



State of Oregon
Department of
Environmental
Quality



DEPARTMENT OF
ECOLOGY
State of Washington



LAKE CHELAN

Geographic Response Plan

(LKCH GRP)



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LAKE CHELAN
Geographic Response Plan

(LKCH GRP)

SPILL RESPONSE CONTACT SHEET

Required Notifications for Oil Spills and Hazardous Substance Releases

Federal Notification - National Response Center	(800) 424-8802*
State Notification - Washington Emergency Management Division	(800) 258-5990*

- Other Contact Numbers -

U.S. Environmental Protection Agency

Region 10 - Spill Response	(206) 553-1263*
- Washington Ops Office	(360) 753-9437
- RCRA/CERCLA Hotline	(800) 424-9346
- Public Affairs	(206) 553-1203

National Oceanic Atmospheric Administration

Scientific Support Coordinator	(206) 526-6081
- Weather	(206) 526-6087

Department of the Interior

Regional Environmental Officer	(503) 326-2489
National Park Service	
- Lake Chelan NRA Comm Center	(360) 854-7249
- Stehekin District Ranger Office	(509) 699-2080 Ex. 12
- Emergency 24/7	Ex. 29*
U.S. Fish and Wildlife Service	(509) 893-8004

Other Federal Agencies

U.S. Forest Service	
- Chelan Ranger District	(509) 682-4900
- Okanogan-Wenatchee Ranger Dist	(509) 664-9200
U.S. Army Corps Engineers (Seattle)	(206) 764-3401

Washington State

Dept Arch and Hist. Preservation	(360) 586-3065
Dept of Ecology	
- Headquarters - Spills (Lacey)	(360) 407-7455
- Central Region - Spills (Yakima)	(509) 575-2490
Dept of Fish and Wildlife	
- District 2 Wenatchee	(509) 662-0452
- Oil Spill Team (pager)	(360) 534-8233*
- Emergency HPA Assistance (pager)	(360) 534-8233*
Dept of Health (Drinking Water)	(800) 521-0323
- After normal business hours	(877) 481-4901
Dept of Transportation	(360) 705-7000
Lake Chelan State Park	(509) 687-3710
Washington State Patrol	
- District 6 HQ (Wenatchee)	(509) 682-8090

Tribal Contacts

Confederated Tribes of the Colville Reservation	(509) 634-2200
- Cultural Resources	(509) 634-2694
	(509) 634-2690
Confederated Tribes and Bands of the Yakama Nation	(509) 865-5121
- Cultural Resources	Ext. 4714

Dam Outflow Gates

Chelan PUD Emergency	(509) 661-4000*
- Non-Emergency	(509) 663-8121

Local Government

Chelan E-911 (All City and County)	(509) 663-9911*
Chelan County	
- RiverCom	(509) 663-9911*
- Sheriff/Marine/Swift Water	(509) 667-6851
- Emergency Management	(509) 667-6863
- Health Department	(509) 886-6400
Manson Area	
- Fire District 5 (Non-Emergency)	(509) 687-3222
City of Chelan	(509) 682-4037
- Fire and Rescue (Non-Emergency)	(509) 682-4476

Response Contractors

Clean Harbors Environmental	(800) 645-8265*
NRC Environmental Services	(800) 337-7455*
Mountain Barge Services	(509) 682-2493
Jim's Pumping Service	(509) 682-1100

Facilities

Rio Tinto (Holden Mine)	(509) 570-3430
Chelan Public Utilities	(509) 667-6415

Hospitals

Lake Chelan Comm Hospital	(509) 682-3300
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* Contact Numbers staffed 24-hours/day

Before you print this document

Chapter 4 with appendices (Adobe pages [25-116](#)) of this document are provided in “landscape” page orientation; all other chapters and appendices are oriented in “portrait.” The appendices in Chapter 4 (Adobe pages [63-116](#)) 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.

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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 Lake Chelan area. It has been approved by Regional Response Team 10 and the Chairs and Co-Chairs of the Northwest Area Committee. Changes to this document are expected as more testing is conducted through drills, site visits, and actual use in spill situations. We value your input and hope that you'll let us know how the plan might be improved. Please submit comments online at <http://www.rrt10nwac.com/Comment>. Comments may also be emailed to GRPs@ecy.wa.gov or submitted by mail using the forms and information provided in Appendix 1A of this document.

This is a condensed GRP developed for Lake Chelan partially in response to the Holden Mine Superfund remediation project. This GRP is located in Central Washington, north of Wenatchee in the rain shadow of the Cascade Range. The area included in this plan is Lake Chelan from the city of Chelan to Lucerne Landing.

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 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.

1.1 GRP CHAPTERS AND APPENDICES

CHAPTER 1	Introduction
APPENDIX 1A	GRP Comment Form
CHAPTER 2	Site Description
CHAPTER 3	Reserved
CHAPTER 4	Response Strategies and Priorities
APPENDIX 4A	Response Strategies
APPENDIX 4B	Notification Strategies
APPENDIX 4C	Staging Area Locations
APPENDIX 4D	Boat Launch Locations
CHAPTER 5	Reserved
CHAPTER 6	Reserved

1.2 GEOGRAPHIC RESPONSE PLAN DEVELOPMENT PROCESS

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

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

1.3 STANDARDIZED RESPONSE LANGUAGE

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

1.4 TERMINOLOGY AND DEFINITIONS

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

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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>.

CHAPTER 2

Site Description

2.1 INTRODUCTION

This chapter provides a description of the area's geography, hydrology, and climate, and includes an overview of oil spill risks in the Lake Chelan area. The condensed plan covers Lake Chelan between Lucerne Landing and the City of Chelan, plus a notification strategy in Stehekin.

2.2 PHYSICAL FEATURES

Lake Chelan is both the deepest and largest natural lake in the state, and the third deepest lake in the country. Over fifty miles long but averaging just one mile wide, it cuts northwest to southeast at a roughly forty-five degree angle. At the northwestern top of the lake is the Stehekin River, which provides almost 70 percent of the annual water to the lake. The rest of the inflow is provided by creeks and streams draining the surrounding Cascade Range and Chelan Mountains.

The majority of the land surrounding the lake is federally-owned natural area. The Lake Chelan National Recreation Area covers the northern watershed and the northern five miles of the lake, down to the border of the Okanogan-Wenatchee National Forest. Within the Forest include the sub-areas of the Lake Chelan Sawtooth Wilderness on the east and the Glacier Peak Wilderness to the west. The Chelan Ranger District controls the central portion of the lake. The southern seven miles of the lake contain the vast majority of the residents and developed areas.

The largest population center is the city of Chelan, population 4000, which wraps around the southeastern point of the lake. There, the lake drains to the Chelan River, passing through town to the Lake Chelan Dam before emptying into the Columbia River. The only other developed areas along the lake are an unincorporated suburb of Chelan called Manson, population 1500, and the community of Stehekin at the northeastern tip of the lake. Stehekin is only accessible by ferry (*The Lady of the Lake*), boat, seaplane, or by foot over Cascade Pass. While Stehekin Airport is open July, August and September, it is considered a difficult landing spot, and is sometimes commandeered for wildland fire response. Due to the transport limitations to the central and northern portions of the lake, it is unlikely that the year-round population there will significantly increase in the future. Nevertheless, Stehekin is a popular spot for tourists and private boaters during the summer. The Lake Chelan National Recreation Area sees between 35,000 and 45,000 annual visitors.

Lucerne Landing is a ferry stop located about seven miles south of Stehekin, on the west shore of the lake. Eleven miles west of the landing is Holden Village, a Lutheran retreat center that hosts 5,000 visitors annually and houses 60 to 100 year-round residents. Next to Holden Village is the decommissioned Holden Mine, which produced copper, zinc, gold and silver between 1930 and 1957 before closing abruptly. It is currently undergoing remediation as a Superfund site. Visitors

and supplies can only arrive via boat or seaplane to the dock at Lucerne Landing, and are then driven on a gravel forest road that parallels Railroad Creek up to Holden Village and the mine.

Table 2-1: Lake Specific Information

Physical Features	English Units	Metric Units
Max. length	50.5 mi	81.3 km
Surface area	52.1 mi ² / 21,600 acres	135 km ²
Average depth	474 ft	144 m
Max. depth	1486 ft	453 m
Water volume	15,800,000 acre ft	3.0 km ³
Surface elevation	1098 ft	335 m
Islands	None	

2.3 HYDROLOGY

Officially known as the Chelan Hydroelectric Project, the Chelan Dam was built in 1928 and is located less than a mile from the river's mouth. It is a steel-reinforced concrete gravity dam, 40 feet high and 490 feet long. Chelan County Public Utility District Number 1 controls the dam outflows and maintains the water level in the lake.

The flow into the lake from the Stehekin River, Railroad Creek and other tributaries is largely determined by snowmelt, rather than direct runoff from rainfall. The water level in the lake is lowest in early spring, before the snow has melted. Snowmelt in April and May leads to peak water levels from June through September, remaining steady around 1098 feet. The Chelan County Public Utility District's license encourages the lake level to stay between 1100 feet and 1079 feet elevation, but maintaining ideal flow to the Chelan River takes precedence. The output through the Chelan Dam is generally steady throughout the year.

2.4 CLIMATE AND WINDS

Lake Chelan's climate is similar to the rest of eastern Washington, with near-desert levels of precipitation. The annual average precipitation at Lake Chelan is 11.4 inches. Rainfall is fairly evenly distributed throughout the year, but in mid-summer it is not unusual for a month or six weeks to pass without any measurable rainfall. The wettest month is November, with an average rainfall of 1.77 inches. Summer high temperatures tend to be in the 80's and winter lows tend to be in the 30's.

Winds on Lake Chelan are strong from April through July, particularly in the upper part of the lake between Stehekin and Lucerne. Sustained winds over 20 miles per hour (mph) are common, with gusts near 40 mph. Stronger winds are unusual but gusts of over 80 mph have occurred.

Wind direction is usually “down lake” (from NW to SE) in late spring to early summer, but direction and speed can vary significantly throughout the day. The rest of the year winds are calmer and more varied in direction. Winds are lower in the lower section of the lake, near Manson and Chelan, but follow the same seasonal pattern.

2.5 TIDES AND CURRENTS

Lake Chelan has no discernible tides or currents. The flow from the tributaries to the Chelan River is generally north-to-south, but the rate at which the lake empties is so low that it should have no major impact on the movement of oil. Wind direction and speed will be the most significant factor in the direction of travel.

2.6 RISK ASSESSMENT

This condensed plan is written to address the oil spill risk presented by a barge transporting fuel to the Holden Mine Superfund Site, along with above-ground diesel storage tanks at the site. At a future date this plan will be expanded to include other areas of Lake Chelan. Rio Tinto mining is responsible for the cleanup project and their Spill Prevention, Control, and Countermeasure plan has been approved by several state and federal agencies.

A 120 foot unmanned barge and 25 foot tug depart the Chelan Staging Area and dock at Lucerne Landing, where a fuel truck carrying up to 4,600 gallons of diesel drives off the barge and follows the gravel-topped Forest Service Road 8031 for 11 miles along Railroad Creek. The largest fuel storage tank at the cleanup site holds 10,000 gallons of diesel, with another two 5,000-gallon tanks nearby. Vehicles and construction equipment hold under 100 gallons of diesel each. Mountain Barge Services, who operate the tug, are also spill responders who maintain equipment at their headquarters in Chelan. There is a trailer of spill response equipment that can be transported on the barge, or stationed in Chelan or Lucerne.

Barges also deliver gasoline and diesel to the residents of Stehekin. This is the most significant spill risk in the northern part of the lake past Lucerne Landing, and will continue to be a risk after the Holden Mine project is completed. Recreational boating is also popular in this area during the summer, and smaller spills from these watercraft are possible.

Other areas at risk from significant spills are in the city of Chelan and its suburbs. The bridges at West Woodin Avenue and Webster Avenue/Highway 97 span the Chelan River, where road based spills would flow south towards the dam. Highway 97, Highway 150 and Highway 971/Lakeshore Road all parallel the southeastern five to ten miles of lakeshore and pose a potential threat from tanker truck accidents.

Shoreside businesses, personal boats, ferries and seaplanes are the other oil spill risks in the area. There are no pipelines, railroads or oil terminals in the watershed.

2.7 REFERENCES

- Chelan County Public Utility District. (2015). *Lake Chelan hydro project*. Retrieved from <http://www.chelanpud.org/lake-chelan-hydro-project.html>
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CHAPTER 3
(Reserved)

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LAKE CHELAN
GEOGRAPHIC RESPONSE PLAN
(LKCH GRP)

CHAPTER 4
Response Strategies and Priorities

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.wrri.us>. Information on protection techniques can be found in Appendix A. Information on shoreline countermeasures can be found in the Northwest Area Shoreline Countermeasures Manual (NWACP Section 9420). The Northwest Area Contingency Plan (NWACP) is available online at <http://www.rtt10nwac.com/NWACP/Default.aspx>.

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

4.1.1 On-site Considerations

Before Deploying a GRP Strategy (Questions to Ask)

- Are conditions safe? Response managers and responders must first determine if efforts to implement a response strategy would pose an undue risk to worker safety or the public, based on conditions present during the time of the emergency. No strategy should be implemented if doing so would threaten public safety or present an unreasonable risk to the safety of responders.
- Has initial control and containment been sufficiently achieved? Source control and containment of the spill at or near the source of a spill are always higher priorities than the deployment of GRP response strategies, especially when concurrent response activities are not possible.
- How far downstream or out into the 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.
 - Chelan County Emergency Dispatch (RiverCom) (509) 663-9911
 - Chelan County Sheriff (509) 667-6851
 - City of Chelan Public Works Street Division (509) 682-8030
 - Lake Chelan State Park Rangers (509) 687-3710
 - Washington State Patrol (District 6) (509) 682-8090
 - U.S. Forest Service Chelan Ranger District (509) 682-4900
 - U.S. Forest Service Okanogan-Wenatchee Ranger District (509) 664-9200

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.

Table 4-1: Water Speed Drift Measurement Table

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

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

4.1.2 Historical River Streamflow Ranges:

Gage/streamflow data from U.S. Geological Survey (USGS) was used to determine the mean monthly stream discharge for rivers in the Lake Chelan 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 river velocities based on the time it takes a floating object to drift 100 feet downstream from any given point in a river or creek. Additional information on calculating river velocities can be found in the [Northwest Area Contingency Plan](#), Section 9302. Information on USGS river gage readings can be found online at <http://maps.waterdata.usgs.gov/mapper/index.html>.

Table 4-2: Historic streamflow for significant rivers near Lake Chelan

<i>Monthly average flow in Cubic Feet per Second (cfs)</i>		
	Chelan River at Chelan - USGS 12452500 <i>(data from 1903 to 2013)</i>	Stehekin River at Stehekin - USGS 12451000 <i>(data from 1910 to 2013)</i>
January	1660	424
February	1580	402
March	1460	538
April	1430	1440
May	2380	3550
June	4110	4150
July	3530	2630
August	1780	1240
September	1520	687
October	1740	618
November	1720	715
December	1720	522

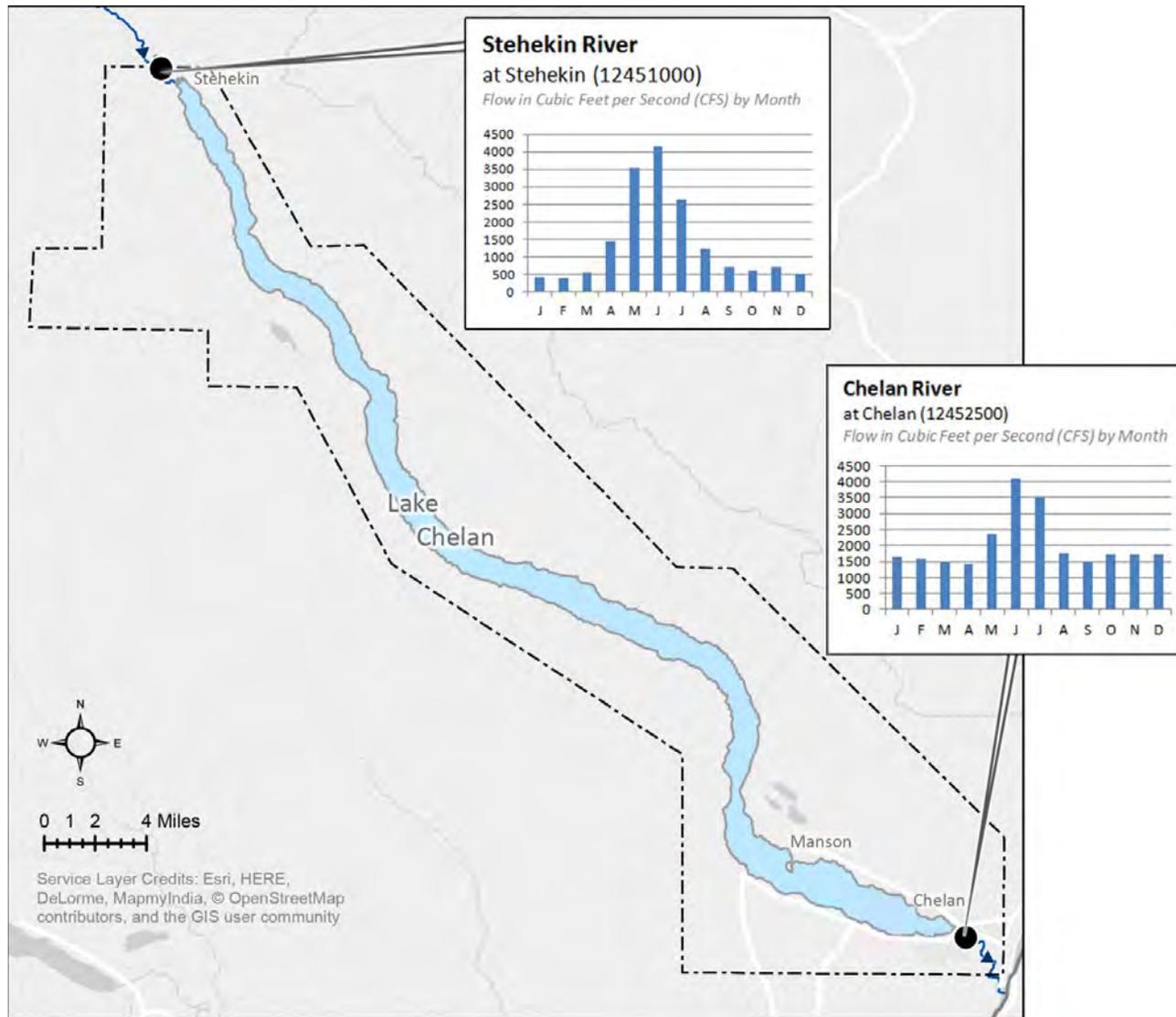
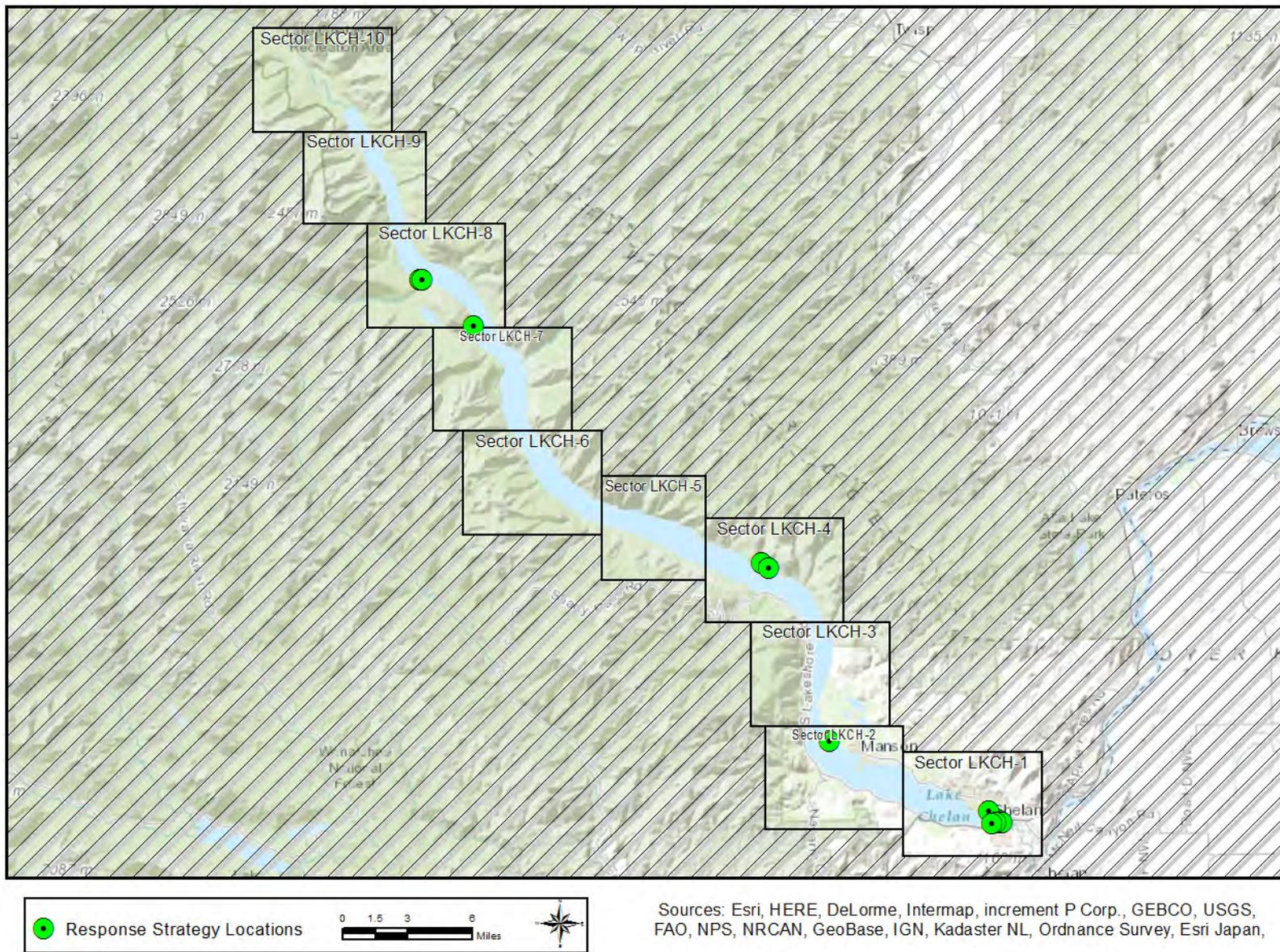
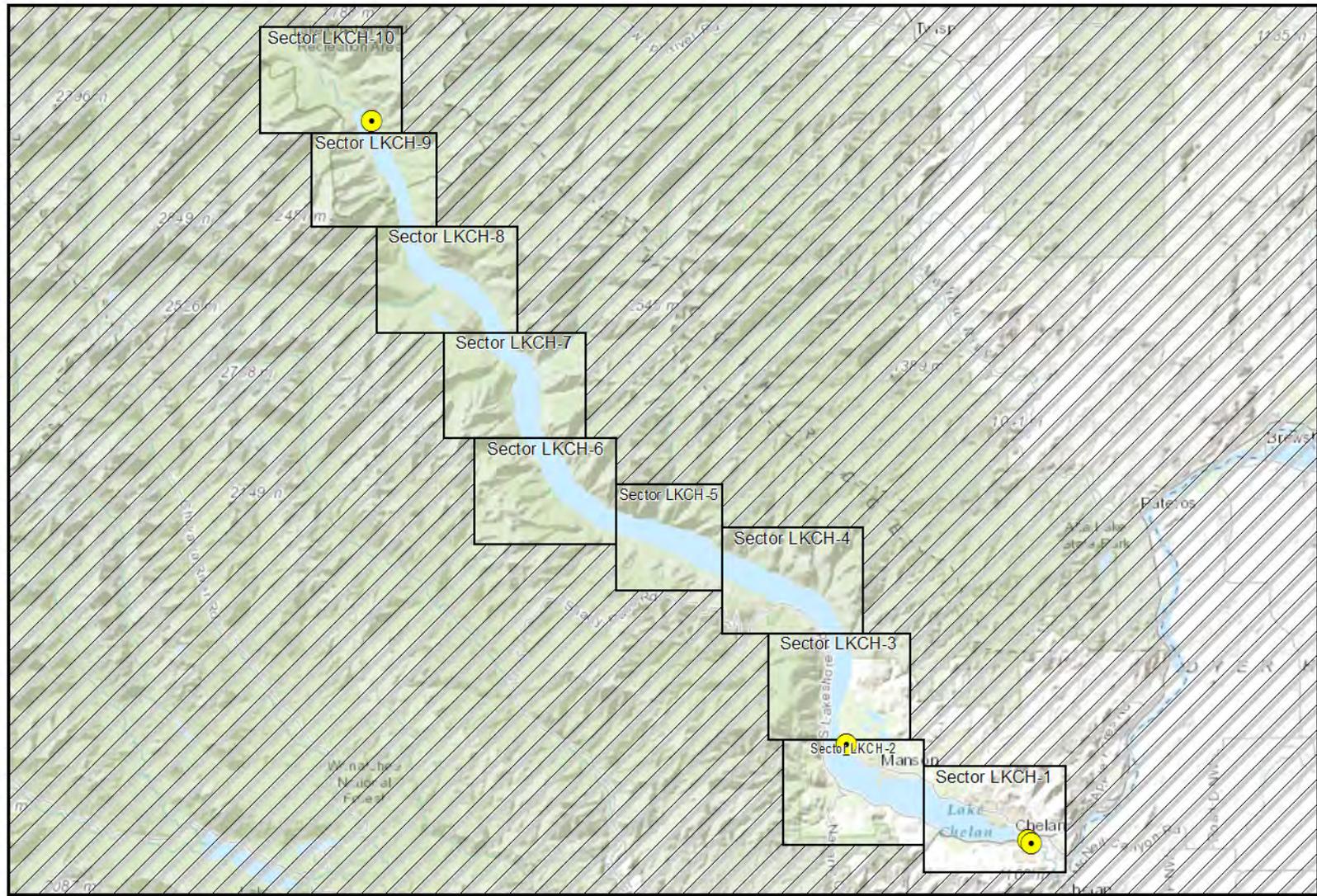


