, take the 3rd exit within the traffic circle to head south on S 45th Ave (becomes NW Royle Road).</td>
</tr>
<tr>
<td>5. After 1.0mi, the strategy location will be on your left near the bottom of the hill. Stage on shoulder of road or field access dirt road (just west of strategy site) - follow WSDOT work zone traffic control guidelines. WORK TRUCK ONLY - NO TRAILERS.</td>
</tr>
</tbody>
</table>
### Gee Creek Tributary - Interstate-5 Rest Area (North Bound)

**Position - Location:** 45° 46.600', -122° 40.179'  
45° 46' 36.0", -122° 40' 10.8"  
45.77667, -122.66966  
Ridgefield

**Strategy Objective:** Sorbent: Collect oil moving downstream on tributary to Gee Creek using sorbent

**Implementation:** Deploy multiple lengths of sorbent boom on upstream and downstream sides of Gee Creek Tributary from walking trail west of auto parking side of Interstate Rest Area (walking trail is on west side of parking lot south of fenced retention pond area). Use anchor posts, trees, or existing structures to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed. Additionally, consider using catch basin socks or sorbent material in parking area catch basins if spill is from automobile or commercial truck at rest area.

**Staging Area:** Onsite: Stage in west side/automobile parking lot at Interstate-5 Gee Creek Rest Area off Exit 11 (North Bound)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Trail Hazards; Vegetation; Mud/Muddy; Vehicle Traffic in Parking Area

**Field Notes:** Rest Area maintained by WSDOT Southwest Region - Maintenance (Area 1); 360-905-2240 or 360-905-2136. WSDOT Environmental/Hazmat at 360-905-2186.

**Watercourse:** Creek - Gee Creek Tributary

**Resources at Risk:** Downstream Resources, Freshwater Wildlife, Salmon - Chinook

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>Anchoring System(s)- Shoreside</td>
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<td>Boom - Sorbent</td>
<td>200 Feet</td>
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<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
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### Recommended Personnel

<table>
<thead>
<tr>
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<th>Quantity</th>
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<tbody>
<tr>
<td>Laborer</td>
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<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Gee Creek Tributary - Interstate-5 Rest Area (North Bound)

GEECTG-1.1 Photo: Looking at creek from walking trail on west side of Interstate-5 Gee Creek Rest Area off Exit 11 (North Bound)

Site Contact

WSDOT Southwest Region
Land/Property Contact: Maintenance Office
4200 Main Street
Vancouver, WA 98668
360.905.2240

Nearest Address

21512 NE 10th Ave
Ridgefield, WA 98642

Driving Directions

1. Head north on interstate 5 and take Exit 11 (NE 219th Street)
2. Keep left within ramp and follow road towards Gee Creek Rest Area
3. After 0.3 miles, keep left to enter the car/automobile side of the rest area.
4. After 0.1mi, park in spaces to your left (west side) near walking trail and fenced area. Stage equipment in parking area. Follow trail to creek/strategy location.
## Hill Creek at Miekler Road

**Position - Location:** 46° 22.038', -122° 55.760'  
46° 22' 2.3", -122° 55' 45.6"  
46.36731, -122.92933  
Castle Rock

### Strategy Objective
Collect oil moving downstream on Hill Creek

### Implementation
On upstream (north) side of roadway, deploy hard boom across creek with multiple lengths of sorbent boom upstream of the hard boom so product moving downstream can be collected. Also deploy sorbent boom downstream of hard boom for secondary collection. Use anchoring posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use Vac Truck from roadway or skimmer/portable storage for collection.

### Staging Area
Onsite: Stage work truck on shoulder of roadway before or after bridge; NO TRAILERS.

### Site Safety
Slips, Trips, Falls; Water Hazard; Roadway - Limited Shoulder; Heavy Vegetation; Mud/Muddy; Unstable Banks

### Field Notes
Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site; stage trailers at SA-CWLZR-24.7 (end of Miekler Rd). Follow WSDOT work zone traffic control guidelines.

### Watercourse
Creek - Hill Creek

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>100 Feet</td>
<td></td>
</tr>
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</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Hill Creek at Miekler Road

HILLC-0.9 Photo: At strategy location on Hill Creek (creek left) looking down stream to creek right from the underside of Miekler Road Bridge over the creek.

Site Contact

Nearest Address

9800 Barnes Dr
Castle Rock, WA 98611

Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road
3. After ~0.1mi, turn left onto Barnes Drive
4. After 2.1mi, turn right onto Imboden Road
5. After 0.2mi, stay left to travel on Miekler Road
6. After ~0.1mi, you have reached the strategy location. Stage on roadway shoulder before or after bridge. NO TRAILERS – Trailers can be staged at end of road at WDFW Olequa Creek Water Access (SA-CWLZR-24.7).
### Hill Creek at Barnes Drive

**Position - Location:** 46° 22.697', -122° 54.847'  
46° 22' 41.8", -122° 54' 50.8"  
46.37829, -122.91412  
Castle Rock

**Strategy Objective:** Collection: Collect oil moving downstream on Hill Creek

**Implementation:** On downstream (west) side of roadway bridge, form collection pocket by deploying hard boom across downstream side of small pool area. Then deploy multiple lengths of sorbent boom within the pool, upstream of the hard boom so product moving downstream can be collected. Also deploy sorbent boom downstream of hard boom for secondary collection. Use anchoring posts, trees, or existing structures to secure boom to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use Vac Truck from roadway or skimmer/storage for collection.

**Staging Area:** Onsite: Stage work truck on shoulder of roadway before or after bridge; NO TRAILERS.

**Site Safety:** Lips, Trips, Falls; Water Hazard; Roadway - Limited Shoulder; Heavy Vegetation; Mud/Muddy; Unstable Banks

**Field Notes:** Follow WSDOT work zone traffic control guidelines - limited shoulder area, DO NOT BRING AN EQUIPMENT TRAILER to this site; they can be staged at corner of Barnes Drive and Rogers Road (1.0mi NE of site).

**Watercourse:** Creek - Hill Creek

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Foot</td>
<td>100</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>Foot</td>
<td>200</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>Each</td>
<td>1</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>Foot</td>
<td>100</td>
<td>Line - 1/2&quot; poly line</td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Hill Creek at Barnes Drive

HILLC-2.1 Photo: At strategy location on Hill Creek looking at small pool area on downstream side of bridge from Barnes Road.

**Site Contact**

**Nearest Address**

10050 Barnes Dr
Castle Rock, WA 98611

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road
3. After 0.1mi, turn left onto Barnes Drive
4. After 1.0mi, the strategy location will be on your right. Stage work truck on roadway shoulder before or after bridge over the creek. Follow WSDOT work zone traffic control guidelines - limited shoulder area.
**WDFW Boat Launch on Kalama River (WA) -- KLMAR-0.7**

**Position - Location:** 46° 2.320’, -122° 51.882’  
46° 2’ 19.2”, -122° 51’ 52.9”  
46.03867, -122.86470  
Kalama

**Strategy Objective:** Collection, Deflection: Collect oil coming downstream on Kalama River to prevent it from entering Columbia River

**Implementation:** From WDFW ramp, Crew 2 launch workboat towing line attached to 700 ft of boom onshore river right. Crew 1 remain onshore river right at boat launch and feed boom across to Crew 2 on river left. Crew 2 use shoreside anchor posts to anchor to river left upstream of side channel; anchor to river center to create steep deflection/collection angle. Anchor every 100-150ft. along boom length or as appropriate for flow conditions. Crew 1 anchor to river right just upstream of boat ramp. Collect oil with vac truck staged at boat ramp.

**Staging Area:** Onsite: Stage at SA-KLMAR-0.7, WDFW boat launch parking area.

**Site Safety:** Slips, trips, and falls. Use caution near heavily vegetated shoreline and beware of possible submerged hazards.

**Field Notes:** Site is a WDFW boat launch used frequently by boaters and fishermen. River bends, widens, and slows in this location.

**Watercourse:** River - With Tidal Influence - Kalama River

**Resources at Risk:** Downstream Resources

**Recommended Equipment**

- 5 Each Anchor - Danforth (or other appropriate type)
- 2 Each Anchoring System(s)- Shoreside
- 700 Feet Boom - B2 (Contractor 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
WDFW Boat Launch on Kalama River (WA)

KLMAR-0.7 Photo: River right on Kalama River at south end of boat launch parking area

**Site Contact**

WDFW Region 5  
Primary Contact: Vancouver  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

222 Kalama River Rd.  
Kalama, WA 98625

**Driving Directions**

From I-5 S, Longview, WA  
1. Go south on I-5  
2. At exit 32 bear right onto ramp to Kalama River Road (0.26 miles)  
3. Turn right on Kalama River Rd (0.5 miles)  
4. Turn left on N Hendrickson Drive and take immediate left down dirt road to boat launch.
Kalama River near Camp Kalama RV Park

**Position - Location:** 46° 2.332', -122° 51.265'  
46° 2’ 19.9", -122° 51’ 15.9"  
46.03886, -122.85442  
Kalama

**Strategy Objective:** Collect oil moving downstream on the Kalama River

**Implementation:** Secure end of 300ft boom to bank on Kalama River (river right) at/near Point A (46.038604, -122.854642). Using workboat, extend boom upstream and across to sand bar/pebble beach on river left, securing it to shore at/near Point B (46.039141, -122.85417) after slack in boom is removed. Use shoreside anchoring posts, trees, or existing structures to keep boom secured to shore. Use additional anchoring systems as needed to keep boom secure in water. Adjust strategy as needed based on conditions. Steep cut bank on river right would make it difficult to hand launch a boat from this location.

**Staging Area:** Onsite: Large grass field, but on private property.

**Site Safety:** Slips, trips and falls, steep bank, river current, slippery, river is shallow in spots

**Field Notes:** Charlene DesRosier. 360.673.2456. Camp Kalama RV Park

**Watercourse:** River - Kalama River

**Resources at Risk:** Freshwater Wildlife, Salmon (Coho, Chinook and Chum), Steelhead, Waterfowl, Winter Steelhead

**Recommended Equipment**

- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s)- Shoreside
- 300 Feet Boom - B2 (Contractor Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 2 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
Kalama River near Camp Kalama RV Park

KLMAR-1.5 Photo: Photo taken looking North

Site Contact

No Information
Not Determined:

Nearest Address

5055 Meeker Dr
Kalama, WA 98625

Driving Directions

1. From Kelso, head south on I-5
2. At exit 32 bear right onto ramp to Kalama River Road (0.26 miles)
3. Turn left on Kalama River Rd (0.18 miles)
4. Turn right on Meeker Dr (0.21 miles)
5. Finish at Camp Kalama RV Park on the right 5055 Meeker Dr, 98625
Lacamas Creek at Highway 506

**Position - Location:**
- 46° 24.705', -122° 55.566'
- 46° 24' 42.3", -122° 55' 34.0" (46.41175, -122.92610)
- Toledo

**Strategy Objective:** Collection: Collect oil moving downstream on Lacamas Creek

**Implementation:** On upstream/north side of Hwy 506 Bridge over creek, deploy hard boom at an angle from creek left upstream and across to creek right (best achievable angle based on stream flow and safe access). Deploy multiple lengths of sorbent boom upstream and downstream of hard boom. Use anchoring posts or trees to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/storage for collection on creek left (booster pump needed). Shoulder space limited – NO TRAILERS.

**Staging Area:** Onsite: Stage work truck on north shoulder of roadway before or after bridge; limited shoulder space - NO TRAILERS.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway/Traffic Hazard; Steep Banks on Creek Right; Vegetation; Mud/Muddy

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited. Slope down to creek left is steep; use 1/2" line for safe descent if needed.

**Watercourse:** Creek - Lacamas Creek

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

**Recommended Equipment**
- 4 Each Anchoring System(s)- Shoreside
- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Bridle(s) - Hand (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 100 Feet Line - 1/2" poly line
- 100 Feet Line - 3/8" poly line
- 1 Each Machete(s) - (or other vegetation cutting tool)

**Recommended Personnel**
- 2 Laborer
- 1 Supervisor
Lacamas Creek at Highway 506

LCMSC-0.3 Photo: At strategy location on upstream side of Hwy 506 bridge over creek (creek left), looking west and across to creek right. Bridge deck visible on left side of photo.

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
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<tbody>
<tr>
<td>Nearest Address</td>
</tr>
<tr>
<td>774 Washington 506</td>
</tr>
<tr>
<td>Toledo, WA 98591</td>
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<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)</td>
</tr>
<tr>
<td>2. Turn left at the end of exit ramp to travel west on Highway WA606.</td>
</tr>
<tr>
<td>3. After 1.8mi, the strategy location will be under the Hwy-506 Bridge over the creek. Stage work truck on north shoulder of roadway before or after bridge; limited shoulder space - NO TRAILERS.</td>
</tr>
</tbody>
</table>
### Lacamas Creek at Drews Prairie Road

**Position - Location:**

- **Onsite:** 46° 27.204', -122° 52.790'
- **Toledo:** 46° 27' 12.2", -122° 52' 47.4" 46.45339, -122.87984

**Strategy Objective:** Collection, Sorbent - Collect oil moving downstream on Lacamas Creek

**Implementation:**

- Deploy hard boom under bridge from upstream creek right to downstream creek left. Place multiple lengths of sorbent boom across creek upstream of the hard boom. Use anchor posts or existing structures to secure boom to banks; actual shoreside anchor points may vary depending on flow. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage from roadway. Follow WSDOT work zone traffic control guidelines.

**Staging Area:**

- Onsite: Stage on shoulder of road before bridge.

**Site Safety:**

- Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Shoulder); Heavy Vegetation; Steep Banks; Mud/Muddy

**Field Notes:**

- Waders or hip boots recommended. Depending on flow, equipment can be lower to creek left from bridge using line or crane truck, but must follow WSDOT work zone traffic control guidelines for lane closure.

**Watercourse:**

- Creek - Lacamas Creek

**Resources at Risk:**

- Downstream Resources, Salmon (Coho, Chinook and Chum), Steelhead

### Recommended Equipment

<table>
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<tr>
<th>Quantity</th>
<th>Item Description</th>
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<tbody>
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<td>6 Each</td>
<td>Anchoring System(s) - Shoreside</td>
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<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 1/2&quot; poly line</td>
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</table>

### Recommended Personnel

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<thead>
<tr>
<th>Quantity</th>
<th>Position</th>
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<tbody>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Lacamas Creek at Drews Prairie Road

LCMSC-4.2 Photo: At strategy location on Lacamas Creek under the Drews Prairie Road Bridge, looking upstream.

Site Contact

Nearest Address

349 Drews Prairie Rd
Toledo, WA 98591

Driving Directions

1. Head south on Interstate-5 and Take Exit 60 (Toledo-Vader Road)
2. Turn left at the end of exit ramp to travel east on Highway WA506/Toledo-Vader Road
3. After 1.3mi, turn left onto Fluckinger Road
4. After 0.5mi, turn left onto Drews Prairie Road
5. After 0.5mi, you have reached the strategy location. Stage on shoulder of road to the right/north immediately before bridge guardrail or in pullout to the right/north just after the bridge.
### Carrolls Channel - S End (WA)  LCR-71.5M

| Position - Location: | 46° 3.322', -122° 52.580' | 46° 3' 19.3", -122° 52' 34.8" | 46.05537, -122.87633 | Kalama |

**Strategy Objective:** Collect and recover oil at south end of Carrolls Channel.

**Implementation:** From BL-LCR-72.7R, launch workboat to the south end of Cottonwood Island with two 700ft. lengths of boom. Angle BM-1 upriver into main channel to collect oil, and BM-2 across Carrolls Channel to enhance collection. Anchor at AP-1 and AP-3 using shoreside anchor posts. Anchor at AP-2 and AP-4, and every 100-150ft. along boom length or as appropriate for conditions. Collect oil in collection pocket using portable skimmer and storage.

**Staging Area:** Remote: Stage at SA-LCR-72.7R, Sportsmen's Club

**Site Safety:** Shallow water and pilings. Recreational and commercial boat traffic.

**Field Notes:** Boat access only. Large beach area.

**Watercourse:** River - With Tidal Influence - Carrolls Channel

**Resources at Risk:** Downstream Habitat, Wetland Habitat

---

**Recommended Equipment**

- 12 Each Anchor - Danforth (or other appropriate type)
- 2 Each Anchoring System(s) - Shoreside
- 1400 Feet Boom - B2 (Contractor Boom) or equivalent
- 1 Each Skimmer (appropriately sized) with Portable Storage
- 1 Each Workboat(s) - of adequate size for type and amount of boom

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor

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APPENDIX 4A  295
Carrols Channel - S End (WA)

LCR-71.5M Photo: From entrance to Carrol's Channel looking NW at south end of Cottonwood Island

**Site Contact**

No Information
Not Determined:

**Nearest Address**

32 Sportsmen's Club Rd
Kalama, WA 98625

**Driving Directions**

Directions to SA-LCR-72.7R
From I-5 S, Kelso, WA
1. At exit 32 bear right onto ramp to Kalama River Road
2. Turn right on Kalama River Rd W
3. Turn left on Sportsmens Club Rd
4. Finish at 32 Sportsmens Club Rd, 98625, on the left
Carrolls Channel - S end (WA)  

**Position - Location:** 46° 3.152’, -122° 52.494’  
46° 3’ 9.1”, -122° 52’ 29.7”  
46.05253, -122.87491  
Kalama

**Strategy Objective:** Collection, Deflection: Divert oil into collection pocket and prevent it from entering Carrolls Channel.

**Implementation:** From BL-LCR-72.7R, Crew 2 deploy workboat to south opening of Carrolls Channel. Crew 1 stage 800ft. of boom onshore at Port of Kalama property and pass line to Crew 2 using line-throwing device or other means. Crew 2 anchor boom at AP-2 and every 100-150ft. along boom length or as appropriate for conditions. Crew 1 anchor at AP-1 using shoreside anchor posts. If oil is travelling upstream through channel, collect using vac truck staged on Port of Kalama property or skimmer and portable storage.

**Staging Area:** Remote: Stage at SA-LCR-72.7R, Sportsmen’s Club

**Site Safety:** Slips, trips, and falls. Water hazards. Commercial and recreational boat traffic. Boom will need to be monitored and lighted at night.

**Field Notes:** Vehicle access from east shore, Port of Kalama property.

**Watercourse:** River - Side Channel - Carrolls Channel

**Resources at Risk:** Downstream Resources, Wetland Habitat

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Each Anchor - Danforth (or other appropriate type)</td>
</tr>
<tr>
<td>1</td>
<td>Each Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>800</td>
<td>Feet Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1</td>
<td>Each Line throwing gun(s) or device(s)</td>
</tr>
<tr>
<td>1</td>
<td>Each Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1</td>
<td>Each Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boat Operator</td>
</tr>
<tr>
<td>3 Laborer</td>
</tr>
<tr>
<td>1 Supervisor</td>
</tr>
</tbody>
</table>
Carrolls Channel - S end (WA)

LCR-71.6R Photo: From entrance to Carrolls Channel, looking NE at SE side of Cottonwood Island

Site Contact

Port of Kalama
Land/Property Owner: WA
360-673-2325

Nearest Address

32 Sportsmen’s Club Rd
Kalama, WA 98625

Driving Directions

Directions to SA-LCR-72.7R
From I-5 S, Kelso, WA
1. At exit 32 bear right onto ramp to Kalama River Road
2. Turn right on Kalama River Rd W
3. Turn left on Sportsmens Club Rd
4. Finish at 32 Sportsmens Club Rd, 98625, on the left
Goble Creek (OR)

**Position - Location:** 46° 1.231', -122° 52.593' | 46° 1' 13.9", -122° 52' 35.6" | 46.02052, -122.87656 Rainier

**Strategy Objective:** Exclusion: Prevent oil from entering Goble Creek.

**Implementation:**
Launch workboat with 100ft boom from Goble Marina boat launch, BL-LCR-74.5L. Deploy boom across creek mouth and anchor at AP-1 and AP-2 using natural anchors or shoreside anchor posts. Anchor along boom length as necessary for conditions.

**Staging Area:** Remote: Stage at SA-LCR-74.5L, Goble Marina. Launch at same BL-LCR-74.5L.

**Site Safety:**
Slips, Trips, Falls, Water Hazard, & Active Railroad, expect trains on the track at any time/from either direction. Do not allow

**Field Notes:**
Railroad tracks and US-30 cross Goble Creek at this site. Salmon habitat. Peak times are Sept - Oct, Apr - May.

**Watercourse:**
River - With Tidal Influence - Columbia River

**Resources at Risk:**
Salmon Concentrations and Habitat

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**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Each</td>
<td>Anchor - Danforth (or other appropriate type)</td>
</tr>
<tr>
<td>2 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - B2 (Contractor Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Boat Operator</td>
</tr>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Goble Creek (OR)

LCR-73.7L Photo: View looking SW at mouth of Goble Creek.

Site Contact

No Information
Not Determined:

Nearest Address

70360 Columbia River Hwy
Rainier, OR 97048

Driving Directions

1. Start at I-5 S, Kelso WA
2. Go southeast on I-5 (1.88 miles)
3. At exit 36 bear right onto ramp to WA-432 W toward US-30/Longview/Kelso (0.46 miles)
4. Continue on WA-432 (3.26 miles)
5. Bear left on WA-433 (Oregon Way) (1.8 miles)
6. Continue on Lewis And Clark Brg (0.63 miles)
7. Continue (0.28 miles)
8. Make sharp left on US-30 (Lower Columbia River Hwy) (8.38 miles)
9. Finish at 70360 Columbia River Hwy, 97048, on the left
**Lewis River (A) (WA)**

<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>45° 51.486', -122° 46.430'</th>
<th>45° 51.29.2&quot;, -122° 46' 25.8&quot;</th>
<th>45.85811, -122.77383</th>
</tr>
</thead>
</table>

**Strategy Objective:** Collection: Collect oil coming downstream on Lewis River.

**Implementation:** From BL-LEWR-0.4 Crew 2 launch workboat and Crew 1 remain onshore and pass line attached to 600' of boom to Crew 2. Crew 1 anchor to AP-1 using shoreside anchor posts. Crew 2 anchor to AP-2 and anchor every 100-150ft. along boom length or as appropriate for conditions. Collect oil using vac truck staged at boat ramp.

**Staging Area:** Onsite: Stage onsite at Stevens' Moorage, SA-LEWR-0.4

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

**Field Notes:** Site access is through Stevens' Moorage, a privately owned boat launch and RV park. Contact manager before deploying strategy.

**Watercourse:** River - With Tidal Influence - Lewis River

**Resources at Risk:** Downstream Resources, Wetland Habitat

### Recommended Equipment
- 5 Each Anchor - Danforth (or other appropriate type)
- 1 Each Anchoring System(s)- Shoreside
- 600 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Line throwing gun(s) or device(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
Lewis River (A) (WA)

LEWR-0.4  Photo: River right looking at boat launch looking S toward collection point

Site Contact

Stevens’ Moorage
Primary Contact: General Manager
4005 Dike Rd.
Woodland, WA 98674
360-989-7367

Nearest Address

4005 Dike Rd.
Woodland, WA 98674

Driving Directions

Directions to SA-LEWR-0.4
From I-5 S, Ridgefield, WA
1. Make U-turn and go back on I-5 (0.11 miles)
2. At exit 21 bear right onto ramp to WA-503 E toward Woodland/Cougar (0.25 miles)
3. Turn left on WA-503 (Lewis River Rd) (0.14 miles)
4. Bear left on Goerig St (0.31 miles)
5. Bear left (0.12 miles)
6. Turn left on 2nd St (0.03 miles)
7. Bear right on Dunham Ave (0.14 miles)
8. Turn left on 5th St (0.13 miles)
9. Continue on Pekin Rd S (0.53 miles)
10. Bear right on Whalen Rd (0.54 miles)
11. Turn left on Kuhnis Rd (1.6 miles)
12. Bear right on Dike Rd SW (1.37 miles)
13. Finish at 4005 Dike Rd., 98674, on the left
**Lewis River - NW Lancaster Road**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 51.873', -122° 44.986'</th>
<th>45° 51.2', -122° 44.592'</th>
<th>45.86454, -122.74977</th>
</tr>
</thead>
</table>

| Strategy Objective: | Collection: Collect oil moving downstream on the Lewis River |

**Implementation:**
Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (45.865447, -122.749419; mid-river about 600ft upstream from mid-span of RR Bridge) and Point B (45.863633, -122.750118; downstream end of boat ramp on river left). After anchors are set, tow boom upstream and secure to anchor at Point A, then all remaining anchor points between Points A & B. At Point B secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point B.

**Staging Area:**
Onsite: Stage equipment at end of roadway near top of boat ramp (BL-LEWR-1.8)

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Road/Trail Hazards; Vegetation/Snag Hazards; Mud.

**Field Notes:**
Enter is gated and may be locked (or appear locked); If locked, notify BNSF at 800-832-5452 before entry. This site is located below RR Bridge on south side of Lewis River in Washington State at BNSF Rail Mile 119 on the Seattle Line (52).

**Watercourse:**
River - With Tidal Influence - Lewis River

**Resources at Risk:**
Downstream Resources, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead, Wetland Habitat

**Recommended Equipment**

<table>
<thead>
<tr>
<th>7 Each</th>
<th>Anchoring System(s) - (anchor, lines, floats)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>700 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
</tr>
<tr>
<td>2 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

| 1 Boat Operator |
| 3 Laborer |
| 1 Supervisor |
Lewis River - NW Lancaster Road

LEWR-1.9 Photo: At strategy location on river left looking NE towards boat ramp and the Lewis River.

Site Contact
Burlington Northern Santa Fe Railroad
Land/Property Contact:
WA
800-832-5452

Nearest Address
33301 NW Lancaster Rd
Ridgefield, WA 98642

Driving Directions
1. Head south on interstate 5 and take Exit 14 (Hwy 501 towards Ridgefield/Battle Ground)
2. At end of ramp turn right onto Hwy 501 (NW 269th St/Pioneer St)
3. After 0.1mi, stay straight through the traffic circle to stay on NW 269th St/Pioneer Street
4. After 0.6mi, take the first right within the traffic circle, onto N 45th Ave (becomes NW 31st Ave after 0.5mi)
5. After 1.0mi, turn left onto NW 289th Street
6. After 1.5mi, take slight right onto NW 61st Ave (becomes NW 291st Street after 400ft)
7. After ~0.5mi, turn right onto NW 71st Avenue (becomes NW Lancaster Rd after 1.6mi)
8. After 2.3mi, at the end of Lancaster Road, the boat ramp will be to your right (lower dirt path).
Lewis River along dike road

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 52.314', -122° 44.476'</th>
<th>45° 52' 18.8&quot;, -122° 44' 28.6&quot;</th>
<th>45.87190, -122.74127</th>
</tr>
</thead>
</table>

| Strategy Objective: | Collection: Collect oil moving downstream on the Lewis River |

| Implementation: | Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A. |

| Staging Area: | Onsite: Stage equipment along dike path. |

| Site Safety: | Slips, Trips, Falls; Water Hazard; |

| Field Notes: | Use workboat to tow boom to site |

| Watercourse: | River - Lewis River |

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

**Recommended Equipment**

- 4 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 400 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
- Supervisor

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APPENDIX 4A
Site Contact

No Information
Not Determined:

Nearest Address

1123 Pekin Rd S
Woodland, WA 98674

Driving Directions

1. From Kalama, take I-5 S
2. Take exit 21 to WA-503 E toward Woodland/Cougar (0.25 miles)
3. Turn right onto Scott Rd (0.14 miles)
4. Turn left on N Pekin Rd (0.02 miles)
5. Turn left onto Davidson Ave (0.8 miles)
6. Turn right at second cross street onto 5th St (0.55 miles)
7. Continue onto Pekin Rd S (1.43 miles)
8. Turn left onto Dike Rd.
Lewis River - WDFW Water Access Site "Martin"  LEWR-3.4

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>Collection: Collect oil moving downstream on the Lewis River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Safety:</td>
<td>Stage in parking lot of WDFW Water Access Site &quot;Martin&quot; near boat ramp (SA-LEWR-3.3)</td>
</tr>
<tr>
<td>Field Notes:</td>
<td>Slips, Trips, Falls; Water Hazard/Snags Along Shore; Vehicle Hazard (Parking Area); Vegetation</td>
</tr>
<tr>
<td>Staging Area:</td>
<td>Onsite: Staging area at parking lot of WDFW Water Access Site &quot;Martin&quot; near boat ramp</td>
</tr>
<tr>
<td>Strategy Objective:</td>
<td>Collection: Collect oil moving downstream on the Lewis River</td>
</tr>
<tr>
<td>Resources at Risk:</td>
<td>Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead</td>
</tr>
<tr>
<td>Watercourse:</td>
<td>River - With Tidal Influence - Lewis River</td>
</tr>
</tbody>
</table>

**Implementation:**
Using workboat, set anchor systems about every 100ft in relatively straight line between Point A (45.865988, -122.722649) on river left and Point B (45.867794, -122.725006) downstream on river right. Tow 900ft boom upstream and across to river left and secure to shore at/near Point A. Extend boom downstream towards river right, securing it to all in-river anchor points as you go. Finally, secure boom to shore at/near Point B on river right along upstream side of boat ramp. Use anchoring posts, trees, or existing structures to secure boom to banks. Vac-truck or skimmer collection at Point B.

**Recommended Equipment**
- 8 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s) - Shoreside
- 900 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 2 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
Lewis River - WDFW Water Access Site "Martin"

LEWR-3.4 Photo: On river right at WDFW Water Access Site "Martin" on the Lewis River looking upstream and across to river left in background, beyond the fallen tree/snag in water along river bank.

**Site Contact**

Washington Department of Fish and Wildlife  
Land/Property Contact : Region 5  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

1242 S Pekin Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp turn right onto W Scott Avenue  
3. After 0.5mi, turn left onto N Pekin Road  
4. After 0.9mi, turn left onto Davidson Avenue  
5. After 0.2mi, turn right onto 5th Street (becoming S Pekin Road after 0.2mi)  
6. After 2.3mi, stay left to remain on S Pekin Road  
7. After 0.5mi (at end of the road) you will have reached WDFW Water Access Site "Martin." Stage and launch boat from this location.
**Lewis River**

<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>45° 52.351', -122° 43.395'</th>
<th>45° 52' 21.1&quot;, -122° 43' 23.7&quot;</th>
<th>45.87252, -122.72324</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy Objective:</strong></td>
<td>Collection : Collect oil moving downstream on the Lewis River</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Remote: Stage equipment along dike trail

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

**Field Notes:** Use workboat to tow boom to site. Lots of open farmland on the west side of the bank. Room to park equipment

**Watercourse:** River - Lewis River

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
<td>3 Each</td>
<td></td>
</tr>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>300 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Lewis River

LEWR-4.1 Photo: No photograph currently available

Site Contact

No Information
Not Determined:

Nearest Address

1148 Pekin Rd S
Woodlawn, WA 98674

Driving Directions

1. From Kalama, take I-5 S
2. Take exit 21 to WA-503 E toward Woodland/Cougar (0.25 miles)
3. Turn right onto Scott Rd (0.14 miles)
4. Turn left on N Pekin Rd (0.02 miles)
5. Turn left onto Davidson Ave (0.8 miles)
6. Turn right at second cross street onto 5th St (0.55 miles)
7. Continue onto Pekin Rd S (1.43 miles)
8. Turn left onto Dike Rd.
**Lewis River along dike path**

**Position - Location:** 45° 52.868', -122° 43.964'  
45° 52' 52.1", -122° 43' 57.9"  
45.88114, -122.73274  
Woodland

**Strategy Objective:** Collect oil moving downstream on the Lewis River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A and Point B. After anchors are set, tow boom upstream and secure to anchor at Point B, then all remaining anchor points between Points A & B. At Point A secure boom to bank using anchoring posts or existing structures. Use vac-truck or skimmer with storage for collection at Point A.

**Staging Area:** Onsite: Stage equipment on dike path

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation

**Field Notes:** Inform/coordinate response activities with nearby property owners as needed.

**Watercourse:** River - Lewis River

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

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**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Each</td>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>400 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
</tr>
</tbody>
</table>

---

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Boat Operator</td>
</tr>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Lewis River along dike path

LEWR-5.0 Photo: No photograph currently available

Site Contact

No Information
Not Determined:

Nearest Address

676 S Pekin Rd
Woodland, WA 98674

Driving Directions

1. From Kalama, take I-5 S
2. Take exit 21 to WA-503 E toward Woodland/Cougar (0.25 miles)
3. Turn left on WA-503 (Lewis River Rd) (0.14 miles)
4. Bear left on Goerig St (0.02 miles)
5. Turn left on Lakeshore Dr (0.8 miles)
6. Continue on Pinkerton Dr (0.55 miles)
7. Turn left on Pekin Rd S (0.38 miles)
8. Turn left onto dike trail and follow to site.
# Lewis River - North of NW 15th Avenue

**Position - Location:** 45° 56.268', -122° 41.095'  
**Strategy Objective:** Exclusion: Prevent oil from entering side channel on river left

**Implementation:** Using workboat, transport 200ft hard boom downstream about ~0.9mi to strategy location on river left at entrance to side channel. Secure end of boom to bank immediately upstream of channel entrance at/near Point A (45.93781, -122.684623). Float boom downstream and across channel entrance (riverside of the pilings), pull boom tight, and secure to bank immediately downstream of channel entrance at/near Point B (45.937796, -122.685193). Use anchoring posts, trees, or existing structures to secure boom to river banks. Back hard boom with multiple lengths of sorbent to reduce sheen.

**Staging Area:** Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area; Pilings at Side Channel Entrance

**Field Notes:** Strategy location is on river left at entrance to side channel about ~0.9mi downstream from Lewis River Golf Club Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4). Use caution - pilings present at side channel entrance.

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>2 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - B3 (River Boom)</td>
<td>200 Feet</td>
<td>or equivalent</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s)</td>
<td>1 Each</td>
<td>Towing (appropriately sized for boom)</td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - (jet drive)</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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</thead>
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<tr>
<td>Boat Operator</td>
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<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
**Lewis River - North of NW 15th Avenue**

**Site Contact**

**Nearest Address**

3209 Old Lewis River Rd
Woodland, WA 98674

**Driving Directions**

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy location is ~0.9mi downstream on river left.

LEWR-11.5 Photo: No photograph currently available
**Lewis River at WDFW Water Access Site "Island"**  
**Position - Location:** 45° 56.337', -122° 40.923'  
**Strategy Objective:** Collection: Collect oil moving downstream on Lewis River (Right Channel)

**Implementation:** Using workboat, transport 400ft hard boom upstream and across to right channel left and secure end of boom to shore at/near Point A (45.938581, -122.681752). From Point A, float boom downstream and across to river right, anchoring boom every 100ft or as needed based on stream flow conditions. Finally, pull boom tight and secure to river right at/near Point B (45.939372, -122.682394; south side of boat ramp at BL-LEWR-11.7). Use anchor posts or existing structures to secure boom ends to river banks. Use vac-truck or skimmer/portable storage for collection at/near Point B.

**Staging Area:** Onsite: Stage in parking area of WDFW Water Access Site "Island" (SA-LEWR-11.7 / BL-LEWR-11.7)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area

**Field Notes:** Site located at WDFW "Island" Water Access Site. Location is open year round; for more information contact WDFW Region 5 at 360-696-6211 or TeamVancouver@dfw.wa.gov.

**Watercourse:** River - Below a Dam - Lewis River (Right Channel)

**Resources at Risk:** Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

- 3 Each Anchoring System(s) - (anchor, lines, floats)
- 2 Each Anchoring System(s)- Shoreside
- 400 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 1 Each Vac Truck or Skimmer and Storage (if collection)
- 1 Each Workboat(s) - (jet drive)

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Lewis River at WDFW Water Access Site "Island"

LEWR-11.7

No Photograph Available

LEWR-11.7 Photo: No photograph currently available

Site Contact

WDFW Region 5
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

3020 Lewis River Rd
Woodland, WA 98674

Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 4.9mi, turn right into WDFW Lewis River Water Access Site. Stage in parking lot near boat ramp.
Lewis River - Northwest of NW Polar Drive  

**Position - Location:** 45° 56.282', -122° 40.805'  
**Strategy Objective:** Deflection: Deflect oil away from side channel on river right

**Implementation:** Using workboat, transport 200ft hard boom downstream about ~0.6mi to strategy location on river right, ~200ft upstream from end of island at side channel entrance. Secure boom end to river right at/near Point A (45.938113, -122.679661) using anchoring posts or trees. Float boom downstream and out into the river, anchoring end of boom at/near Point B (45.938009, -122.680423). Ensure additional anchor(s) are utilized as boom is deployed. Number of anchors needed and actual boom angle greatly depend on stream flow conditions; modify strategy as needed to achieve deflection.

**Staging Area:** Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area; Vegetation on River Banks

**Field Notes:** Strategy location is on river right at entrance to side channel about ~0.6mi downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4).

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

---

**Recommended Equipment**

- 2 Each Anchoring System(s) - (anchor, lines, floats)
- 1 Each Anchoring System(s) - Shoreside
- 200 Feet Boom - B3 (River Boom) or equivalent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 1 Each Workboat(s) - (jet drive)

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Lewis River - Northwest of NW Polar Drive

LEWR-11.8 Photo: No photograph currently available

Site Contact

Nearest Address

3209 Old Lewis River Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue strait to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy location is ~0.6mi downstream on river right.
**Lewis River - Fish Pens at Side Channel Entrance t**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 56.264', -122° 40.207'</th>
<th>45° 56' 15.8&quot;, -122° 40' 12.4&quot;</th>
<th>45.93773, -122.67012</th>
<th>Woodland</th>
</tr>
</thead>
</table>

**Strategy Objective:** Deflection: Deflect oil away from fish pens near entrance to Houghton Creek

**Implementation:** Using workboat, transport 300ft hard boom downstream about ~0.2mi to strategy location on river right (about ~200ft upstream from fish pens). Secure boom end to river right at/near Point A (45.937679, -122.669443) using anchoring posts or trees. Float boom across side channel entrance, riverside of the fish pens. Anchor remaining boom end at/near Point B (45.937773, -122.670562). Ensure additional anchors are utilized as boom is deployed. Number of anchors and actual boom angle greatly depend on stream flow conditions; modify strategy as needed to achieve deflection.

**Staging Area:** Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area; Vegetation on River Banks

**Field Notes:** Strategy location is on river right about ~200ft upstream of fish pens, ~0.2mi downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4).

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Fish Pens

### Recommended Equipment

| 3 Each | Anchoring System(s) - (anchor, lines, floats) |
| 1 Each | Anchoring System(s)- Shoreside |
| 300 Feet | Boom - B3 (River Boom) or equivalent |
| 1 Each | Bridle(s) - Towing (appropriately sized for boom) |
| 1 Each | Heaving Line(s) |
| 1 Each | Workboat(s) - (jet drive) |

### Recommended Personnel

| 1 Boat Operator |
| 2 Laborer |
| 1 Supervisor |
Lewis River - Fish Pens at Side Channel Entrance

**Site Contact**

**Nearest Address**

3209 Old Lewis River Rd
Woodland, WA 98674

**Driving Directions**

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue strait to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy location is ~0.2mi downstream on river right.
**Lewis River - Downstream from Lewis River Golf Cou**

| Position - Location: | 45° 56.191’, -122° 40.042’ | 45° 56’ 11.5", -122° 40’ 2.5" | 45.93652, -122.66736 | Woodland |

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area; Vegetation on River Banks

**Strategy Objective:**
Collection: Collect oil moving downstream on the Lewis River

**Implementation:**
Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (45.936139, -122.667075; about ~200ft west/riverside of boat ramp) and Point B (45.93684, -122.667576; on river right ~400ft downstream from ramp. After anchors are set, tow boom out from boat ramp and secure end to anchor at/near Point A, then all remaining anchor points between Points A and B as boom is deployed. Finally, secure boom end to bank at Point B using anchor posts. Use vac-truck or skimmer/portable storage for collection at/near Point B.

**Staging Area:**
Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

**Watercourse:**
River - Below a Dam - Lewis River

**Resources at Risk:**
Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead

**Strategy shoreside location (Point B) is on river right about ~400ft downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4). Dirt road that leads NW from ramp will take you to strategy shoreside location.

**Recommended Equipment**

- **Boat Launch Location:**
  - 3 Each: Anchoring System(s) - (anchor, lines, floats)
  - 1 Each: Anchoring System(s) - Shoreside
  - 300 Feet: Boom - B3 (River Boom) or equivalent
  - 1 Each: Bridle(s) - Towing (appropriately sized for boom)
  - 1 Each: Heaving Line(s)
  - 1 Each: Vac Truck or Skimmer and Storage (if collection)
  - 1 Each: Workboat(s) - (jet drive)

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Site Contact

Nearest Address

3209 Old Lewis River Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy shoreside location is at end of 400ft dirt road that leads NW from boat ramp area.
## Lewis River - Downstream from Lewis River Golf Cou LEWR-12.3b

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 56.220', -122° 40.100'</th>
<th>45° 56' 13.2&quot;, -122° 40' 6.0&quot;</th>
<th>45.93700, -122.66833</th>
<th>Woodland</th>
</tr>
</thead>
</table>

### Strategy Objective:
Deflection: Deflect oil away from river right on the Lewis River

### Implementation:
Using workboat, transport 300ft hard boom downstream about ~500ft to strategy's shoreside location on river right. Secure boom end to bank at/near Point A (45.936981, -122.667798), using anchoring posts or trees. Float boom downstream and out into river, anchoring the remaining boom end at/near Point B (45.937091, -122.668902; ~120ft out from river right). Ensure additional anchors are utilized as boom is deployed. Number of anchors and actual boom angle greatly depend on stream flow conditions; modify strategy as needed to achieve deflection.

### Staging Area:
Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

### Site Safety:
Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area; Vegetation on River Banks

### Field Notes:
Strategy shoreside location (Point A) is on river right about ~500ft downstream from Lewis River Golf Course Boat Ramp (SA-LEWR-12.4, BL-LEWR-12.4). Trail at end of dirt road that leads NW from ramp will take you to strategy shoreside location.

### Watercourse:
River - Below a Dam - Lewis River

### Resources at Risk:
Fish Pens

### Recommended Equipment

<table>
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<tr>
<th>Number</th>
<th>Item</th>
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<tr>
<td>3 Each</td>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
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<tr>
<td>1 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>300 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Workboat(s) - (jet drive)</td>
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### Recommended Personnel

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<tr>
<th>Number</th>
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<tr>
<td>1</td>
<td>Boat Operator</td>
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<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
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</table>

---

**APPENDIX 4A**
**Site Contact**

**Nearest Address**

3209 Old Lewis River Rd  
Woodland, WA 98674

---

**Driving Directions**

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue strait to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy shoreside location is on trail about ~80ft beyond end of 400ft dirt road that leads NW from boat ramp area.
Lewis River at the Lewis River Golf Course

**Position - Location:**
Lewis River at the Lewis River Golf Course

**Strategy Objective:**
Collection: Collect oil moving downstream on the Lewis River

**Implementation:**
Using workboat, set anchor systems every 100 ft, or as needed based on flow, in relatively straight line between Point A (45.935021, -122.665124, ~145 ft out from river right) and Point B (45.935676, -122.665716; on river right ~230 ft upstream from boat ramp). After anchors are set, tow boom upstream secure end to anchor at/near Point A, then all remaining anchor points between Points A and B as boom is deployed. Finally, secure remaining boom end to bank at Point B using anchor posts. Use skimmer/portable storage for collection at/near Point B.

**Staging Area:**
Remote: Stage in parking area of Lewis River Golf Course Boat Launch (SA-LEWR-12.4 / BL-LEWR-12.4)

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Moving Vehicles; Vegetation on River Banks, Steep Banks

**Field Notes:**
Site is located about 275 ft down slope from parking lot at Club House for Lewis River Golf Course; with a 26 ft drop. Use of vac-truck from parking area not recommended.

**Watercourse:**
River - Below a Dam - Lewis River

**Resources at Risk:**
Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

<table>
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<tr>
<th>Item</th>
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<th>Description</th>
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<td>Anchor, lines, floats</td>
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<td>Anchor System(s) - Shoreside</td>
<td>1 Each</td>
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<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>300 Feet</td>
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<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
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<tr>
<td>Skimmer (appropriately sized) with Portable Storage</td>
<td>1 Each</td>
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<tr>
<td>Workboat(s) - (jet drive)</td>
<td>1 Each</td>
<td></td>
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**Recommended Personnel**

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<tr>
<th>Role</th>
<th>Quantity</th>
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<tr>
<td>Boat Operator</td>
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<td>Laborer</td>
<td>2</td>
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<tr>
<td>Supervisor</td>
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</tbody>
</table>
Lewis River at the Lewis River Golf Course

**LEWR-12.5**

**Site Contact**

**Lewis River Golf Course**
Land/Property Owner:
3209 Lewis River Road
Woodland, WA 98674
360-225-8566

**Nearest Address**

3209 Old Lewis River Rd
Woodland, WA 98674

**Driving Directions**

To Staging Area and Boat Launch (SA-LEWR-12.4, BL-LEWR-12.4)
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue strait to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp. Strategy shoreside location is about ~230ft upstream from boat ramp.

LEWR-12.5 Photo: At Lewis River Golf Club on river right looking down/west towards strategy location. General area of shoreside anchor point (Point B) circled in yellow.
**Lewis River - East of NE 12th Avenue**

| **Position - Location:** | 45° 55' 42.4", -122° 39' 15.8" | 45.92843, -122.65439 | Woodland |

**Strategy Objective:** Exclusion: Keep oil out of side channel on Lewis River (river left)

**Implementation:** Using workboat, transport 100ft hard boom downstream about ~1.4mi to strategy location on river left at entrance to side channel. Secure end of boom to bank immediately upstream of channel entrance at/near Point A (45.92853, -122.654264). Float boom downstream and across channel entrance, pull boom tight, and secure to bank immediately downstream of channel entrance at/near Point B (45.928368, -122.654519). Use anchoring posts, trees, or existing structures to secure boom to river banks. Back hard boom with multiple lengths of sorbent to reduce sheen.

**Staging Area:** Remote: Stage in parking lot of Lewis River - Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles; Vegetation on River Banks, Partially Submerged Logs

**Field Notes:** Strategy is located on river left about ~1.4mi downstream from Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7).

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

### Recommended Equipment

- 2 Each Anchoring System(s) - Shoreside
- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 1 Each Workboat(s) - (jet drive)

### Recommended Personnel

- 1 Boat Operator
- 2 Laborer
- Supervisor
Lewis River - East of NE 12th Avenue

LEWR-13.3

LEWR-13.3 Photo: No photograph currently available

Site Contact

Nearest Address

43309 NE Haapa Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch (SA-LEWR-14.7 / BL-LEWR-14.7); Haapa Boat Launch
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 0.2mi, turn left onto NE Haapa Road
9. After 0.4, roadway curves to the right and becomes Haapa Pit. Entrance to Haapa Park is on the left. Stage equipment in parking area near boat ramp.
**Lewis River - West of 434th Street**

**Position - Location:** 45° 55.994', -122° 39.093'  
45° 55' 59.6", -122° 39' 5.6"  
45.93323, -122.65155  
Woodland

**Strategy Objective:** Exclusion: Keep oil out of side channel on Lewis River (river left)

**Implementation:** Using workboat, transport 100ft hard boom downstream about ~0.9mi to strategy location on river left at entrance to side channel. Secure end of boom to bank immediately upstream of channel entrance at/near Point A (45.933315, -122.65139). Float boom downstream and across channel entrance, pull boom tight, and secure to bank immediately downstream of channel entrance at/near Point B (45.933207, -122.65165). Use anchoring posts, trees, or existing structures to secure boom to river banks. Back hard boom with multiple lengths of sorbent to reduce sheen.

**Staging Area:** Remote: Stage in parking lot of Lewis River - Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles; Vegetation on River Banks, Partially Submerged Logs

**Field Notes:** Strategy is located on river left about ~0.9mi downstream from Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7).

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
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<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
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</tr>
<tr>
<td>Workboat(s) - (jet drive)</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
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</table>
Lewis River - West of 434th Street

LEWR-13.8 Photo: No photograph currently available

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th>Nearest Address</th>
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</table>

43309 NE Haapa Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch (SA-LEWR-14.7 / BL-LEWR-14.7); Haapa Boat Launch
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 0.2mi, turn left onto NE Haapa Road
9. After 0.4, roadway curves to the right and becomes Haapa Pit. Entrance to Haapa Park is on the left. Stage equipment in parking area near boat ramp.
### Lewis River - Upstream from Happa Boat Launch

**Position - Location:**
- 45° 56.193', -122° 38.020'
- 45° 56' 11.6", -122° 38' 1.2"  
- 45.93655, -122.63367

**Strategy Objective:**
Deflection: Deflect oil away from river right on the Lewis River

**Implementation:**
Using workboat, transport 300ft hard boom upstream about ~1100ft to strategy's shoreside location on river right. Secure boom end to bank at/near Point A (45.936643, -122.633147), using anchoring posts or trees. Float boom downstream and out into river, anchoring the remaining boom end at/near Point B (45.936513, -122.634218; ~190ft out from river right, ~150ft upstream from island). Ensure additional anchors are utilized as boom is deployed. Number of anchors and actual boom angle greatly depend on stream flow conditions; modify strategy as needed to achieve deflection.

**Staging Area:**
Remote: Stage in parking lot of Lewis River - Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7)

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Moving Vehicles; Vegetation on River Banks, Partially Submerged Logs

**Field Notes:**
Strategy is located on river right about ~0.2mi upstream from Happa Boat Launch (SA-LEWR-14.7/BL-LEWR-14.7).

**Watercourse:**
River - Below a Dam - Lewis River

**Resources at Risk:**
Habitat and Waterfowl, Salmon, Steelhead

---

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
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<td>Anchoring System(s) - Shoreside</td>
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<tr>
<td>Heaving Line(s)</td>
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<td>Workboat(s) - (jet drive)</td>
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### Recommended Personnel

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<tr>
<td>Supervisor</td>
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**Position - Location:**
Woodland

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**Position - Location:**
Woodland

**Latitude and Longitude:**
45° 56.193', -122° 38.020'

**Source: Eswr:**

---

**Source:**

---

**Applicability:**

---

**Implementation:**

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**Field Notes:**

---

**Recommended Equipment:**

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**Recommended Personnel:**

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**References:**

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**Appendix 4A**

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**Diagram:**

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***Lewis River - Upstream from Happa Boat Launch***

**LEWR-14.9**

**Site Contact**

**Nearest Address**

43309 NE Haapa Rd
Woodland, WA 98674

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**Driving Directions**

To Staging Area and Boat Launch (SA-LEWR-14.7 / BL-LEWR-14.7); Happa Boat Launch
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 0.2mi, turn left onto NE Haapa Road
9. After 0.4, roadway curves to the right and becomes Haapa Pit. Entrance to Haapa Park is on the left. Stage equipment in parking area near boat ramp.
### Lewis River Fish Hatchery - Downstream Water Intak

**Position - Location:** 45° 56.224', -122° 37.207'  
45° 56' 13.5", -122° 37' 12.4"  
45.93707, -122.62012  
Woodland

**Strategy Objective:** Exclusion: Keep oil away from fish hatchery water intakes.

**Implementation:** Secure end of 200ft length of boom to bank on river right at/near Point A (45.937139, -122.619931; about ~40ft upstream of water intake pipes). Using workboat, float boom downstream and out from river right, anchoring boom in river at/near Point B (45.937036, -122.620126; ~35ft out from pipe structure). Float remaining boom downstream and back to river right, securing it to shore at/near Point C (45.937131, -122.620355, ~40ft downstream from intake pipes). Deploy sorbent boom within hard boom area as needed to reduce sheen or recover product.