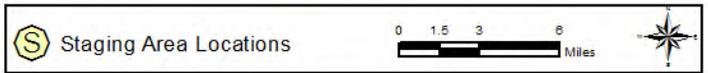
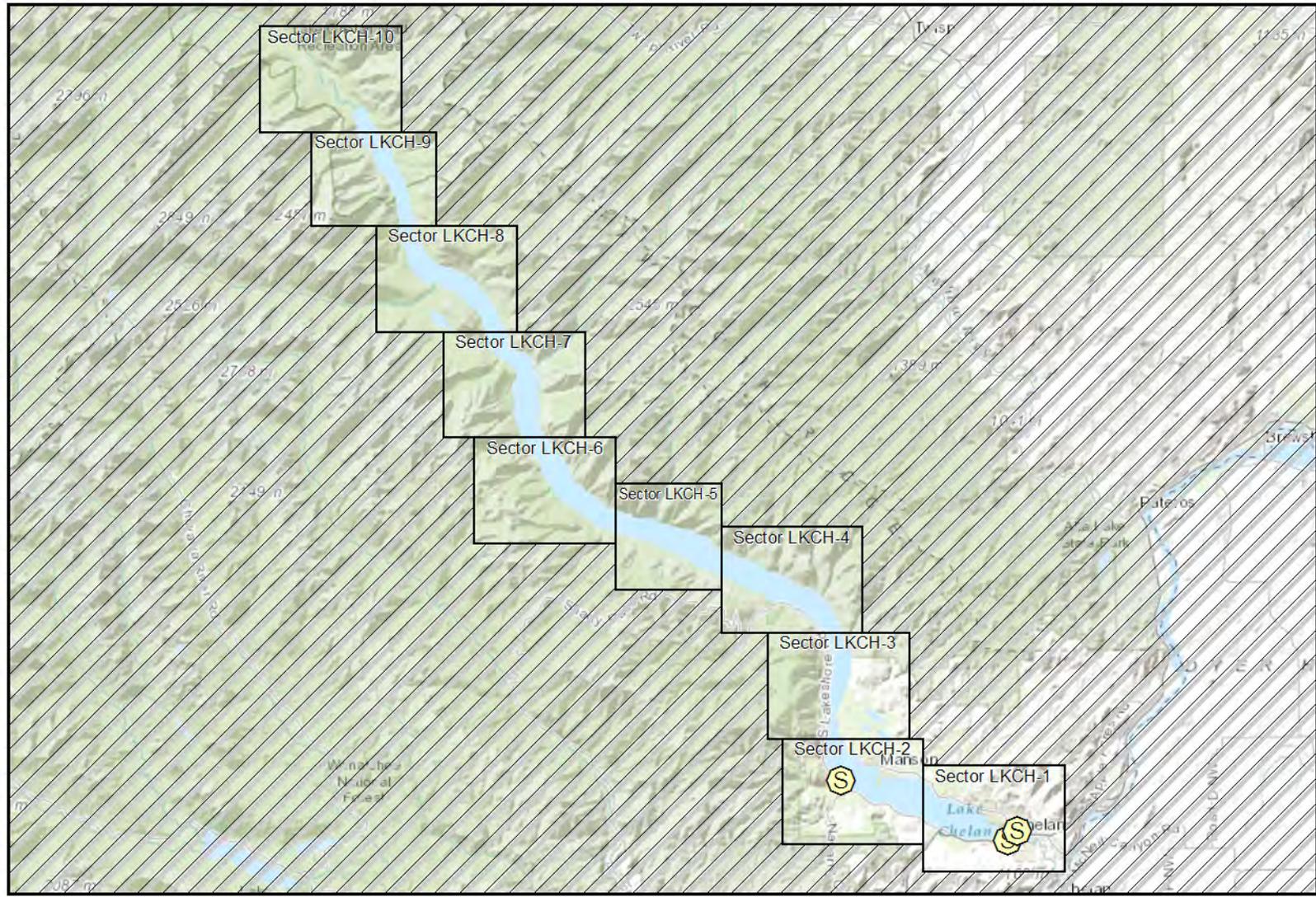
Figure 4-1: Historic streamflow for significant rivers near Lake Chelan

4.2 AREA MAPS

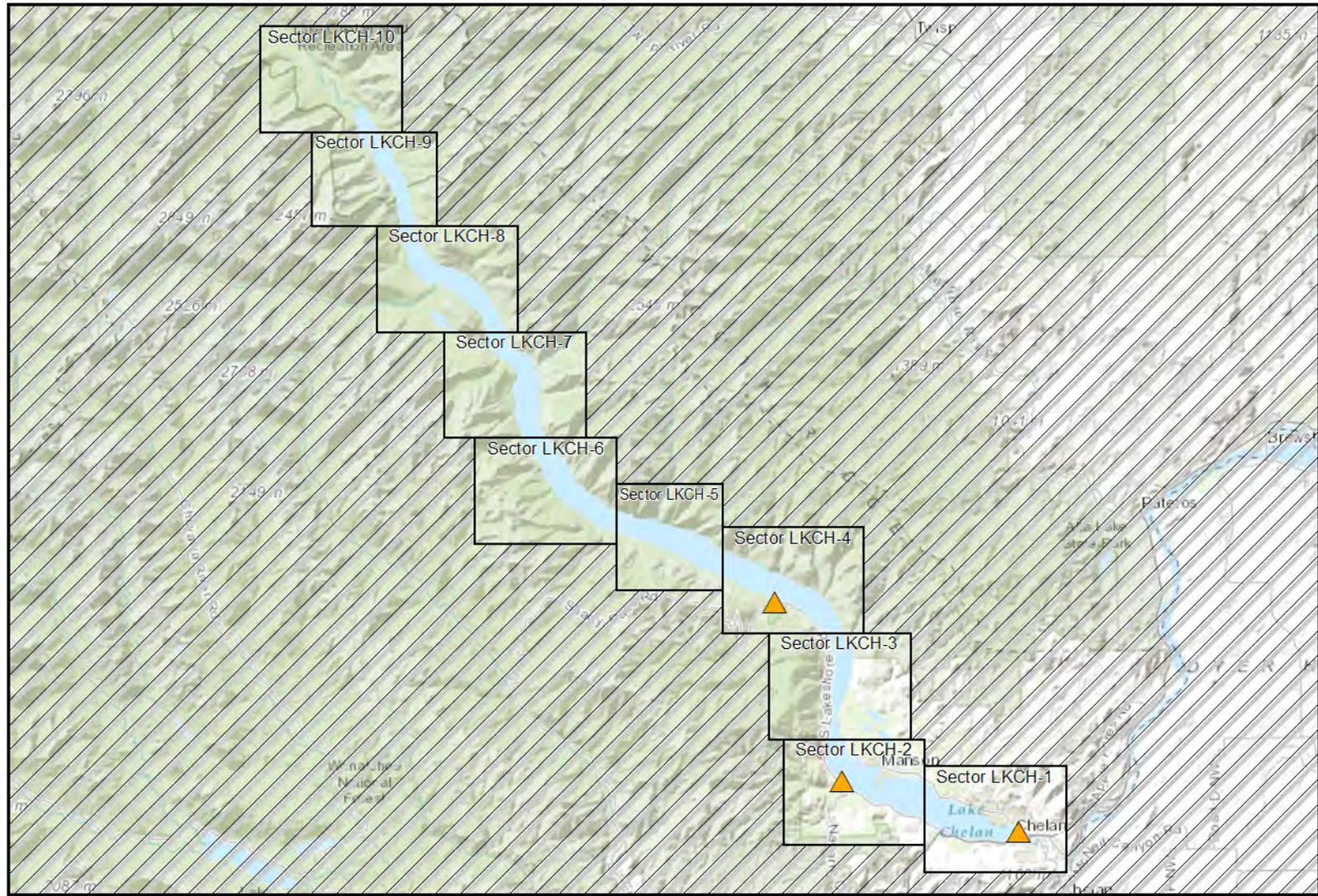




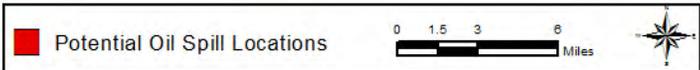
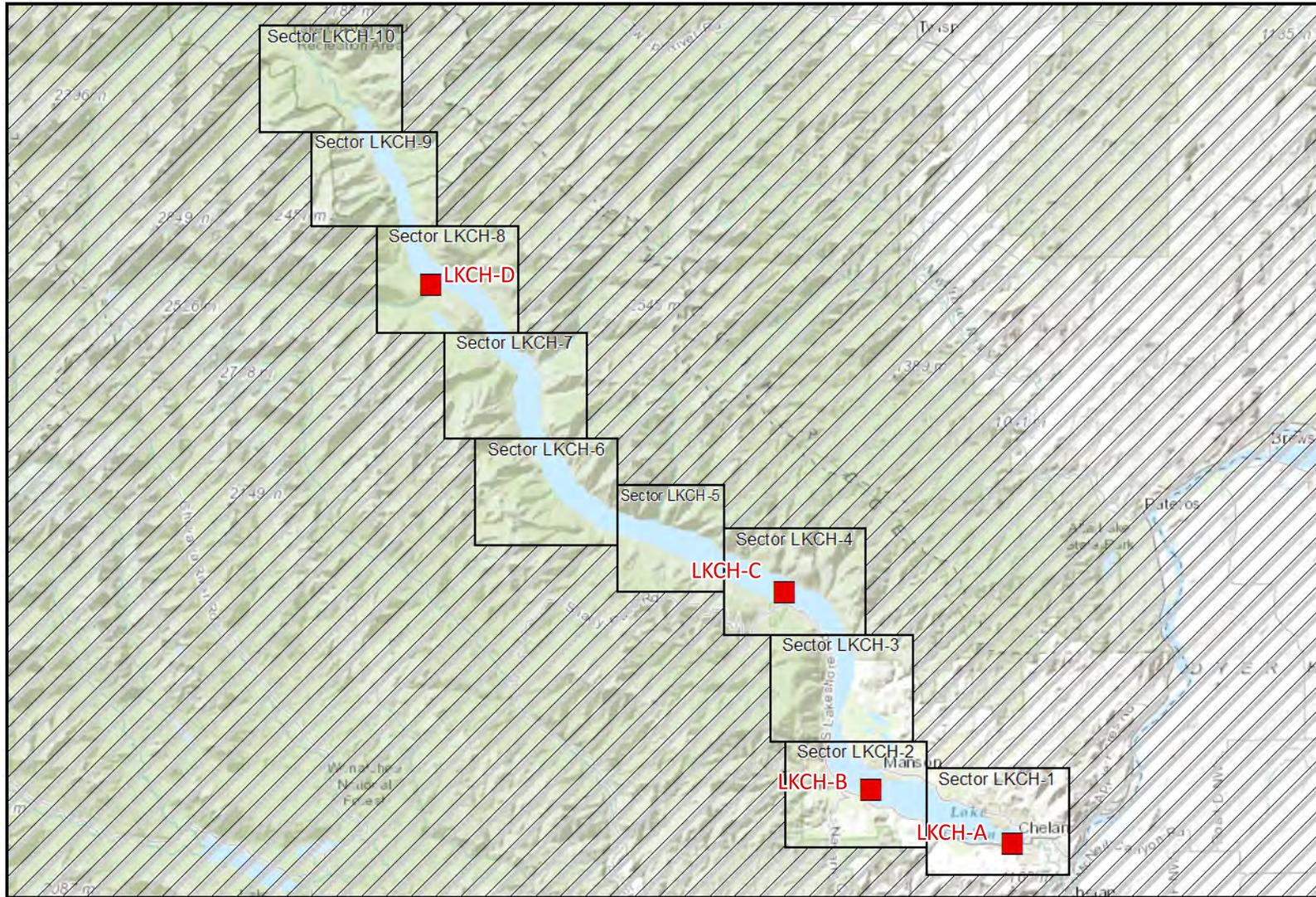
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan,



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



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



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

4.3 STRATEGY AND RESPONSE PRIORITIES

4.3.1 General Response Priorities

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

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

4.3.2 Strategy Priorities based on Potential Oil Spill Origin Points

POSOPs are geographic locations that have a defined list of response strategy implementation priorities listed in a matching table of Section 4.3. The placement of each POSOP is often based on spill risks in the area, including oil pipelines, railways, highways/roadways, tributaries, and vessel movements. Intersections of two or more of these risk locations typically represent a higher spill risk than any one individually, increasing the probability of an oil spill. Occasionally POSOPs are generalized to ensure implementation priorities are developed throughout an entire planning area.

These points are displayed on area overview and sector maps as red boxes. In establishing response priorities during a response, or selecting an appropriate POSOP, the downstream and tidal movement of spilled oil and the time it takes to mobilize and deploy response resources must be considered. Generally, GRP strategies should first be implemented downstream, well beyond the furthest extent of the

spill, with deployments continuing upstream towards the spill source and in some cases slightly beyond. POSOPs are alphabetically designated.

The following tables provide the strategy implementation order for POSOPs in Lake Chelan: LKCH-A, LKCH-B, LKCH-C and LKCH-D. These priority tables were determined using a combination of variables, including: notification time, travel time for responders and equipment, average and seasonal flow rates, average winds, tides or currents, deployment time, proximity to the spill source, and other considerations.