**Staging Area:** Remote: Stage at WDFW Water Access Point "Cedar" (SA-LEWR-15.5). Use boat launch BL-LEWR-15.5.

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

**Field Notes:** Strategy location is at downstream water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Water Intakes

#### Resources at Risk

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<td>200 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
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<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
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<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
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<td></td>
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<tr>
<td>Heaving Line(s)</td>
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<tr>
<td>Workboat(s) - (jet drive)</td>
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#### Recommended Personnel

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<td>Laborer</td>
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<td>Supervisor</td>
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</table>
Lewis River Fish Hatchery - Downstream Water Intak

LEWR-15.5a Photo: On river left near boat launch BL-LEWR-15.5, looking across Lewis River towards fish hatchery water intakes on river right.

Site Contact

WDFW - Merwin Hatchery
Land/Property Contact: Hatchery Manager
111 Merwin Hatchery Court
Ariel, WA 98603-9727
360-225-4390

Nearest Address

5100 NE Etna Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch SA-LEWR-15.5 and BL-LEWR-15.5
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

NOTE: DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
**Lewis River at WDFW Water Access Site "Cedar Creek***

**Position - Location:** 45° 56.201', -122° 37.199'  
**45° 56' 12.0", -122° 37' 11.9"  
**45.93668, -122.61998**

**Strategy Objective:** Collection: Collect oil moving downstream on the Lewis River

**Implementation:** Using workboat, set anchor systems every 100ft, or as needed based on flow, in relatively straight line between Point A (45.936742, -122.619328; about ~150ft out from tree line on river left) and Point B (45.936657, -122.620459; the upstream side of boat ramp at BL-LEWR-15.5). After anchors are set, tow boom upstream and secure to Point A, then all remaining anchor points between Points A and B as boom is deployed. Finally, secure boom end to bank at Point B using anchor posts or existing structures. Use vac-truck or skimmer/portable storage at/near Point B for collection.

**Staging Area:** Onsite: Staging Area and Boat Launch SA-LEWR-15.5 and BL-LEWR-15.5 are onsite

**Site Safety:** Slips, Trips, Falls; Water Hazard; Moving Vehicles in Parking/Boat Launch Area

**Field Notes:** Site located at WDFW "Cedar Creek" Water Access Site. Location is open year round; for more information contact WDFW Region 5 at 360-696-6211 or TeamVancouver@dfw.wa.gov.

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Downstream Resources, Habitat and Waterfowl, Salmon, Steelhead

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**Recommended Equipment**

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<td>Heaving Line(s)</td>
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<td>Vac Truck or Skimmer and Storage (if collection)</td>
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**Recommended Personnel**

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<td>Laborer</td>
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<tr>
<td>Supervisor</td>
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</table>

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**APPENDIX 4A**
Lewis River at WDFW Water Access Site "Cedar Creek"

LEWR-15.5b Photo: At WDFW "Cedar Creek" Water Access Site boat launch on river left of Lewis River looking upstream/east towards river with river right in background.

### Site Contact

**WDFW Region 5**
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

### Nearest Address

5100 NE Etna Rd
Woodland, WA 98674

### Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

**NOTE:** DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
Lewis River off NE Etna Road

**Position - Location:** 45° 56.151', -122° 37.089'  
45° 56' 9.0", -122° 37' 5.3"  
45.93585, -122.61815  
Woodland

**Strategy Objective:** Exclusion : Keep oil out of Cedar Creek Fork of Lewis River

**Implementation:** Transport equipment to site using workboat (jet drive) from BL-LEWR-15.5. Secure end of 100ft boom to upstream side of backwater area on river left at/near Point A (45.935749, -122.617925). Using workboat, float remaining end downstream and across backwater area, remove slack in boom and secure to shore on river left at/near Point B (45.935916, -122.618233). In same manner deploy multiple lengths of sorbent boom across backwater area behind hard boom. Replace saturated sorbents as needed. Use anchoring posts, trees, or existing structures to secure boom to river bank.

**Staging Area:** Remote: Stage at WDFW Water Access Point "Cedar" (SA-LEWR-15.5); use boat launch at same location.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Submerged/Partially Submerged Rock in Area

**Field Notes:** Site is located about ~700ft upstream from boat launch BL-LEWR-15.5; backwater area just upstream from Cedar Creek Fork entrance across from Lewis River Fish Hatchery.

**Watercourse:** River - Below a Dam - Lewis River - Cedar Creek Fork

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

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<td>Boom - Sorbent</td>
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<td>Bridle(s) - Towing (appropriately sized for boom)</td>
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<tr>
<td>Heaving Line(s)</td>
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<tr>
<td>Workboat(s) - (jet drive)</td>
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**Recommended Personnel**

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<tr>
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<td>Laborer</td>
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<tr>
<td>Supervisor</td>
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</table>
Lewis River off NE Etna Road

No Photograph Available

Site Contact

Nearest Address

5200 NE Etna Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch SA-LEWR-15.5 and BL-LEWR-15.5
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

NOTE: DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
Lewis River - Cedar Creek Fork

**Position - Location:** 45° 56.166', -122° 37.125'  
45° 56' 9.9", -122° 37' 7.5"  
45.93609, -122.61875  
Woodland

**Strategy Objective:** Exclusion: Keep oil out of Cedar Creek Fork of Lewis River

**Implementation:** Transport equipment to site using workboat (jet drive) from BL-LEWR-15.5. Secure end of 100ft boom to upstream side of Lewis River Cedar Creek Fork on river left at/near Point A (45.935749, -122.617925). Using workboat, float remaining end downstream and across fork, remove slack in boom and secure to shore on river left at/near Point B (45.935916, -122.618233). In same manner deploy multiple lengths of sorbent boom across waterway behind hard boom. Replace saturated sorbents as needed. Use anchoring posts, trees, or existing structures to secure boom to river bank.

**Staging Area:** Remote: Stage at WDFW Water Access Point "Cedar" (SA-LEWR-15.5). Use boat launch BL-LEWR-15.5.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Submerged/Partially Submerged Rock in Area

**Site Notes:** Site is located about ~500ft upstream from boat launch BL-LEWR-15.5, downstream of Etna Road Bridge over Cedar Creek Fork.

**Watercourse:** River - Below a Dam - Lewis River - Cedar Creek Fork

**Resources at Risk:** Habitat and Waterfowl, Salmon, Steelhead

**Recommended Equipment**

- 4 Each Anchoring System(s) - Shoreside
- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Bridle(s) - Towing (appropriately sized for boom)
- 1 Each Heaving Line(s)
- 1 Each Workboat(s) - (jet drive)

**Recommended Personnel**

- Boat Operator
- 2 Laborer
- 1 Supervisor

---

APPENDIX 4A 339
Site Contact

Nearest Address

5100 NE Etna Rd
Woodland, WA 98674

Driving Directions

To Staging Area and Boat Launch SA-LEWR-15.5 and BL-LEWR-15.5
1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E Etna Road
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

NOTE: DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
# Lewis River at Old Lewis River Road

**Position - Location:** 45° 56.307', -122° 36.597'  
**Strategy Objective:** Collection: Collect oil moving downstream on the Lewis River

**Implementation:** Using workboat, set anchor upstream in mid-river at/near Point A (45.938617, -122.609268). Set additional in-river anchoring systems in relatively straight line between Point A and Point B (45.938395, -122.610399, bank on river right). Tow 300ft boom upstream and secure end to Point A. Float boom downstream and across to river right, securing it to each anchoring system as you go. Finally, secure boom to bank at Point B using anchoring posts, trees, or existing structures. Vac-truck or skimmer/storage collection at Point B.

**Staging Area:** Remote: Stage equipment on-site. Launch work boat from Cedar Creek Boat Launch (BL-LEWR-15.5)

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation

**Field Notes:** Strategy location is immediately upstream of water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Downstream Resources, Fish Hatchery, Habitat and Waterfowl, Salmon, Steelhead

### Recommended Equipment

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<td>Bridle(s)</td>
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<td>Supervisor</td>
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</table>
Lewis River at Old Lewis River Road

LEWR-16.1a Photo: On Lewis River (river right) immediately upstream of hatchery water intakes, looking upstream/NE and across to river left.

**Site Contact**

WDFW - Merwin Hatchery  
Land/Property Contact: Hatchery Manager  
111 Merwin Hatchery Court  
Ariel, WA 98603-9727  
360-225-4390

**Nearest Address**

4500 Old Lewis River Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp continue straight to head south on Pacific Avenue  
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road  
4. After 7.7mi, turn right onto Old Lewis River Road  
5. After 1.1mi, about 0.2mi beyond the fish hatchery, the strategy location will be on the right. Stage vehicles and equipment near WDFW water intake pump house.
Lewis River Fish Hatchery - Upstream Water Intakes

**Position - Location:** 45° 56.289', -122° 36.625'  
45° 56' 17.4", -122° 36' 37.5"  
45.93815, -122.61042  
Woodland

**Strategy Objective:** Exclusion: Keep oil away from fish hatchery water intakes.

**Implementation:** Secure end of 200ft length of boom to bank on river right at/near Point A (45.938391, -122.610389; about ~35ft upstream of pump house dock). Using workboat, float boom downstream and out from the dock, anchoring boom’s mid-point in river at/near Point B (45.938143, -122.610428; ~40ft out from middle of dock). Float remaining boom downstream and back to river right, securing it to shore at/near Point C (45.938135, -122.61083, ~40ft downstream from pump house dock). Deploy sorbent boom within hard boom area as needed to reduce sheen or recover product.

**Staging Area:** Onsite: Stage equipment on-site. Launch work boat from Cedar Creek Boat Launch (BL-LEWR-15.5)

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

**Field Notes:** Strategy location is at upstream water intakes for the Lewis River Hatchery; coordinate activities with WDFW Hatchery Manager - Call 360-225-4390.

**Watercourse:** River - Below a Dam - Lewis River

**Resources at Risk:** Water Intakes

---

**Recommended Equipment**

1. Each 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) - (jet drive)

**Recommended Personnel**

1. Boat Operator
2. Laborer
1. Supervisor
Lewis River Fish Hatchery - Upstream Water Intakes

Site Contact

WDFW - Merwin Hatchery
Land/Property Contact: Hatchery Manager
111 Merwin Hatchery Court
Ariel, WA 98603-9727
360-225-4390

Nearest Address

4500 Old Lewis River Rd
Woodland, WA 98674

Driving Directions

1. Head south on interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 7.7mi, turn right onto Old Lewis River Road.
5. After 1.1mi, about 0.2mi beyond the fish hatchery, the strategy location will be on the right. Stage vehicles and equipment near WDFW water intake pump house.
# Lake River - Felida Moorage

**Position - Location:** 45° 42' 20.6", -122° 43' 19.4"  
45.70572, -122.72207  
Vancouver

**Strategy Objective:** Exclusion: Prevent oil from travelling downstream on Lake River to Columbia River

**Implementation:** From Felida Moorage ramp, launch workboat with 800ft. boom. Deploy boom at a steep collection angle. Anchor at AP-1 (45.704078, -122.721968) and AP-2 (45.706389, -122.721998) using shoreside anchor posts. Do not disturb ground at any locations other than anchor points described. Remain on gravel and hardened surfaces. Anchor every 100-150ft. along boom length or as appropriate for flow conditions. Recover oil using vac truck at ramp. Notify Environmental Unit if deploying strategies in this area.

**Staging Area:** Onsite: Stage onsite in parking area for moorage and boat launch.

**Site Safety:** Slips, trips, and falls. Narrow road into site and dip at railroad crossing. Use caution driving vac truck to site. Heavy vegetation on river left - use caution to avoid becoming tangled.

**Field Notes:** Privately-owned houseboat moorage and boat ramp at 122nd Street in Vancouver. River is tidally-influenced and flows out of Vancouver Lake.

**Watercourse:** River - With Tidal Influence - Lake River

**Resources at Risk:** Downstream Resources, Federally Protected Area/Lands, Houseboats, Migratory Bird Populations, Sensitive Resources Nearby,

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### Recommended Equipment

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<tr>
<td>Anchor - Danforth (or other appropriate type)</td>
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<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>2 Each</td>
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<tr>
<td>800 Feet Boom - B2 (Contractor Boom) or equivalent</td>
<td>1 Each</td>
<td></td>
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<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
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</tr>
<tr>
<td>Workboat(s) - of adequate size for type and amount of boom</td>
<td>1 Each</td>
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### Recommended Personnel

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<th>Quantity</th>
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<tr>
<td>Boat Operator</td>
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<tr>
<td>Laborer</td>
<td>3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Lake River - Felida Moorage

LKRVR-10.8 Photo: River center on docks looking E toward ramp

Site Contact

Felida Moorage
Land/Property Owner: Property Owner
4911 NW 122nd Street
Vancouver, WA 98685
360-573-3394

Nearest Address

4999 NW 122nd St
Vancouver, WA 98685

Driving Directions

From I-5 S, Vancouver, WA
1. At exit 7 bear right onto ramp to I-205 S toward WA-14/I-84/Salem (0.26 miles)
2. At exit 36 take ramp to Ne 134th St toward Wsu Vancouver (0.57 miles)
3. Turn left on NE 134th St (0.07 miles)
4. Turn right on NE 20th Ave (0.13 miles)
5. Continue on NE Highway 99 (0.77 miles)
6. Turn right on NE 117th St (1.16 miles)
7. Continue on NW 119th St (1.72 miles)
8. Turn right on NW 36th Ave (0.15 miles)
9. Turn left on NW 122nd St (0.63 miles)
10. Finish at 4999 NW 122nd St, 98685, on the left
### McMurphy Creek at Annonen Road

**Position - Location:** 46° 24.429', -122° 57.793'  
**Strategy Objective:** Collection: Collect oil moving downstream on McMurphy Creek

**Implementation:** On upstream/east side of roadway, deploy hard boom across creek in front of culvert. Deploy multiple lengths of sorbent boom immediately upstream of hard boom in manner that prevents sorbent from inadvertently entering culvert. Use anchoring posts or trees/bushes to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection.

**Staging Area:** Onsite: Stage work truck on partial shoulder and roadway; NO TRAILERS.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway/Traffic Hazard; Limited Shoulder; Heavy Vegetation

**Field Notes:** Follow WSDOT work zone traffic control guidelines must be followed. If needed, underflow dam on private property (west of roadway) may be installed but access/activity must be coordianted with property owner.

**Watercourse:** Creek - McMurphy Creek

**Resources at Risk:** Salmon - Chum, Steelhead

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### Recommended Equipment

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<tr>
<th>Item</th>
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<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
</tr>
<tr>
<td>Line - 3/8” poly line</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Machete(s) - (or other vegetation cutting tool)</td>
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<tr>
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<tbody>
<tr>
<td>Laborer</td>
</tr>
<tr>
<td>Supervisor</td>
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</tbody>
</table>

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McMurry Creek at Annonen Road

MCMRC-0.2 Photo: At strategy location on Annonen Road looking SSE towards culvert location (circled in yellow). Active railway in background, about 60ft upstream from culvert.

Site Contact

Nearest Address

505 Annonen Rd
Winlock, WA 98596

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA506.
3. After 3.8mi, immediately after railroad tracks, turn right onto Annonen Road.
4. After 0.4mi, the strategy location will be on your right between (OM-3R) roadway object markers on shoulder of road at creek (striped black and yellow markers). Shoulder is very limited at this location and truck will partially block roadway. Must follow WSDOT work zone traffic control guidelines for temporary lane closure.
Mill Creek at South Cloverdale Road

**Position - Location:** 45° 57.633', -122° 48.088'  
**Strategy Objective:** Collection: Collect oil moving downstream on Mill Creek

**Implementation:** On upstream/east side of roadway, deploy hard boom across creek in front of culvert. Deploy multiple lengths of sorbent boom upstream and downstream from hard boom. Use anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection.

**Staging Area:** Remote: Stage trailer at SA-SCHSC-0.6 (Old Pacific Highway near I-5 Exit 27). Work truck only at Strategy Location.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation; Bank Condition Unknown

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6.

**Watercourse:** Creek - Mill Creek

**Resources at Risk:** Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**

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<td>Anchoring System(s)- Shoreside</td>
<td>4 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
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<td></td>
</tr>
<tr>
<td>Bridle(s) - Hand</td>
<td>1 Each</td>
<td>(appropriately sized for boom)</td>
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<tr>
<td>Line - 3/8&quot; poly line</td>
<td>100 Feet</td>
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**Recommended Personnel**

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<tr>
<td>Laborer</td>
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<tr>
<td>Supervisor</td>
<td></td>
</tr>
</tbody>
</table>
Site Contact

Nearest Address

2063 S Cloverdale Rd
Kalama, WA 98625

Driving Directions

1. Head south on interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, at the intersection of Robb Road with Todd Road and Old Pacific Highway, stage equipment trailer at the gravel lot on the left/north side of roadway (Staging Area SA-SCHSC-0.6). Only use work truck to deliver equipment/personnel to site because space along shoulder is very limited at strategy location.
4. From SA-SCHSC-0.6, head SE on Todd Road.
5. After 0.6mi, turn right onto S Cloverdale Road
6. After 1.5mi, stay to right to remain on S Cloverdale Road
7. After ~270ft, strategy location will be on left side of roadway near old/overgrown dirt road. Stage equipment along roadway shoulder or on old dirt road.
**Mill Creek at Martins Bluff Road**

**Position - Location:** 45° 57.857', -122° 47.210'  
45° 57' 51.4", -122° 47' 12.6"  
45.96428, -122.78683  
Kalama

**Strategy Objective:** Sorbent: Collect oil moving downstream on Mill Creek using sorbents

**Implementation:** On downstream/SE side of Martins Bluff Road, deploy multiple lengths of sorbent boom across Mill Creek in front of culvert. Use anchor posts or trees to secure ends of sorbent boom to creek banks. Replace saturated sorbents as needed.

**Staging Area:** Onsite: Stage trailer at SA-SCHSC-0.6 (Old Pacific Highway near I-5 Exit 27). Work truck only at Strategy Location.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Heavy Vegetation; Steep Grade to Creek from Roadway

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site; use SA-SCHSC-0.6.

**Watercourse:** Creek - Mill Creek

**Resources at Risk:** Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**

- 2 Each Anchoring System(s) - Shoreside
- 100 Feet Boom - Sorbent
- 100 Feet Line - 3/8" poly line
- 1 Each Machete(s) - (or other vegetation cutting tool)

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Mill Creek at Martins Bluff Road

MILLC-1.1 Photo: From shoulder of Martins Bluff Road, looking SSW towards strategy location on Mill Creek and downstream side of roadway culvert.

Site Contact

Nearest Address

610 Martins Bluff Rd
Kalama, WA  98625

Driving Directions

1. Head south on Interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, at the intersection of Robb Road with Todd Road and Old Pacific Highway, stage equipment trailer at the gravel lot on the left/north side of roadway (Staging Area SA-SCHSC-0.6). Only use work truck to deliver equipment/personnel to site because space along shoulder is very limited at strategy location.
4. From SA-SCHSC-0.6, head SE on Todd Road.
5. After 0.6mi, turn right onto S Cloverdale Road
6. After 1.5mi, stay to left to continue on Martins Bluff Road
7. After 0.8mi, strategy location will be on the right at/near bottom of grade beyond roadway shoulder. Stage truck/equipment on shoulder.
Olequa Creek off Old Olequa Crossing Road

**Position - Location:** 46° 22.377', -122° 56.563'  
46° 22' 22.6", -122° 56' 33.8"  
46.37295, -122.94271  
Castle Rock

**Strategy Objective:** Collection: Collect oil moving downstream on Olequa Creek

**Implementation:** Secure end of 200ft length of hard boom to bank on creek left at/near Point B (46.372862, -122.942278). Using hand-launch workboat, extend boom upstream and across to creek right, securing it to bank at/near Point A (46.373014, -122.943034; about 200ft upstream from fish barrier). Use line from center point of boom to bank on creek left upstream of Point B to keep boom secure in water. Extend multiple lengths of sorbent boom across creek on upstream side of fish barrier, downstream of hard boom. Use vac-truck or skimmer with storage for collection at Point B. Replace saturated sorbents as need.

**Staging Area:** Onsite: Stage at end of unnamed roadway off Ol Olequa Crossing Road near WDFW fish barrier

**Site Safety:** Slips, Trips, Falls; Water Hazard; Steep Banks with Vegetation; Mud/Muddy; Low Hanging Steel Cable with Water Line.

**Field Notes:** Fish barrier is part of WDFW-Cowlitz Evaluation Project; inform WDFW before strategy implementation; call 360-864-6133, 360-623-0622, 360-791-4690, or 206-245-9971.

**Watercourse:** Creek - Olequa Creek

**Resources at Risk:**

**Recommended Equipment**

- 4 Each: Anchoring System(s)- Shoreside
- 200 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)
- 300 Feet: Line - 3/8” poly line
- 1 Each: Workboat(s) - (hand-launch)

**Recommended Personnel**

- 1 Boat Operator
- 2 Laborer
- 1 Supervisor
Olequa Creek off Old Olequa Crossing Road

OLQAC-0.5 Photo: At strategy location on Olequa Creek (creek left), immediately upstream of WDFW fish barrier, looking upstream and across to creek right. Low hanging steel cable with water line visible.

Site Contact

Nearest Address

8306 Westside Hwy
Castle Rock, WA 98611

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA506.
3. After 3.0mi, turn left onto Westside Highway
4. After 1.9mi, turn left onto Old Olequa Crossing Road
5. After 0.3mi, turn right onto unnamed road.
6. After 0.1mi (end of road), follow dirt road to thr right down to the strategy location on Olequa Creek (creek left). Stage equipment on dirt roadway or at end of unnamed road. The low hanging steel cable across the creek holds a water line for the WDFW Fish Barrier – use caution.
Olequac Creek at Enchanted Valley Country Club

Position - Location: 46° 23.573', -122° 57.078'  46° 23' 34.4", -122° 57' 4.7"  46.39289, -122.95130

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

Implementation: Using workboat, transport 200ft boom upstream and secure on creek right near Point A (46.393011, -122.951665). At boom mid-point, secure line and extend it across to creek left about 100ft upstream from Point C. Then extend boom downstream and across to Point C (46.392762, -122.951101) while pulling tension on line (connected to Point B) allowing correct boom shape to be formed. From Point C, extending remaining boom upstream allowing collection pocket to be formed. Secure boom to shore using anchoring posts or trees. Vac-truck or skimmer/portable storage collection at Point C.

Staging Area: Onsite: Stage equipment in cul-de-sac at end of Olequa Place, adjacent to the creek.

Site Safety: Slips, Trips, Falls; Water Hazard/Snags Near Shore; Vegetation; Mud/Muddy Banks

Field Notes: Notify property owner in advance of strategy implementation; call/leave message at 509-995-5439, 509-990-0925, or email ralphchilders@yahoo.com.

Watercourse: Creek - Olequac Creek

Resources at Risk: Downstream Resources, Salmon, Steelhead

Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
<td></td>
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<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Winch - Power Winch</td>
<td>1 Each</td>
<td></td>
</tr>
<tr>
<td>Workboat(s) - (hand-launch)</td>
<td>1 Each</td>
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Recommended Personnel

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<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Olequa Creek at Enchanted Valley Country Club

OLQAC-2.6 Photo: At strategy location on creek left, looking (NW) upstream and across to creek right.

**Site Contact**

Property Owner (OLQAC-2.6)
Land/Property Owner:
1324 North Liberty Lake #237
Liberty Lake, WA 99019
509-995-5439

**Nearest Address**

177 Olequa Dr
Vader, WA 98593

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA506.
3. After 3.0mi, turn left onto Westside Highway
4. After 0.5mi, turn right onto Enchanted Valley Drive
5. After 190ft, turn right to stay on Enchanted Valley Drive (becoming Olequa Drive after 0.3mi)
6. After 0.4mi, at bottom of hill after curves stay straight to remain on Olequa Drive (becomes Olequa Place).
Stage equipment in cul-de-sac at end of Olequa Place near creek.
Olequa Creek at 7th Street (Highway 506)  

**Position - Location:** 46° 24.115', -122° 57.868'  
46° 24' 6.9", -122° 57' 52.1"  
46.40192, -122.96446  

**Strategy Objective:** Collect oil moving downstream on Olequa Creek

**Implementation:** Access creek right under bridge. Using line and bridge deck (along upstream side of bridge) transfer one end of 100ft hard boom to upstream creek left; secure boom end to bridge structure or anchoring posts. On downstream side of bridge on creek right, pull slack out of hard boom and secure to bank using anchoring posts. Deploy multiple lengths of sorbent boom across creek in same manner. If product collecting beyond capacity sorbents can handle, use vac-truck from roadway shoulder or skimmer/portable storage for collection but follow WSDOT work zone traffic control guidelines.

**Staging Area:** Onsite: Stage on shoulder of 7th Street (Highway 506) near bridge over creek

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Traffic and Crossing Hazard; Heavy Vegetation; Steep Grade on Creek Left; Mud/Muddy

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Waders or hip boots recommended. Access creek right from trail behind guardrail near SW corner of bridge.

**Watercourse:** Creek - Olequa Creek

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

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**Recommended Equipment**

<table>
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<tr>
<td>Anchoring System(s)- Shoreside</td>
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</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
</tr>
<tr>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
<td>1 Each</td>
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<tr>
<td>Heaving Line(s)</td>
<td>1 Each</td>
</tr>
<tr>
<td>Line - 3/8” poly line</td>
<td>100 Feet</td>
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</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
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</tr>
</tbody>
</table>
Olequa Creek at 7th Street (Highway 506)

OLQAC-3.7 Photo: At strategy location on Olequa Creek (creek right) under 7th Street Bridge in Vader, looking upstream and across to creek left.

**Site Contact**

**Nearest Address**

110 7th St
Vader, WA 98593

**Driving Directions**

1. Head south on Interstate-5 and take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA 506.
3. After 3.9mi, you will have reached the strategy location at the 7th Street / Highway 506 Bridge over Olequa Creek; stage on shoulder of roadway. Best access to site under bridge is from downstream creek right (SW corner of bridge); follow trail between guard rail and wooden fence down to the creek.
## Olequa Creek at Annonen Road

**Position - Location:** 46° 24.916', -122° 58.024'  
**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway/Traffic Hazard; Steep Banks; Heavy Vegetation; Mud/Muddy

**Staging Area:** Onsite: Stage behind guardrail before or after bridge on NE/upstream side of roadway.

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Slope down to creek right under bridge is steep; use 1/2" line for safe descent if needed.

**Watercourse:** Creek - Olequa Creek

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

### Implementation

- **Strategy Objective:** Collection: Collect oil moving downstream on Olequa Creek

- **Recommended Equipment**
  - 4 Each Anchoring System(s) - Shoreside
  - 100 Feet Boom - B3 (River Boom) or equivalent
  - 200 Feet Boom - Sorbent
  - 1 Each Bridle(s) - Hand (appropriately sized for boom)
  - 1 Each Heaving Line(s)
  - 100 Feet Line - 1/2" poly line
  - 100 Feet Line - 3/8" poly line
  - 1 Each Machete(s) - (or other vegetation cutting tool)

- **Recommended Personnel**
  - 2 Laborer
  - 1 Supervisor
Olequa Creek at Annonen Road

OLQAC-4.8 Photo: At strategy location on upstream side of Annonen Road bridge over Olequa Creek (creek left), looking NW and across to creek right. Upper left corner of photo shows bridge support.

Site Contact

Nearest Address

150 Annonen Rd
Winlock, WA 98596

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (Vader/Ryderwood)
2. Turn left at the end of exit ramp to travel west on Highway WA606.
3. After 3.8mi, immediately after railroad tracks, turn right onto Annonen Road.
4. After 1.1mi, the strategy location will be on the right at the bridge over Olequa Creek. Stage behind guardrail on either side of bridge. Follow WSDOT work zone traffic control guidelines when working on or near roadway.
Olequa Creek at Ferrier Road

Position - Location: 46° 26.736', -122° 57.739'  46° 26' 44.2", -122° 57' 44.3"  46.44560, -122.96232  Winlock

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

Implementation: On upstream/NE side of roadway, deploy hard boom across creek upstream of bridge at an angle upstream towards creek right based on stream flow and access. Deploy multiple lengths of sorbent boom on upstream and downstream sides of hard boom. Use line and anchoring posts or trees to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer/portable storage for collection, but must follow WSDOT work zone traffic control guidelines for lane closure since shoulder is limited.

Staging Area: Onsite: Stage on shoulder of roadway before NE corner of bridge - NO TRAILERS

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Shoulder); Heavy Vegetation

Field Notes: Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder space limited - DO NOT BRING AN EQUIPMENT TRAILER to this site. Waders or hip boots recommended.

Watercourse: Creek - Olequa Creek

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

Recommended Equipment

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<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
OLQAC-7.9 Photo: At strategy location on Olequa Creek (creek left) just upstream of bridge on Ferrier Road, looking downstream/SW and across to creek right.

**Site Contact**

No Information
Not Determined:

**Nearest Address**

1785 Ferrier Rd
Winlock, WA 98596

**Driving Directions**

1. Head south on interstate-5 and Take Exit 63 (WA-505 towards Winlock/Toledo)
2. Turn right at the end of exit ramp to travel west on highway WA505
3. After 0.3mi, turn right onto highway WA-505 (west)
4. After 0.6mi, turn left S Military Road.
5. After 2.9mi, turn right onto McGlaughlin Road
6. After 1.1mi, turn left onto Ferrier Road
7. After ~0.4mi, you have reach the strategy location. Park truck on shoulder of roadway before bridge. Trail leads from shoulder down to creek.
### Olequa Creek at near Winlock Wastewater Treatment

| Position - Location | 46° 28.910', -122° 56.767' | 46° 28' 54.6", -122° 56' 46.0" | 46.48183, -122.94612 | Winlock |

| Strategy Objective | Collection: Collect oil moving downstream on Olequa Creek |

| Implementation | Deploy hard boom across creek from base of bridge on creek right upstream and across to creek left. Place multiple lengths of sorbent boom on upstream and downstream sides of hard boom. Use anchoring posts, trees, or existing structures to secure boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck with extended hose or skimmer/portable storage for collection; booster pump required. Use 1/2” line to safely move people/equipment from bridge roadway down steep grade to base of bridge. |

| Staging Area | Onsite: Stage in parking area for Winlock Wastewater Treatment Plant adjacent to creek |

| Site Safety | Slips, Trips, Falls; Water Hazard; Steep/Unstable Banks; Vegetation/Tree Blocking Trail; Roadway Nearby |

| Field Notes | Follow trail along south fence line for Winlock Waste Water Treatment Plant to trail leading down to creek left. Waders or hip boots recommended. |

| Watercourse | Creek - Olequa Creek |

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

### Recommended Equipment

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
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<tbody>
<tr>
<td>6 Each</td>
<td>Anchoring System(s) - Shoreside</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 3/8” poly line</td>
</tr>
</tbody>
</table>

### Recommended Personnel

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Position</th>
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<tbody>
<tr>
<td>2 Laborer</td>
<td>Winlock 46.48183, -122.94612</td>
</tr>
<tr>
<td>1 Supervisor</td>
<td>Winlock 46° 28.910', -122° 56.767'</td>
</tr>
</tbody>
</table>

Position - Location:

- 46° 28.910', -122° 56.767'
- 46° 28' 54.6", -122° 56' 46.0"
Olequa Creek at near Winlock Wastewater Treatment

OLQAC-10.9 Photo: At strategy location on Olequa Creek (creek left) near south fenceline of Winlock Wastewater Treatment Plant looking upstream (NW) to creek right.

### Site Contact

### Nearest Address

1214 SW Mayer St  
Winlock, WA 98596

### Driving Directions

1. Head south on Interstate-5 and Take Exit 63 (WA-505 towards Winlock/Toledo)
2. Turn right at the end of exit ramp to travel west on highway WA505
3. After 2.9mi, turn left onto Kerron Avenue
4. After 0.6mi, turn left onto Hining Avenue (becoming W Front Street)
5. After 0.8mi, turn right onto SW Campbell Street
6. After ~300ft, turn left onto SW Mayer Street
7. After ~0.1mi, the Winlock Wastewater Treatment Plant will be on the right before the bridge over Olequa Creek. Stage towards the south end of the treatment plant's parking lot near the creek. Trail along south fenceline leads down to creek left.
**Olequa Creek at NW Kerron Street**

| **Position - Location:** | 46° 30.021', -122° 56.235' | 46° 30'.13', -122° 56' 14.1'' | 46.50036, -122.93725 | Winlock |

| **Strategy Objective:** | Collection | Collect oil moving downstream on Olequa Creek |

**Implementation:** Deploy hard boom across creek from base of bridge on creek right upstream and across to creek left. Place multiple lengths of sorbent boom on upstream and downstream sides of hard boom. Use anchoring posts, trees, or existing structures to secure boom and sorbents to banks. Replace saturated sorbents as needed. If product collecting beyond capacity sorbents can handle, use vac-truck with extended hose or skimmer/portable storage for collection; booster pump required. Use 1/2” line to safely move people/equipment from bridge roadway down steep grade to base of bridge.

**Staging Area:** Onsite: Stage on shoulder of highway north of bridge over creek on east/northbound side of roadway.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Visibility); Heavy Vegetation

**Field Notes:** Follow WSDOT work zone traffic control guidelines when working on or near roadway. Waders or hip boots recommended.

**Watercourse:** Creek - Olequa Creek

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>6 Each</td>
<td>Anchoring System(s)- Shoreside</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Boom - B3 (River Boom) or equivalent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>1 Each</td>
<td>Bridle(s) - Hand (appropriately sized for boom)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Heaving Line(s)</td>
</tr>
<tr>
<td>100 Feet</td>
<td>Line - 1/2&quot; poly line</td>
</tr>
<tr>
<td>200 Feet</td>
<td>Line - 3/8&quot; poly line</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>2</td>
<td>Laborer</td>
</tr>
<tr>
<td>1</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Olequa Creek at NW Kerron Street

OLQAC-12.4 Photo: At strategy location on Olequa Creek (creek right) under the Highway WA-603 bridge in Winlock, looking upstream (ESE) towards creek left.

Site Contact

Nearest Address

1411 NW Kerron St
Winlock, WA 98596

Driving Directions

1. Head south on Interstate-5 and Take Exit 63 (WA-505 towards Winlock/Toledo)
2. Turn right at the end of exit ramp to travel west on highway WA505
3. After 2.9mi, turn right onto Kerron Avenue (Highway WA603 North)
4. After 0.6mi, you will have crossed the bridge over Olequa Creek. Use shoulder on the right/east side of roadway after bridge beyond guardrail for staging. Follow guard rail to bridge; strategy location is down steep incline at the base of the bridge on creek right.
Ostrander Creek culvert under W Stock Road

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Staging Area:**
- Onsite: Stage equipment on side of road
- Use boom and sorbent on both sides of bridge for initial containment. If time allows, use sandbags with PVC to create an underflow dam approximately 100ft upstream from culvert where depth and current is less. 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.
- Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Ostrander Creek

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

**Strategy Objective:** Collection: Collect oil moving downstream

**Recommended Equipment**
- 200 Feet Boom - Sorbent
- 1 Assort Equipment (shovels, pickaxes, tamper bars, sledge hammers)
- 1 Assort Fill material (sand, earth, gravel, sandbags)
- 1 Each Vac Truck or Skimmer and Storage

**Recommended Personnel**
- 2 Laborer
- 1 Supervisor
Ostrander Creek culvert under W Stock Road

OSTRC-0.15 Photo: Photo taken from top of culvert looking South

Site Contact

No Information
Not Determined :

Nearest Address

46 W Stock Rd
Kelso, WA 98626

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn right on Sparks Dr (0.06 miles)
4. Turn left on Pacific Ave N (0.53 miles)
5. Turn left on Pleasant Hill Rd (0.37 miles)
6. Turn left on Stock Rd W (0.15 miles)
7. Site is on Stock Rd, before the railroad trestle
Ostrander Creek

**Position - Location:** 46° 11.685', -122° 53.727'  
46° 11' 41.1", -122° 53' 43.6"  
46.19474, -122.89546  
Kelso

**Strategy Objective:** Collection: Collect oil moving downstream on Ostrander Creek

**Implementation:** Secure end of 100ft length of boom to bank on creek right near Point A. Using line, extend boom west about ~20ft to creek right and secure to bank near Point B. Form Point B, extend remaining boom downstream along creek left, securing it to NE corner of culverts at/near Point C. Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

**Staging Area:** Onsite: Stage equipment on side of road

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** Culvert has two channels, both approximately 8 ft wide

**Watercourse:** Creek - Ostrander Creek

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

**Recommended Equipment**

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

**Recommended Personnel**

- 2 Laborer
- 1 Supervisor
Ostrander Creek

OSTRC-0.2 Photo: Photo taken downstream of culvert looking South

**Site Contact**

No Information
Not Determined:

**Nearest Address**

3440 Pleasant Hill Rd
Kelso, WA 98626

**Driving Directions**

1. From Kelso, take I-5 N
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn right on Sparks Dr (0.06 miles)
4. Turn left on Pacific Ave N (0.53 miles)
5. Turn left on Pleasant Hill Rd (0.31 miles)
6. Site is at the corner of Pleasant Hill Road and W Stock Road, on the left
Ostrander Creek at Pacific Highway N

**Position - Location:** 46° 11.683', -122° 53.586'  
**Strategy Objective:** Collection: Collect oil moving downstream

**Implementation:** Secure end of 100ft length of boom to bank on creek right near Point A. Using line, extend boom west about ~20ft to creek right and secure to bank near Point B. Form Point B, extend remaining boom downstream along creek left, securing it to NE corner of culverts at/near Point C. Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

**Staging Area:** Onsite: Stage equipment on side of road.

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

**Field Notes:** Heavy vegetation and steep bank

**Watercourse:** Creek - Ostrander Creek

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

---

**Recommended Equipment**

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

**Recommended Personnel**

- **1 Laborer**
- **1 Supervisor**
Ostrander Creek at Pacific Highway N

OSTRC-0.35 Photo: Photo taken from top of culvert looking East

**Site Contact**

No Information
Not Determined:

**Nearest Address**

2752 N Pacific Ave
Kelso, WA 98626

**Driving Directions**

1. From Kelso, take I-5 N
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn right on Sparks Dr (0.06 miles)
4. Turn left on Pacific Ave N (0.67 miles)
5. Finish at 2752 N Pacific Ave, 98626, on the right
Salmon Creek at NW 36th Avenue (Hwy-501)  

Position - Location: 45° 43.357', -122° 42.407' 45° 43' 21.4", -122° 42' 24.4" 45.72262, -122.70678  

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

Implementation: Secure end of 200ft length hard boom to bank on creek left under SE corner of NW 36th Ave Bridge near Point B (~45.722678, -122.707183). Form trail using plywood sheets to access creek right or use work boat. From creek right, pull boom upstream and secure to bank near Point A (~45.722602, -122.706472). Use anchor and/or lines from boom to bank as needed to maintain shape of boom in creek. Use sorbent boom downstream of hard boom for sheen/secondary collection. Deploy sorbent boom across side channel openings on creek right and left. Vac-truck or skimmer (with storage) collection at Point B.  

Staging Area: Onsite: Stage on wide shoulder of roadway near SE corner of NW 36th Avenue Bridge.  

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard; Steep Banks with Vegetation; Mud/Muddy  

Field Notes: In-line booster pump needed if using Vac-Truck from roadway shoulder. Follow WSDOT work zone traffic control guidelines when working on or near roadway.  

Watercourse: Creek - Salmon Creek  

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead  

---  

Recommended Equipment  

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

Recommended Personnel  

- 1 Boat Operator  
- 2 Laborer  
- 1 Supervisor
Salmon Creek at NW 36th Avenue (Hwy-501)

SALMC-2.2 Photo: On creek left looking upstream from the SE end of the NW 36th Ave Bridge. Ideal hard boom deployment depicted in yellow; sorbent boom in white.

Site Contact

WSDOT - Environmental
Primary Contact: 360-705-7483

CRESA
Secondary Contact: Clark Regional Emergency Services Agency
360-696-4461

Nearest Address

13615 NW 36th Ave
Vancouver, WA 98685

Driving Directions

1. Head south on Interstate-5 and Take Exit 5 (NE 99th Street)
2. Turn right at the end of exit ramp to travel west on NE 99th Street
3. After 2.0mi, turn right onto NW Lakeshore Ave (becoming NW 36th Ave after 1.1mi)
4. After 2.1 miles, you have reached the strategy location. Stage on wide shoulder before bridge. Inform WSDOT and CRESA, and follow WSDOT work zone traffic control guidelines.
Salmon Creek - Klineline Pond (Salmon Creek Park)  

Position - Location:  45° 42.111', -122° 39.479'  

Strategic Objective:  Collection  

Implementation:  Secure end of 100ft length of hard boom to bank on creek right near Point C (45.706857, -122.657929; north and upstream side of walking bridge). Extend boom across to creek left and secure to bank near base of bridge at Point B. Use line to extend remaining boom upstream and back across to creek right, remove slack, and secure to bank near Point A (45.706798, -122.657716, ~60ft upstream from Point C). Use multiple layers of sorbent boom across creek within hard boom area and on downstream side of bridge. Use vac-truck or skimmer/storage for collection at Point B, as needed.

Staging Area:  Onsite: Stage in parking lot of Salmon Creek Park near the pedestrian bridge over creek (SA-SALMC-5.6).

Site Safety:  Slips, Trips; Water Hazard; Parking Lot Hazards; Steep Banks; Heavy Vegetation; Mud/Muddy

Field Notes:  Contact Clark County Parks and Recreation for access support, and notify them before implementation; call 360-737-6118 or 360-397-2285; If spill/sheen impacts observed on Klineline Pond notify WDFW at 360-902-2700.

Watercourse:  Creek - Salmon Creek

Resources at Risk:  Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon, Steelhead

Recommended Equipment

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

Recommended Personnel

- 2 Laborer
- 1 Supervisor
Salmon Creek - Klineline Pond (Salmon Creek Park)

SALMC-5.6 Photo: View from walking bridge over creek on Salmon Creek Trail near Klineline Pond looking downstream.

Site Contact

Clark County Parks and Trails
Municipality (County/City): 4700 NE 78th Street
Vancouver, WA 98665
360-397-2285

Nearest Address

1717 NE 117th St
Vancouver, WA 98686

Driving Directions

1. Head south on Interstate-5 and at Exit 7 keep right to stay on Interstate-205 (Salem)
2. On Interstate-205 take Exit 36 (NE 134th Street)
3. At end of ramp, turn left onto NE 134th Street
4. After 0.1mi, turn right onto NE Hwy 99/Pacific Hwy
5. After 0.9mi, turn right onto NE 117th Street
6. After 0.3mi, immediately after passing under Interstate-5, turn right into parking area for Salmon Creek Park. Stage equipment in parking lot near pedestrian bridge over the creek. If needed, contact Clark County Parks for access support; call 360-737-6118 or 360-397-2285.
<table>
<thead>
<tr>
<th><strong>Position - Location:</strong></th>
<th>Sauer Creek at Cloverdale Rd</th>
<th><strong>SAURC-0.75</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy Objective:</strong></td>
<td>Culvert Block: Collect oil moving downstream on Sauer Creek</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td>Use boom and sorbent on both sides of bridge for initial containment. If time allows, install culvert block at this location. 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 &amp; storage for collection (if site is collecting oil).</td>
<td></td>
</tr>
<tr>
<td><strong>Staging Area:</strong></td>
<td>Onsite: Stage equipment on side of road</td>
<td></td>
</tr>
<tr>
<td><strong>Site Safety:</strong></td>
<td>slips, trips and falls, somewhat steep bank, roadway hazard</td>
<td></td>
</tr>
<tr>
<td><strong>Field Notes:</strong></td>
<td>Modify strategy as needed, based on stream flow conditions. Downstream side of the culvert is most easily accessible, SW side of road.</td>
<td></td>
</tr>
<tr>
<td><strong>Watercourse:</strong></td>
<td>Creek - Sauer Creek</td>
<td></td>
</tr>
<tr>
<td><strong>Resources at Risk:</strong></td>
<td>Freshwater Wildlife</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Equipment

- **4 Each** Anchoring System(s) - Shoreside
- **100 Feet** Boom - B2 (Contractor Boom) or equivalent
- **200 Feet** Boom - Sorbent
- **1 Assort** Fill material (sand, earth, gravel, sandbags)
- **1 Roll** Plastic Sheeting
- **4 Each** Plywood sheets (4ft x 4ft)
- **1 Each** Vac Truck or Skimmer and Storage

### Recommended Personnel

- **1 Laborer**
- **1 Supervisor**
Sauer Creek at Cloverdale Rd

SAURC-0.75 Photo: Taken from top of culvert looking NE

Site Contact

No Information
Not Determined:

Nearest Address

1051 Cloverdale Rd
Kalama, WA 98625

Driving Directions

1. From I-5, Take exit 27 toward Todd Rd/ Port of Kalama
2. Turn right onto Robb Rd
3. Turn left onto Old Pacific Hwy S
4. Turn right onto Vincent Rd
5. Turn right onto Cloverdale Rd. Destination will be on the left
6. Finish at 1051 Cloverdale Rd, 98625
**Sauer Creek at Paradise Acres Road**

**SAURC-0.9**

| Position - Location: | 45° 59.385', -122° 48.906' | 45° 59' 23.1", -122° 48' 54.4" | 45.98975, -122.81510 | Kalama |

**Strategic Objective:** Collection: Collect oil moving downstream on Sauer 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 approximately 100 ft upstream from culvert where depth and current is less. 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.

**Staging Area:** Remote: Ask permission to stage equipment from property owners

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** Follow WSDOT Traffic Safety Guidelines

**Watercourse:** Creek - Sauer Creek

**Resources at Risk:** Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>4 Each</td>
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<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Fill material (sand, earth, gravel, sandbags)</td>
<td>1 Assort</td>
<td></td>
</tr>
<tr>
<td>Pipe(s), PVC (8 inch x 8ft)</td>
<td>2 Each</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
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**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Laborer</td>
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<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Sauer Creek at Paradise Acres Road

**SAURC-0.9**

SAURC-0.9 Photo: Photo taken from downstream side of culvert looking NW

### Site Contact

**No Information**
Not Determined:

### Nearest Address

326 Paradise Acres Rd
Kalama, WA 98625

### Driving Directions

1. From Kalama, take I-5 N
2. Take exit 27 to Todd Road/Port Of Kalama (0.29 miles)
3. Turn left on Robb Rd (0.13 miles)
4. Make sharp left on Old Pacific Hwy S (0.76 miles)
5. Make sharp right on Vincent Rd (0.24 miles)
6. Turn right on Cloverdale Rd (0.24 miles)
7. Turn left on Sauer Rd (Saver Rd) (0.13 miles)
8. Make sharp left on Paradise Acres Rd (0.13 miles)
9. Finish at 326 Paradise Acres Rd, 98625, on the right
**Schoolhouse Creek at Robb Rd**

**Position - Location:** 45° 58.861', -122° 49.285'  
**45° 58' 51.7", -122° 49' 17.1"**  
45.98102, -122.82142  
Kalama

**Strategy Objective:** Sorbent/Snare, Underflow Dam : Collect Oil using an underflow dam

**Implementation:** Put a culvert block or underflow dam on either upstream or downstream side of culvert. If on the downstream side, dam at the pond where it returns to a creek, and use the pond for holding and collection area.

**Staging Area:** Onsite: Roadway near strategy location

**Site Safety:** slips, trips and falls, slippery bank, overgrown vegetation

**Field Notes:** Dirt road, surrounded by private property, parking on the side of the road only

**Watercourse:** Creek - Schoolhouse Creek

**Resources at Risk:**

**Recommended Equipment**

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>1 Assort</td>
<td>Fill material (sand, earth, gravel, sandbags)</td>
</tr>
<tr>
<td>2 Each</td>
<td>Pipe(s), PVC (8 inch x 8ft)</td>
</tr>
<tr>
<td>100 Each</td>
<td>Sandbag(s)</td>
</tr>
<tr>
<td>1 Each</td>
<td>Vac Truck or Skimmer and Storage</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>4 Laborer</td>
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</tr>
<tr>
<td>1 Supervisor</td>
<td></td>
</tr>
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</table>
**Schoolhouse Creek at Robb Rd**

**SCHSC-0.3 Photo:** Pool downstream of culvert to be used as collection

<table>
<thead>
<tr>
<th>Site Contact</th>
</tr>
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<tbody>
<tr>
<td><strong>Nearest Address</strong></td>
</tr>
<tr>
<td>225 Robb Rd</td>
</tr>
<tr>
<td>Kalama, WA 98625</td>
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</table>

<table>
<thead>
<tr>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Start at I-5 Kelso</td>
</tr>
<tr>
<td>2. Go southeast on I-5 (4.74 miles)</td>
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<tr>
<td>3. At exit 27 bear right onto ramp toward Todd Road/Port Of Kalama (0.29 miles)</td>
</tr>
<tr>
<td>4. Turn left on Robb Rd (0.18 miles)</td>
</tr>
<tr>
<td>5. Finish at 225 Robb Rd, 98625, on the right</td>
</tr>
</tbody>
</table>
**Schoolhouse Creek near Cloverdale Road**  
**SCHSC-1.3**

**Position - Location:**  
45° 59.123', -122° 48.811'  
45° 59' 7.4", -122° 48' 48.7"  
45.98539, -122.81352  
Kalama

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

**Implementation:** Use boom and sorbent on the North East sides of bridge for initial containment. If time allows, install culvert block at this location. 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:** Remote: Stage on shoulder of roadway near creek; Follow WSDOT Traffic Safety Guidelines.

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** Access culvert from grass field (private property). Coordinate access with property owner before implementation if possible.

**Watercourse:** Creek - Canyon Creek (aka Schoolhouse Creek)

**Resources at Risk:** Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
<td></td>
</tr>
<tr>
<td>Boom - B2 (Contractor Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Assort Fill material (sand, earth, gravel, sandbags)</td>
<td>1 Assort</td>
<td></td>
</tr>
<tr>
<td>Pipe(s), PVC (4inch x 8ft)</td>
<td>10 Each</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Schoolhouse Creek near Cloverdale Road

SCHSC-1.3 Photo: Picture taken on downstream side of culvert looking NE

### Site Contact

**No Information**
Not Determined :

### Nearest Address

1080 Cloverdale Rd
Kalama, WA 98625

### Driving Directions

1. From Kelso, head southeast on I-5
2. At exit 27 bear right onto ramp toward Todd Road/Port Of Kalama (0.29 miles)
3. Turn left on Robb Rd (0.13 miles)
4. Turn right on Todd Rd (0.6 miles)
5. Turn left on Cloverdale Rd S (0.58 miles)
6. Finish at 1080 Cloverdale Rd, 98625, on the right
**Salmon Creek at Pleasant Hill Rd**

**Position - Location:** 46° 15.267', -122° 53.162'  
46° 15' 16.0", -122° 53' 9.7"  
46.25445, -122.88603  
Castle Rock

**Strategy Objective:** Collect oil moving downstream on Salmon Creek

**Implementation:** Secure end of 100ft length of boom to bank on creek right near Point A. Using line, extend boom south about ~20ft to creek right and secure to bank near Point B. From Point B, extend remaining boom across to creek right, securing it to NE corner of culverts at/near Point C. Use multiple layers of sorbent boom or sweep across creek within boomed area in front of culverts. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer for collection.

**Staging Area:** Onsite: Stage equipment on grassy field

**Site Safety:** Slips, Trips, Falls; Water Hazard; Vegetation.

**Field Notes:** Down a paved road to private property, then through a gate and onto a grass field that leads to the creek. Grass field gets very muddy. 4x4 with good tires recommended.