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

Table 4-3: Priority Table LKCH-A (Barge Loading Dock in Chelan)

LKCH-A (Barge Loading Dock in Chelan)					
Implementation Priority	Strategy Number	Sector Map (Page #)	Strategy Matrix (Page #)	Strategy Details (Page #)	Remarks
1	LKCH-60.6	43	55	73	N/A
2	LKCH-58.9	43	55	71	Low Lake Level Only
3	LKCH-60.8	43	55	75	N/A
4	LKCH-60.9	43	56	77	N/A
5	LKCH-61.0	43	56	79	N/A
6	LKCH-61.2	43	56	81	N/A
7	LKCH-48.0	44	54	69	N/A
8	LKCH-37.5	46	54	67	N/A
9	LKCH-37.0	46	54	65	N/A
10	LKCH-104.4	50	57	83	High Lake Level Only

Table 4-4: Priority Table LKCH-B (Manson)

LKCH-B (Manson)					
Implementation Priority	Strategy Number	Sector Map (Page #)	Strategy Matrix (Page #)	Strategy Details (Page #)	Remarks
1	LKCH-48.0	44	54	69	N/A
2	LKCH-58.9	43	55	71	Low Lake Level Only
3	LKCH-60.6	43	55	73	N/A
4	LKCH-37.5	46	54	67	N/A
5	LKCH-37.0	46	54	65	N/A
6	LKCH-104.4	50	57	83	High Lake Level Only

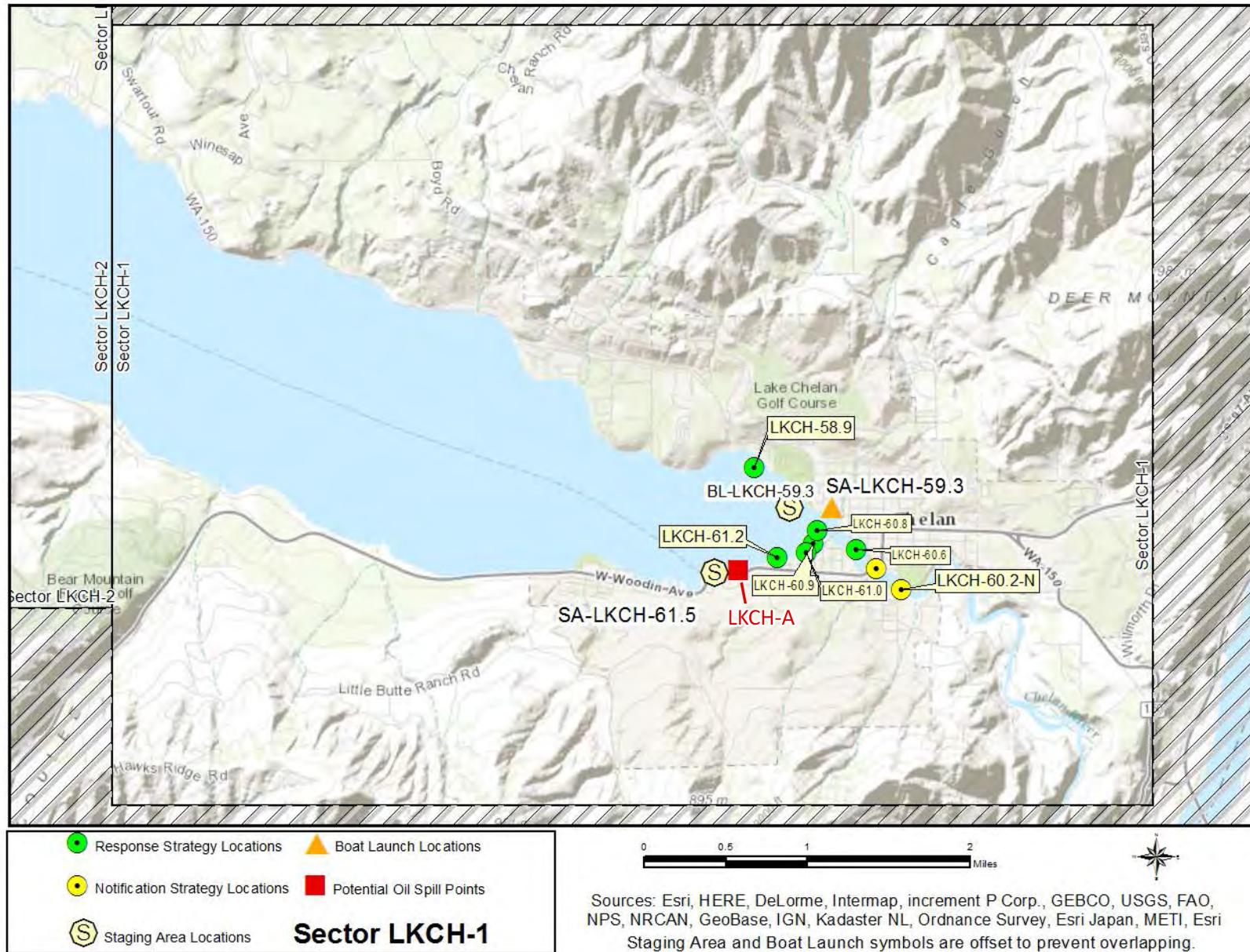
Table 4-5: Priority Table LKCH-C (Dutch Harbor)

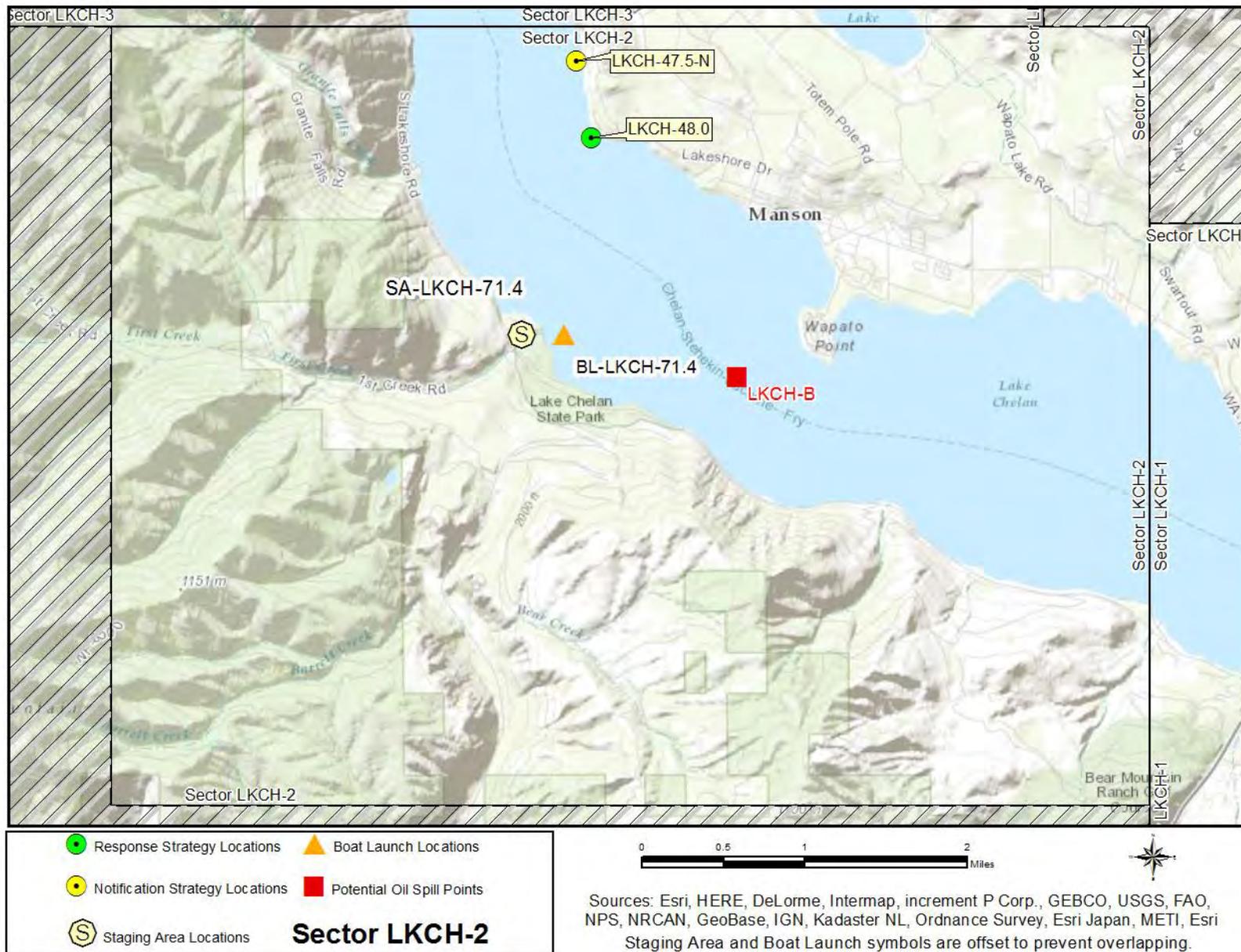
LKCH-C (Dutch Harbor)					
Implementation Priority	Strategy Number	Sector Map (Page #)	Strategy Matrix (Page #)	Strategy Details (Page #)	Remarks
1	LKCH-37.0	46	54	65	N/A
2	LKCH-37.5	46	54	67	N/A
3	LKCH-48.0	44	54	69	N/A
4	LKCH-58.9	43	55	71	Low Lake Level Only
5	LKCH-60.6	43	55	73	N/A
6	LKCH-104.4	50	57	83	High Lake Level Only

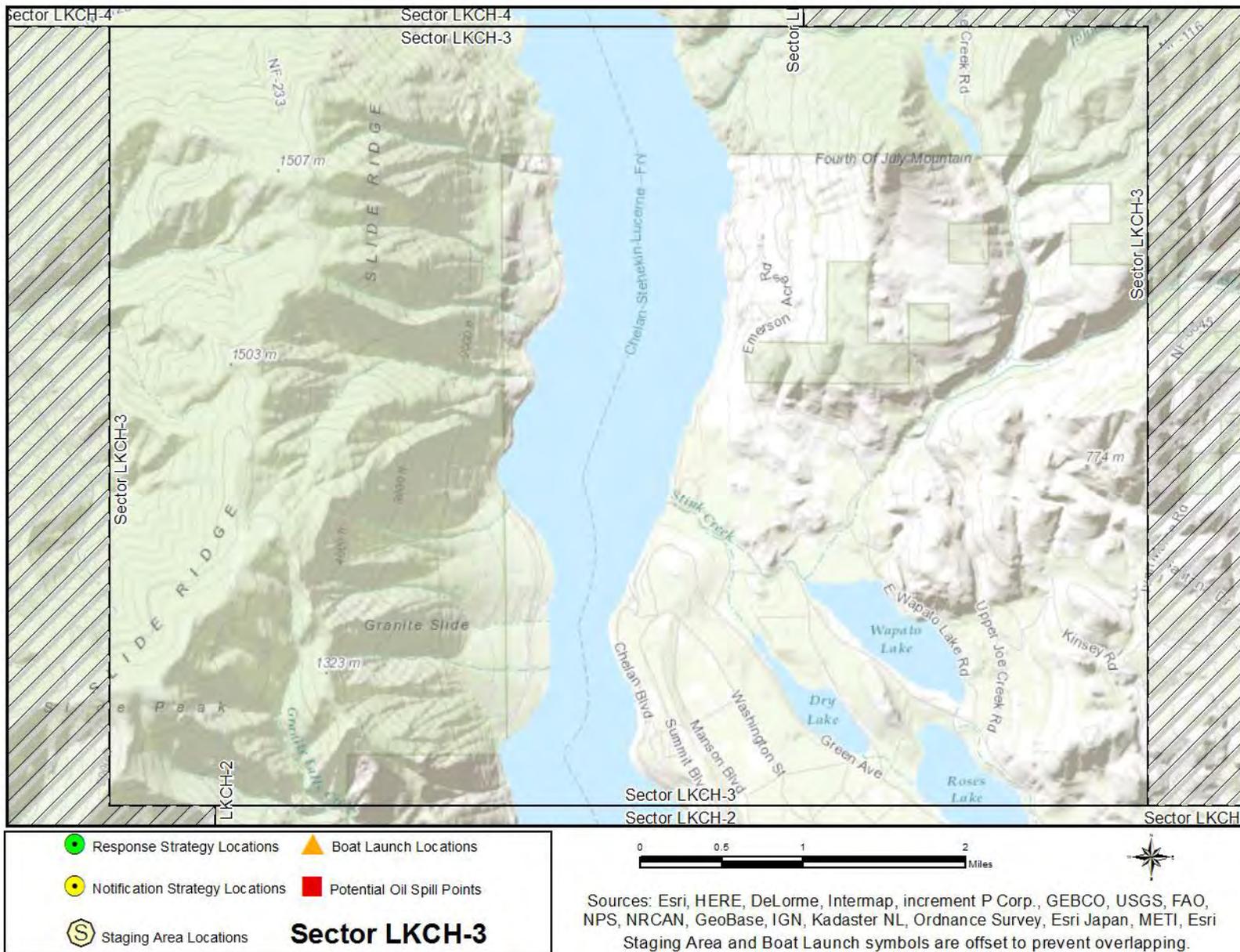
Table 4-6: Priority Table LKCH-D (Lucerne Landing)

LKCH-D (Lucerne Landing)					
Implementation Priority	Strategy Number	Sector Map (Page #)	Strategy Matrix (Page #)	Strategy Details (Page #)	Remarks
1	LKCH-108.4	50	57	87	N/A
2	LKCH-108.5	50	58	89	N/A
3	LKCH-108.3	50	57	85	N/A
4	LKCH-104.4	50	57	83	High Lake Level Only
5	LKCH-37.0	46	54	65	N/A
6	LKCH-37.5	46	54	67	N/A
7	LKCH-48.0	44	54	69	N/A
8	LKCH-58.9	43	55	71	Low Lake Level Only
9	LKCH-60.6	43	55	73	N/A

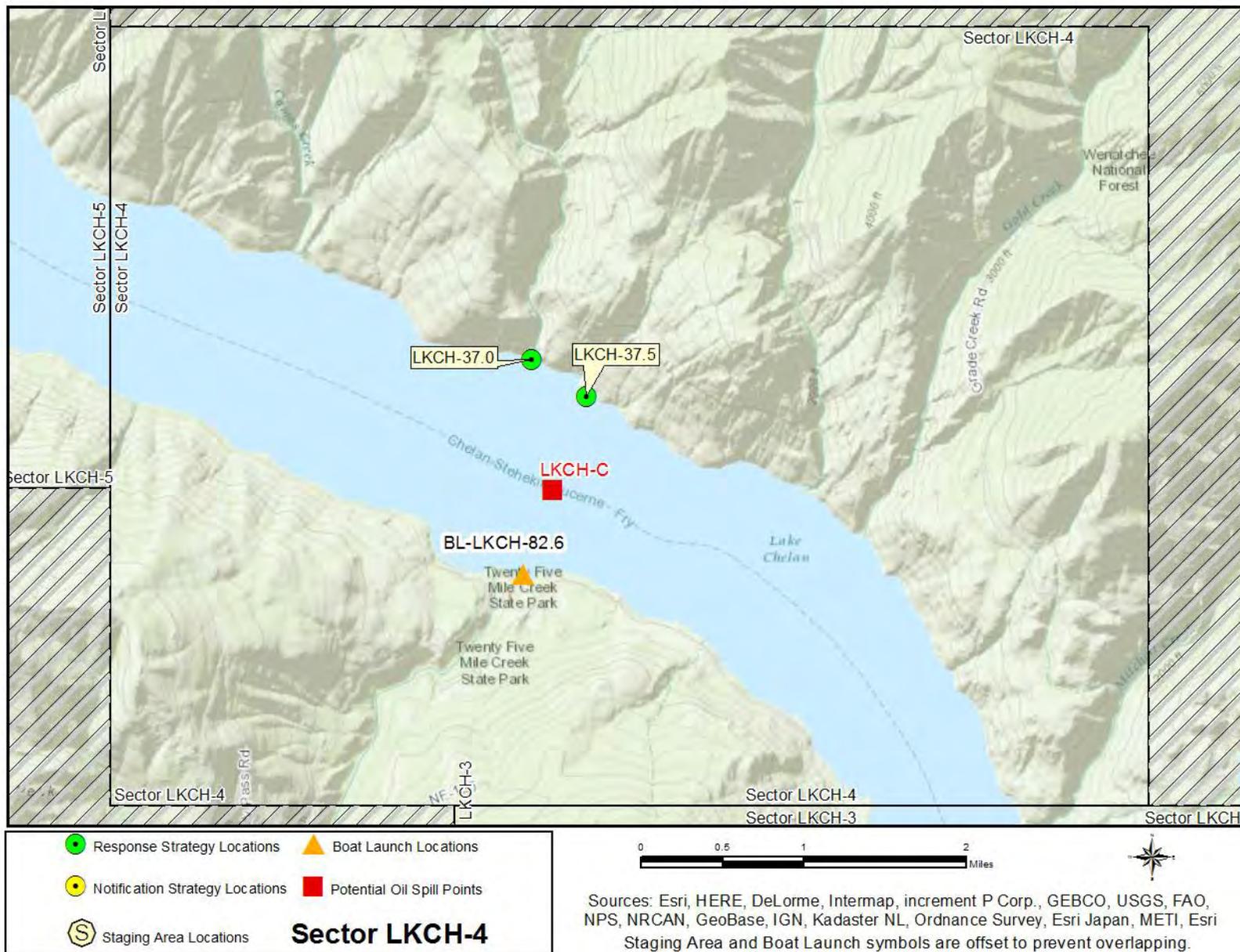
4.4 SECTOR MAPS (STRATEGY LOCATIONS)

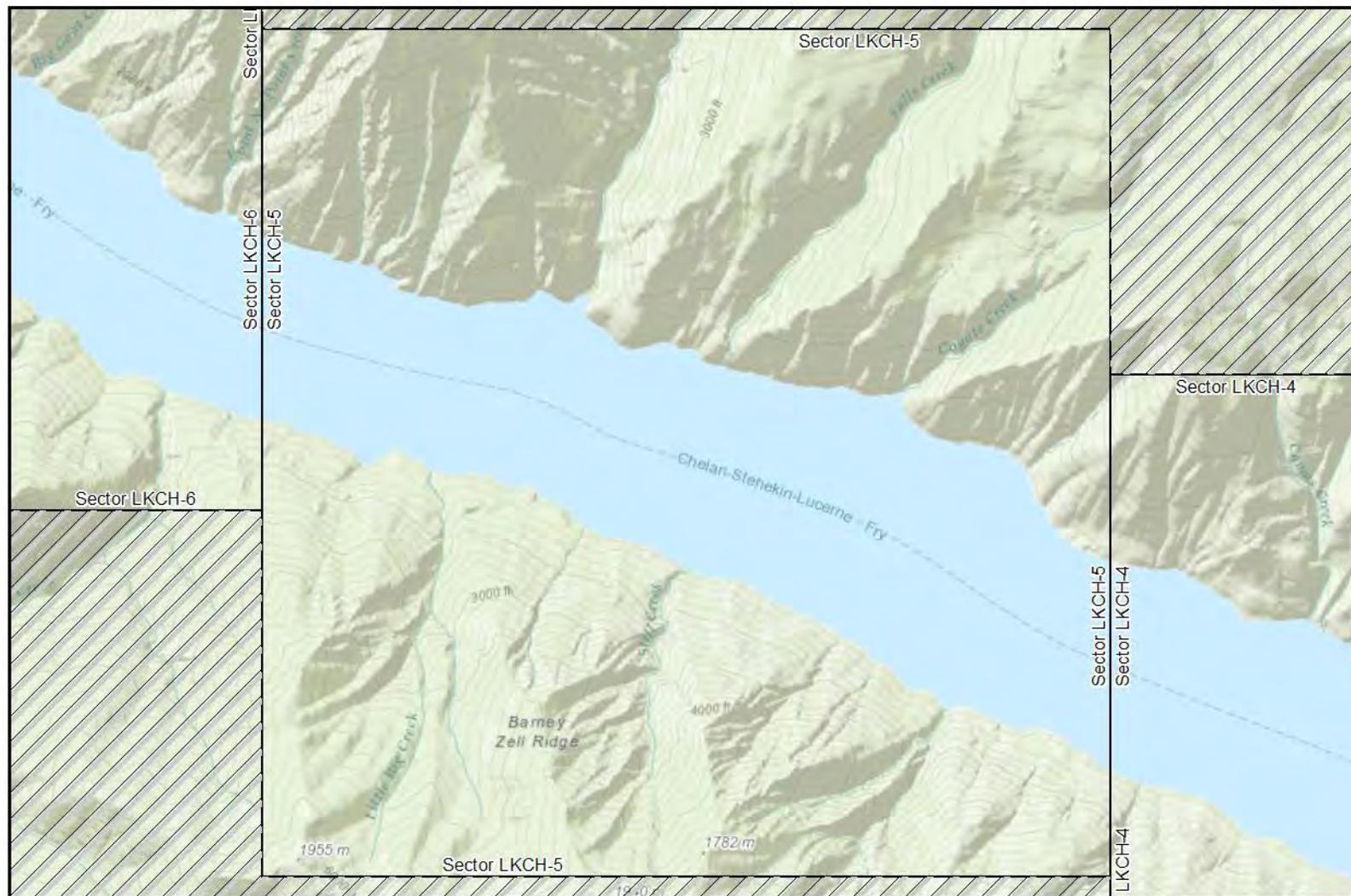






Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri Staging Area and Boat Launch symbols are offset to prevent overlapping.