**Watercourse:** Creek - Salmon Creek

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>200 Feet</td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage (if collection)</td>
<td>1 Each</td>
</tr>
</tbody>
</table>

**Recommended Personnel**

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Salmon Creek at Pleasant Hill Rd

No Photograph Available

SLMNC-0.35 Photo: No photograph currently available

Site Contact

Private Owner: Property Owner
2101 Larson Ln SW
Castle Rock, WA 98611
360-608-7808

Nearest Address

2542 Larson Ln SW
Castle Rock, WA 98611

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 48 to I-5-Business Loop/ Castle Rock (0.26 miles)
3. Turn left on I-5-BL/Huntington Ave S (0.49 miles)
4. Turn left on Larsen Ln SW (0.45 miles)
5. 2542 Larson Ln SW will be on the left
6. Continue through gate and onto grass field which leads down to creek.
### Salmon Creek near Huntington Ave S

| **Position - Location:** | 46° 15.576', -122° 53.307' | 46° 15' 34.6", -122° 53' 18.4" | 46.25960, -122.88844 | Castle Rock |

**Strategy Objective:** Sorbent: Collect oil moving downstream on Salmon Creek  

**Implementation:** Deploy multiple lengths of sorbent boom on creek. Use line to secure ends of sorbent boom to anchoring posts, trees, or existing structures nearby. Replace saturated sorbents as needed.  

**Staging Area:** Onsite: Stage equipment on grass field north of culvert.  

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.  

**Field Notes:** Bank leading down to the culvert is very steep and covered in overgrown vegetation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.  

**Watercourse:** Creek - Salmon Creek  

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

---

**Recommended Equipment**  

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>4 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Assort Equipment</td>
<td>1 Assort</td>
<td>(shovels, pickaxes, tamper bars, sledge hammers)</td>
</tr>
</tbody>
</table>

**Recommended Personnel**  

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Salmon Creek near Huntington Ave S

SLMNC-0.7 Photo: Photo taken looking South

Site Contact

No Information
Not Determined:

Nearest Address

1955 Huntington Ave S
Castle Rock, WA 98611

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 48 to I-5-Business Loop/Castle Rock (0.26 miles)
3. Turn left on I-5-Business/Huntington Ave S (0.1 miles)
4. Turn left onto Pleasant Hill Rd
5. Site is on left.
Salmon Creek along Dougherty Dr  

**Strategy Objective:** Collect oil moving downstream on Salmon 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 approximately 100ft upstream from culvert where depth and current is less. 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 o

**Staging Area:** Remote: Stage equipment on shoulder of Dougherty Dr

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:** Bank leading down to the culvert is very steep and covered in overgrown vegetation. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:** Creek - Salmon Creek

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

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>4 Each</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
</tr>
<tr>
<td>Equipment (shovels, pickaxes, tamper bars, sledge hammers)</td>
<td>1 Assort</td>
</tr>
<tr>
<td>Fill material (sand, earth, gravel, sandbags)</td>
<td>1 Assort</td>
</tr>
<tr>
<td>Pipe(s), PVC (8 inch x 8ft)</td>
<td>2 Each</td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
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</table>

**Recommended Personnel**

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<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Salmon Creek along Dougherty Dr

SLMNC-2.3 Photo: Photo taken from road looking South

Site Contact

No Information
Not Determined:

Nearest Address

129 Winfield Dr
Castle Rock, WA  98611

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 48 to Business Loop/ Castle Rock (0.26 miles)
3. Make sharp right on Huntington Ave S (0.06 miles)
4. Turn left on Bond Rd (1.23 miles)
5. Turn left on Powell Rd (0.1 miles)
6. Turn right on Dougherty Dr (0.2 miles)
7. Site is on right, where Creek crosses under roadway.
Toutle River off Old Pacific Hwy N

Position - Location: 46° 19.029', -122° 54.400'  
46° 19' 1.7", -122° 54' 24.0"  
46.31715, -122.90667  
Castle Rock

Strategy Objective: Collection: Collect oil moving downstream on the Toutle River

Implementation: Secure end of 500ft length hard boom to bank on creek left near Point B (46.317831, -122.907019). Then secure 500ft line to remaining boom end and use hand-launch work boat to transport line upstream ~450ft to river right. Use winch to pull boom upstream and across to river right, securing boom end to bank at or near Point A (46.316575, -122.906314). Use in river anchoring systems or lines from boom to bank as needed to maintain shape of boom in river. Use anchor posts, trees, or existing structures to keep boom secured to banks. Skimmer (with storage) collection at Point B. If needed, launch jet-boat from BL-CWLZR-17.6 (located about ~3.4m downstream) to support the implementation of this strategy - but boat operator must know the river well in order to avoid sandbars and other obstructions.

Staging Area: Onsite: Stage in upper dirt/gravel lot at strategy location

Site Safety: Slips, Trips, Falls; Water Hazard; Steep Banks; Rocky/Uneven Path to lower riverfront area.

Field Notes: If needed, launch jet-boat from BL-CWLZR-17.6 (located about ~3.4m downstream) to support the implementation of this strategy - but boat operator must know the river well in order to avoid sandbars and other obstructions.

Watercourse: River - Toutle River

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

Recommended Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s) - (anchor, lines, floats)</td>
<td>4 Each</td>
</tr>
<tr>
<td>Anchoring System(s) - Shoreside</td>
<td>4 Each</td>
</tr>
<tr>
<td>Boom - B3 (River Boom) or equivalent</td>
<td>500 Feet</td>
</tr>
<tr>
<td>Bridle(s) - Towing (appropriately sized for boom)</td>
<td>1 Each</td>
</tr>
<tr>
<td>Line - 1/2&quot; poly line</td>
<td>500 Feet</td>
</tr>
<tr>
<td>Line - 3/8&quot; poly line</td>
<td>500 Feet</td>
</tr>
<tr>
<td>Skimmer (appropriately sized) with Portable Storage</td>
<td>1 Each</td>
</tr>
<tr>
<td>Winch - Power Winch</td>
<td>1 Each</td>
</tr>
<tr>
<td>Workboat(s) - (hand-launch)</td>
<td>1 Each</td>
</tr>
</tbody>
</table>

Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Operator</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Toutle River off Old Pacific Hwy N

TTLR-1.0 Photo: At strategy location on the Toutle River (river left - Point B), looking upstream and across to river right.

Site Contact

Nearest Address

7256 Old Pacific Hwy N
Castle Rock, WA  98611

Driving Directions

1. Head south on Interstate-5 and Take Exit 52 (Toutle Park Road)
2. Turn left at the end of exit ramp to travel SE on Old Pacific Highway
3. After ~0.6mi, turn left into gravel lot (south end)
4. After ~250ft, decayed dirt road to lower river front area will be on your left. The road is not drivable, so you must hand carry equipment down to river left from this location.
### Toutle River - Unnamed Tributary at Kroll Road

**TTLRTA-1.1**

| **Position - Location:** | 46° 18.690', -122° 53.154' | 46° 18' 41.4", -122° 53' 9.2" | 46.31150, -122.88589 | Castle Rock |

**Strategy Objective:** Collection: Collect oil moving downstream on unnamed tributary to the Toutle River

**Implementation:**
- On upstream (east) side of roadway, deploy hard boom across creek in front of the culvert and back it with multiple lengths of sorbent boom so product moving downstream can be collected. Use anchoring posts, trees, or existing structures to secure hard boom and sorbents to creek banks. Replace saturated sorbents as needed. Limited shoulder area - DO NOT BRING AN EQUIPMENT TRAILER to this site.

**Staging Area:** Onsite: Stage work truck on shoulder of roadway; Space limited - NO TRAILERS

**Site Safety:** Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Shoulder); Heavy Vegetation

**Field Notes:**
- Follow WSDOT work zone traffic control guidelines when working on or near roadway. Shoulder parking is very limited at this location - DO NOT BRING AN EQUIPMENT TRAILER to this site.

**Watercourse:** Creek - Unnamed Creek (tributary to the Toutle River)

**Resources at Risk:** Downstream Resources

**Recommended Equipment**
- 4 Each Anchoring System(s)- Shoreside
- 100 Feet Boom - B3 (River Boom) or equivalent
- 100 Feet Boom - Sorbent
- 1 Each Bridle(s) - Hand (appropriately sized for boom)
- 1 Each Machete(s) - (or other vegetation cutting tool)

**Recommended Personnel**
- Laborer
- 1 Supervisor
Toutle River - Unnamed Tributary at Kroll Road

TTLRTA-1.1 Photo: Aerial image of strategy location with creek, strategy, and roadway depicted. Hard boom in red; sorbent boom in white; site area in yellow circle.

| Site Contact             | \n|--------------------------|\n| Nearest Address          | 199 Kroll Rd  
Castle Rock, WA 98611   |
### Unnamed Creek at Old Pacific Highway S

#### USCCA-0.5

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>Collection, Underflow Dam</th>
<th>Collect oil moving downstream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Objective:</td>
<td>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. 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 &amp; storage for collection (if site is collecting oil).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staging Area:</th>
<th>Onsite: Very limited area on the side of the road, enough for 2 or 3 small trucks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Safety:</td>
<td>Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Notes:</th>
<th>Culvert under paved road. Limited parking. The creek is approximately 10 ft in width but will vary seasonally. Stream is mostly dry in the summer. Shoreline composition is mostly grass with some mud, river rock. <em><strong>Downstream side of the culvert is most easily accessible, SW side of road.</strong></em></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Watercourse:</th>
<th>Creek - Unnamed Creek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources at Risk:</td>
<td>Freshwater Wildlife</td>
</tr>
</tbody>
</table>

#### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>4 Each</td>
<td>Booms - B2 (Contractor Boom) or equivalent</td>
</tr>
<tr>
<td>Boom - B2 (Contractor Boom) or equivalent</td>
<td>100 Feet</td>
<td>Boom - Sorbent</td>
</tr>
<tr>
<td>Assort Fill material (sand, earth, gravel, sandbags)</td>
<td>200 Feet</td>
<td></td>
</tr>
<tr>
<td>Plastic Sheeting</td>
<td>1 Roll</td>
<td></td>
</tr>
<tr>
<td>Plywood sheets (4ft x 4ft)</td>
<td>4 Each</td>
<td></td>
</tr>
<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
<td></td>
</tr>
</tbody>
</table>

#### Recommended Personnel

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<thead>
<tr>
<th>Role</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
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</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
**Unnamed Creek at Old Pacific Highway S**

USCCA-0.5 Photo: At strategy location on creek right looking to the SW

### Site Contact

**No Information**  
Not Determined:

### Nearest Address

6954 Old Pacific Hwy S  
Kalama, WA 98625

### Driving Directions

1. From Kelso, take I-5 S  
2. Take exit 27 to Todd Road/Port Of Kalama (0.29 miles)  
3. Turn left on Robb Rd (0.13 miles)  
4. Turn left on Old Pacific Hwy S (1.01 miles)  
5. Site is on the right, just past Nimmo Rd.
Unnamed Creek at Cloverdale Road

**Position - Location:**
- 45° 59.595', -122° 49.204'
- 45° 59' 35.7", -122° 49' 12.3"
- 45.99325, -122.82007

**Strategy Objective:**
- Culvert Block, Sorbent: Collect oil moving downstream

**Implementation:**
- Use boom and sorbent on both sides of the bridge for initial containment. If time allows, install culvert block at this location. 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: Stage equipment on side of the road. Large grass fields in the area are privately owned.

**Site Safety:**
- Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation

**Field Notes:**
- Culvert under paved road. Limited parking. Shoreline composition is mostly grass with vegetation. Robert (Ken) Palmer (360-673-2200) is property owner on west side of culvert and was very cooperative. Culvert has easy access off the side of the road but has a wire fence around it.

**Watercourse:**
- Creek - Unnamed Creek

**Resources at Risk:**
- Freshwater Wildlife

**Recommended Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
<td>2 Each</td>
<td>Shoreside</td>
</tr>
<tr>
<td>Boom - B2 (Contractor Boom) or equivalent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>100 Feet</td>
<td></td>
</tr>
<tr>
<td>Plastic Sheeting</td>
<td>1 Roll</td>
<td></td>
</tr>
<tr>
<td>Plywood sheets (4ft x 4ft)</td>
<td>4 Each</td>
<td></td>
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<tr>
<td>Vac Truck or Skimmer and Storage</td>
<td>1 Each</td>
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**Recommended Personnel**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
</tr>
</tbody>
</table>
Unnamed Creek at Cloverdale Road

USCCA-0.8 Photo: Photo taken looking NE

Site Contact
No Information
Not Determined:

Nearest Address
803 Cloverdale Rd
Kalama, WA 98625

Driving Directions
1. From Kalama, head northwest on I-5
2. At exit 27 bear right onto ramp toward Todd Road/Port Of Kalama (0.32 miles)
3. Turn right on Robb Rd (0.03 miles)
4. Make sharp left on Old Pacific Hwy S (0.76 miles)
5. Make sharp right on Vincent Rd (0.24 miles)
6. Turn left on Cloverdale Rd (0.23 miles)
7. Finish at 803 Cloverdale Rd, 98625, on the left
## Unnamed Stream at Burcham Street

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 9.004', -122° 53.892'</th>
<th>46° 9'.2&quot;, -122° 53' 53.5&quot;</th>
<th>46.15007, -122.89821</th>
<th>Kelso</th>
</tr>
</thead>
</table>

### Strategy Objective:
Culvert Block: Collect oil moving downstream

### Implementation:
If time allows, install culvert block at this location on north/upstream side of roadway. If not, deploy one length of river boom (hard boom) on upstream side of culvert (blocking the culvert). Then place multiple lines of sorbent boom immediately upstream of the hard boom. Secure boom (including sorbent boom) to banks using anchoring posts, trees, or existing structures. Use lines to keep boom secure in water (as needed).

### Staging Area:
Onsite: Stage equipment on hill above the site. Follow WSDOT Traffic Safety Guidelines.

### Site Safety:
Slips, Trips, Falls; Water Hazard; Vegetation.

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

### Watercourse:
Intermittent Stream - Unnamed Stream

### Resources at Risk:
Freshwater Wildlife

### Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)</td>
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<tr>
<td>Boom - B2 (Contractor Boom) or equivalent</td>
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<td>Boom - Sorbent</td>
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<tr>
<td>Fill material (sand, earth, gravel, sandbags)</td>
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### Recommended Personnel

<table>
<thead>
<tr>
<th>Position</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelso</td>
<td>46° 9.004', -122° 53.892'</td>
</tr>
</tbody>
</table>

2 Laborer
1 Supervisor
Unnamed Stream at Burcham Street

USCCB-0.8 Photo: Photo taken upstream of culvert looking North

**Site Contact**

No Information
Not Determined:

**Nearest Address**

1401 Burcham St
Kelso, WA 98626

**Driving Directions**

1. Head south on I-5
2. From I-5, take exit 39 towards WA-4 (0.32 miles)
3. Turn left on WA-4 (Allen St) (0.08 miles)
4. Continue on Allen St (0.05 miles)
5. Make sharp left on Minor Rd (0.45 miles)
6. Turn right on Burcham St (0.12 miles)
7. Finish at 1401 Burcham St, 98626, on the left
### Unnamed Creek at Washburn Rd

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 12.452', -122° 53.854'</th>
<th>46° 12' 27.1&quot;, -122° 53' 51.2&quot;</th>
<th>46.20753, -122.89756</th>
<th>Kelso</th>
</tr>
</thead>
</table>

**Strategy Objective:**
Collection: Collect oil moving downstream

**Implementation:**
From roadway, secure end of 100ft length of river boom to bank near Point A. Secure remaining end to shore on northern part of culvert at Point B. Use multiple layers of sorbent boom and/or sweep across creek within boomed area (between boom and culverts). River boom should be positioned in a manner that prevents sorbents from moving downstream if breakaway occurs. If product collecting beyond capacity sorbents can handle, use vac-truck or skimmer with storage for collection.

**Staging Area:**
Remote: No staging onsite.

**Site Safety:**
Slips, Trips, Falls; Water Hazard; Roadway Hazard; Vegetation.

**Field Notes:**
Inform/coordinate response activities with nearby property owners as needed. Follow WSDOT work zone traffic control guidelines when working on or near roadway.

**Watercourse:**
Creek - Unnamed Creek

**Resources at Risk:**
Freshwater Wildlife, Salmon - Coho, Steelhead

**Recommended Equipment**
- 100 Feet Boom - B3 (River Boom) or equivalent
- 200 Feet Boom - Sorbent
- 1 Each Vac Truck or Skimmer and Storage

**Recommended Personnel**
- 2 Laborer
- 1 Supervisor
Unnamed Creek at Washburn Rd

USCCC-0.0 Photo: Photo taken looking NE

Site Contact

No Information
Not Determined :

Nearest Address

130 Washburn Rd
Kelso, WA 98626

Driving Directions

1. From Kelso, take I-5 N
2. Take exit 42 to Sparks Drive toward Pleasant Hill Rd (0.26 miles)
3. Turn right on Sparks Dr (0.06 miles)
4. Turn left on Pacific Ave N (0.53 miles)
5. Turn left on Pleasant Hill Rd (1.26 miles)
6. Turn right on Washburn Rd (0.26 miles)
7. Site is on the left, park on the shoulder.
Whipple Creek near NW 179th Street (Wood Bridge)  WPPLC-2.3

Position - Location:  45° 45.030', -122° 43.007'  45° 45' 1.8", -122° 43' .4"  45.75049, -122.71678  Ridgefield

Strategy Objective: Sorbent: Collect oil moving downstream on Whipple Creek using sorbents

Implementation: Use wooden bridge over creek to deploy multiple lengths of sorbent boom on upstream and downstream sides of bridge. Use line to secure ends of sorbent boom to bridge, anchoring posts, or existing structures nearby. Replace saturated sorbents as needed. USE LIGHT-DUTY TRUCK ONLY with no trailer. The wooden bridge has weight restrictions and is not likely to support the weight of a vacuum or equipment trailer at this location.

Staging Area: Onsite: Stage off NW 179th Street before wooden bridge on unnamed roadway.

Site Safety: Slips, Trips, Falls; Water Hazard; Roadway Hazard (Limited Visibility); Vegetation; Bridge Restrictions

Field Notes: May be able to temporarily park equipment trailer at Clark County Sheriff’s Office (West Precinct), 505 NW 179th Street, ~2mi east of strategy site (before I-5) on south side of roadway; call 360-397-2211.

Watercourse: Creek - Whipple Creek

Resources at Risk: Freshwater Wetlands, Freshwater Wildlife, Habitat and Waterfowl, Salmon - Coho, Steelhead

Recommended Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring System(s)- Shoreside</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Boom - Sorbent</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Heaving Line(s)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Line - 3/8” poly line</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Recommended Personnel

<table>
<thead>
<tr>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
</tr>
<tr>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Whipple Creek near NW 179th Street (Wood Bridge)

WPPLC-2.3 Photo: View of strategy location from NW 179th Street (westbound). Wood bridge/strategy site circled in red.

Site Contact

No Information
Not Determined:

Nearest Address

4112 NW 179th St
Ridgefield, WA 98642

Driving Directions

1. Head south on Interstate-5 and Take Exit 9 (NE 179th Street)
2. Turn right at the end of exit ramp to travel west on NW 179th Street
3. After 2.5mi, take slight right onto unnamed roadway off of NW 179th Street
4. After 170ft, at bottom of hill and curve to the right, you will be at the wooden bridge/strategy location.
Stage on roadway before bridge; LIGHT TRUCKS ONLY-- NO TRAILERS OR VAC-TRUCKS.
Appendix 4B

Notification Strategy 2-Pagers
## NOTIFICATION STRATEGIES – LIST

<table>
<thead>
<tr>
<th>Notification Strategy</th>
<th>LCR-100.8R-N**</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWLZR-4.7-N</td>
<td></td>
</tr>
<tr>
<td>CWLZR-5.2-N</td>
<td></td>
</tr>
<tr>
<td>CWLZR-22.3-N</td>
<td></td>
</tr>
<tr>
<td>CWLZR-27.3-N</td>
<td></td>
</tr>
<tr>
<td>CWLZR-49.8-N</td>
<td></td>
</tr>
<tr>
<td>CWMR-13.3-N</td>
<td></td>
</tr>
<tr>
<td>KLMAR-2.6-N</td>
<td></td>
</tr>
<tr>
<td>KLMAR-10.8-N</td>
<td></td>
</tr>
<tr>
<td>LKRVR-1.84-N**</td>
<td></td>
</tr>
</tbody>
</table>

**Notification strategies from LCR-GRP that are included in this appendix**
Cowlitz River - Kelso Ranney Collector (Water Intake)  CWLZR-4.7-N

**Position - Location:**  46° 8.543', -122° 54.830'  
46° 8' 32.6", -122° 54' 49.8"  
46.14238, -122.91383  
Kelso

**Strategy Objective:**  Notification: Notify City of Kelso so they can take action to protect their water intakes

**Implementation:**  During Normal Business Hours call City of Kelso Public Works at 360-577-3360 or contact the city's water treatment plant directly at 360-577-1085. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream or downstream of the Ranney Collector/Water Intake. After hours, contact Kelso Police at 360-423-1270 and ask that the on-duty public works person return your call.

**Field Notes:**  No information

**Watercourse:**  River - With Tidal Influence - Cowlitz River

**Resources at Risk:**  Water Intakes

**Communication Process and Action:**

Call the City of Kelso Public Works at 360-577-3360 or 360-577-1085. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream or downstream of the Ranney Collector/Water Intake. After hours, contact Kelso Police at 360-423-1270 and ask that the on-duty public works person return your call.

Once notified, the City of Kelso will determine what action(s) they need to take to protect the collector/intakes. Actions by the city might include shutting down the intake pumps and closing intake valves.
**Cowlitz River - Kelso Ranney Collector (Water Intake)**

No Photograph Available

**Site Contact**

City of Kelso - Public Works  
Municipality (County/City):  
203 S Pacific Ave  
Kelso, WA 98626  
360-577-3360

**Nearest Address**

501 1st Ave S  
Kelso, WA 98626

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 39 (WA-4 toward Kelso)  
2. At end of exit, turn right onto highway WA4/Allen Street  
3. After 0.6mi, turn left onto S 4th Avenue  
4. After ~0.2mi, turn right onto Ash Street  
5. After 0.1 mile, turn left onto 1st Avenue S. The Kelso Ranney structure will be on the right, riverside of the railroad tracks behind the Kelso/Longview Amtrak Station.
<table>
<thead>
<tr>
<th>Cowlitz River - Longview Water Intakes</th>
<th>CWLZR-5.2-N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong></td>
<td>46° 9.023', -122° 54.869'</td>
</tr>
<tr>
<td><strong>Strategy Objective:</strong></td>
<td>Notification : Notify City or Longview so they can take action to protect their water intakes</td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td>During Normal Business Hours (Monday through Thursday 7am-6pm) call City of Longview Stormwater Division at 360-442-5299, 360-957-2720, or 360-442-5209. After hours call 360-578-0900.</td>
</tr>
<tr>
<td><strong>Field Notes:</strong></td>
<td>No Information</td>
</tr>
<tr>
<td><strong>Watercourse:</strong></td>
<td>River - With Tidal Influence - Cowlitz River</td>
</tr>
<tr>
<td><strong>Resources at Risk:</strong></td>
<td>Economic Resource, Water Intakes</td>
</tr>
</tbody>
</table>

**Communication Process and Action:**

During Normal Business Hours (Monday through Thursday 7am-6pm) call the City of Longview Stormwater Division at 360-442-5299, 360-957-2720, or 360-442-5209. After hours call 360-578-0900.

After notice about a significant spill in the area is received, the City of Longview will determine what action(s) they need to take to protect the water intakes. Actions by the city might include shutting down the intake pumps and closing intake valves.

Implementation of response strategy CWLZR-5.2 by contractors is also an option to further protect the intakes from oiling.
Cowlitz River - Longview Water Intakes

CWLZR-5.2-N Photo: At City of Longview water intake pump station on river right of Cowlitz River, adjacent to the Westside Hwy, about 0.2mi upstream from the Cowlitz Way Bridge.

Site Contact

City of Longview - Stormwater
Primary Contact:
1525 Broadway
Longview, WA 98632
360-442-5299

Nearest Address

101 Fishers Lane
Kelso, WA 98626

Driving Directions

1. Head south on Interstate-5 and Take Exit 39 (towards Kelso)
2. Turn right at the end of exit ramp, heading west on Hwy 4/Allen Street
3. After 0.9mi, just after the bridge over the Cowlitz River, turn right onto 1st Avenue NW
4. After 0.3 miles, the pump station will be on your right, adjacent to the river.
### Cowlitz River - Castle Rock Water Intakes

**Position - Location:**  46° 20.042', -122° 55.916'  
46° 20' 2.5", -122° 55' 55.0"  
46.33403, -122.93194  
Castle Rock

**Strategy Objective:** Notification  
Notify City of Castle Rock so they can take action to protect their water intakes

**Implementation:**
During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility. If the business number is inoperative, or for after hours assistance, call the city's answering service at 360-751-7478.

**Field Notes:**  No Information

**Watercourse:**  River - Cowlitz River

**Resources at Risk:**  Economic Resource, Water Intakes

**Communication Process and Action:**
Call the City of Castle Rock Public Works at 360-703-0167 or 360-751-7478 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility.

Once notified, the City of Castle Rock will determine what action(s) they need to take to protect the water intakes. Actions by the city might include shutting down the intake pumps and closing intake valves.
Cowlitz River - Castle Rock Water Intakes

CWLZR-22.3-N Photo: Looking NE towards the City of Castle Rock pump station from the Westside Highway.

Site Contact

City of Castle Rock - Public Works
Land/Property Contact: 360 "A" Street SW - P.O. Box 370
Castle Rock, WA 98611
360-703-0167

Nearest Address

6810 Westside Hwy
Castle Rock, WA 98611

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (WA-506, Vader/Ryderwood)
2. At end of exit, turn left to head west on highway WA-506
3. After ~3.0mi, turn left onto Westside Highway
4. After ~5.3mi, turn left onto unnamed dirt/gravel road and take long driveway to immediate left. The pump station is behind the gated fence at the end of the long driveway.
## Cowlitz River - Vader Water Intakes

| Position - Location:  | 46° 24.365', -122° 56.002' | 46° 24' 21.9", -122° 56' .1" | 46.40608, -122.93336 |

| Strategy Objective: Notification | Notify Lewis County so they can take action to protect the City of Vader's water intakes |

| Implementation: | During Normal Business Hours call Lewis County Public Works at 360-740-1123 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility. After hours call Lewis County Emergency Management at 360-740-1151 or the Sheriff's Office at 360-748-9286 for assistance. |

| Field Notes: | No information |

| Watercourse: | River - Cowlitz River |

| Resources at Risk: | Water Intakes |

### Communication Process and Action:

Call Lewis County Public Works at 360-740-1123 and inform them of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River upstream of the facility. After hours contact Lewis County Emergency Management at 360-740-1151 or the Sheriff's Office at 360-748-9286 for assistance.

Once notified, the county will determine what action(s) they need to take to protect the City of Vader's water intakes. Actions by the county might include shutting down the intake pumps and closing intake valves.
Cowlitz River - Vader Water Intakes

CWLZR-27.3-N

No Photograph Available

CWLZR-27.3-N Photo: No photo currently available.

Site Contact

Lewis County - Public Works
Municipality (County/City): 2025 NE Kresky Ave Chehalis, WA 98532 360-740-1123

Nearest Address

108 Willmar Ct Vader, WA 98593

Driving Directions

1. Head south on Interstate-5 and Take Exit 59 (WA-506, Vader/Ryderwood)
2. At end of exit, turn left to head west on highway WA-506
3. After ~2.4mi, turn left onto dirt/gravel pullout with gate.
4. The City of Vader’s water intakes are in the Cowlitz River, >100ft beyond gate.
### Cowlitz River - Salmon and Trout Hatcheries (WDFW) **CWLZR-49.8-N**

**Position - Location:**
- 46° 30.680', -122° 37.767'  
- 46° 30' 40.8", -122° 37' 46.0"  
- 46.51134, -122.62946  
  - Salkum

**Strategy Objective:** Notify WDFW Cowlitz River Hatcheries so they can take action to protect their fish resources

**Implementation:** Notify WDFW Cowlitz River Salmon Hatchery of any significant oil spill or potential spill that impacts or threatens to impact the Cowlitz River or downstream waters. CALL 360-864-6135.

**Field Notes:** No information

**Watercourse:** River - Below a Dam - Cowlitz River

**Resources at Risk:** Fish Hatchery

**Communication Process and Action:**

Notify Cowlitz River Salmon Hatchery by calling 360-864-6135. Inform them of the incident and any actual or threatened oil impacts on the Cowlitz River and downstream waters. The Cowlitz River Salmon Hatchery also manages the Cowlitz River Trout Hatchery, located ~7.0mi downstream, so this notification covers both facilities.

Once notified, the Hatchery Manager will decide what actions are necessary to protect the fish resources under their control; which may or may not include delaying the seasonal release of fish from the hatchery.
COWLITZ, SW LEWIS GRP

Cowlitz River - Salmon and Trout Hatcheries (WDFW)

Site Contact

WDFW - Cowlitz River Hatcheries
Land/Property Owner: Mark
165 Osprey Lane
Toledo, WA 98591
360-864-6135

Nearest Address

125 Salmon Ln
Salkum, WA 98582

Driving Directions

1. Head south on Interstate-5 and Take Exit 68 (US-12 East; Morton/Yakima)
2. At end of exit, turn left onto highway US-12 East
3. After 11.9mi, turn right onto Fuller Road
4. After 1.1mi turn left onto Spencer Road
5. After 0.2mi, keep right to remain on Barrier Dam Lane
6. After 0.4mi turn left onto Salmon Lane – the hatchery will be on the right

CWLZR-49.8-N

CWLZR-49.8-N Photo: No photo currently available
Coweeman River - Rearing Pond

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 9.340', -122° 46.881'</th>
<th>46° 9' 20.4&quot;, -122° 46' 52.9&quot;</th>
<th>46.15566, -122.78136</th>
<th>Kelso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Objective:</td>
<td>Notification: Notify Coweeman Rearing Pond so they can take action to protect their fish resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation:</td>
<td>Notify Coweeman River Rearing Pond of any significant oil spill or potential spill that impacts or threatens to impact the river or downstream waters. CALL 360-577-0602.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Notes:</td>
<td>No information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watercourse:</td>
<td>River - Coweeman River</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources at Risk:</td>
<td>Salmon, Steelhead</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Communication Process and Action:**

Notify Coweeman River Rearing Pond by calling 360-577-0602. Inform them of the incident and any actual or threatened oil impacts on the Coweeman River and downstream waters.

Once notified, the rearing pond owner/manager will decide what actions are necessary to protect their fish resources; which may or may not include delaying the seasonal release of fish from the rearing pond.
Coweeman River - Rearing Pond

Site Contact

Coweeman Rearing Pond
Land/Property Owner: Owner/Manager
278 Clear Water Rd (Libby Lane)
Kelso, WA 98626
360-577-0602

Driving Directions

1. Head south on Interstate-5 and Take Exit 36 (WA-432)
2. Within exit, keep right to take Exit 36B (Airport/Talley Way)
3. At end of exit, turn left onto Coweeman Park Drive
4. After 0.1mi, turn left onto Talley Way
5. After 0.2mi, turn left onto ramp for highway WA432 E, stay left at split following sign for I-5 Seattle
6. After 0.4mi, take exit on left (Kelso Drive) – Do Not Get On Interstate-5 (North Bound)
7. At end of exit the roadway becomes Old Pacific Highway (heading towards Rose Valley/Carrols)
8. After 1.1mi, turn left onto Rose Valley Road
9. After 2.3mi, turn left to stay on Rose Valley Road

Nearest Address

278 Clear Water Rd
Kelso, WA 98626

CWMR-13.3-N Photo: No photo currently available
<table>
<thead>
<tr>
<th>Kalama River - Kalama Ranney Collector (Water Inta)</th>
<th>KLMAR-2.6-N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong> 46° 2.617', -122° 50.341'</td>
<td>46° 2' 37.0&quot;, -122° 50' 20.5&quot;</td>
</tr>
<tr>
<td><strong>Strategy Objective:</strong> Notify City of Kalama so they can take action to protect their water intakes</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation:</strong> During Normal Business Hours call City of Kalama Public Works at 360-673-3706 or contact the city’s water treatment plant directly at 360-673-4047. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Kalama River upstream of the Ranney Collector/Water Intake. After hours, contact Kalama Police/Dispatch at 360-577-3090 and ask that the on-duty public works person return your call.</td>
<td></td>
</tr>
<tr>
<td><strong>Field Notes:</strong> No information</td>
<td></td>
</tr>
<tr>
<td><strong>Watercourse:</strong> River - Kalama River</td>
<td></td>
</tr>
<tr>
<td><strong>Resources at Risk:</strong> Water Intakes</td>
<td></td>
</tr>
</tbody>
</table>

**Communication Process and Action:**

Call the City of Kalama Public Works at 360-673-3706 or 360-673-4047. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Kalama River upstream of the Ranney Collector/Water Intake. After hours, contact Kalama Police/Dispatch at 360-577-3090 and ask that the on-duty public works person return your call.

Once notified, the City of Kalama will determine what action(s) they need to take to protect the collector/intakes. Actions by the city might include shutting down the intake pumps and closing intake valves.
Kalama River - Kalama Ranney Collector (Water Inta
KLMAR-2.6-N)

KLMAR-2.6-N Photo: On river left of the Kalama River looking west toward City of Kalama Ranney Collector behind fenced area, circled in yellow.

Site Contact
City of Kalama - Public Works
Municipality (County/City): 6315 Old Pacific Hwy South
Kalama, WA 98625
360-673-3707

Nearest Address
164 Modrow Rd
Kalama, WA 98625

Driving Directions
1. Head south on Interstate-5 and Take Exit 32 (Kalama River Road)
2. Turn left at end of exit ramp to head east on Kalama River Road
3. After 1.3mi, turn right onto Modrow Road and cross bridge.
4. After ~0.3mi, the pump station will be on your right. The collector is adjacent to the Kalama River, behind the fenced area.
Kalama River - Kalama Falls Hatchery (WDFW)  KLMAR-10.8-N

Position - Location:  46°  .996', -122° 44.045'  46° 0'59.7", -122° 44'2.7"

Strategy Objective: Notification: Notify WDFW Kalama Falls Hatchery so they can take action to protect their fish resources.

Implementation: Notify WDFW Kalama Falls Hatchery of any significant spill or potential oil spill that impacts or threatens to impact the Kalama River, Toutle River, Cowlitz River, Lewis River, or downstream waters. CALL 360-673-4825 or 360-864-6135.

Field Notes: No information

Watercourse: River - Kalama River

Resources at Risk: Salmon

Communication Process and Action:

Notify WDFW Kalama Falls Hatchery by calling 360-673-4825 or 360-864-6135. Inform them of the incident and any actual or threatened oil impacts on the Kalama River, Toutle River, Cowlitz River, Lewis River. The Kalama Falls Hatchery also manages Fallert Creek, North Toutle, and Mossyrock Hatcheries. It is also responsible for the Modrow Fish Trap on the Kalama River. This notification covers all five facilities.

Once notified, the Hatchery Manager will decide what actions are necessary to protect their fish resources; which may or may not include delaying the seasonal release of fish from the hatchery.
Kalama River - Kalama Falls Hatchery (WDFW)

KLMAR-10.8-N Photo: At Kalama Falls Hatchery looking north from parking lot towards main building and fish pens beyond.

### Site Contact

**WDFW - Kalama Falls Hatchery**  
Land/Property Owner: Hatchery Manager  
11285 Spirit Lake Highway  
Toutle, WA 98649  
360-673-4825

### Driving Directions

1. Head south on Interstate-5 and Take Exit 32 (Kalama River Road)  
2. Turn left at end of exit ramp to head east on Kalama River Road  
3. After 8.6mi, turn right onto Hatchery Road.  
4. After 0.3mi, you have reached the main hatchery building at the bottom of the hill.
### Flushing Channel Pumping Station

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 40.151', -122° 44.720'</th>
<th>45° 40' 9.1&quot;, -122° 44' 43.2&quot;</th>
<th>45.66919, -122.74533</th>
<th>Vancouver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Objective:</td>
<td>Notification: Contact Port of Vancouver to shut down pumping station between Columbia River and Vancouver Lake.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation:</td>
<td>Call Port of Vancouver to notify them of a spill on the Columbia River that could impact the Flushing Channel pumping station. They will shut down the pumps to prevent transfer of oil between the Columbia River and Vancouver Lake.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Notes:</td>
<td>Water flows from Flushing Channel into Vancouver Lake, but not the other direction.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watercourse:</td>
<td>Lake - Vancouver Lake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources at Risk:</td>
<td>Downstream Resources, Lake Habitat</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Communication Process and Action:**

Call Port of Vancouver to notify them of a spill that could impact the pumping station and Flushing Channel. Port personnel will shut down pumps to prevent oil from travelling from Columbia River into Flushing Channel and Vancouver Lake.
Flushing Channel Pumping Station

LCR-100.8R-N Photo: Pumping station between Vancouver Lake and Flushing Channel that flows into Columbia River

Site Contact

Port of Vancouver
Primary Contact: 24-Hour Security
3103 NW Lower River Road
Vancouver, WA 98660
360-992-1120

Nearest Address

6801 NW Lower River Rd.
Vancouver, WA 98660

Driving Directions

From I-5 S, Vancouver, WA
1. At exit 1D take ramp on the right to East-4th Plain Blvd-West (0.2 miles)
2. At fork keep right (0.07 miles)
3. Continue on E Fourth Plain Blvd (1.41 miles)
4. Continue (0.14 miles)
5. Continue on WA-501 (NW Lower River Rd) (3.21 miles)
6. Finish at 6801 NW Lower River Rd., 98660, on the right
<table>
<thead>
<tr>
<th>Lewis River - Woodland Ranney Collector (Water Int)</th>
<th>LEWR-7.0-N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong> 45° 54.609', -122° 44.409'</td>
<td>45° 54' 36.5&quot;, -122° 44' 24.5&quot;</td>
</tr>
<tr>
<td><strong>Strategy Objective:</strong> Notification</td>
<td>Notify City of Woodland so they can take action to protect their water intakes</td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td>Call the City of Woodland Public Works at 360-606-1191, 360-608-1417, or 360-607-0968. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Lewis River upstream of the Ranney Collector/Water Intake.</td>
</tr>
</tbody>
</table>

**Field Notes:** No information

**Watercourse:** River - Lewis River

**Resources at Risk:** Water Intakes

**Communication Process and Action:**

Call the City of Woodland at 360-606-1191, 360-608-1417, or 360-607-0968. Inform them of any significant oil spill or potential spill that impacts or threatens to impact the Lewis River upstream of the Ranney Collector/Water Intake.

Once notified, the City of Woodland will determine what action(s) they need to take to protect the collector/intakes. Actions by the city might include shutting down the intake pumps and closing intake valves.
**Lewis River - Woodland Ranney Collector (Water Int) LEWR-7.0-N**

**Site Contact**

**City of Woodland - Public Works**  
Municipality (County/City) :  
300 E Scott Avenue  
Woodland, WA 98674  
360-225-7999

**Nearest Address**

1380 Lewis River Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 21 (WA-503 East; Woodland/Cougar)  
2. At end of exit, stay straight to remain on Pacific Avenue  
3. After 0.7mi, turn left to stay on Pacific Avenue and then turn left onto highway WA503 South (Lewis River Road)  
4. After ~0.4mi, the Bryant Pump House will be on your right, across the street from the Hi-School Pharmacy store.
### Lewis River - Merwin Hatchery (WDFW) LEWR-19.0-N

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 57.279', -122° 33.888'</th>
<th>45° 57' 16.7&quot;, -122° 33' 53.3&quot;</th>
<th>45.95464, -122.56479</th>
<th>Ariel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Objective:</td>
<td>Notification</td>
<td>Notify WDFW Merwin Hatchery so they can take action to protect their fish resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation:</td>
<td>Notify WDFW Merwin Hatchery of any significant oil spill or potential spill that impacts or threatens to impact the Lewis River or downstream waters. CALL 360-225-4390.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Notes:</td>
<td>No information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watercourse:</td>
<td>River - Below a Dam - Lewis River</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources at Risk:</td>
<td>Salmon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Communication Process and Action:**

Notify Merwin Hatchery by calling 360-225-4390. Inform them of the incident and any actual or threatened oil impacts on the Lewis River or downstream waters. The Merwin Hatchery also manages the Lewis River Hatchery, located ~3.2mi downstream, so this notification covers both facilities. ASK THEM TO DEPLOY THEIR SORBENT AND/OR HARD BOOM IN FRONT OF WATER INTAKES AT THE LEWIS RIVER FISH HATCHERY AND CONSIDER SHUTTING DOWN WATER INTAKES.

Once notified, the Hatchery Manager will decide what actions are necessary to protect the fish resources under their control; which may or may not include delaying the seasonal release of fish from the hatchery.
Lewis River - Merwin Hatchery (WDFW)

LEWR-19.0-N Photo: Looking NW towards main hatchery building from Merwin Hatchery Court.

Site Contact

**WDFW - Merwin Hatchery**
Land/Property Owner: Hatchery Manager
111 Merwin Hatchery Court
Ariel, WA 98603-9727
360-225-4390

Nearest Address

125 Merwin Hatchery Ct
Ariel, WA 98603

Driving Directions

1. Head south on Interstate-5 and Take Exit 21 (WA-503 East; Woodland/Cougar)
2. At end of exit, stay straight to remain on Pacific Avenue
3. After 0.7mi, turn left to stay on Pacific Avenue and then turn left onto highway WA503 South (Lewis River Road)
4. After 10.3mi, turn right onto Merwin Village Road
5. After 0.6mi, turn right onto Merwin Hatchery Court
6. After 0.1mi turn right into the hatchery facility
Ridgefield National Wildlife Refuge (WA)  

**Position - Location:** 45° 48.438', -122° 44.470'  
45° 48' 26.3", -122° 44' 28.2"  
45.80730, -122.74116  
Ridgefield

**Strategy Objective:** Notification: Notify Ridgefield National Wildlife Refuge of spills impacting the Columbia River and Lake River

**Implementation:** Call Ridgefield National Wildlife Refuge main office during business hours (7am - 5pm) or Project Leader after hours.

**Field Notes:** Ridgefield National Wildlife Refuge has 3 water intakes on Bachelor Island Slough at (45.81438, -122.759792), (45.817633, -122.760013), (45.799207, -122.768186), and one water intake on Lake River (45.762733, -122.750028). The intakes pump water into the Refuge's impoundments and run from mid-August through early December.

**Watercourse:** Freshwater Wetland - Ridgefield National Wildlife Refuge

**Resources at Risk:** Federally Protected Area/Lands, Waterfowl Concentrations

**Communication Process and Action:**
Call Ridgefield National Wildlife Refuge main office during business hours (7am - 5pm) or Project Leader after hours. They will initiate internal notifications, evacuate the Refuge if spill poses threat to Refuge staff and visitors, and shut down water intakes.
Ridgefield National Wildlife Refuge (WA)

**Site Contact**

**Ridgefield National Wildlife Refuge**
Primary Contact: Main Office
360-887-4106

**Ridgefield National Wildlife Refuge**
Alternate Contact: Project Lead
360-823-8610

**Nearest Address**

1071 South Hillhurst Road
Ridgefield, WA 98642

**Driving Directions**

From I-5 South, Ridgefield, WA
1. At exit 14 take ramp on the right to WA-501 S/Pioneer St toward Ridgefield (0.34 miles)
2. Turn right on WA-501 (Pioneer St) (0.74 miles)
3. At roundabout, take 2nd exit to proceed west on WA-501 (Pioneer St) (1.81 miles)
4. Turn left on S 9th Ave (0.26 miles)
5. Continue on S Hillhurst Rd (0.36 miles)
6. Turn right on S. Refuge Rd. at sign for Ridgefield National Wildlife Refuge and follow road for 0.5 mile.
Appendix 4C

Staging Area 2-Pagers
# STAGING AREAS – LIST

<table>
<thead>
<tr>
<th>SA-CWLZR-1.6</th>
<th>SA-KLMAR-0.7**</th>
<th>SA-LEWR-11.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA-CWLZR-6.35</td>
<td>SA-KLMAR-2.8</td>
<td>SA-LEWR-12.4</td>
</tr>
<tr>
<td>SA-CWLZR-16.1</td>
<td>SA-LCR-72.7R**</td>
<td>SA-LEWR-14.7</td>
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<tr>
<td>SA-CWLZR-17.6</td>
<td>SA-LCR-74.5L**</td>
<td>SA-LEWR-15.5</td>
</tr>
<tr>
<td>SA-CWLZR-24.7</td>
<td>SA-LEWR-0.4**</td>
<td>SA-SALMC-5.6</td>
</tr>
<tr>
<td>SA-CWLZR-29.8</td>
<td>SA-LEWR-3.3</td>
<td>SA-SCHSC-0.6</td>
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<tr>
<td>SA-CWMR-1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Staging Areas from LCR-GRP that are included in this appendix**
Cowlitz River - Gerhart Gardens Park

**SA-CWLZR-1.6**

**Staging Area**

| Position - Location: | 46° 6.682', -122° 53.731' | 46° 6' 40.9", -122° 53' 43.9" | 46.1136, -122.89552 | Longview |

**Comments:** Gerhart Gardens Park belongs to the City of Longview. Coordinate staging with Parks Department; call 360-487-8337.

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>3</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>3 Bars/4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>120000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>85%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>25</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>60</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Flush</td>
<td>2</td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LCR-65.9R
Cowlitz River - Gerhart Gardens Park

SA-CWLZR-1.6 Photo: On river right at Staging Area and Boat Launch in Gerhart Gardens Park in Longview, looking towards river with river left in background.

**Site Contact**

City of Vancouver Parks and Recreation
Primary Contact:
415 Sixth Street
Vancouver, WA 98660
360-487-8337

**Nearest Address**

200 Freedom Way
Longview, WA 98632

**Driving Directions**

1. Head south on Interstate-5 toward Exit 36
2. Take Exit 36 and keep left to continue on Exit 36A (Washington 432 W/Longview)
3. After 0.8mi, take the exit for Dike Road (1st exit after bridge)
4. At end of exit, turn right onto Frontage Road
5. After 0.2mi, turn left onto Freedom Way
6. After 0.1mi, turn right into parking area for Gerhart Gardens Park. Stage equipment near boat launch.
## Cowlitz River - Carnival Market

### Staging Area

| Position - Location: | 46° 9.938', -122° 54.937' | 46° 9' 56.3", -122° 54' 56.2" | 46.16564, -122.91561 | Kelso |

### Comments:
Carnival Market

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>2 4000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

###GRP Response Strategies Served:

---

**Note:** The image contains a map and additional details about the location, but due to the nature of the task, these are not transcribed into plain text representations.
Cowlitz River - Carnival Market

SA-CWLZR-6.35 Photo: Photo taken from staging area looking East

Site Contact

No Information
Not Determined:

Nearest Address

829 Westside Hwy
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 39 to WA-4 W toward Kelso (0.3 miles)
3. Turn left on WA-4 (Allen St) (0.73 miles)
4. Continue on Allen St Bridge (0.24 miles)
5. Turn right on WA-411 (1st Ave NW) (1.47 miles)
6. Finish at 829 Westside Hwy, 98626. Boat launch is on the right.
Cowlitz River - Camelot Beach

**Staging Area**

| **Position - Location:** | 46° 15.941', -122° 54.270' | 46° 15' 56.5", -122° 54' 16.2" | 46.26569, -122.90451 | Castle Rock |

**Comments:** Gravel lot

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>20,000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Portable</td>
<td>2</td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### GRP Response Strategies Served:

- SA-CWLZR-16.1
- SA-CWLZR-16.2
- BL-CWLZR-16.1
- Castlerock
Cowlitz River - Camelot Beach

SA-CWLZR-16.1 Photo: Photo taken from river right looking NW

### Site Contact

**No Information**
Not Determined:

### Nearest Address

213 Camelot Spur
Castle Rock, WA 98611

### Driving Directions

1. Take I-5 to Exit 49
2. Take exit 49 to WA-504 E toward S/Castle Rock/Toutle (0.43 miles)
3. Turn right on I-5-Bl (Front Ave NW) (0.39 miles)
4. Bear right on Front Ave NW (0.34 miles)
5. Turn right on WA-411 (A St SW) (0.69 miles)
6. Turn left to stay on WA-411 (Westside Hwy) (1.54 miles)
7. Turn left onto Camelot Dr (0.1 miles)
8. Bear left onto Camelot Spur and follow dirt road to boat launch.
Cowlitz River - Castle Rock Sports Complex/Memorial Park

**SA-CWLZR-17.6**

**Staging Area**

| **Position - Location:** | 46° 16.698', -122° 54.711' | 46° 16' 41.9", -122° 54' 42.7" | 46.27830, -122.91185 | Castle Rock |

**Comments:**
During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of the need to use the Sports Complex/Memorial Park boat launch parking area for staging. If the business number is inoperative, or for after hours assistance, call the city's answering service at 360-751-7478.

**Location Information**

<table>
<thead>
<tr>
<th><strong>Asset</strong></th>
<th><strong>Type/Status</strong></th>
<th><strong>Amount/Number</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>2</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 4 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td>Yes</td>
<td>98,000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>25</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>61</td>
</tr>
<tr>
<td>Power</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Flush</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>$5/day</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

CWLZR-18.0
Cowlitz River - Castle Rock Sports Complex/Memorial Park

SA-CWLZR-17.6 Photo: On river right at the Castle Rock Sports Complex/Memorial Park, looking SE towards the boat ramp and Cowlitz River.

**Site Contact**

City of Castle Rock - Public Works  
Municipality (County/City):  
360 "A" Street SW - P.O. Box370  
Castle Rock, WA 98611  
360-703-0167

**Nearest Address**

5018 Westside Hwy  
Castle Rock, WA 98611

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 49 (Castle Rock/Toutle)  
2. At end of exit ramp turn right onto Hwy 411/Huntington Avenue N  
3. After 0.7mi, turn right on “A” Street to remain on Hwy 411  
4. After 0.7mi, turn right onto the Westside Highway  
5. After 0.3mi, turn right onto unnamed road that leads into the Sports Complex  
6. After ~0.3mi, turn right onto unnamed road in park and follow it around to the boat ramp; stage equipment in boat launch parking area near ramps.
Cowlitz River - WDFW Water Access Site "Olequa Cre"  SA-CWLZR-24.7

Staging Area

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 22.067', -122° 56.058'</th>
<th>46° 22' 4.0&quot;, -122° 56' 3.5&quot;</th>
<th>46.36778, -122.93431</th>
</tr>
</thead>
</table>

| Comments: | WDFW Water Access Site "Olequa Creek" is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov. |

Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>8000 square feet</td>
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<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt</td>
<td>90 percent</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
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</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>4</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discover Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

GRP Response Strategies Served:

HILLC-0.9, CWLZR-24.7
Cowlitz River - WDFW Water Access Site "Olequa Creek" SA-CWLZR-24.7

SA-CWLZR-24.7 Photo: On river left at WDFW Water Access Site "Olequa Creek" looking west toward boat ramp with the Cowlitz River and river right in background.