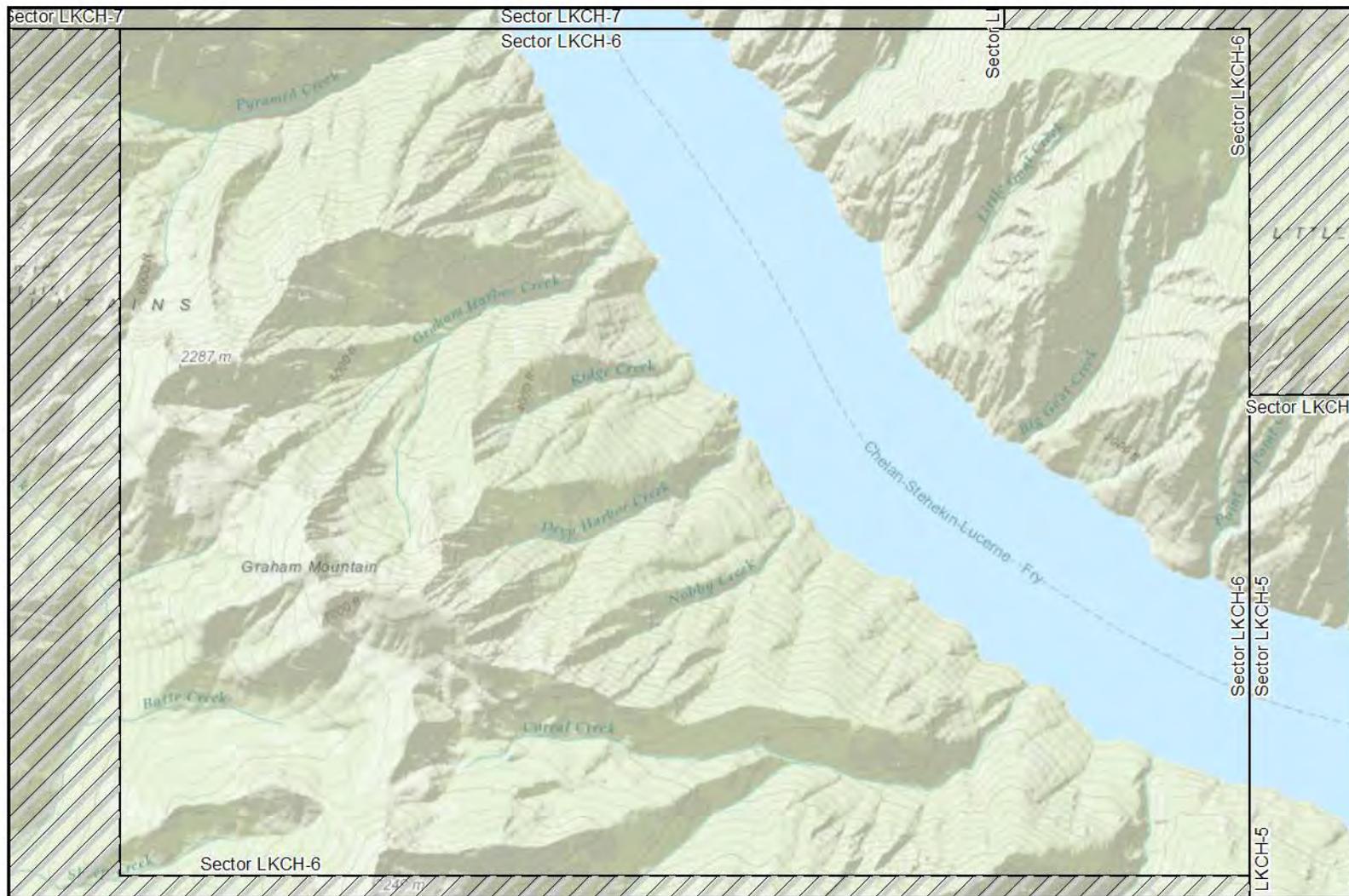




	Response Strategy Locations		Boat Launch Locations
	Notification Strategy Locations		Potential Oil Spill Points
	Staging Area Locations	Sector LKCH-5	



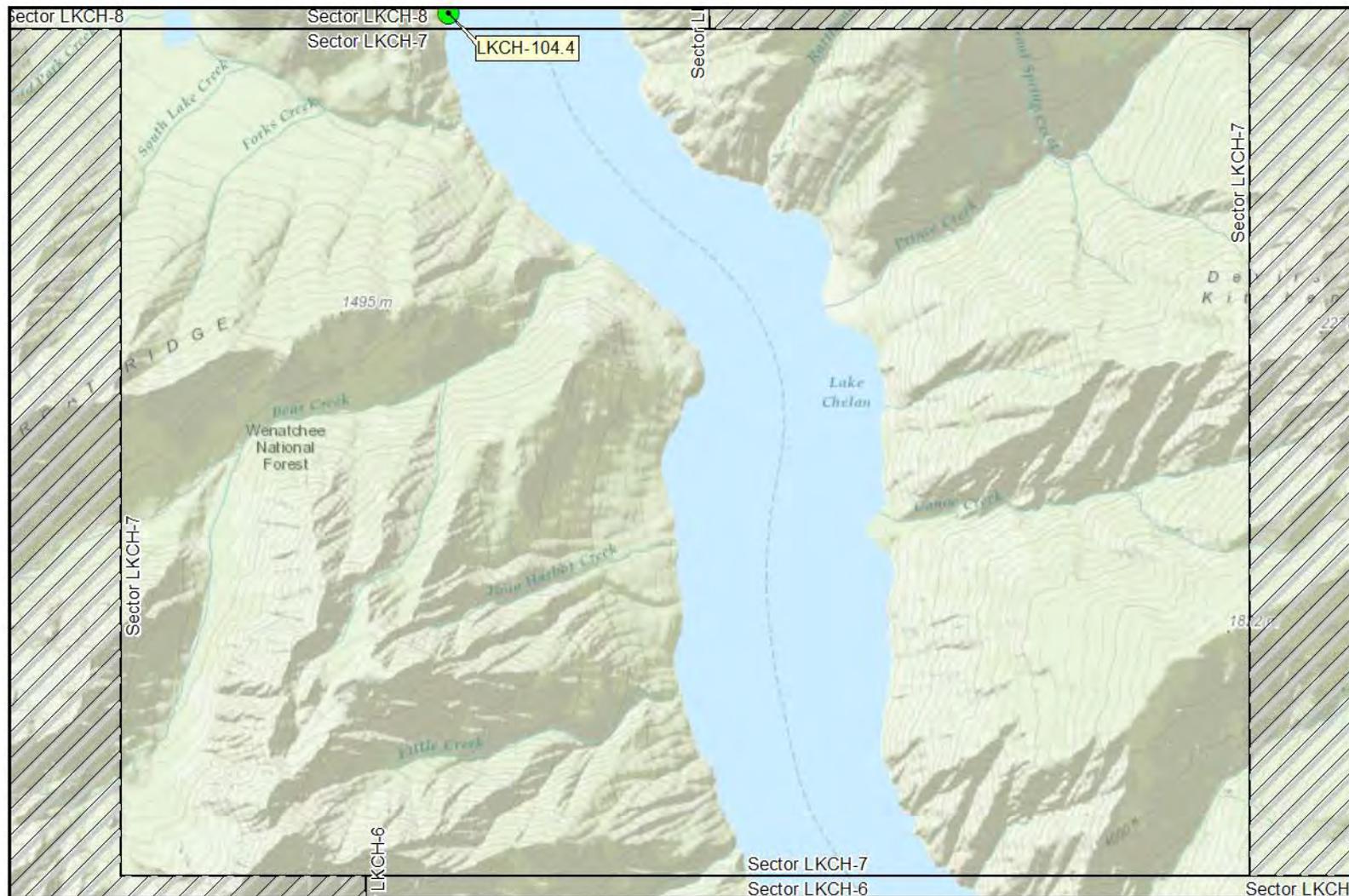
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri Staging Area and Boat Launch symbols are offset to prevent overlapping.



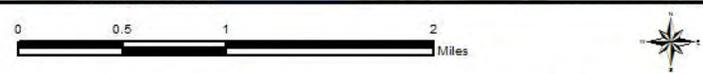
	Response Strategy Locations		Boat Launch Locations
	Notification Strategy Locations		Potential Oil Spill Points
	Staging Area Locations	Sector LKCH-6	



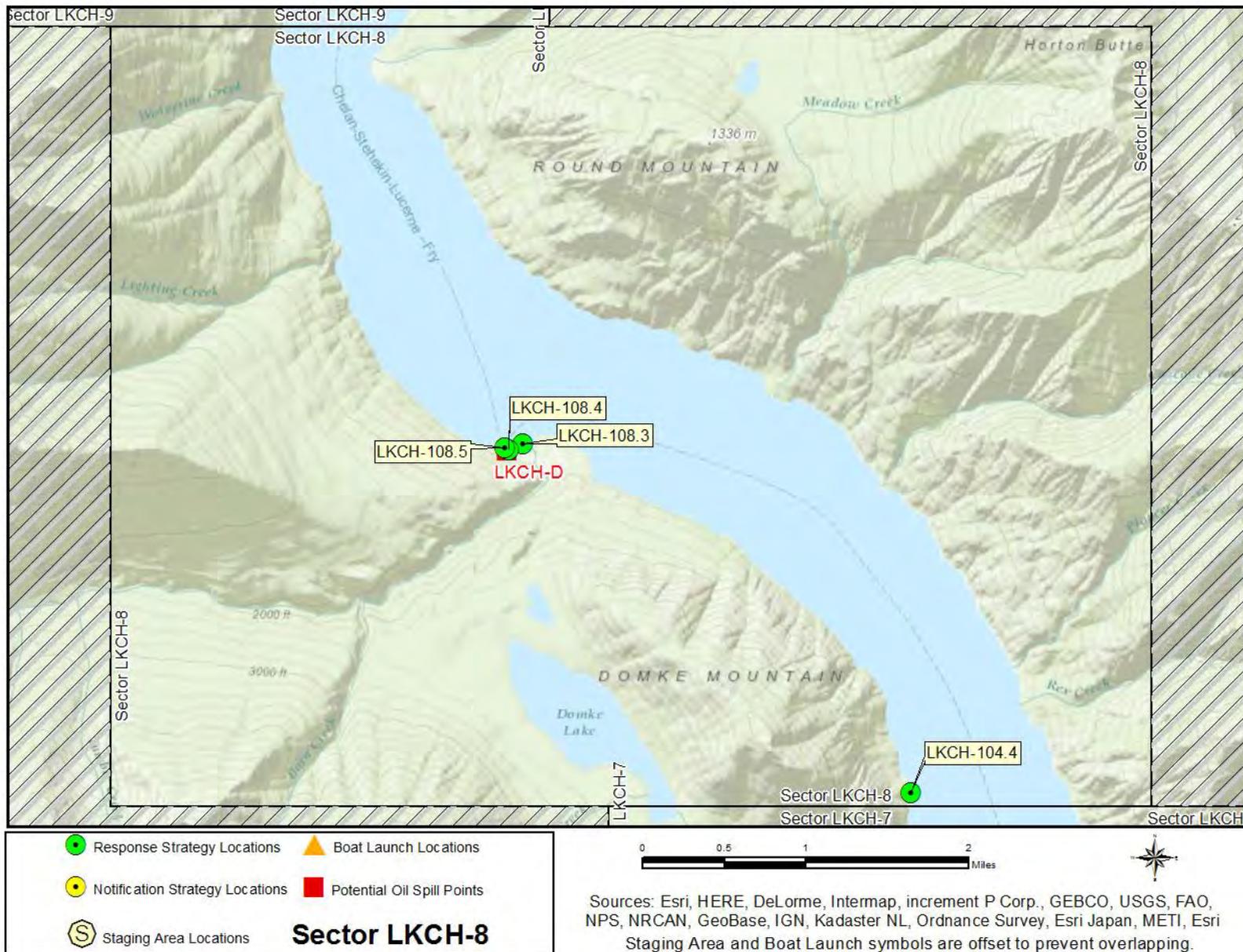
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri Staging Area and Boat Launch symbols are offset to prevent overlapping.

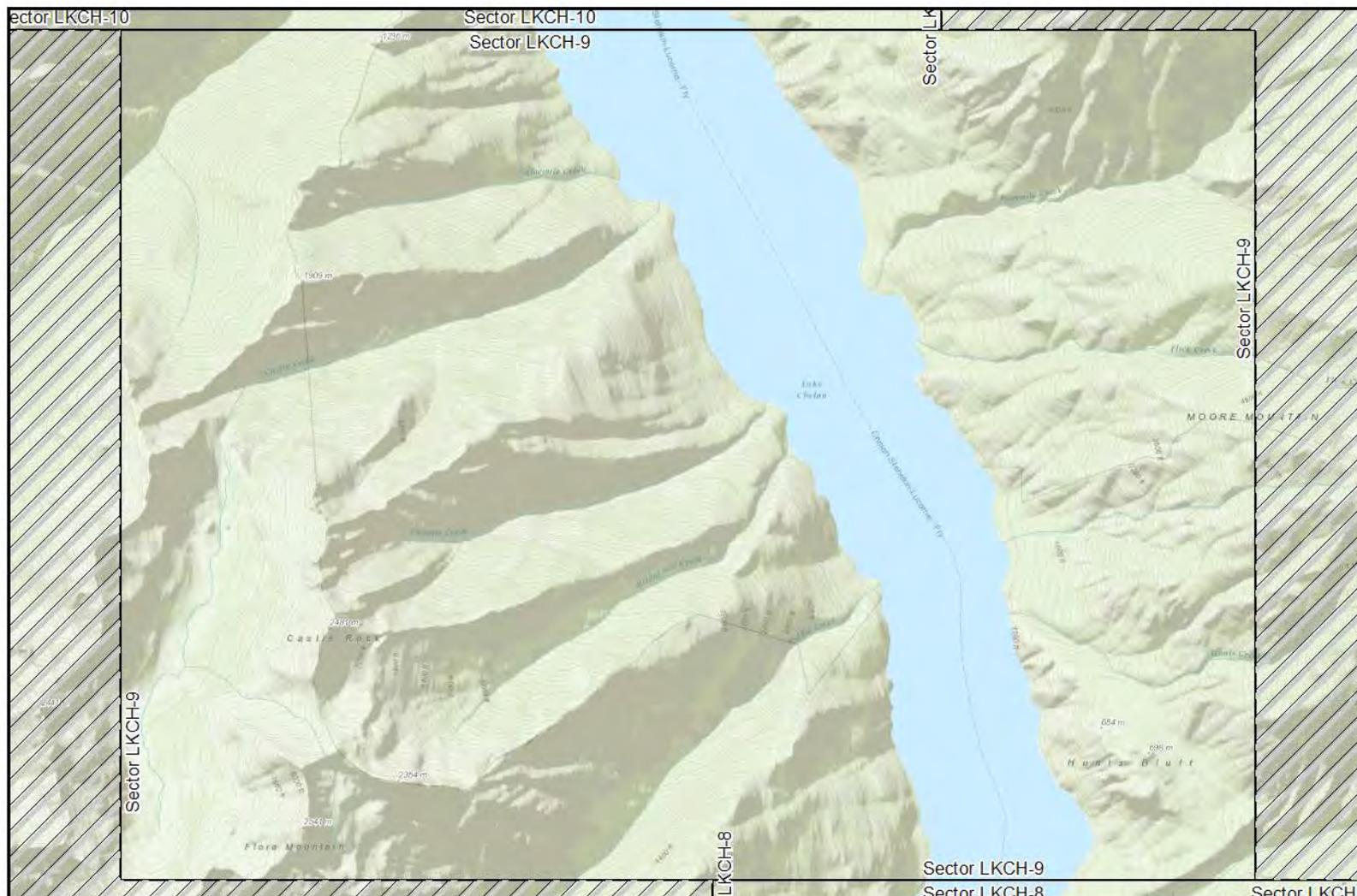


	Response Strategy Locations		Boat Launch Locations
	Notification Strategy Locations		Potential Oil Spill Points
	Staging Area Locations	Sector LKCH-7	



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.

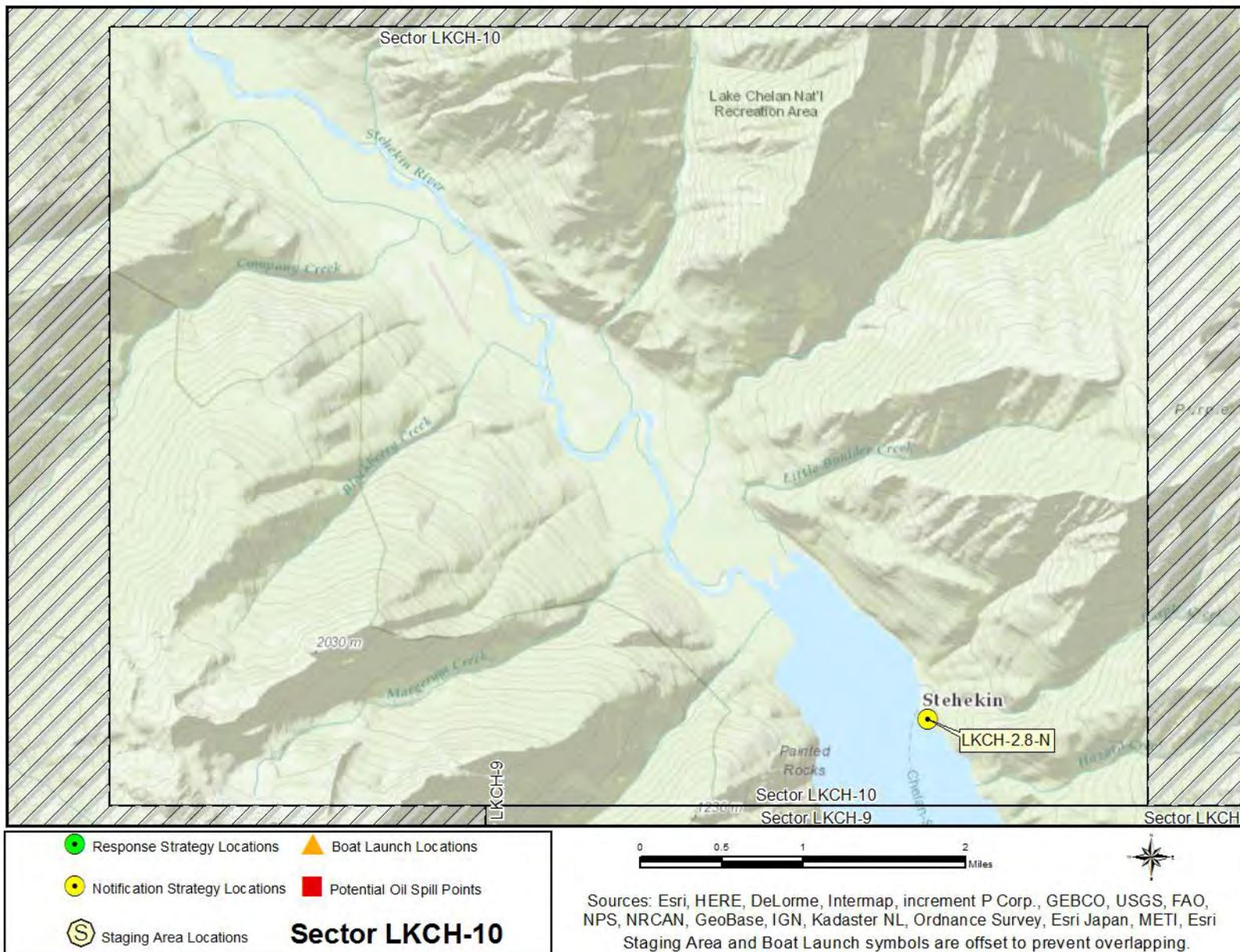




	Response Strategy Locations		Boat Launch Locations
	Notification Strategy Locations		Potential Oil Spill Points
	Staging Area Locations	Sector LKCH-9	



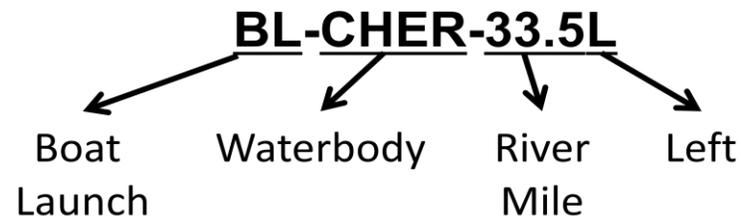
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri Staging Area and Boat Launch symbols are offset to prevent overlapping.



4.5 MATRICES

4.5.1 Strategy Names

Each strategy in this document has been given a “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 strategy location. Some short names indicate whether the strategy 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 in the northwest corner 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-” at the beginning of the short name.