**Site Contact**

**WDFW Region 5**
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

**Nearest Address**

271 Miekler Rd
Castle Rock, WA 98661

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road
3. After ~0.1mi, turn left onto Barnes Drive
4. After 2.1mi, turn right onto Imboden Road
5. After 0.2mi, stay left to travel on Miekler Road
6. After ~0.3mi at end of road, you have reached WDFW Water Access Site "Olequa Creek" on the Cowlitz River. Stage equipment in parking area to the south, adjacent to river.
Cowlitz River - WDFW "I-5" Water Access Site  
SA-CWLZR-29.8

Staging Area

**Position - Location:** 46° 24.818', -122° 53.461'  
46° 24' 49.1", -122° 53' 27.7"  
46.41364, -122.89102  
Toledo

**Comments:** WDFW "I-5" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon - 4 bars</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>30,000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Gravel</td>
<td>70 percent</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>10</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discover Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
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### GRP Response Strategies Served:

CWLZR-29.9
Cowlitz River - WDFW "I-5" Water Access Site

SA-CWLZR-29.8 Photo: At WDFW "I-5" Water Access Site on the Cowlitz River (river left), looking NW towards the boat ramp and across to river right.

**Site Contact**

**WDFW Region 5**
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

**Nearest Address**

275 Mandy Rd
Toledo, WA 98591

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, turn right onto Mandy Road
4. After 2.3mi, WDFW "I-5" Water Access Site will be on your left before passing under Interstate 5.
Coweeman River - Cowlitz County SAR

**Staging Area**

**Position - Location:** 46° 7.884', -122° 53.859'  
46° 7' 53.0", -122° 53' 51.6"  
46.13140, -122.89765  
Kelso

**Comments:** Search and Rescue station across street from boat launch

---

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
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<td>Estimated Lot Size</td>
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<td></td>
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<tr>
<td>Lot Cover (Primary)</td>
<td>None</td>
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<tr>
<td>Parking - Car</td>
<td>Not Determined</td>
<td>On the road</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Determined</td>
<td>On the road</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

---

**GRP Response Strategies Served:**
Coweean River - Cowlitz County SAR

SA-CWMR-1.0 Photo: Photo taken from top of boat ramp looking SW

Site Contact

No Information
Not Determined:

Nearest Address

1809 Grade St
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. At fork keep right toward Kelso Dr./Carrolls (0.46 miles)
4. Turn right on Kelso Dr (1.58 miles)
5. Turn left on Haussler Rd (0.06 miles)
6. Bear right on Grade St (0.28 miles)
7. Finish at 1809 Grade St, 98626, on the left
**Sportman Loop Lower (WDFW) - Kalama River**

**SA-KLMAR-0.7**

### Staging Area

| Position - Location: | 46° 2.333', -122° 51.861' | 46° 2' 20.0", -122° 51' 51.7" | 46.03889, -122.86435 | Kalama |

**Comments:** WDFW Boat Ramp Parking and Staging

---

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Gravel</td>
<td>10 spaces</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Gravel</td>
<td>20</td>
</tr>
</tbody>
</table>

---

**GRP Response Strategies Served:**

KLMAR-0.7
SA-KLMAR-0.7 Photo: River right at WDFW Kalama River boat ramp

Site Contact

**WDFW Region 5**

Primary Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

222 Kalama River Rd.
Kalama, WA 98625

Driving Directions

From I-5 S, Kelso, WA
1. At exit 32 bear right onto ramp to Kalama River Road
2. Turn right on Kalama River Rd W (0.5 mi)
3. Turn left on Hendrickson Dr. N and then an immediate left on the gravel road.
Kalama River - WDFW Water Access "Modrow Bridge"  

**SA-KLMAR-2.8**

**Staging Area**

| Position - Location: | 46° 2.841', -122° 50.227' | 46° 2' 50.5", -122° 50' 13.6" | 46.04735, -122.83712 | Kalama |

**Comments:**  
WDFW Water Access Site "Modrow Bridge" is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

---

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
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<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>2 bars - No Data</td>
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<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>20,000 SqFt</td>
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<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>90%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>16</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>8</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

---

**GRP Response Strategies Served:**
SA-KLMAR-2.8 Photo: At WDFW Modrow Bridge Water Access Site on the Kalama River (river left), looking west towards the boat ramp, Modrow Bridge, and river right.

**Site Contact**

**WDFW Region 5**  
Primary Contact: Vancouver  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

150 Modrow Rd  
Kalama, WA 98625

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 32 (Kalama River Road)  
2. Turn left at end of exit ramp to head east on Kalama River Road  
3. After 1.3 mi, turn right onto Modrow Road and cross bridge.  
4. Immediately after bridge, turn left and follow the road down to the boat launch and parking area.
Sportsmen's Club (WDFW) - Kalama River

**Position - Location:** 46° 2.333', -122° 52.437'  
46° 2' 20.0", -122° 52' 26.2"  
46.03888, -122.87395  
Kalama

**Comments:** Sportsmen's Club Parking and Staging

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
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<tbody>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Gravel</td>
<td>6 spaces</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>WDFW Discover Pass Required</td>
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**GRP Response Strategies Served:**

LCR-71.6R, LCR-70.0M, LCR-71.5M, LCR-71.4R
Sportsmen's Club (WDFW) - Kalama River

SA-LCR-72.7R Photo: River right looking SW at Sportsmen's Club boat ramp

Site Contact

WDFW Region 5
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

32 Sportsmen's Club Rd
Kalama, WA 98625

Driving Directions

From I-5 S, Kalama, WA
1. At exit 32 bear right onto ramp to Kalama River Road
2. Turn right on Kalama River Rd W
3. Turn left on Sportsmens Club Rd
4. Finish at 32 Sportsmens Club Rd, 98625, on the left
### Scipio's Goble Landing

**SA-LCR-74.5L**

<table>
<thead>
<tr>
<th>Staging Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position - Location:</strong></td>
</tr>
</tbody>
</table>

**Comments:** Paved parking area 150'x650'=97,500' sq ft, Boat fuel (non-ethanol unleaded) available.

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
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<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>Yes</td>
<td>300 Open slips</td>
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<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
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<td>Estimated Lot Size</td>
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<td>97500 Sq Ft</td>
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<tr>
<td>Fuel</td>
<td>Yes</td>
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<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
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<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>40</td>
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<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>40</td>
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<tr>
<td>Power</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Restroom</td>
<td>Restroom - with Showers</td>
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<tr>
<td>User Fee</td>
<td>Yes</td>
<td>3 per launch; +$3 parking</td>
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<tr>
<td>Waste Disposal</td>
<td>Pumpout</td>
<td></td>
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<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
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</table>

### GRP Response Strategies Served:

LCR-73.7L
Scipio's Goble Landing

SA-LCR-74.5L Photo: Top of ramp at Scipio’s Goble Landing looking E at Columbia River and top of Sandy Island.

**Site Contact**

**Scipio's Goble Landing**

Land/Property Owner : Goble Marina
70360 Columbia River Hwy
Rainier, OR 97048
503-556-6510

**Nearest Address**

70360 Columbia River Hwy
Rainier, OR 97048

**Driving Directions**

Directions to Scipio's Goble Landing BL-LCR-74.5L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (39.02 miles)
6. Finish at 70360 Columbia River Hwy, 97048, on the right
Stevens' Moorage RV Park and Boat Launch

SA-LEWR-0.4

**Staging Area**

**Position - Location:** 45° 51.489', -122° 46.487'  
45° 51' 29.3", -122° 46' 29.2"  
45.85815, -122.77479  
Woodland

**Comments:** Stevens' Moorage Parking and Staging

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
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</thead>
<tbody>
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<td>Boat Dock(s)</td>
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<td>50 ft.</td>
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<td>Boat Ramp(s)</td>
<td>Asphalt</td>
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<tr>
<td>Estimated Lot Size</td>
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<td>45000 Sq Ft</td>
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<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Gravel</td>
<td>15 spaces</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Gravel</td>
<td>10 spaces</td>
</tr>
<tr>
<td>Power</td>
<td>Unknown</td>
<td></td>
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<tr>
<td>Restroom</td>
<td>Restroom - Portable</td>
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<tr>
<td>User Fee</td>
<td>Yes</td>
<td>$6 for boat launch and trailer parking</td>
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<td>Water (potable)</td>
<td>Unknown</td>
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**GRP Response Strategies Served:**

LEWR-0.4, LEWR-0.35, LCR-87.3R
Stevens' Moorage RV Park and Boat Launch

SA-LEWR-0.4 Photo: River right on Lewis River looking South

Site Contact

Stevens' Moorage
Land/Property Contact: General Manager
4005 Dike Rd.
Woodland, WA 98674
360-989-7367

Nearest Address

4005 Dike Road
Woodland, WA 98674

Driving Directions

From I-5 S, Woodland, WA
1. Take exit 21 toward WA-503 E/ Woodland/ Cougar (0.2 mi)
2. Turn right onto W Scott Ave (0.5 mi)
3. Turn left onto N Pekin Rd (0.9 mi)
4. Turn left onto Davidson Avenue (0.2 mi)
5. Turn right at the 2nd cross street onto 5th St (0.2 mi)
6. Continue onto S Pekin Rd (0.5 mi)
7. Slight right onto Whalen Rd (0.5 mi)
8. Turn left onto Kuhnis Rd (1.6 mi)
9. Continue onto Dike Rd
Destination will be on the left in 1.2 mi
Lewis River - WDFW Water Access Site "Martin"

**SA-LEWR-3.3**

**Staging Area**

<table>
<thead>
<tr>
<th>Position - Location</th>
<th>45° 52.079', -122° 43.487'</th>
<th>45° 52' 4.8&quot;, -122° 43' 29.2&quot;</th>
<th>45.86799, -122.72479</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td>WDFW Water Access Site &quot;Martin&quot; is open year round; For extended use, contact WDFW Region 5 at 360-696-6211 or email <a href="mailto:TeamVancouver@dfw.wa.gov">TeamVancouver@dfw.wa.gov</a>.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>50,000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Gravel</td>
<td>80%</td>
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<tr>
<td>Parking - Car</td>
<td>Gravel</td>
<td>5</td>
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<tr>
<td>Parking - Trailer</td>
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<td>Power</td>
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<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
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<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
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<tr>
<td>Waste Disposal</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-3.4
Lewis River - WDFW Water Access Site "Martin"

SA-LEWR-3.3 Photo: At WDFW Water Access site "Martin" looking west towards boat ramp with Lewis River (and river left) in background.

**Site Contact**

Washington Department of Fish and Wildlife  
Land/Property Contact: Region 5  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp turn right onto W Scott Avenue  
3. After 0.5mi, turn left onto N Pekin Road  
4. After 0.9mi, turn left onto Davidson Avenue  
5. After 0.2mi, turn right onto 5th Street (becoming S Pekin Road after 0.2mi)  
6. After 2.3mi, stay left to remain on S Pekin Road  
7. After 0.5mi (at end of the road) you will have reached WDFW Water Access Site "Martin." Stage equipment in parking lot near boat ramp.

**Nearest Address**

1242 S Pekin Rd  
Woodland, WA 98674
Lewis River - WDFW "Island" Water Access Site

SA-LEWR-11.7

Staging Area

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 56.360', -122° 40.911'</th>
<th>45° 56' 21.6&quot;, -122° 40' 54.7&quot;</th>
<th>45.93933, -122.68185</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Woodland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: WDFW "Island" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td>55,000 SqFt</td>
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</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td>70%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>10</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

GRP Response Strategies Served:
LEWR-11.7
Lewis River - WDFW "Island" Water Access Site

SA-LEWR-11.7 Photo: At WDFW "Island" Water Access Site on river right (channel right) of Lewis River looking NW towards boat launch. Lewis River and right channel left in background.

**Site Contact**

**WDFW Region 5**
Primary Contact : Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

**Nearest Address**

3020 Lewis River Rd
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue strait to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 4.9mi, entrance to Lewis River Water Access Site "Island" will be on your right. Stage in parking lot near boat ramp.
Lewis River Golf Club Boat Launch

SA-LEWR-12.4

**Staging Area**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 56.173', -122° 39.959'</th>
<th>45° 56' 10.4&quot;, -122° 39' 57.5&quot;</th>
<th>45.93622, -122.66598</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodland</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Lewis River Golf Club Boat Launch parking area can be used for staging. Coordinate use of parking area with golf course administration and operations office; call 360-225-8566 or 360-225-8254.

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
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</tr>
<tr>
<td>Estimated Lot Size</td>
<td>12,000 SqFt</td>
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</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td>100%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>15</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>6</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-11.8, LEWR-11.5, LEWR-12.2, LEWR-12.5, LEWR-12.3a, LEWR-12.3b
Lewis River Golf Club Boat Launch

SA-LEWR-12.4 Photo: On river right at Lewis Rive Golf Course Boat Ramp, looking downstream/west and across to river left.

**Site Contact**

**Lewis River Golf Course**  
Primary Contact:  
3209 Lewis River Road  
Woodland, WA 98674  
360-225-8566

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp continue straight to head south on Pacific Avenue  
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road  
4. After 5.5mi, turn right onto Old Lewis River Road.  
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)  
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp.

**Nearest Address**

3209 Old Lewis River Rd  
Woodland, WA 98674
Lewis River - Haapa Boat Launch

**SA-LEWR-14.7**

**Staging Area**

**Position - Location:** 45° 56.153', -122° 38.260'  
45° 56' 9.2", -122° 38' 15.6"  
45.93589, -122.63767  
Woodland

**Comments:** Haapa Park is open daily from 7AM to dusk. Contact Clark County Dispatch (CRESA) for after-hours access assistance; call 360-693-3111. Clark County Sheriff’s Department and WDFW Enforcement Officers have a 24-hour access key to park.

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td>33,000 SqFt</td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>85%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>35</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>15</td>
</tr>
<tr>
<td>Power</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-13.3, LEWR-14.9, LEWR-13.8
Lewis River - Haapa Boat Launch

SA-LEWR-14.7 Photo: At Happa Park on river left of Lewis River looking north towards boat launch. River and bank on river right in background.

**Site Contact**

**Clark County Parks and Trails**  
Primary Contact: 360-397-2285

**CRESA**  
Secondary Contact: Clark Regional Emergency Services Agency  
360-696-4461

**Nearest Address**

43309 NE Haapa Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 0.2mi, turn left onto NE Haapa Road
9. After 0.4, roadway curves to the right and becomes Haapa Pit. Entrance to Haapa Park is on the left. Stage equipment in parking area near boat ramp.
Lewis River - WDFW "Cedar Creek" Water Access Site

Position - Location: 45° 56.186', -122° 37.230'  
45° 56' 11.1", -122° 37' 13.8"  
45.93643, -122.62050  
Woodland

Comments: WDFW "Cedar Creek" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
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</tr>
<tr>
<td>Estimated Lot Size</td>
<td>18,000 SqFt</td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td>100%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>30</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>12</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

GRP Response Strategies Served:

LEWR-15.6b, LEWR-15.5b, LEWR-15.6a, LEWR-15.5a
SA-LEWR-15.5 Photo: At WDFW "Cedar Creek" Water Access Site on river left of Lewis River looking north towards boat launch. Lewis River and river right in background.

**Site Contact**

**WDFW Region 5**  
Primary Contact: Vancouver  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

5100 NE Etna Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp continue straight to head south on Pacific Avenue  
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road  
4. After 0.1mi, turn right onto E CC Street.  
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road  
6. After 5.3mi, roadway becomes NE Cedar Creek Road  
7. After 0.6mi, stay to left and travel on NE Etna Road  
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

**NOTE:** DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
**Staging Area - Klineline Pond (Salmon Creek Region)**

<table>
<thead>
<tr>
<th>Location Information</th>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
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<tbody>
<tr>
<td>Boat Dock(s)</td>
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<td>Cell Phone Coverage</td>
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<td></td>
<td></td>
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<tr>
<td>Estimated Lot Size</td>
<td>180,000 SqFt</td>
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<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Flush</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Not Determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

SALMC-5.6
Staging Area - Klineline Pond (Salmon Creek Region)

SA-SALMC-5.6 Photo: At Salmon Creek Regional Park in Vancouver looking north from edge of parking area towards Klineline Pond.

Site Contact

Clark County Parks and Trails
Primary Contact:
4700 NE 78th Street
Vancouver, WA 98665
360-397-2285

Driving Directions

1. Head south on Interstate-5 and at Exit 7 keep right to stay on Interstate-205 (Salem)
2. On Interstate-205 take Exit 36 (NE 134th Street)
3. At end of ramp, turn left onto NE 134th Street
4. After 0.1mi, turn right onto NE Hwy 99/Pacific Hwy
5. After 0.9mi, turn right onto NE 117th Street
6. After 0.3mi, immediately after passing under Interstate-5, turn right into parking area for Salmon Creek Park. Stage equipment in parking lot near pedestrian bridge over the creek. If needed, contact Clark County Parks for access support; call 360-737-6118 or 360-397-2285.

Nearest Address

1717 NE 117th St
Vancouver, WA 98686
Schoolhouse Creek - Old Pacific Highway near I-5

SA-SCHSC-0.6

Staging Area

Position - Location: 45° 58.876', -122° 49.409'  
45° 58' 52.6", -122° 49' 24.5"  
45.98127, -122.82349  
Kalama

Comments: Location is gravel parking area off Old Pacific Highway South. Equipment trailer can be staged at this location so work trucks can be loaded and sent to deploy nearby strategies that have limited access or shoulder areas.

Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
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<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
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<tr>
<td>Estimated Lot Size</td>
<td>8,500 SqFt</td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Gravel</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>15</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>5</td>
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<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

GRP Response Strategies Served:

MILLC-1.1, MILLC-0.3, BYBEC-0.8
Schoolhouse Creek - Old Pacific Highway near I-5

SA-SCHSC-0.6 Photo: At staging area along Old Pacific Highway South looking SSE towards intersection with Robb Road and Todd Road in Kalama near I-5 Exit 27.

Site Contact

No Information
Not Determined:

Nearest Address

200 Robb Rd
Kalama, WA 98625

Driving Directions

1. Head south on Interstate-5 and Take Exit 27 (Todd Road/Port of Kalama)
2. Turn left at the end of exit ramp to travel NE on Robb Road
3. After 0.1mi, turn left onto Old Pacific Highway S. Staging area is the gravel lot on the right immediately after turning onto Old Pacific Highway.
Appendix 4D

Boat Launch 2-Pagers
# BOAT LAUNCHES_LIST

<table>
<thead>
<tr>
<th>BL-CWLZR-1.6</th>
<th>BL-CWLZR-29.8</th>
<th>BL-LEWR-3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL-CWLZR-6.35</td>
<td>BL-CWMR-1.0</td>
<td>BL-LEWR-11.7</td>
</tr>
<tr>
<td>BL-CWLZR-16.1</td>
<td>BL-KLMAR-2.8</td>
<td>BL-LEWR-12.4</td>
</tr>
<tr>
<td>BL-CWLZR-17.6</td>
<td>BL-LCR-74.5L**</td>
<td>BL-LEWR-14.7</td>
</tr>
<tr>
<td>BL-CWLZR-24.7</td>
<td>BL-LEWR-1.8</td>
<td>BL-LEWR-15.5</td>
</tr>
</tbody>
</table>

**Boat launch locations from LCR-GRP that are included in this appendix**
## Cowlitz River - Gerhart Gardens Park

**BL-CWLZR-1.6**

### Boat Launch Location

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 6.682', -122° 53.731'</th>
<th>46° 6.409', -122° 53' 43.9''</th>
<th>46.11136, -122.89552</th>
</tr>
</thead>
<tbody>
<tr>
<td>City: Longview</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Comments:
Gerhart Gardens Park belongs to the City of Longview. Coordinate use of boat launch with Parks Department; call 360-487-8337.

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>3</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>3 Bars/4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>120000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>85%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>25</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>60</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Flush</td>
<td>2</td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### GRP Response Strategies Served:

CWMR-0.2, CWLZR-1.0, LCR-65.9R, CWMR-0.1, LCR-66.2R, CWMR-0.15, CWLZR-1.65, CWMR-0.15, CWMR-0.35, CWMR-0.02, CWLZR-1.3
Cowlitz River - Gerhart Gardens Park

SA-CWLZR-1.6 Photo: On river right at Staging Area and Boat Launch in Gerhart Gardens Park in Longview, looking towards river with river left in background.

Site Contact

City of Vancouver Parks and Recreation
Primary Contact: 
415 Sixth Street
Vancouver, WA 98660
360-487-8337

Nearest Address

200 Freedom Way
Longview, WA 98632

Driving Directions

1. Head south on Interstate-5 toward Exit 36
2. Take Exit 36 and keep left to continue on Exit 36A (Washington 432 W/Longview)
3. After 0.8mi, take the exit for Dike Road (1st exit after bridge)
4. At end of exit, turn right onto Frontage Road
5. After 0.2mi, turn left onto Freedom Way
6. After 0.1mi, turn right into parking area for Gerhart Gardens Park. Stage equipment near boat launch.
Cowlitz River - Carnival Market

**Boat Launch Location**

**Position - Location:** 46° 9.938', -122° 54.937'

46° 9' 56.3", -122° 54' 56.2" 46.16564, -122.91561

Kelso

**Comments:** Carnival Market - Small boats only

---

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>2 4000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

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**GRP Response Strategies Served:**

CWLZR-7.25, CWLZR-5.2, CWLZR-4.3, CWLZR-7.4, CWLZR-5.6
Cowlitz River - Carnival Market

SA-CWLZR-6.35 Photo: Photo taken from staging area looking East

Site Contact

No Information
Not Determined:

Nearest Address

829 Westside Hwy
Kelso, WA 98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 39 to WA-4 W toward Kelso (0.3 miles)
3. Turn left on WA-4 (Allen St) (0.73 miles)
4. Continue on Allen St Bridge (0.24 miles)
5. Turn right on WA-411 (1st Ave NW) (1.47 miles)
6. Finish at 829 Westside Hwy, 98626. Boat launch is on the right.
## Cowlitz River - Camelot Beach

**Position - Location:**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>46° 15'.941', -122° 54'.270'</td>
<td>46° 15'.56.5&quot;, -122° 54'.16.2&quot;</td>
<td>46.26569, -122.90451</td>
</tr>
</tbody>
</table>

**Comments:** Camelot Beach boat launch - small boats only

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>20,000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
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<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Portable</td>
<td>2</td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### GRP Response Strategies Served:

CWLZR-15.8L, CWLZR-14.1, CWLZR-15.9, CWLZR-15.8R
Cowlitz River - Camelot Beach

SA-CWLZR-16.1 Photo: Photo taken from river right looking NW

Site Contact

No Information
Not Determined:

Nearest Address

213 Camelot Spur
Castle Rock, WA 98611

Driving Directions

1. Take I-5 to Exit 49
2. Take exit 49 to WA-504 E toward S/Castle Rock/Toutle (0.43 miles)
3. Turn right on I-5-BL (Front Ave NW) (0.39 miles)
4. Bear right on Front Ave NW (0.34 miles)
5. Turn right on WA-411 (A St SW) (0.69 miles)
6. Turn left to stay on WA-411 (Westside Hwy) (1.54 miles)
7. Turn left onto Camelot Dr (0.1 miles)
8. Bear left onto Camelot Spur and follow dirt road to boat launch.
**Cowlitz River - Castle Rock Sports Complex/Memorial**

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>2</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 4 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
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<td>98,000 sq ft</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>25</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>61</td>
</tr>
<tr>
<td>Power</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Flush</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>$5/day</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

CWLZR-18.0, CWLZR-17.2, CWLZR-17.4, CWLZR-17.75

During Normal Business Hours call City of Castle Rock Public Works at 360-703-0167 and inform them of the need to use the Sports Complex/Memorial Park boat launch. If the business number is inoperative, or for after hours assistance, call the city's answering service at 360-751-7478.

**Position - Location:**

46° 16.698', -122° 54.711'

46° 16.419", -122° 54.427" 46.27830, -122.91185

Castle Rock
Cowlitz River - Castle Rock Sports Complex/Memorial Park

SA-CWLZR-17.6 Photo: On river right at the Castle Rock Sports Complex/Memorial Park, looking SE towards the boat ramp and Cowlitz River.

City of Castle Rock - Public Works
Municipality (County/City):
360 "A" Street SW - P.O. Box370
Castle Rock, WA 98611
360-703-0167

Nearest Address
5018 Westside Hwy
Castle Rock, WA 98611

Driving Directions
1. Head south on Interstate-5 and Take Exit 49 (Castle Rock/Toutle)
2. At end of exit ramp turn right onto Hwy 411/Huntington Avenue N
3. After 0.7mi, turn right on "A" Street to remain on Hwy 411
4. After 0.7mi, turn right onto the Westside Highway
5. After 0.3mi, turn right onto unnamed road that leads into the Sports Complex
6. After ~0.3mi, turn right onto unnamed road in park and follow it around to the boat ramp; stage equipment in boat launch parking area near ramps.
CLARK, COWLITZ, SW LEWIS GRP

October 2015

Cowlitz River - WDFW Water Access Site "Olequa Creek"  
BL-CWLZR-24.7

<table>
<thead>
<tr>
<th>Boat Launch Location</th>
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<tbody>
<tr>
<td><strong>Position - Location:</strong></td>
</tr>
<tr>
<td>46° 22.067', -122° 56.058'</td>
</tr>
<tr>
<td>46° 22' 4.0&quot;, -122° 56' 3.5&quot;</td>
</tr>
</tbody>
</table>
| 46.36778, -122.93431 | Castle Rock  
| **Comments:** |  
| WDFW Water Access Site "Olequa Creek" is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.  

<table>
<thead>
<tr>
<th>Location Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset</strong></td>
</tr>
<tr>
<td>Boats Dock(s)</td>
</tr>
</tbody>
</table>
| Boat Ramp(s) | Concrete, Solid | 1  
| Cell Phone Coverage | Not Determined |  
| Estimated Lot Size | 8000 square feet |  
| Lot Cover (Primary) | Dirt | 90 percent |  
| Parking - Car | Not Marked |  
| Parking - Trailer | Not Marked | 4  
| Power | No |  
| Restroom | Restroom - Vault | 1  
| User Fee | Yes | Discover Pass |  
| Water (potable) | No |  

**GRP Response Strategies Served:**  
CWLZR-23.6, CWLZR-26.5, CWLZR-26.0, CWLZR-24.7
Cowlitz River - WDFW Water Access Site "Olequa Cre" BL-CWLZR-24.7

SA-CWLZR-24.7 Photo: On river left at WDFW Water Access Site "Olequa Creek" looking west toward boat ramp with the Cowlitz River and river right in background.

### Site Contact

**WDFW Region 5**  
Land/Property Contact: Vancouver  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

### Nearest Address

271 Miekler Rd  
Castle Rock, WA 98661

### Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)  
2. Turn right at the end of exit ramp to travel west on Rogers Road  
3. After ~0.1mi, turn left onto Barnes Drive  
4. After 2.1mi, turn right onto Imboden Road  
5. After 0.2mi, stay left to travel on Miekler Road  
6. After ~0.3mi at end of road, you have reached WDFW Water Access Site "Olequa Creek" on the Cowlitz River. Stage equipment in parking area to the south, adjacent to river.
Cowlitz River - WDFW "I-5" Water Access Site

**Position - Location:**
- 46° 24.818', -122° 53.461'
- 46° 24' 49.1", -122° 53' 27.7"
- 46.41364, -122.89102

**Toledo**

**Comments:** WDFW "I-5" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon - 4 bars</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td>30,000 sq ft</td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Gravel</td>
<td>70 percent</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>10</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discover Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

CWLZR-29.9, CWLZR-27.4
Cowlitz River - WDFW "I-5" Water Access Site

SA-CWLZR-29.8 Photo: At WDFW "I-5" Water Access Site on the Cowlitz River (river left), looking NW towards the boat ramp and across to river right.

Site Contact

WDFW Region 5
Land/Property Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

275 Mandy Rd
Toledo, WA 98591

Driving Directions

1. Head south on Interstate-5 and Take Exit 57 (Jackson Hwy/Barnes Drive)
2. Turn right at the end of exit ramp to travel west on Rogers Road.
3. After 1.3mi, turn right onto Mandy Road
4. After 2.3mi, WDFW "I-5" Water Access Site will be on your left before passing under Interstate-5.
# Coweeman River - Cowlitz County SAR

**Position - Location:** 46° 7.884', -122° 53.859'  
46° 7' 53.0", -122° 53' 51.6"  
46.13140, -122.89765  
Kelso

**Comments:** Boat launch on private property

## Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>Verizon, ATT - 3 bars, 4G</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Determined</td>
<td>On the road</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Determined</td>
<td>On the road</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

## GRP Response Strategies Served:

- CWMR-1.4, CWMR-2.0, CWMR-1.75, CWMR-1.6, CWMR-1.3, CWMR-1.15
Coweeman River - Cowlitz County SAR

SA-CWMR-1.0 Photo: Photo taken from top of boat ramp looking SW

Site Contact

No Information
Not Determined:

Nearest Address

1809 Grade St
Kelso, WA  98626

Driving Directions

1. From Kalama, take I-5 N
2. Take exit 36 to WA-432 W toward WA-4/Longview/Long Beach (0.19 miles)
3. At fork keep right toward Kelso Dr./Carrolls (0.46 miles)
4. Turn right on Kelso Dr (1.58 miles)
5. Turn left on Haussler Rd (0.06 miles)
6. Bear right on Grade St (0.28 miles)
7. Finish at 1809 Grade St, 98626, on the left
### Kalama River - WDFW Water Access "Modrow Bridge"  
**BL-KLMAR-2.8**

#### Boat Launch Location

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>Kalama</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>46° 2.841&quot;, -122° 50.227'</strong></td>
<td>46° 2' 50.5&quot;, -122° 50' 13.6&quot; 46.04735, -122.83712</td>
</tr>
</tbody>
</table>

#### Comments:

WDFW Water Access Site "Modrow Bridge" is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

---

#### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Yes</td>
<td>2 bars - No Data</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>20,000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td>90%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>16</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>8</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

---

**GRP Response Strategies Served:** 

---

APPENDIX 4D
Kalama River - WDFW Water Access "Modrow Bridge"  

SA-KLMAR-2.8 Photo: At WDFW Modrow Bridge  Water Access Site on the Kalama River (river left), looking west towards the boat ramp, Modrow Bridge, and river right.

**Site Contact**

**WDFW Region 5**  
Primary Contact : Vancouver  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

150 Modrow Rd  
Kalama, WA 98625

**Driving Directions**

1. Head south on Interstate-5 and Take Exit 32 (Kalama River Road)  
2. Turn left at end of exit ramp to head east on Kalama River Road  
3. After 1.3mi, turn right onto Modrow Road and cross bridge.  
4. Immediately after bridge, turn left and follow the road down to the boat launch and parking area.
Scipio's Goble Landing

**Boat Launch Location**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>46° 0' 57.9&quot;, -122° 52' 27.4&quot;</th>
<th>46.01607, -122.87428</th>
<th>Rainier</th>
</tr>
</thead>
</table>

**Comments:** Single concrete boat ramp with floating docks and slips at marina.

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>Yes</td>
<td>300 Open slips</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Solid</td>
<td>1</td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>97,500 Sq Ft</td>
</tr>
<tr>
<td>Fuel</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Asphalt</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Marked</td>
<td>40</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Marked</td>
<td>40</td>
</tr>
<tr>
<td>Power</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - with Showers</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>3 per launch; +$3 parking</td>
</tr>
<tr>
<td>Waste Disposal</td>
<td>Pumpout</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LCR-73.7L
SA-LCR-74.5L Photo: Top of ramp at Scipio’s Goble Landing looking E at Columbia River and top of Sandy Island.

### Site Contact

**Scipio’s Goble Landing**
Land/Property Owner: Goble Marina
70360 Columbia River Hwy
Rainier, OR 97048
503-556-6510

### Driving Directions

Directions to Scipio’s Goble Landing BL-LCR-74.5L
1. Start at Portland, OR
2. Go north on NW 6th Ave toward NW Couch St (0.02 miles)
3. Turn left on NW Couch St (0.45 miles)
4. Turn right onto ramp and go on I-405 N (0.55 miles)
5. At exit 3 bear left onto ramp toward St Helens/W (39.02 miles)
6. Finish at 70360 Columbia River Hwy, 97048, on the right
Lewis River - NW Lancaster Road Boat Launch

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Washed Out</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td>1800 SqFt</td>
<td></td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>2</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>1</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-1.9

Entry is gated and may be locked (or appear locked); notify BNSF at 800-832-5452 before entry. This site is located below RR Bridge on south side of Lewis River in Washington State at BNSF Rail Mile 119 on the Seattle Line (52).
Lewis River - NW Lancaster Road Boat Launch

Photo: At site location on river left looking NE towards boat ramp and the Lewis River.

Site Contact

No Information

Land/Property Contact:

Nearest Address

33301 NW Lancaster Rd
Ridgefield, WA 98642

Driving Directions

1. Head south on Interstate 5 and take Exit 14 (Hwy 501 towards Ridgefield/Battle Ground)
2. At end of ramp turn right onto Hwy 501 (NW 269th St/Pioneer St)
3. After 0.1mi, stay strait through the traffic circle to stay on NW 269th St/Pioneer Street
4. After 0.6mi, take the first right within the traffic circle, onto N 45th Ave (becomes NW 31st Ave after 0.5mi)
5. After 1.0mi, turn left onto NW 289th Street
6. After 1.5mi, take slight right onto NW 61st Ave (becomes NW 291st Street after 400ft)
7. After ~0.5mi, turn right onto NW 71st Avenue (becomes NW Lancaster Rd after 1.6mi)
8. After 2.3mi, at the end of Lancaster Road, the boat ramp will be to your right (lower dirt path).
Lewis River - WDFW Water Access Site "Martin"  

**BL-LEWR-3.3**

<table>
<thead>
<tr>
<th>Position - Location:</th>
<th>45° 52.079', -122° 43.487'</th>
<th>45° 52' 4.8&quot;, -122° 43' 29.2&quot;</th>
<th>45.86799, -122.72479</th>
<th>Woodland</th>
</tr>
</thead>
</table>

**Comments:** WDFW Water Access Site "Martin" is open year round; For extended use, contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>50,000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Gravel</td>
<td>80%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Gravel</td>
<td>5</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Gravel</td>
<td>20</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td>Not Available</td>
</tr>
<tr>
<td>Restroom</td>
<td>Restroom - Vault</td>
<td>1</td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Waste Disposal</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-3.4
Lewis River - WDFW Water Access Site "Martin"

SA-LEWR-3.3 Photo: At WDFW Water Access site "Martin" looking west towards boat ramp with Lewis River (and river left) in background.

**Site Contact**

**Washington Department of Fish and Wildlife**

Land/Property Contact: Region 5  
2108 Grand Boulevard  
Vancouver, WA 98661  
360-696-6211

**Nearest Address**

1242 S Pekin Rd  
Woodland, WA 98674

**Driving Directions**

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)  
2. At end of ramp turn right onto W Scott Avenue  
3. After 0.5mi, turn left onto N Pekin Road  
4. After 0.9mi, turn left onto Davidson Avenue  
5. After 0.2mi, turn right onto 5th Street (becoming S Pekin Road after 0.2mi)  
6. After 2.3mi, stay left to remain on S Pekin Road  
7. After 0.5mi (at end of the road) you will have reached WDFW Water Access Site "Martin." Stage equipment in parking lot near boat ramp.
**Lewis River - WDFW "Island" Water Access Site**

**Position - Location:**
- **45° 56.360', -122° 40.911'**
- **45° 56' 21.6", -122° 40' 54.7"**
- **45.93933, -122.68185**

**Woodland**

**Comments:**
WDFW "Island" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

---

### Location Information

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Concrete, Plank</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>55,000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td>70%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>20</td>
</tr>
<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>10</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Yes</td>
<td>Discovery Pass</td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

---

**GRP Response Strategies Served:**

LEWR-11.7
SA-LEWR-11.7 Photo: At WDFW "Island" Water Access Site on river right (channel right) of Lewis River looking NW towards boat launch. Lewis River and right channel left in background.

Site Contact

WDFW Region 5
Primary Contact: Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

3020 Lewis River Rd
Woodland, WA 98674

Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 4.9mi, entrance to Lewis River Water Access Site “Island” will be on your right. Stage in parking lot near boat ramp.
Lewis River Golf Club Boat Launch

**Position - Location:** 45° 56.173', -122° 39.959'  
45° 56' 10.4", -122° 39' 57.5"  
45.93622, -122.66598  
Woodland

**Comments:** Coordinate use of Lewis River Golf Club Boat Launch with golf course administration and operations office; call 360-225-8566 or 360-225-8254. Shallow ramp - jet drive work boat recommended.

**Location Information**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Type/Status</th>
<th>Amount/Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Dock(s)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Boat Ramp(s)</td>
<td>Gravel</td>
<td>1</td>
</tr>
<tr>
<td>Cell Phone Coverage</td>
<td>Not Determined</td>
<td></td>
</tr>
<tr>
<td>Estimated Lot Size</td>
<td></td>
<td>12,000 SqFt</td>
</tr>
<tr>
<td>Lot Cover (Primary)</td>
<td>Dirt/Gravel</td>
<td>100%</td>
</tr>
<tr>
<td>Parking - Car</td>
<td>Not Marked</td>
<td>15</td>
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<tr>
<td>Parking - Trailer</td>
<td>Not Marked</td>
<td>6</td>
</tr>
<tr>
<td>Power</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Restroom</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>User Fee</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Water (potable)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**GRP Response Strategies Served:**

LEWR-11.8, LEWR-11.5, LEWR-12.2, LEWR-12.5, LEWR-12.3a, LEWR-12.3b
Lewis River Golf Club Boat Launch

SA-LEWR-12.4 Photo: On river right at Lewis River Golf Course Boat Ramp, looking downstream/west and across to river left.

Site Contact

**Lewis River Golf Course**
Primary Contact:
3209 Lewis River Road
Woodland, WA 98674
360-225-8566

Nearest Address

3209 Old Lewis River Rd
Woodland, WA 98674

Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 5.5mi, turn right onto Old Lewis River Road.
5. After 0.1mi, turn right onto unnamed road (entrance to Lewis River Golf Course)
6. After ~900ft, immediately before golf course parking lot, stay to the right and follow dirt road down to boat launch parking area. Stage equipment in parking area near boat ramp.
## Lewis River - Haapa Boat Launch

**Position - Location:**
- 45° 56.153', -122° 38.260'
- 45° 56' 9.2", -122° 38' 15.6" (Woodland)
- 45.93589, -122.63767

**Comments:**
Haapa Park is open daily from 7AM to dusk. Contact Clark County Dispatch (CRESA) for after-hours access assistance; call 360-693-3111. Clark County Sheriff's Department and WDFW Enforcement Officers have a 24-hour access key to park.

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### GRP Response Strategies Served:
- LEWR-13.3
- LEWR-14.9
- LEWR-13.8
Lewis River - Haapa Boat Launch

SA-LEWR-14.7 Photo: At Happa Park on river left of Lewis River looking north towards boat launch. River and bank on river right in background.

Site Contact

Clark County Parks and Trails
Primary Contact:
360-397-2285

CRESA
Secondary Contact: Clark Regional Emergency Services Agency
360-696-4461

Nearest Address

43309 NE Haapa Rd
Woodland, WA  98674

Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 0.2mi, turn left onto NE Haapa Road
9. After 0.4, roadway curves to the right and becomes Haapa Pit. Entrance to Haapa Park is on the left. Stage equipment in parking area near boat ramp.
**Lewis River - WDFW "Cedar Creek" Water Access Site**

**BL-LEWR-15.5**

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<td><strong>Position - Location:</strong> 45° 56.186', -122° 37.230'</td>
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**Comments:** WDFW "Cedar Creek" Water Access Site is open year round; for more information contact WDFW Region 5 at 360-696-6211 or email TeamVancouver@dfw.wa.gov.

**Location Information**

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**GRP Response Strategies Served:**

LEWR-15.6b, LEWR-16.1b, LEWR-16.1a, LEWR-15.5b, LEWR-15.6a, LEWR-15.5a
Lewis River - WDFW "Cedar Creek" Water Access Site

SA-LEWR-15.5 Photo: At WDFW "Cedar Creek" Water Access Site on river left of Lewis River looking north towards boat launch. Lewis River and river right in background.

Site Contact

WDFW Region 5
Primary Contact : Vancouver
2108 Grand Boulevard
Vancouver, WA 98661
360-696-6211

Nearest Address

5100 NE Etna Rd
Woodland, WA 98674

Driving Directions

1. Head south on Interstate 5 and take Exit 21 (Hwy 503 E/Woodland-Cougar)
2. At end of ramp continue straight to head south on Pacific Avenue
3. After 0.7mi, stay left at curve in road and then turn left onto Lewis River Road
4. After 0.1mi, turn right onto E CC Street.
5. After 0.3mi, stay to left (after crossing bridge); roadway becomes NW Hayes Road
6. After 5.3mi, roadway becomes NE Cedar Creek Road
7. After 0.6mi, stay to left and travel on NE Etna Road
8. After 1.2mi, the site will be on your left. Stage equipment in parking area near boat ramp.

NOTE: DO NOT TRAVEL ON NE GRIST MILL ROAD. Historic Covered Bridge over Cedar Creek on Grist Mill Road has significant weight restrictions. Truck/Trailer combinations or vac-trucks would likely be too heavy to cross bridge.
CHAPTER 5
-
(RESERVED)
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CHAPTER 6

Resources at Risk

6.1 CHAPTER INTRODUCTION

This chapter provides a summary of natural, cultural, and economic resources at risk in the Lake Washington 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 at potentially at risk from smothering, acute toxicity, and/or the chronic long-term effects that may result from being exposed to spilled oil. Classification types are
listed below, with the abbreviation of each type provided in the brackets (to the right of the classification).

The Cowlitz, Kalama, Lewis, EF Lewis River and Salmon Creek systems afford 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 subbasin are classified as threatened, endangered, sensitive, or of special concern under the federal Endangered Species Act or Washington State guidelines.

- 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],
- Brewer’s sparrow [FCo],
- Caspian tern [FCo],
- Common loon [SS],
- Fox Sparrow [FCo],
- Marbled murrelet [FT/ST],
- Northern spotted owl [FT/SE],
- Olive-sided flycatcher [FCo],
- Oregon vesper sparrow [FCo],
- Peregrine falcon [FCo/SS],
- Pileated woodpeckers [SC],
- Purple martin [SC],
- Purple finch [FCo],
Rufous hummingbird [FCo],
Sandhill crane [SE],
Short-billed dowitcher [FCo],
Short-eared owl [FCo],
Slender-billed white-breasted nuthatch [SC],
Steaked horned lark [FT/SE],
Vaux’s swift [SC],
Willow flycatcher [FCo],
Yellow-billed cuckoo [FT/SC].

**Mammals:**
Columbian white-tailed deer [FE],
Mazama pocket gopher (Oregon subspecies) [FT/ST],
Townsend’s big-eared bat [SC],
Western gray squirrel [ST].

**Fish/Shellfish:**
Bull trout [FT/SC],
Chinook [FT/SC],
Coho [FT],
Fall chum [FT/SC],
steelhead [FT/SC],
Coastal cutthroat [FCo],
Pacific eulachon smelt [FT/SC],
Pacific lamprey [FCo],
California floater [SC].

**Amphibian/Reptile:**
Dunn’s salamander [SC],
Oregon spotted frog [FT/SE],
Western toad [SC]

**Plants:**
Bradshaw’s desert parsley [FE],
Golden paintbrush [FT],
Kincaid’s lupine [FT],
Nelson’s checker-mallow [FT],
• Water howellia [FT],
• Whitebark pine [FC].

6.2.1 General Resource Concerns

6.2.1a-Habitats

• **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.

• **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 a variety of birds, including 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. Typical resident fish are likely present in most streams.

• **Stream mouths** are concentration areas for fish and are feeding areas for a variety of birds.

6.2.1b-Fish and Shellfish

• **Anadromous salmonids** species are present throughout the basin, including Bull trout [FT/SC], coho [FT], spring/summer/fall Chinook [FT/SC], fall chum [FT/SC], Summer/winter steelhead [FT/SC], Coastal cutthroat trout [FCo], Pacific lamprey [FCo], trout and Pacific eulachon smelt [FT].

• **Resident fish**, Brown bullhead, Carp, Largemouth bass, Large scale sucker, Long nose dace, Mountain whitefish, Northern pike minnow, Pea mouth, Rainbow trout, Resident cutthroat, sculpin, and Yellow perch.

• **Fresh water mussels**, including California floaters [SC], 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 Columbia and Cowlitz. Field size, flood conditions, weather, and crop rotations of any given year help to determine the actual waterfowl distribution. Resident and migratory waterfowl heavily utilize the islands, backwaters, wetlands and adjacent uplands of the region from fall through spring.
- **Sandhill Cranes** [SE] congregate in large numbers along the Columbia River, Vancouver Lake and lower portion of the Cowlitz River.

- **Marbled Murrelet** [FT/ST] nesting areas known to be present in vicinity of river and associated uplands.

- **Great blue and Green herons**, along with Bald eagles [FCo/SS] and Ospreys, nest and forage year-round along waterways throughout the region.

- **Resident and migratory songbirds** heavily utilize riparian habitats year-round and are susceptible to oiling if riparian vegetation and shorelines become contaminated.

- **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. Larger mammals are also present throughout this area.

### 6.2.2 Specific Geographic Areas of Concern-Overview

**Cowlitz River** (Columbia River ~ RM 68)

- **Coweeman River** (Cowlitz River ~ RM 1.4): From I-5 upstream to about Coweeman River RM 7 emergent and scrub shrub wetlands in the lower Coweeman River regularly provide large concentrations of wintering waterfowl, Great blue heron, Pileated woodpeckers [SC], Bald eagles [FCo/SS], Orioles and nesting Red-tailed Hawks. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.

- **Toutle River** (Cowlitz River ~ RM 20): Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.

- **Olequa and Lacamas Creeks** (Cowlitz River ~ RM 24.5 to RM 30): Pastures and emergent wetlands in the Cowlitz River floodplain and nearby ponds supports regular large concentrations of wintering waterfowl, geese, and osprey nesting. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.

**Vancouver Lake**

- **Burnt Bridge Creek** (Tributary of Vancouver Lake): Bald eagle [FCo/SS] nesting near the confluence with Vancouver Lake. Waterfowl concentration between I-5 and Vancouver Lake including Sandhill Cranes [SE]. Tundra swans, geese and ducks in the lowlands immediately upstream from Vancouver Lake. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Salmon Creek coho [ST], and freshwater mussels.
Lake River (Columbia River ~ RM 87)

- **Salmon Creek** (Lake River ~ RM 9): This stream reach includes Salmon Creek/Salmon Creek Greenway, and Salmon Creek County Park. Bald eagle [FCo/SS] nesting at ~ Salmon Creek RM 3. Waterfowl concentration between I-5 and confluence with Columbia River including Sandhill crane [SE], Tundra swan, geese and ducks. Mazama pocket gopher [FT/ST] usage near the City of Battle Ground. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels and freshwater mussels.

- **Whipple Creek** (Lake River ~ RM 7): Bald eagle [FCo/SS] nesting near Whipple Creek Park. Waterfowl concentration downstream from approximately where the stream crosses NW 179th Street to the confluence with Lake River. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.

- **Flume Creek** (Lake River ~ 5.5): Waterfowl concentration including Sandhill crane [SE] and geese near the confluence with Lake Creek both upstream and downstream from the railroad crossing. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. This stream flows to the Ridgefield Wildlife Area.

Lewis River (Columbia River ~ RM 87):

- **Lewis River main stem and tributaries**: Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels, resident fish and freshwater mussels.

- **East Fork Lewis River** (Lewis River RM 3.5): Waterfowl concentration including Tundra swan, Duck, Geese from City of La Center upstream to about EF Lewis ~ RM 7 where the power lines cross the river. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels and resident fish.

- **Staples Creek/Clover Valley area** (Lewis River ~ RM 12): Sloughs, wetlands and riparian areas support cavity nesting ducks at the confluence with Lewis River.

6.2.3 Specific Geographic Areas of Concern – Maps and Descriptions

Cowlitz River (See: Figure 6-1)

1) **Lewis and Clark State Park**: Boone Creek, a salmonid spawning stream, runs through the park and is tributary to Lacamas Creek. This 621-acre park is in one of the last major stands of old-growth forests in the state. Coniferous trees, streams, wetlands, dense vegetation, and wet prairie comprise the park environment along with a vast stand of rare old-growth forest.
2) **Mouth of Blue Creek** and vicinity (Cowlitz ~RM 42-47): Waterfowl concentration area. Cavity nesting Wood ducks and Mergansers in old river channels, beaver dams and flooded willow areas. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.

3) **Mouth of Olequa and Lacamas Creeks and vicinity** (Cowlitz River ~RM 24.5 to RM 30): Pastures and emergent wetlands in the Cowlitz River floodplain and nearby ponds support regular large concentrations of wintering waterfowl, geese, and osprey nesting. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.

4) **Toutle River** (Cowlitz River ~RM 20/Toutle RM 3 to RM 4.5): Snag rich area used by Bald eagles. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.

5) **Arkansas, Delameter, and Whittle Creeks** (Cowlitz River ~RM 17): Wetlands across from town of Castle Rock provide habitat for cavity nesting ducks. Emergent and scrub shrub wetlands and flood plains provide regular large concentrations of wintering waterfowl including Canada geese. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.

6) **Pleasant Hill** (Cowlitz River ~RM 8.5): An unnamed stream and associated wetland complex between I-5 and Pleasant Hill Road near the town of Lexington. Wood ducks and other cavity nesting ducks regularly inhabit these areas.
Figure 6-1: Specific geographic areas of concern within the Cowlitz River system
Columbia River (See Figure 6-2)

7) **Carrolls Channel and Owl Creek Mouth** (Columbia River ~RM 69 to 71): Concentrations of waterfowl including swans, ducks, and geese. Seabirds, harbor seals and California sea lions coincide with winter run of Pacific eulachon smelt [FT] in Carrolls Channel. Heron rookery, Short-eared owls and wetlands in the lower reach of Owl Creek near I-5. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.

8) Mouth of **Kalama River** (Columbia River ~RM 73): Concentrations of waterfowl including swans, ducks, and geese. Seabirds, harbor seals and California sea lions coincide with winter run of Pacific eulachon smelt [FT] near mouth of river. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.

9) **Martin/Burke Islands and Vicinity** (Columbia River ~RM 79-81): Riparian habitat. Juvenile salmonid rearing habitat in off-river channels. Concentration area for breeding, migrating and wintering waterfowl. Sandhill crane [SE]. Area supports cavity nesting ducks.

10) **Horseshoe Lake (and vicinity) near Woodland** (Lewis River ~RM 6): Cavity nesting duck concentration in the sloughs wetlands, and riparian areas in this area.


12) **Frenchman’s Bar/Shillapoo Wildlife Area/Vancouver Lake** (~RM 96-99): Riparian habitat, pasture and agricultural land that supports wintering and migrating concentrations of waterfowl, shorebirds and Sandhill cranes [SE]. Common loon [SS], Purple martin [SC], Slender-billed white-breasted nuthatch [SC] also present. Juvenile salmonid rearing habitat in off-river channels. **Shillapoo Vancouver Wildlife Area** (~2,300 acres) includes one of the largest Great blue heron rookeries on the lower Columbia River. **Vancouver Lake State Park** (~190 acre) has 2.5 miles of publically accessible shoreline and is also used by wildlife and migratory waterfowl.
Figure 6-2: Specific geographic areas of concern in area near the Lower Columbia River
6.3 CULTURAL RESOURCES AT RISK-SUMMARY

Culturally sensitive sites are present within the Clark Cowlitz 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. After the Unified Command is established, information related to specific archeological concerns will be coordinated through the Environmental Unit.

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

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 or marine mammal pupping areas. 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

After a Unified Command is formed, the Wildlife Branch (Operations Section) in consultation with the appropriate trustee agencies and the Environmental Unit will evaluate 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 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).
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## Appendix 6A – List of Economic Resources

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<td>Cowlitz River - Silver Creek, WA</td>
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<td>Coweeman River - Rearing Pond</td>
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<td>Kalama Falls Hatchery</td>
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