Associated waterbody short name designations used within this plan include:

LKCH = Lake Chelan

N = Notification Strategy

SA = Staging Area

BL = Boat Launch

4.5.2 Response Strategy Matrices

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-37.0	Lake Chelan (Dutch Harbor) 48.01229 -120.25733	Exclusion	Boom 650ft	Yes	Remote Coordinate with incident/unified command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.	Sensitive Resources	Coordinate transit to strategy location with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 - South across the lake. In low water use BL-LKCH-71.4 (~10 mi S).	46	65
LKCH-37.5	Lake Chelan (Dutch Harbor) 48.00900 -120.25005	Exclusion	Boom 800ft	Yes	Remote Coordinate with incident/unified command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.	Sensitive Resources	Coordinate transit to strategy location with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 - South across the lake. In low water use BL-LKCH-71.4 (~10 mi S).	46	67
LKCH-48.0	Lake Chelan (Willow Point Park - Manson) 47.89295 -120.19034	Exclusion	Boom 1050ft	Yes	Remote Old Mill Park, Hwy 150 and E. Wapato Lake Rd (200 Mill Rd, Manson, WA) - about 4 miles away from site	Sensitive Resources	Coordinate with Chelan County Fire District No. 5 (Manson); call (509)-663-9911 (Rivercom911 Dispatch). Boat Launch available at Old Mill Park (and low water access at Manson Bay Park via Fire Dept); call Manson Parks (509)-687-9635.	44	69

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-58.9 Low Lake Levels Only	Lake Chelan (Chelan/ Spaders Bay) 47.84538 -120.03182	Exclusion	Boom 1150ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Sensitive Resources	Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at (509) 663-9911 before implementation. Notify City of Chelan Parks and Recreation at 509-682-8023 before staging equipment at Lakeshore Park.	43	71
LKCH-60.6	Lake Chelan (Chelan) 47.83802 -120.01837	Collection, Exclusion	Boom 700ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Power Generation	Coordinate with Chelan Fire and Rescue via Rivercom911 Dispatch at (509)-663-9911 before implementation. Notify City of Chelan Parks and Recreation at (509)-682-8023 before staging equipment at Lakeshore Park.	43	73
LKCH-60.8	Lake Chelan (Chelan) 47.83973 -120.02357	Collection	Boom 300ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Power Generation	Coordinate with Chelan Fire and Rescue via Rivercom911 Dispatch at (509)-663-9911 before implementation. Notify City of Chelan Parks and Recreation at (509)-682-8023 before staging equipment at Lakeshore Park.	43	75

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-60.9	Lake Chelan (Chelan) 47.83856 -120.02410	Collection	Boom 300ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Power Generation	Coordinate with Chelan Fire and Rescue via Rivercom911 Dispatch at (509)-663-9911 before implementation. Notify City of Chelan Parks and Recreation at (509)-682-8023 before staging equipment at Lakeshore Park.	43	77
LKCH-61.0	Lake Chelan (Chelan) 47.83783 -120.02498	Collection	Boom 500ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Power Generation	Coordinate with Chelan Fire and Rescue via Rivercom911 Dispatch at (509)-663-9911 before implementation. Notify City of Chelan Parks and Recreation at (509)-682-8023 before staging equipment at Lakeshore Park.	43	79
LKCH-61.2	Lake Chelan (Chelan) 47.83735 -120.02880	Collection	Boom 300ft	Yes	Remote Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816	Power Generation	Coordinate with Chelan Fire and Rescue via Rivercom911 Dispatch at (509)-663-9911 before implementation. Notify City of Chelan Parks and Recreation at (509)-682-8023 before staging equipment at Lakeshore Park.	43	81

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-104.4 Low Lake Levels Only	Lake Chelan 48.17123 -120.54483	Exclusion	Boom 250ft	Yes	Remote Coordinate with incident command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.	Sensitive Resources	Coordinate transit to strategy location with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~20 mi S). In low water use BL-LKCH-71.4 (~30 mi S).	50	83
LKCH-108.3	Lake Chelan (Lucerne Landing) 48.20220 -120.59654	Diversions	Boom 100ft	Yes	Onsite Shoreside of dock at Lucerne Landing.	Sensitive Resources	Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).	50	85
LKCH-108.4	Lake Chelan (Lucerne Landing) 48.20166 -120.59835	Containment	Boom 500ft	Yes	Onsite Shoreside of dock at Lucerne Landing.	Sensitive Resources	Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).	50	87

Strategy Name	Location	Strategy Type	Boom Length	Boat Req?	Staging Area	Resources At Risk	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-108.5	Lake Chelan (Lucerne Landing) 48.20191 -120.59892	Containment	Boom 800ft	Yes	Onsite Shoreside of dock at Lucerne Landing.	Sensitive Resources	Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509)-575-2490. Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).	50	89

4.5.3 Notification Strategy Matrices

Strategy Name	Location	Strategy Type	Resources at Risk	Implementation	Comments	Sector Map (Page #)	Strategy Details (Page#)
LKCH-2.8-N	National Park Service Stehekin Ranger Station 48.30838 -120.65643	Notification	Federal Lands, Marina, Public Recreation Site/Area, Wetlands	Call the NPS Stehekin Ranger's Station at (509) 699-2080 x 29 (24-hr number).	Notify park staff of oil spill so they can deploy response equipment.	52	93
LKCH-47.5-N	Lake Chelan Reclamation District Water Intake 47.89977 -120.19240	Notification	Public Health and Safety, Water Intakes	Call Lake Chelan Notification District emergency line at (509) 687-3548. Inform them that a spill has occurred and to consider shutting down their intakes.	Shut down drinking water and irrigation intakes.	44	95
LKCH-60.1-N	City of Chelan Drinking Water Intake 47.83634 -120.01575	Notification	Public Health and Safety, Water Intakes	Call City of Chelan Public Works and inform them a spill has occurred. Advise they consider shutting down their intakes.	Shut down drinking water intake and park irrigation intakes.	43	97
LKCH-60.2-N	Lake Chelan Hydroelectric Project 47.83447 -120.01246	Notification	Power Generation, Salmon Bearing Stream	Call System Operations at (509) 661-4000 (staffed 24/7). They will deploy response equipment and/or adjust water intakes.	Keep oil out of dam	43	99

4.5.4 Staging Area Matrices

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
SA-LKCH-59.3	Lakeshore Park Marina	47.84179 -120.02438	310 W Manson Road Chelan, WA 98816	City of Chelan Parks and Recreation Owner Chelan, WA 98816 509-682-8023	LKCH-58.9 LKCH-60.6 LKCH-60.8 LKCH-60.9 LKCH-61.0 LKCH-61.2	Pump-out station, launch and ample pay parking. Adjacent to RV Park with utilities and wi-fi.	43	103
SA-LKCH-61.5	Mountain Barge Services	47.83607 -120.03427	1228 W Woodin Ave Chelan, WA 98816	Mountain Barge Services Chelan, WA 98816 509-682-2493	LKCH-37.0 LKCH-37.5	(Previously Tom Courtney Tug and Barge). Barge to Lucerne Landing loading and departure site. Response will be coordinated from here.	43	105
SA-LKCH-71.4	Lake Chelan State Park	47.87544 -120.19691	7544 S. Lakeshore Road Chelan, WA 98816	Washington State Parks and Recreation Commission Lake Chelan State Park Chelan, WA 98816 509-687-3710	LKCH-48.0	The park provides one kitchen shelter without electricity plus a small parking area.	44	107

4.5.5 Boat Launch Location Matrices

Strategy Name	Name	Position	Nearest Address	Contact	Strategies Served	Comments	Sector Map (Page #)	Strategy Details (Page#)
BL-LKCH-59.3	Lakeshore Park Marina	47.84179 -120.02438	310 W Manson Road Chelan, WA 98816	City of Chelan Parks and Recreation Owner Chelan, WA 98816 509-682-8023	LKCH-58.9 LKCH-60.6 LKCH-60.8 LKCH-60.9 LKCH-61.0 LKCH-61.2	Pump-out station, launch and ample pay parking. Adjacent to RV Park with utilities and wi-fi.	44	111
BL-LKCH-71.4	Lake Chelan State Park	47.87544 -120.19691	7544 S. Lakeshore Road Chelan, WA 98816	Washington State Parks and Recreation Commission Lake Chelan State Park Chelan, WA 98816 509-687-3710	LKCH-48.0	Accessible in low water. The park has a double lane boat launch with nearby parking for approximately 32 vehicles with trailers. The launch offers a 1080 feet of docking space along the four piers near the launch.	44	113
BL-LKCH-82.6	25-Mile Creek Boat Launch	47.99316 -120.26120	20530 S Lakeshore Rd Chelan, WA 98816	Washington State Parks Chelan Owner Chelan, WA 98816 360-902-8844	LKCH-37.0 LKCH-37.5 LKCH-104.4 LKCH-108.3 LKCH-108.4 LKCH-108.5	Twenty-Five Mile Creek State Park offers two boat ramps. The launch is generally usable from mid-June to the end of December, as long as the lake is at an elevation of 1093. For up-to-date information, call the Information Center at 360-902-8844. There is a modern marina with moorage for 20 boats up to 23 feet long.	46	115

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APPENDIX 4A
Response Strategy 2-Pagers

RESPONSE STRATEGIES – LIST

LKCH-37.0

LKCH-37.5

LKCH-48.0

LKCH-58.9

LKCH-60.6

LKCH-60.8

LKCH-60.9

LKCH-61.0

LKCH-61.2

LKCH-104.4

LKCH-108.3

LKCH-108.4

LKCH-108.5

Lake Chelan (Dutch Harbor) LKCH-37.0

Position - Location: 48° .737', -120° 15.440' 48° 0' 44.2", -120° 15' 26.4" 48.01229, -120.25733 Chelan

Strategy Objective: Exclusion : Keep oil away from shore at this location

Implementation: Using workboat, secure end of boom to shore near "A" (48.012568, -120.258706). Pull boom out away from shore to the Southeast (650ft); secure remaining boom end to shore near "B" (48.011948, -120.256291). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures, trees, or anchor posts to secure boom to shore. Water depth at this location is very deep immediately offshore.

Staging Area: Remote: Coordinate with incident/unified command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.

Site Safety: Steep banks; rocky hillside; water hazard; slip, trip, fall hazards; limited or no site access

Field Notes: Coordinate transit to strategy location with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 – South across the lake. In low water use BL-LKCH-71.4 (~10 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

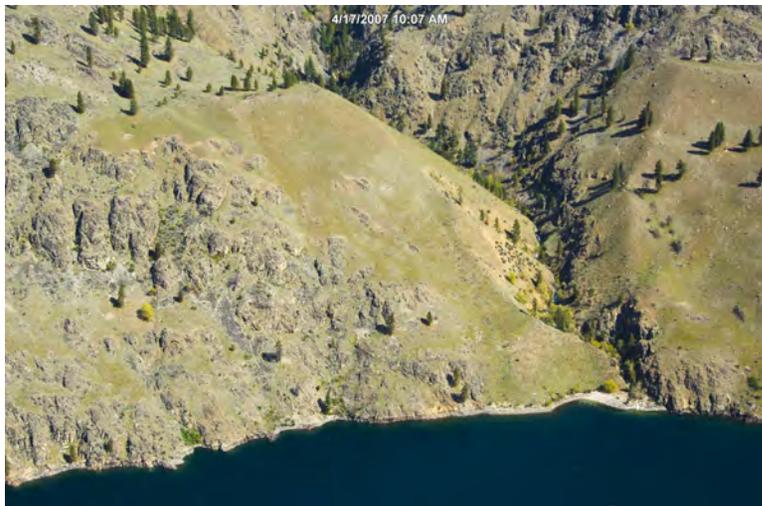
1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
3	Each	Anchoring System(s) - (anchor, lines, floats)
650	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
500	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lake Chelan (Dutch Harbor)

LKCH-37.0



LKCH-37.0 Photo: Aerial photo looking NNE at strategy location



Site Contact

Mountain Barge Services
 Primary Contact :
 509-682-2493

U.S. Forest Service Okanogan-Wenatchee National Forest
 Land/Property Owner :
 509-664-9254

Nearest Address

1228 W Woodin Ave
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan (Dutch Harbor)

LKCH-37.5

Position - Location: 48° .540', -120° 15.003' 48° 0' 32.4", -120° 15' .2" 48.00900, -120.25005 Chelan

Strategy Objective: Exclusion : Keep oil away from shore at this location

Implementation: Using workboat, secure end of boom to shore near "A" (48.009623, -120.250955). Pull boom out away from shore to the SE (750ft to 800ft); secure remaining boom end to shore near "C" (48.008417, -120.248527). Pull boom into desired shape anchoring near "B" (48.009077, -120.250505 – 60ft off shore, about ~225ft SSE of "A"). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures, trees, or anchor posts to secure boom to shore. Water depth is very deep immediately offshore.

Staging Area: Remote: Coordinate with incident/unified command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.

Site Safety: Steep banks; rocky hillside; water hazard; slip, trip, fall hazards; limited or no site access

Field Notes: Coordinate transit to strategy location with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 – South across the lake. In low water use BL-LKCH-71.4 (~10 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

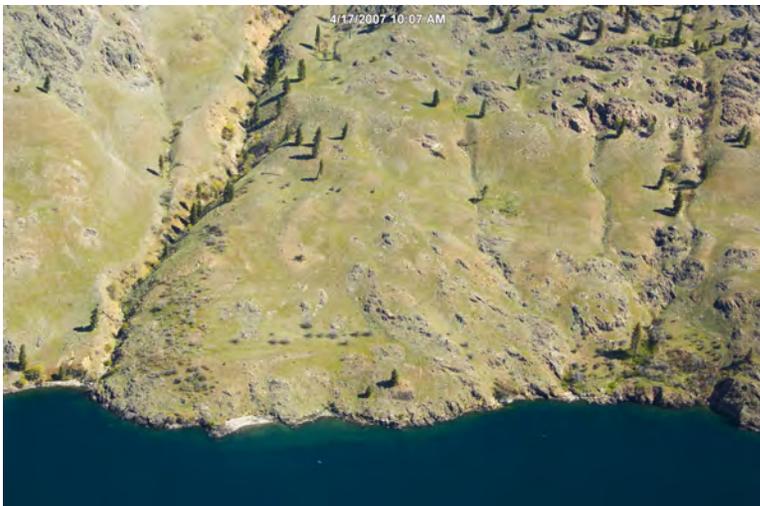
1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
5	Each	Anchoring System(s) - (anchor, lines, floats)
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
500	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lake Chelan (Dutch Harbor)

LKCH-37.5



LKCH-37.5 Photo: Aerial photo looking NE at strategy location



Site Contact

Mountain Barge Services

Primary Contact :
509-682-2493

U.S. Forest Service Okanogan-Wenatchee National Forest

Land/Property Owner :
509-664-9254

Nearest Address

1228 W Woodin Ave
Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan (Willow Point Park - Manson)

LKCH-48.0

Position - Location: 47° 53.577', -120° 11.421' 47° 53' 34.6", -120° 11' 25.2" 47.89295, -120.19034 Manson

Strategy Objective: Exclusion : Keep oil away from shore at this location.

Implementation: Using workboat, secure end of boom to shore at "A" (47.894172, -120.190630, North side of private dock). Pull boom out away from shore W-SW about ~150ft, anchoring near "B" (47.894005, -120.191270) continuing S-SE ~450ft anchoring boom near "C" (47.892978, -120.190388). From "C" continue E-SE ~350ft anchoring boom near Point "D" (47.892885, -120.188986, about ~25ft from end of small private dock) and then to shore near "E" (47.893078, -120.188854). **Sensitive underwater resources in the area could be damaged if anchors are set out of recommended position**

Staging Area: Remote: Old Mill Park, Hwy 150 and E. Wapato Lake Rd (200 Mill Rd, Manson, WA) – about 4 miles away from site

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/swimming near shore/watercraft

Field Notes: Coordinate with Chelan County Fire District No. 5 (Manson); call 509-663-9911 (Rivercom911 Dispatch). Boat Launch available at Old Mill Park (& low water access at Manson Bay Park via Fire Dept); call Manson Parks 509-687-9635.

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
6	Each	Anchoring System(s) - (anchor, lines, floats)
1050	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
500	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

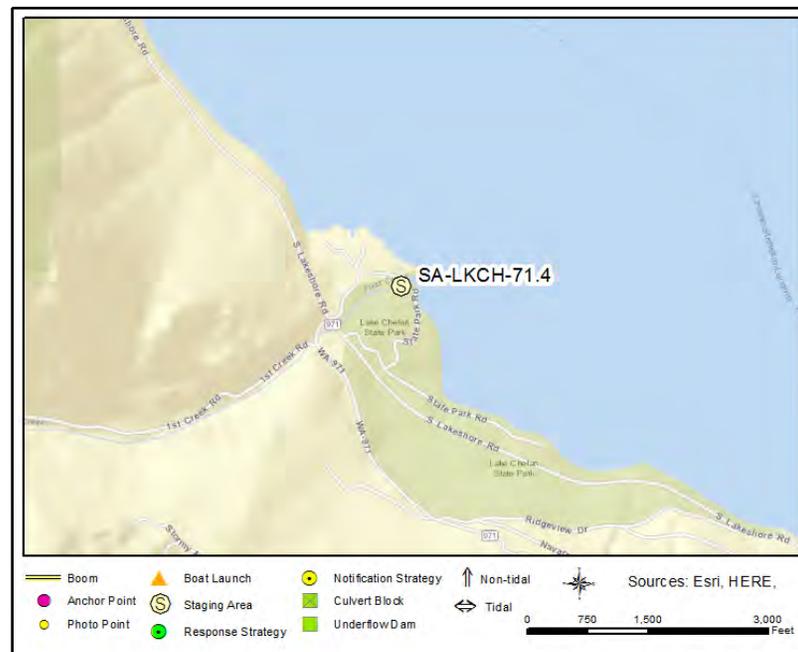
1	Boat Operator
4	Laborer
1	Supervisor

Lake Chelan (Willow Point Park - Manson)

LKCH-48.0



LKCH-48.0 Photo: Aerial photo looking NE at strategy location



Site Contact

Chelan Fire and Rescue
 Fire Department :
 509-663-9911

Manson Parks and Recreation District
 Land/Property Owner : Owner
 509-687-9635

Nearest Address

200 Mill Rd
 Manson, WA 98831

Driving Directions

1. Start at Location 1
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left on Mill Rd, then take the first left to the boat launch.

Lake Chelan (Chelan/Spaders Bay)

LKCH-58.9

Position - Location: 47° 50.723', -120° 1.909' 47° 50' 43.4", -120° 1' 54.5" 47.84538, -120.03182 Chelan

Strategy Objective: Exclusion : Prevent oil from entering this part of Spaders Bay during periods of Low Lake Level Only

Implementation: Using workboat, secure end of boom to shore using existing structures near "A" (47.846758, -120.031990, end of dirt road West of Spader Bay Condominiums). Pull boom away from shore and SE to corner of boat dock at Spader Bay Condominiums. Secure boom to SW corner of dock at "D" (47.844743, -120.029993). Pull boom into desired shape anchoring it at "B" (47.845666, -120.032324, ~400ft from shore at "A") and "C" (47.844736, -120.030761, ~190ft West of dock at "D"). ****Sensitive underwater resources in the area could be damaged if anchors are set out of recommended position****

Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/swimming near shore/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring Post(s) - (shoreside)
7	Each	Anchoring System(s) - (anchor, lines, floats)
1150	Feet	Boom - B3 (River Boom) or equivalent
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) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
5	Laborer
1	Supervisor

Lake Chelan (Chelan/Spaders Bay)

LKCH-58.9



LKCH-58.9 Photo: Aerial photo looking NNW at strategy location; anchor point is dock closest to photo center.



Site Contact

City of Chelan Parks and Recreation
 Other : Owner

 Chelan, WA 98816
 509-682-8023

Nearest Address

310 W Manson Rd
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan (Chelan)

LKCH-60.6

Position - Location: 47° 50.281', -120° 1.102' 47° 50' 16.9", -120° 1' 6.1" 47.83802, -120.01837 Chelan

Strategy Objective: Collection, Exclusion : Prevent oil from reaching Lake Chelan Dam

Implementation: Using workboat, secure end of boom to shore along Chelan Riverwalk Loop Trail at "A" (47.838166, -120.019750, end of dirt road near corner off W. Okanogan Avenue near corner of S 1st Street). Pull boom out away from shore, SE across to Riverwalk Park (opposite shore). Secure remaining end of boom near "B" (47.837736, -120.017185, South of parking area on Emerson Street). Form collection pocket along Riverwalk Park to the NNW. Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures or anchor post to secure boom to shore.

Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Power Generation



Recommended Equipment

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
700	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
700	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

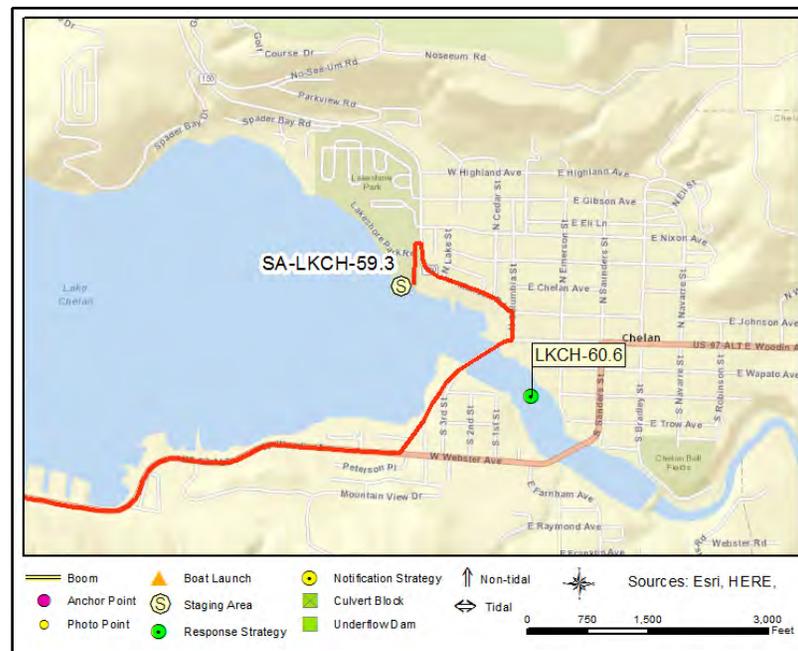
1	Boat Operator
3	Laborer
1	Supervisor

Lake Chelan (Chelan)

LKCH-60.6



LKCH-60.6 Photo: From Chelan Riverwalk Park, looking across Lake Chelan towards Anchor "A" and Chelan Riverwalk Loop Trail



Site Contact

Chelan Fire and Rescue
 Fire Department :

 Chelan, WA 98816
 509-663-9911

Nearest Address

310 W Manson Road
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan (Chelan) LKCH-60.8

Position - Location: 47° 50.384', -120° 1.414' 47° 50' 23.0", -120° 1' 24.9" 47.83973, -120.02357 Chelan

Strategy Objective: Collection : Remove oil from the water before it reaches the W Woodin Avenue Bridge

Implementation: Using workboat, secure end of boom to shore near "A" (47.839563, -120.023020, North corner of "Grandview on the Lake" property at 322 W Woodin Ave). Pull boom out away from shore to the West (~250ft); anchor remaining end of boom near "C" (47.839632, -120.023984). Pull boom into desired shape anchoring near "B" (47.839742, -120.023542, ~150ft W-NW from shore). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures to secure boom to shore near Grandview on the Lake property.

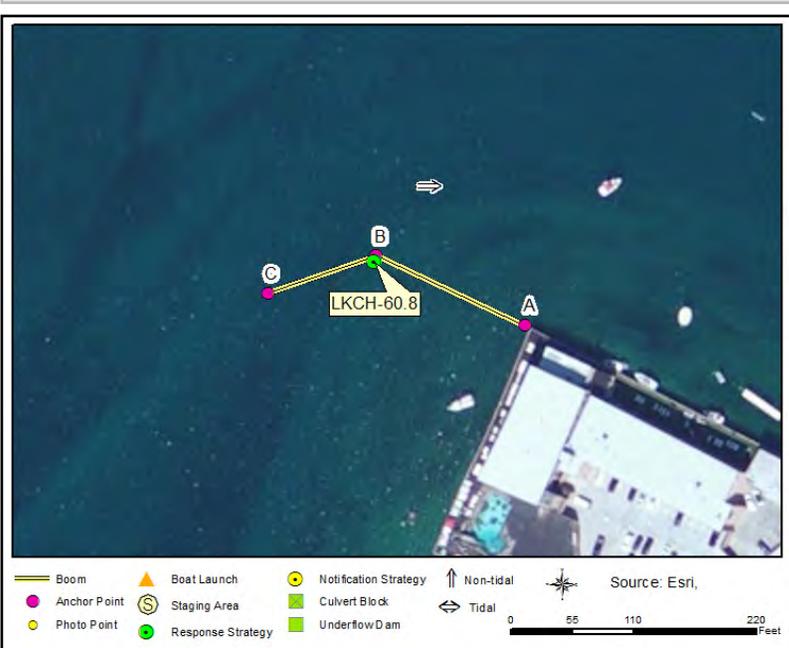
Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/swimming near shore/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Power Generation



Recommended Equipment

1	Each	Anchoring Post Driver(s)
1	Each	Anchoring Post(s) - (shoreside)
3	Each	Anchoring System(s) - (anchor, lines, floats)
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
300	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

3	Laborer
1	Supervisor

Lake Chelan (Chelan)

LKCH-60.8



LKCH-60.8 Photo: From shore SW of strategy location, looking NE toward shoreside anchor point.



Site Contact

Chelan Fire and Rescue
 Fire Department :

 Chelan, WA 98816
 509-663-9911

Nearest Address

310 W Manson Rd
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan (Chelan)

LKCH-60.9

Position - Location: 47° 50.313', -120° 1.446' 47° 50' 18.8", -120° 1' 26.8" 47.83856, -120.02410 Chelan

Strategy Objective: Collection : Remove oil from the water before it reaches the W Woodin Avenue Bridge

Implementation: Using workboat, secure end of boom to shore at NW corner of USDA Forest Service parking lot (428 W Woodin Ave) near "A" (47.838545, -120.023561). Pull boom out away from shore to the West (~300ft); anchor remaining end of boom near "B" (47.838550, 120.024821). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures or anchoring posts to secure boom to shore at US Forestry Department parking lot. Contact Forest Service in Chelan for property access (509-682-4900).

Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/swimming near shore/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Power Generation



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring System(s) - (anchor, lines, floats)
3	Each	Anchoring System(s)- Shoreside
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
300	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

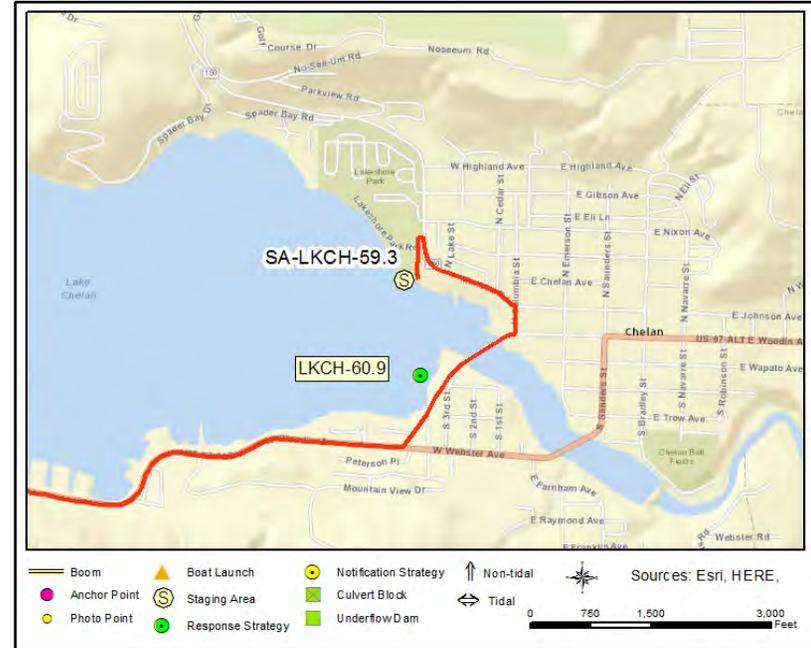
1	Boat Operator
2	Laborer
1	Supervisor

Lake Chelan (Chelan)

LKCH-60.9



LKCH-60.9 Photo: Aerial photo of strategy location



Site Contact

USDA Forest Service Chelan
 Land/Property Owner :
 Chelan, WA 98816
 509-682-4900

Nearest Address

310 W Manson Road
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan (Chelan)

LKCH-61.0

Position - Location: 47° 50.270', -120° 1.499' 47° 50' 16.2", -120° 1' 29.9" 47.83783, -120.02498 Chelan

Strategy Objective: Collection : Remove oil from the water before it reaches the W Woodin Avenue Bridge

Implementation: Using workboat, secure end of boom to shore at NW corner of public viewing area near "A" (47.837529, -120.023844); just south of USDA Forest Service offices at 428 W Woodin Avenue. Pull boom out away from shore NW (~450ft); anchor remaining end of boom near "C" (47.838049, -120.025610). Pull boom into desired shape anchoring it near "B" (47.837836, -120.025339, ~100ft SE from end of boom at "C" and ~360ft WNW of "A"). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures or anchoring posts to secure boom to shore.

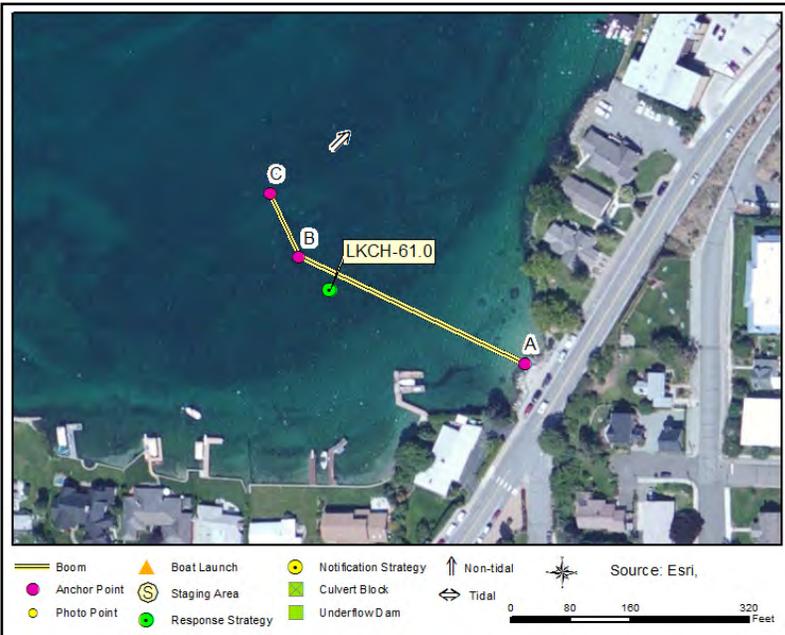
Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Power Generation



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring Post(s) - (shoreside)
4	Each	Anchoring System(s) - (anchor, lines, floats)
500	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
300	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
3	Laborer
1	Supervisor

Lake Chelan (Chelan)

LKCH-61.0



LKCH-61.0 Photo: Aerial photo looking south; strategy location is towards left side of photo



Site Contact

Chelan Fire and Rescue
 Fire Department :

 Chelan, WA 98816
 509-663-9911

Nearest Address

310 W Manson Rd
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan (Chelan)

LKCH-61.2

Position - Location: 47° 50.241', -120° 1.728' 47° 50' 14.4", -120° 1' 43.7" 47.83735, -120.02880 Chelan

Strategy Objective: Collection : Remove oil from the water before it reaches the W Woodin Avenue Bridge

Implementation: Using workboat, secure end of boom to shore at NW corner of the Peterson's Waterfront Resort property on the west side of the west-end dock near "A" (47.837350, -120.028760). Pull boom out away from shore NW (~265ft); anchor remaining end of boom near "C" (47.837945, -120.029356). Pull boom into desired shape anchoring it near "B" (47.837781, 120.028973, about 120ft out from west-end dock, ~110ft SE of "C" and ~170ft NNW of "A"). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures or posts to secure boom at "A".

Staging Area: Remote: Stage at Lakeshore Park Boat Launch, ~310 W Manson Road, Chelan 98816

Site Safety: Water hazard; slip, trip, fall hazards; recreational area/watercraft

Field Notes: Coordinate with Chelan Fire & Rescue via Rivercom911 Dispatch at 509-663-9911 before implementation. Notify City of Chelan Parks & Recreation at 509-682-8023 before staging equipment at Lakeshore Park.

Watercourse: Lake - High water June through September

Resources at Risk: Power Generation



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring Post(s) - (shoreside)
3	Each	Anchoring System(s) - (anchor, lines, floats)
300	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
300	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

1	Boat Operator
2	Laborer
1	Supervisor

Lake Chelan (Chelan)

LKCH-61.2



LKCH-61.2 Photo: Aerial photo looking south at strategy location; anchor point is dock on far left of photo.



Site Contact

Chelan Fire and Rescue
 Emergency Contact :

 Chelan, WA 98816
 509-663-9911

Nearest Address

310 W Manson Rd
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan **LKCH-104.4**

Position - Location: 48° 10.274', -120° 32.690' 48° 10' 16.4", -120° 32' 41.4" 48.17123, -120.54483 Chelan

Strategy Objective: Exclusion : Keep oil away from shore at this location during periods of High Lake Level Only

Implementation: Using workboat, secure end of boom to shore near "A" (48.171002, -120.545235). Pull boom out away from shore and then North (250ft); secure remaining boom end to shore near "C" (48.171454, -120.544855). Pull boom into desired shape anchoring it near "B" (48.170992, -120.545039, about ~50ft east of "A"). Boom standoff distance from shore should be 15ft to 20ft. It is very rocky and steep at this location. Shoreside anchoring posts may not be effective and safe shoreside access is not available. Water depth is very deep immediately offshore.

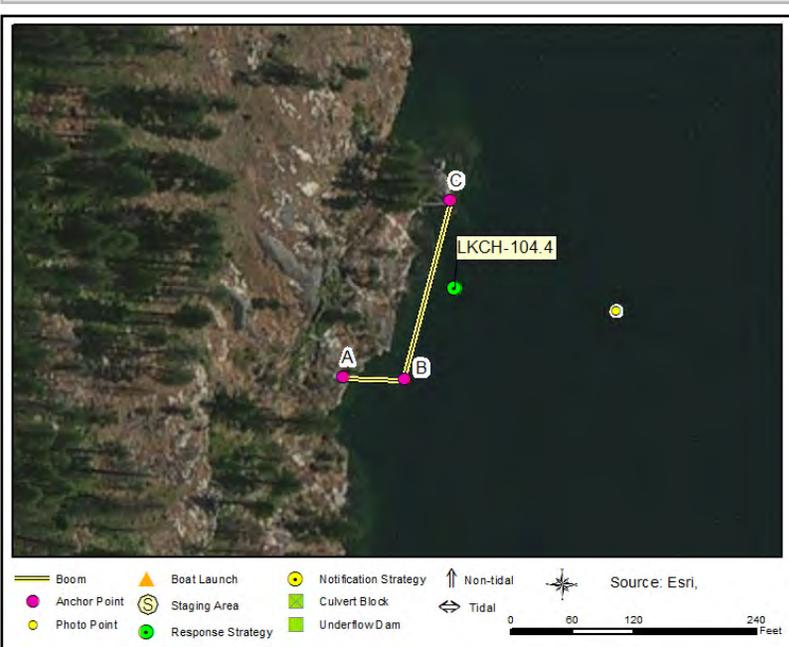
Staging Area: Remote: Coordinate with incident command (or call Ecology) before staging in Chelan at SA-LKCH-61.5 Mountain Barge.

Site Safety: Steep banks; rocky hillside; water hazard; slip, trip, fall hazards; limited or no site access

Field Notes: Coordinate transit to strategy location with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~20 mi S). In low water use BL-LKCH-71.4 (~30 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
4	Each	Anchoring System(s) - (anchor, lines, floats)
250	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
500	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

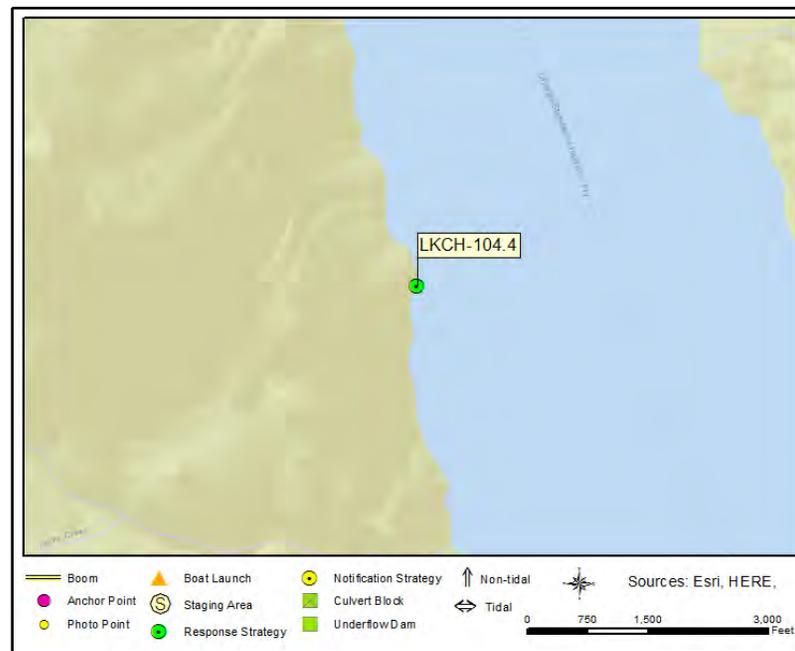
1	Boat Operator
2	Laborer
1	Supervisor

Lake Chelan

LKCH-104.4



LKCH-104.4 Photo: On Lake Chelan near strategy location looking west towards shore.



Site Contact

Mountain Barge Services
 Primary Contact :
 509-682-2493

U.S. Forest Service Okanogan-Wenatchee National Forest
 Land/Property Owner :
 509-664-9254

Nearest Address

Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan (Lucerne Landing) LKCH-108.3

Position - Location: 48° 12.132', -120° 35.792' 48° 12' 7.9", -120° 35' 47.5" 48.20220, -120.59654 Chelan

Strategy Objective: Diversion : Direct oil into cove near mouth of Railroad Creek, preventing it from impacting other parts of the lake

Implementation: Using workboat, secure end of boom to shore near "A" (48.202085, -120.596089, ~170ft North of mouth of Railroad Creek). Pull boom out away from shore Northwest (100ft) anchoring boom end near "B" (48.202151, -120.596492). Use existing structures or trees to secure boom to shore (use anchor posts only if nothing else available).

Staging Area: Onsite: Shoreside of dock at Lucerne Landing.

Site Safety: Slip, trip, fall hazards; moving equipment near dock & roadway; water hazard; lake debris, limited site access

Field Notes: Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
100	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
200	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

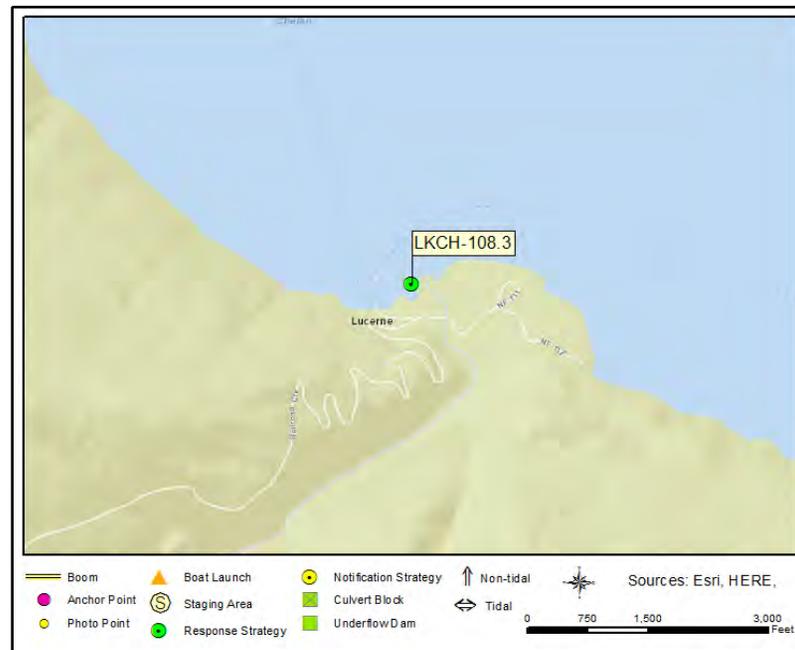
1	Boat Operator
2	Laborer
1	Supervisor

Lake Chelan (Lucerne Landing)

LKCH-108.3



LKCH-108.3 Photo: On Lake Chelan near Lucerne Landing looking SE towards mouth of Railroad Creek.



Site Contact

Mountain Barge Services
 Primary Contact :
 509-682-2493

U.S. Forest Service Okanogan-Wenatchee National Forest
 Land/Property Owner :
 509-664-9254

Nearest Address

Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan (Lucerne Landing)

LKCH-108.4

Position - Location: 48° 12.099', -120° 35.901' 48° 12' 6.0", -120° 35' 54.1" 48.20166, -120.59835 Chelan

Strategy Objective: Containment : Prevent oil from escaping the dock area at Lucerne Landing

Implementation: Using workboat, secure end of boom to "A" (far end of the dock at Lucerne Landing). Pull boom out away from the dock to the Southeast (~450ft); secure remaining boom end to shore near "B" (48.201430, -120.597200, ~450ft SE of dock's far end, ~250ft NE from base of dock's SE corner). Use additional anchoring systems to maintain the shape of the boom and to keep it secure. Use existing structures or trees to secure boom to shore (use anchor posts only if nothing else available).

Staging Area: Onsite: Shoreside of dock at Lucerne Landing.

Site Safety: Slippery banks when wet or icy; trip & fall hazards; moving equipment on dock & roadway; water hazard; lake debris

Field Notes: Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
3	Each	Anchoring Post(s) - (shoreside)
1	Each	Anchoring System(s) - (anchor, lines, floats)
500	Feet	Boom - B3 (River Boom) or equivalent
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) - of adequate size for type and amount of boom

Recommended Personnel

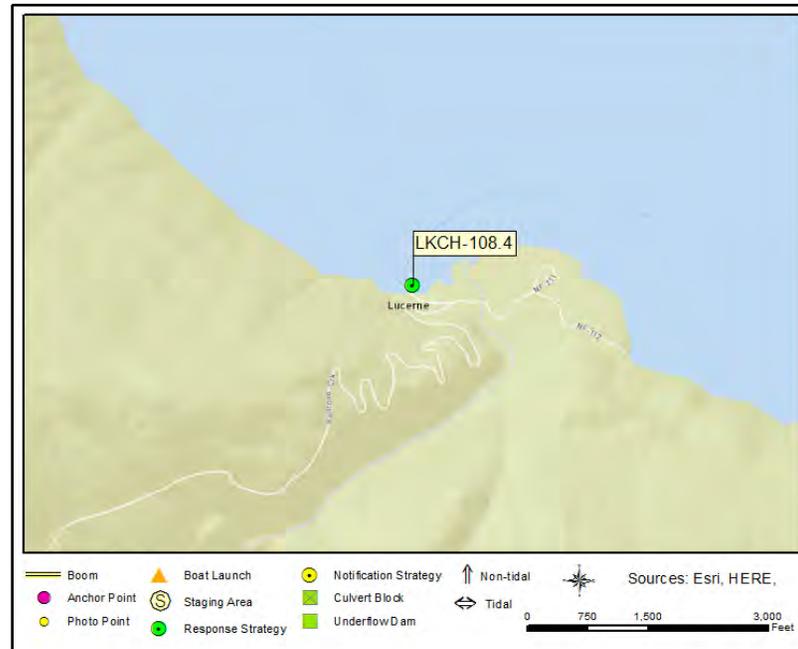
1	Boat Operator
3	Laborer
1	Supervisor

Lake Chelan (Lucerne Landing)

LKCH-108.4



LKCH-108.4 Photo: Shoreside of SW corner of dock at Lucerne Landing, looking NW out towards Lake Chelan.



Site Contact

Mountain Barge Services
 Land/Property Owner :
 509-682-2493

Nearest Address

Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan (Lucerne Landing) LKCH-108.5

Position - Location: 48° 12.114', -120° 35.935' 48° 12' 6.9", -120° 35' 56.1" 48.20191, -120.59892 Chelan

Strategy Objective: Containment : Prevent oil from escaping the dock area at Lucerne Landing

Implementation: Using workboat, secure end of boom to shore near "A" (48.201230, -120.598841, ~215ft South of far end of the dock). Pull boom out and away from shore, around the end of the dock and eastward to "D" (48.201763, -120.596856, ~500ft West of far end of dock). Secure boom to shore near "D" and at "B" (far end of the dock). Pull boom into shape anchoring it near "C" (48.201872, -120.597684, ~300ft out from the dock). Use additional anchoring systems to secure and maintain the shape of the boom. Use existing structures or trees to secure boom to shore (use anchor posts as last resort).

Staging Area: Onsite: Shoreside of dock at Lucerne Landing.

Site Safety: Slippery banks when wet or icy; trip & fall hazards; moving equipment on dock & roadway; water hazard; lake debris

Field Notes: Coordinate transit to Lucerne Landing with incident/unified command or call Ecology (509-575-2490). Nearest boat ramp (lake above 1093' only) is BL-LKCH-82.6 (~23 mi S). In low water use BL-LKCH-71.4 (~33 mi S).

Watercourse: Lake - High water June through September

Resources at Risk: Sensitive Resources



Recommended Equipment

1	Each	Anchoring Post Driver(s)
6	Each	Anchoring Post(s) - (shoreside)
4	Each	Anchoring System(s) - (anchor, lines, floats)
800	Feet	Boom - B3 (River Boom) or equivalent
1	Each	Bridle(s) - Towing (appropriately sized for boom)
1	Each	Heaving Line(s)
500	Feet	Line - 3/8" poly line
1	Each	Workboat(s) - of adequate size for type and amount of boom

Recommended Personnel

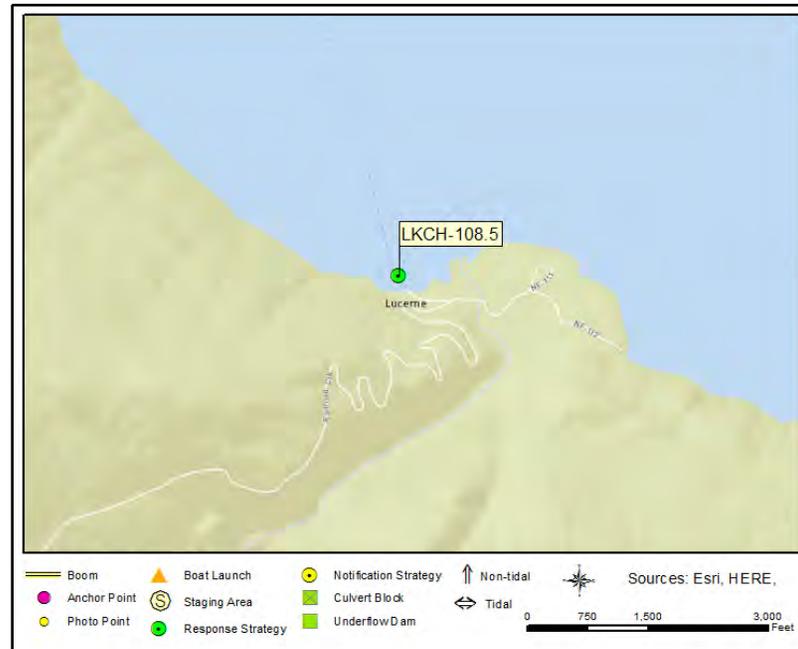
1	Boat Operator
4	Laborer
1	Supervisor

Lake Chelan (Lucerne Landing)

LKCH-108.5



LKCH-108.5 Photo: Shoreside of SW corner of dock at Lucerne Landing, looking NW out towards Lake Chelan.



Site Contact

Mountain Barge Services
 Primary Contact :
 509-682-2493

U.S. Forest Service Okanogan-Wenatchee National Forest
 Land/Property Owner :
 509-664-9254

Nearest Address

Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

APPENDIX 4B
Notification Strategy 2-Pagers

NOTIFICATION STRATEGIES – LIST

LKCH-2.8-N

LKCH-47.5-N

LKCH-60.1-N

LKCH-60.2-N

National Park Service Stehekin Ranger Station LKCH-2.8-N

Position - Location: 48° 18.503', -120° 39.386' 48° 18' 30.2", -120° 39' 23.2" 48.30838, -120.65643 Chelan

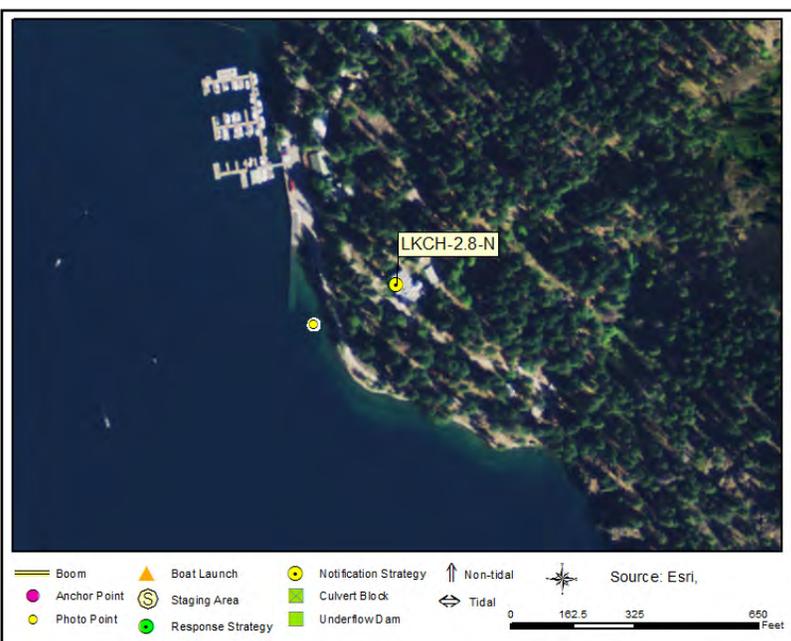
Strategy Objective: Notification : Notify park staff of oil spill so they can deploy response equipment.

Implementation: Call the NPS Stehekin Ranger's Station at (509) 699-2080 x 29 (24-hr number).

Field Notes: Park Service has 26' boat, boom and access to gravel launch at Stehekin.

Watercourse: Lake - Lake Chelan

Resources at Risk: Federal Lands, Marina, Public Recreation Site/Area, Wetlands



Communication Process and Action:

Call the National Park Service and explain the situation regarding the spill. Advise they consider deploying spill response equipment where appropriate.

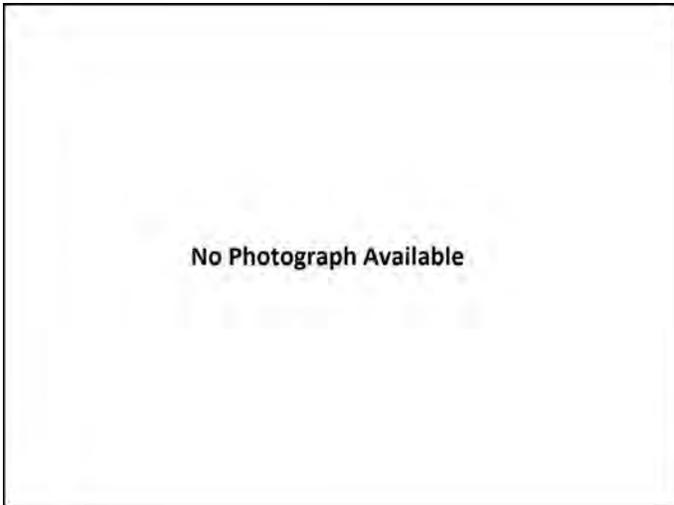
Call the following numbers, in order, until someone at NPS is reached:

Stehekin District Ranger Office:
 (509) 699-2080 x 12 (8 am - 5 pm)
 (509) 699-2080 x 29 (24/7)

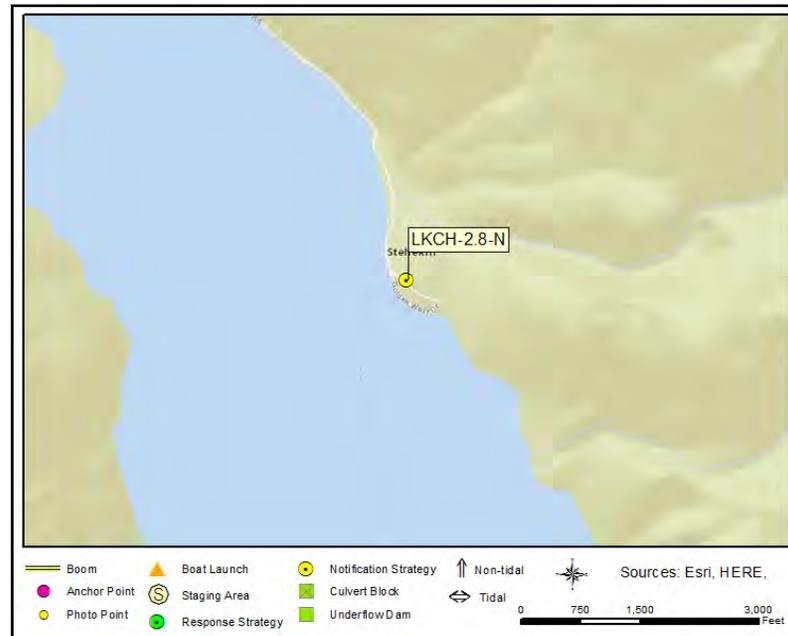
National Recreation Area Communication Center:
 (360) 854-7249

National Park Service Stehekin Ranger Station

LKCH-2.8-N



LKCH-2.8-N Photo: No photograph available.



Site Contact

National Park Service
 Emergency Contact : Stehekin District Ranger Office
 Stehekin, WA
 509-699-2080 ext. 29 or 12

Nearest Address

1222 W Woodin Ave
 Chelan, WA 98816

Driving Directions

Stehekin is accessible only by plane, boat or ferry. Directions to Mountain Barge Services dock:
 1. From I-90 in George, Washington take exit 149 towards Quincy/Wenatchee (0.27 miles)
 2. Turn left on WA-281 (Royal Anne Ave) (10.56 miles)
 3. Turn left on WA-28 (F St SW) (33.79 miles)
 4. Turn left on US-2 (US-97) (1.02 miles)
 5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan (0.24 miles)
 6. Turn right on US-97-ALT (State Highway 97a) (32.7 miles)
 7. Turn left into Mountain Barge Services, 1222 W Woodin Ave 98816
 .
 At Stehekin Landing, the Golden West Visitor's Center is across the street, or southeast at the end of Stehekin Valley Road.

Lake Chelan Reclamation District Water Intake **LKCH-47.5-N**

Position - Location: 47° 53.986', -120° 11.544' 47° 53' 59.2", -120° 11' 32.7" 47.89977, -120.19240 Manson

Strategy Objective: Notification : Shut down drinking water and irrigation intakes.

Implementation: Call Lake Chelan Notification District emergency line at 509-687-3548. Inform them that a spill has occurred and to consider shutting down their intakes.

Field Notes: Two drinking water intakes at 47.5 and 49.5 (Manson Bay). Irrigation intake located at Old Mill Park.

Watercourse: Lake - Lake Chelan

Resources at Risk: Public Health and Safety, Water Intakes

Communication Process and Action:

Call the Lake Chelan Reclamation District and explain the situation regarding the spill. Recommend they consider shutting down their water intakes.

Call the following numbers in order until someone at LCRD is reached:
 509-687-3548 (24/7 Emergency Line)
 509-470-1960 (Water Treatment Plant Operator in Charge)
 509-679-0639 (Manager)

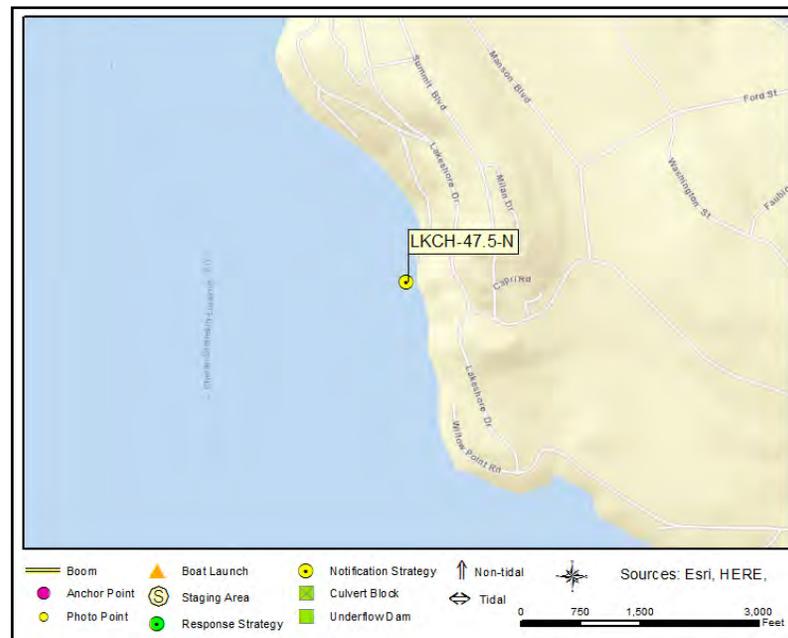


Lake Chelan Reclamation District Water Intake

LKCH-47.5-N



LKCH-47.5-N Photo: Approximate location of northernmost drinking water intake of Lake Chelan Reclamation District.



Site Contact

Lake Chelan Reclamation District
 Emergency Contact : Utility
 80 Wapato Way
 Manson, WA 98831
 509-687-3548

Nearest Address

80 Wapato Way
 Manson, WA 98831

Driving Directions

1. From I-90 in George, Washington take exit 149 towards Quincy/Wenatchee (0.27 miles)
2. Turn left on WA-281 (Royal Anne Ave) (10.56 miles)
3. Turn left on WA-28 (F St SW) (33.79 miles)
4. Turn left on US-2 (US-97) (1.02 miles)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan (0.24 miles)
6. Turn right on US-97-ALT (State Highway 97a) (33.74 miles)
7. Bear left on W Woodin Ave (0.39 miles)
8. Turn left on N Columbia St (0.07 miles)
9. Turn left on WA-150 (Manson Rd) (7.6 miles)
10. Continue on Wapato Way (0.16 miles)
11. Finish at 80 Wapato Way, 98831

City of Chelan Drinking Water Intake **LKCH-60.1-N**

Position - Location: 47° 50.181', -120° .945' 47° 50' 10.8", -120° 0' 56.7" 47.83634, -120.01575 Chelan

Strategy Objective: Notification : Shut down drinking water intake and park irrigation intakes.

Implementation: Call City of Chelan Public Works and inform them a spill has occurred. Advise they consider shutting down their intakes.

Field Notes: Drinking water intake at Webster Ave/US-97 Bridge. Park irrigation intakes at Lakeshore Park (59.3) and Lakeside Park (63.3).

Watercourse: Lake - Lake Chelan

Resources at Risk: Public Health and Safety, Water Intakes



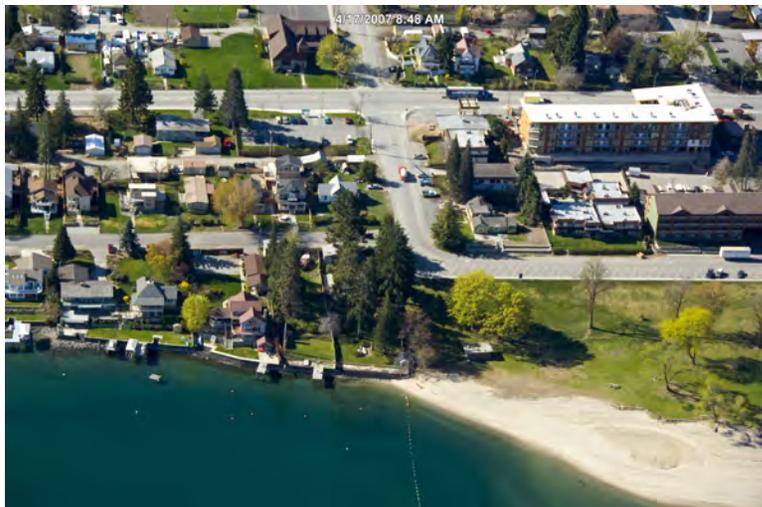
Communication Process and Action:

Call the City of Chelan Public Works Department and explain the situation regarding the spill. Recommend they consider shutting down their water intakes.

- Call the following numbers in order until someone at Public Works is reached:
- Water Treatment Plant Operator
509 679 1307
 - 509 264 8300
 - Assistant Water Treatment Plant Operator
509 630 0921
 - 509 630 6193
 - Treatment Plant
509 670 1439
 - 509 630 1883
 - Assistant Public Works Director
509 670 1639

City of Chelan Drinking Water Intake

LKCH-60.1-N



LKCH-60.1-N Photo: Aerial photo of approximate location of northernmost water intake.



Site Contact

Chelan Public Works - Water Division
 Municipality (County/City) : City Utility
 50 Chelan Falls Hwy
 Chelan, WA 98816
 509-682-8030

Nearest Address

509 S Washington St
 Chelan, WA 98816

Driving Directions

1. From I-90 in George, Washington take exit 149.
2. At exit 149 take ramp on the right to WA-281 N toward Quincy/Wenatchee (0.27 miles)
3. Turn left on WA-281 (Royal Anne Ave) (10.56 miles)
4. Turn left on WA-28 (F St SW) (33.79 miles)
5. Continue on US-2 (Sunset Hwy) (11.93 miles)
6. At fork keep left on US-97 (State Highway 97) (22.08 miles)
7. Turn left on WA-150 (Highway 150) (2.98 miles)
8. Turn left at US-97-ALT to stay on WA-150 (E Woodin Ave) (0.33 miles)
9. Turn left on S Clifford St (0.07 miles)
10. Turn left on E Wapato Ave (0.07 miles)
11. Turn right on S Washington St (0.06 miles)
12. Finish at 509 S Washington St, 98816

Lake Chelan Hydroelectric Project **LKCH-60.2-N**

Position - Location: 47° 50.068', -120° .748' 47° 50' 4.1", -120° 0' 44.9" 47.83447, -120.01246 Chelan

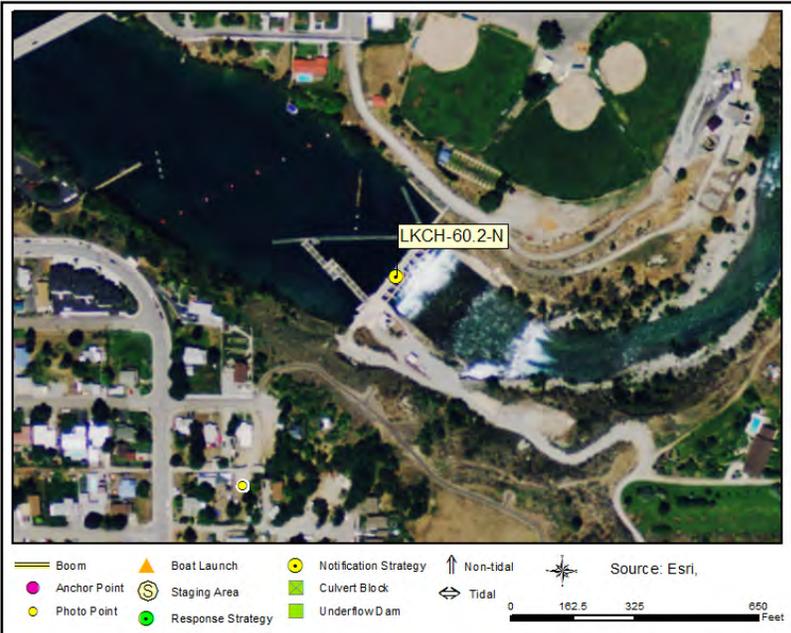
Strategy Objective: Notification : Keep oil out of dam

Implementation: Call System Operations at 509/661-4000 (staffed 24/7). They will deploy response equipment and/or adjust water intakes.

Field Notes:

Watercourse: River - Above a Dam - Chelan River - high flow June-Sept

Resources at Risk: Power Generation, Salmon Bearing Stream



Communication Process and Action:

Call System Operations at 509/661-4000 (staffed 24/7). Chelan County PUD has a trailer of spill response equipment staged within 50 miles of the Lake Chelan Dam. When notified they will deploy response equipment to protect the dam infrastructure. Water intakes are subsurface but their flow could be reduced or shut off in an emergency.

Lake Chelan Hydroelectric Project

LKCH-60.2-N



LKCH-60.2-N Photo: Aerial photo looking NE at Lake Chelan Dam



Site Contact

City of Chelan Parks and Recreation
 Primary Contact : Owner

Chelan, WA 98816
 509-682-8023

Nearest Address

Chiari Falls Road
 Chelan, WA 98816

Driving Directions

1. From I-90 in George, WA take exit 149 for State Route 281 toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Turn right on E Farnham Ave
8. Bear right on S Saunders St
9. Turn left on E Iowa St
10. Continue on E Iowa Ave
11. Turn left on Chiari Falls Rd
12. Finish at Chiari Falls Road, 98816, on the left

APPENDIX 4C
Staging Area 2-Pagers

STAGING AREAS – LIST

SA-LKCH-59.3

SA-LKCH-61.5

SA-LKCH-71.4

Lakeshore Park Marina **SA-LKCH-59.3**

Staging Area

Position - Location: 47° 50.507', -120° 1.463' 47° 50' 30.4", -120° 1' 27.8" 47.84179, -120.02438 Chelan

Comments: Pump-out station, launch and ample pay parking. Adjacent to RV Park with utilities and wi-fi.



GRP Response Strategies Served:

LKCH-60.9, LKCH-58.9, LKCH-61.0, LKCH-61.2, LKCH-60.6, LKCH-60.8

Location Information

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	Yes	100 Slips
Boat Ramp(s)	Concrete, Solid	1
Cell Phone Coverage	Unknown	
Covered Spaces	Yes	2 Picnic shelters in park
Estimated Lot Size		45000 Square Feet
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	102 \$5 Fee
Parking - Trailer	Marked	24 \$5 Fee
Power	Yes	
Restroom	Restroom - with Showers	
User Fee	Yes	8 \$ Launch Fee (Moorage varies)
Waste Disposal	Pumpout	2
Water (potable)	Yes	

Lakeshore Park Marina

SA-LKCH-59.3



SA-LKCH-59.3 Photo: Aerial photo looking NE at Lakeshore Park Boat Launch



Site Contact

City of Chelan Parks and Recreation
 Municipality (County/City) : Owner

Chelan, WA 98816
 509-682-8023

Nearest Address

310 W Manson Road
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Mountain Barge Services

SA-LKCH-61.5

Staging Area

Position - Location: 47° 50.164', -120° 2.056' 47° 50' 9.8", -120° 2' 3.4" 47.83607, -120.03427 Chelan

Comments: (Previously Tom Courtney Tug & Barge). Barge to Lucerne Landing loading and departure site. Response will be coordinated from here.



GRP Response Strategies Served:

LKCH-37.0, LKCH-37.5

Location Information

Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	At Marina
Boat Ramp(s)	Concrete, Plank	1
Cell Phone Coverage	Unknown	
Covered Spaces	Yes	2 Picnic shelters at marina
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	6 Onsite - more in marina
Parking - Trailer	None	Some in area
Power	Yes	
Restroom	Restroom - with Showers	At Marina
User Fee	Unknown	
Waste Disposal	Pumpout	At Marina
Water (potable)	Yes	

Mountain Barge Services

SA-LKCH-61.5



SA-LKCH-61.5 Photo: Aerial photo looking S at tug and barge dock in low water (mid-April). Marina with facilities to the right.



Site Contact

Mountain Barge Services

Land/Property Owner :

Chelan, WA 98816
509-682-2493

Nearest Address

1228 W Woodin Ave
Chelan, WA 98816

Driving Directions

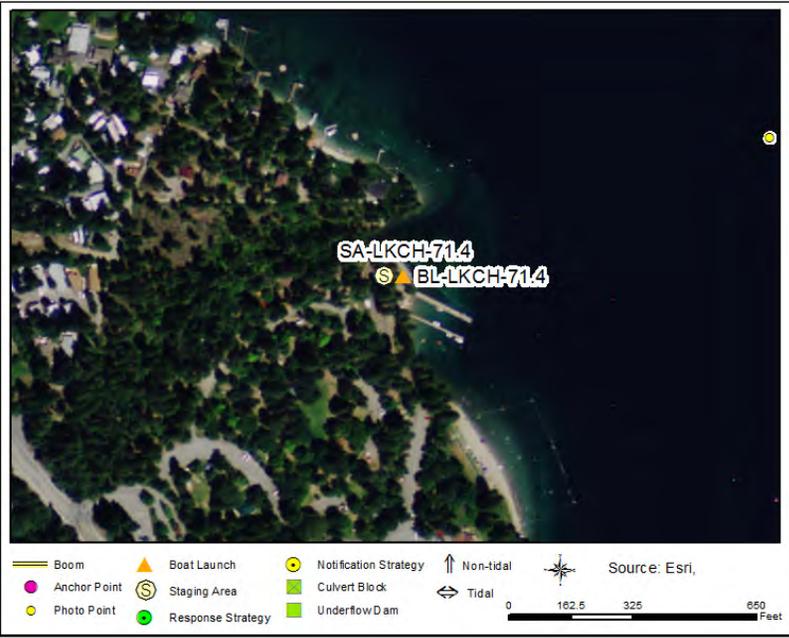
1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Finish at 1222 W Woodin Avenue, 98816, on the left

Lake Chelan State Park **SA-LKCH-71.4**

Staging Area

Position - Location: 47° 52.527', -120° 11.814' 47° 52' 31.6", -120° 11' 48.9" 47.87544, -120.19691 Chelan

Comments: The park provides one kitchen shelter without electricity plus a small parking area.



Location Information

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	Yes	1080 feet along 4 piers
Boat Ramp(s)	Concrete, Solid	2 (double lane)
Cell Phone Coverage	Unknown	
Covered Spaces	Yes	1 Kitchen shelter + concession stand
Lot Cover (Primary)	Asphalt	28000 Square Feet
Parking - Car	Marked	
Parking - Trailer	Marked	32
Power	Yes	At campsites
Restroom	Restroom - with Showers	5 At campsites
User Fee	No	
Waste Disposal	Dump Station	1
Water (potable)	Yes	At campsites

GRP Response Strategies Served:

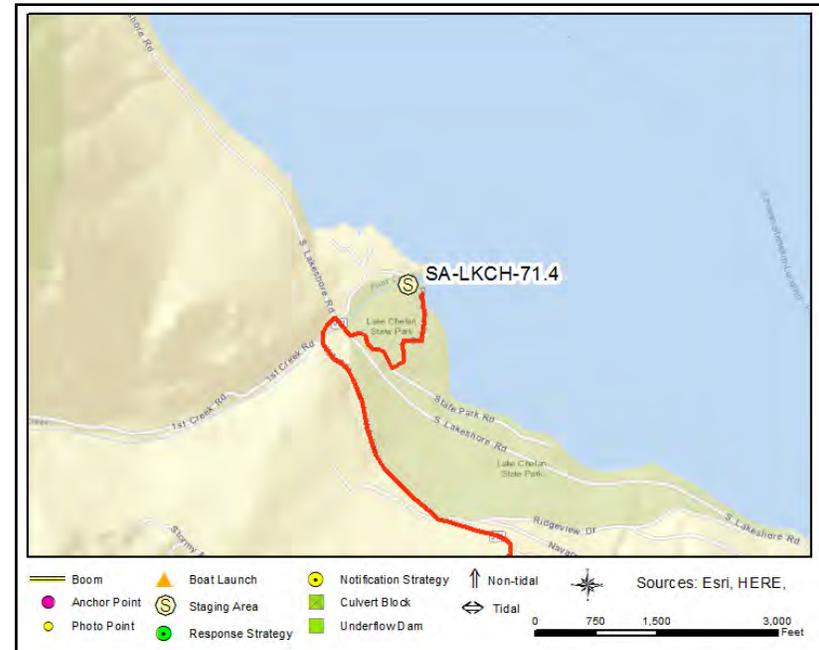
LKCH-48.0

Lake Chelan State Park

SA-LKCH-71.4



SA-LKCH-71.4 Photo: Aerial photo of Lake Chelan State Park boat launch. Taken 4/17/07 low water.



Site Contact

Washington State Parks and Recreation Commission
 Land/Property Contact : Lake Chelan State Park

 Chelan, WA 98816
 509-687-3710

Nearest Address

7544 S. Lakeshore Road
 Chelan, WA 98816

Driving Directions

1. From I-90 in George, Washington take exit 149 towards Quincy/Wenatchee (0.27 miles)
2. Turn left on WA-281 (Royal Anne Ave) (10.56 miles)
3. Turn left on WA-28 (F St SW) (33.79 miles)
4. Turn left on US-2 (US-97) (1.02 miles)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan (0.24 miles)
6. Turn right on US-97-ALT (State Highway 97a) (23.11 miles)
7. Make sharp left on WA-971 (Navarre Coulee Rd) (9.05 miles)
8. Turn right at S Lakeshore Rd to stay on WA971 (S Lakeshore Rd) (0.14 miles)
9. Take the next left onto State Park Rd, then make the first left to reach the boat launch.

APPENDIX 4D
Boat Launch 2-Pagers

BOAT LAUNCHES – LIST

BL-LKCH-59.3

BL-LKCH-71.4

BL-LKCH-82.6

Lakeshore Park Marina **BL-LKCH-59.3**

Boat Launch Location

Position - Location: 47° 50.507', -120° 1.463' 47° 50' 30.4", -120° 1' 27.8" 47.84179, -120.02438 Chelan

Comments: Pump-out station, launch and ample pay parking. Adjacent to RV Park with utilities and wi-fi.



Location Information

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	Yes	100 Slips
Boat Ramp(s)	Concrete, Solid	1
Cell Phone Coverage	Unknown	
Covered Spaces	Yes	2 Picnic shelters in park
Estimated Lot Size		45000 Square Feet
Lot Cover (Primary)	Asphalt	100 %
Parking - Car	Marked	102 \$5 Fee
Parking - Trailer	Marked	24 \$5 Fee
Power	Yes	
Restroom	Restroom - with Showers	
User Fee	Yes	8 \$ Launch Fee (Moorage varies)
Waste Disposal	Pumpout	2
Water (potable)	Yes	

GRP Response Strategies Served:

LKCH-60.9, LKCH-58.9, LKCH-61.0, LKCH-61.2, LKCH-60.6, LKCH-60.8

Lakeshore Park Marina

BL-LKCH-59.3



SA-LKCH-59.3 Photo: Aerial photo looking NE at Lakeshore Park Boat Launch



Site Contact

City of Chelan Parks and Recreation
 Municipality (County/City) : Owner

 Chelan, WA 98816
 509-682-8023

Nearest Address

310 W Manson Road
 Chelan, WA 98816

Driving Directions

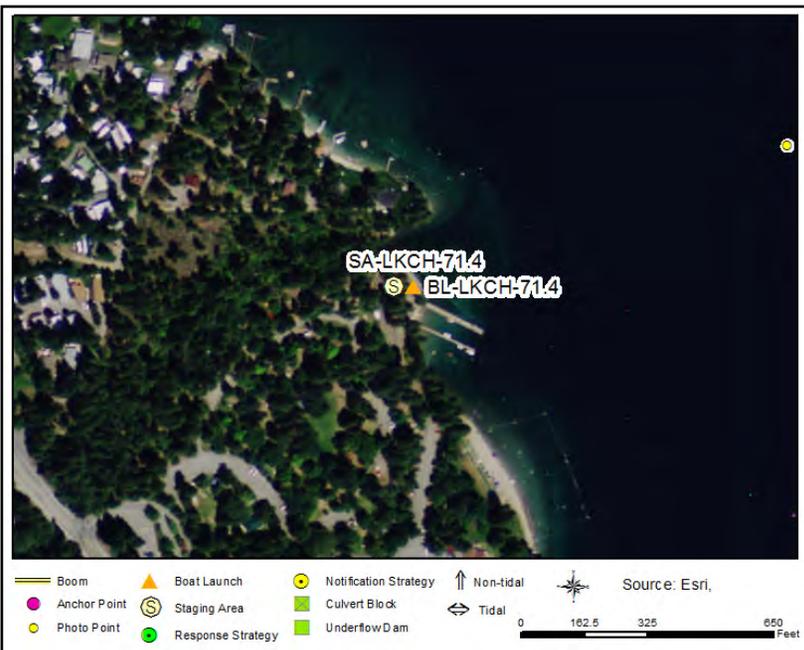
1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Bear left on W Woodin Ave
8. Turn left on N Columbia St
9. Turn left on WA-150 (Manson Rd)
10. Turn left into Lakeshore Park and Marina

Lake Chelan State Park **BL-LKCH-71.4**

Boat Launch Location

Position - Location: 47° 52.527', -120° 11.814' 47° 52' 31.6", -120° 11' 48.9" 47.87544, -120.19691 Chelan

Comments: Accessible in low water. The park has a double lane boat launch with nearby parking for approximately 32 vehicles with trailers. The launch offers a 1080 feet of docking space along the four piers near the launch.



Location Information

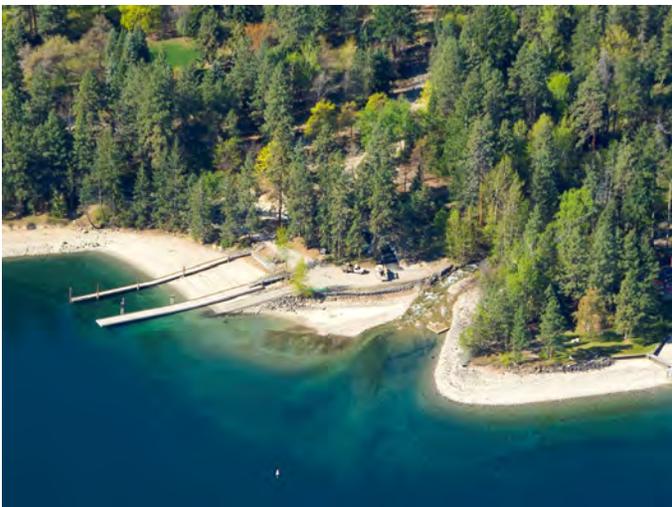
Asset	Type/Status	Amount/Number
Boat Dock(s)	Yes	1080 feet along 4 piers
Boat Ramp(s)	Concrete, Solid	2 (double lane)
Cell Phone Coverage	Unknown	
Covered Spaces	Yes	1 Kitchen shelter + concession stand
Lot Cover (Primary)	Asphalt	28000 Square Feet
Parking - Car	Marked	
Parking - Trailer	Marked	32
Power	Yes	At campsites
Restroom	Restroom - with Showers	5 At campsites
User Fee	No	
Waste Disposal	Dump Station	1
Water (potable)	Yes	At campsites

GRP Response Strategies Served:

LKCH-48.0

Lake Chelan State Park

BL-LKCH-71.4



SA-LKCH-71.4 Photo: Aerial photo of Lake Chelan State Park boat launch. Taken 4/17/07 low water.



Site Contact

Washington State Parks and Recreation Commission
 Land/Property Contact : Lake Chelan State Park

 Chelan, WA 98816
 509-687-3710

Nearest Address

7544 S. Lakeshore Road
 Chelan, WA 98816

Driving Directions

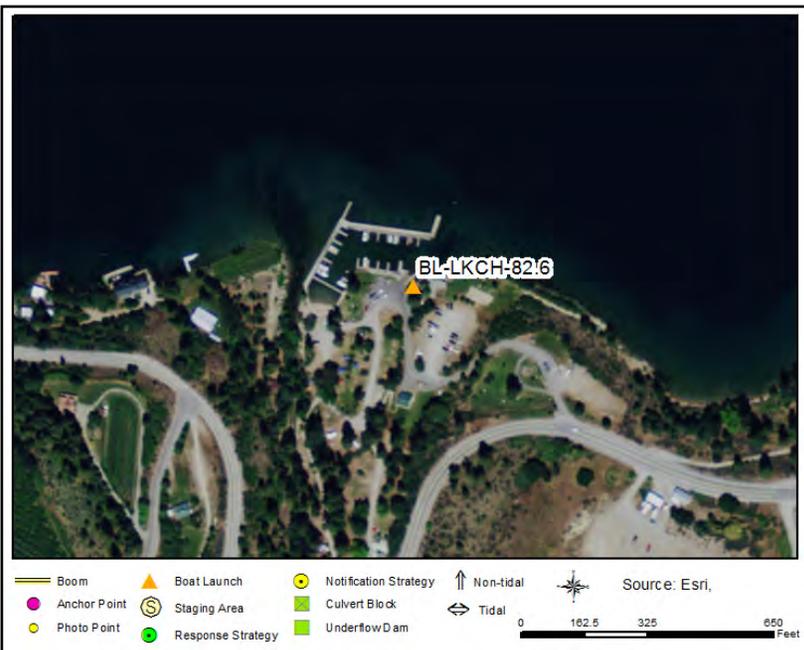
1. From I-90 in George, Washington take exit 149 towards Quincy/Wenatchee (0.27 miles)
2. Turn left on WA-281 (Royal Anne Ave) (10.56 miles)
3. Turn left on WA-28 (F St SW) (33.79 miles)
4. Turn left on US-2 (US-97) (1.02 miles)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan (0.24 miles)
6. Turn right on US-97-ALT (State Highway 97a) (23.11 miles)
7. Make sharp left on WA-971 (Navarre Coulee Rd) (9.05 miles)
8. Turn right at S Lakeshore Rd to stay on WA971 (S Lakeshore Rd) (0.14 miles)
9. Take the next left onto State Park Rd, then make the first left to reach the boat launch.

25-Mile Creek Boat Launch BL-LKCH-82.6

Boat Launch Location

Position - Location: 47° 59.590', -120° 15.672' 47° 59' 35.4", -120° 15' 40.3" 47.99316, -120.26120 Chelan

Comments: Twenty-Five Mile Creek State Park offers two boat ramps. The launch is usable from mid-June to the end of December, if the lake elevation is 1093 ft or above. Check with Information Center 360-902-8844. There is a modern marina with moorage for 20 boats up to 23 feet long. If lake is below 1093 ft use Lake Chelan State Park (BL-LKCH-71.4).



Location Information

<u>Asset</u>	<u>Type/Status</u>	<u>Amount/Number</u>
Boat Dock(s)	Yes	34
Boat Ramp(s)	Asphalt	2 - lake must be 1093+ ft
Covered Spaces	No	
Estimated Lot Size		37000 Sq Ft
Fuel	Yes	1 Gas Dock
Lot Cover (Primary)	Gravel	90 %. Asphalt roads.
Parking - Car	Gravel	16800 Sq Ft
Parking - Trailer	Gravel	77000 Sq Ft 2 Lots
Power	Yes	
Restroom	Restroom - with Showers	2
User Fee	No	Discover Pass (emergency exempt)
Waste Disposal	Dump Station	2
Water (potable)	Yes	

GRP Response Strategies Served:

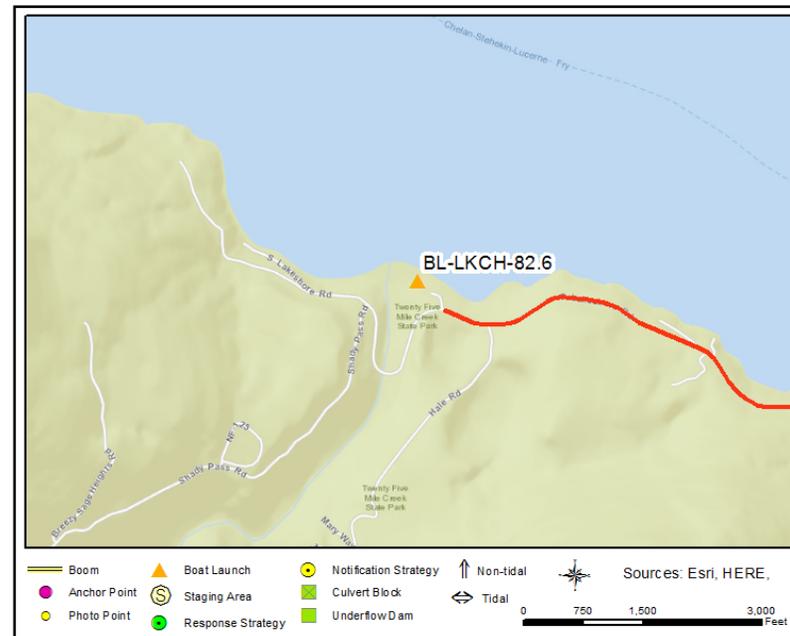
LKCH-108.3, LKCH-108.4, LKCH-37.0, LKCH-104.4, LKCH-37.5, LKCH-108.5

25-Mile Creek Boat Launch

BL-LKCH-82.6



Photo: Aerial photo looking S at 25-Mile Creek State Park boat ramps



Site Contact

Washington State Parks and Recreation Commission
 Land/Property Owner : Lake Chelan State Park

 Chelan, WA 98816
 509-687-3710

Nearest Address

20530 S Lakeshore Rd
 Chelan, WA 98816

Driving Directions

1. From I-90, take exit 149 for State Route 281 S toward Quincy/ Wenatchee
2. Go north on WA-281 (State Route 281 N)
3. Turn left on WA-28 (F St SW)
4. Turn left on US-2 (US-97)
5. Take ramp on the right to US-97-Alt N toward Entiat/Chelan
6. Turn right on US-97-ALT (State Highway 97a)
7. Make sharp left on WA-971 (Navarre Coulee Rd)
8. Turn left on S Lakeshore Rd
9. Finish at 20530 S Lakeshore Rd, 98816, on the right

CHAPTER 5
(Reserved)

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CHAPTER 6
(Reserved)