

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

# Office of Spill Prevention and Response



## Klamath River

GEOGRAPHIC RESPONSE PLAN | August 2025

Siskiyou, Humboldt, and Del Norte Counties



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# Spill Response Contact Sheet

## Immediate Emergency Notifications for Oil Spills Call Upon Discovery of Spill

\* Staffed 24-Hours/Day

<b>Local Emergency Response Agencies</b>	<b>911*</b>
<b>State Notification - California Office of Emergency Services, State Warning Center</b> (State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES immediately) †See Footnote on spill thresholds for notification.	<b>(800) 852-7550*</b>
<b>Certified Unified Program Agency (CUPA)</b> (Cal OES Spill Report will be emailed to CUPA as part of their immediate notification)	
<b>Siskiyou County Community Development</b>	<b>(530) 841-2100</b>
<b>Humboldt County Division of Environmental Health</b>	<b>(707) 445-6215</b>
<b>Del Norte Environmental Health Division</b>	<b>(707) 465-0426</b>
<b>Federal Notification - National Response Center:</b> Any person in charge of a vessel or of an onshore or offshore facility is subject to the federal reporting requirements of the Discharge of Oil regulation if it discharges a harmful quantity of oil to U.S. navigable waters, adjoining shorelines, or the contiguous zone. ‡	<b>(800) 424-8802*</b>
<b>Infrastructure Emergency Notification: Promptly Notify</b>	
<b>Railroad, Pipeline, Fixed Facilities</b>	
<b>UPRR Railroad Emergency</b>	<b>(888) 877-7267*</b>
<b>BNSF Railroad Emergency</b>	<b>(800) 832-5452*</b>
<b>Highways, Utilities, Dams, Other Infrastructure</b>	
<b>California Highway Patrol</b> (as appropriate) (The California Highway Patrol must be notified for spills occurring on highways in the State of California.)	<b>911/Local CHP Office*</b>
<b>California Department of Transportation (Caltrans)</b>	
<b>District 2: Siskiyou, Trinity, Shasta, Modoc, Tehama, Lassen, Plumas Counties</b>	<b>(530) 225-3426</b>
<b>District 1: Del Norte, Lake, Mendocino, Humboldt Counties</b>	<b>(707) 445-6600</b>
<b>California Department of Water Resources, State Water Projects</b>	<b>(916) 574-2714*</b>
<b>Oil Spill Response Agency Notifications: Promptly Notify</b>	
<b>Oiled Wildlife Care Network</b>	
<b>OWCN Activation/Oiled Wildlife Hotline</b>	<b>(877) 823-6926*</b>
<b>U.S. Environmental Protection Agency</b>	
<b>24-Hour Duty Officer</b>	<b>(800) 300-2193*</b>
<b>CALFIRE Office of the State Fire Marshal</b>	
<b>24-Hour Duty Chief</b>	<b>(916) 323-7390*</b>
<b>On-Call Pipeline Safety Engineer: Doug Allen</b>	<b>(916) 591-0699</b>
<b>On-Call Pipeline Safety Engineer: Alin Podoreanu</b>	<b>(916) 212-8891</b>

**\* Staffed 24-Hours/Day****Oil Spill Response Agency Notifications: Promptly Notify (continued)****CALFIRE Office of the State Fire Marshal**

<b>24-Hour Duty Chief</b>	<b>(916) 323-7390*</b>
<b>On-Call Pipeline Safety Engineer: Doug Allen</b>	<b>(916) 591-0699</b>
<b>On-Call Pipeline Safety Engineer: Alin Podoreanu</b>	<b>(916) 212-8891</b>

**Local Fire and Law Enforcement**

<b>Cal Fire Northern Region-Chief</b>	<b>(530) 224-2460</b>
<b>Cal Fire Siskiyou Unit, Yreka Emergency Command Center</b>	<b>(530) 842-7066*</b>
<b>Cal Fire Humboldt-Del Norte Unit</b>	<b>(707) 725-4413</b>
<b>Siskiyou County Sheriff</b>	<b>(530) 841-2903 911*</b>
<b>Humboldt County Sheriff</b>	<b>(707) 445-7251 911*</b>
<b>Del Norte County Sheriff</b>	<b>(707) 464-4191 911*</b>

**California Native American Tribes**

<b>Karuk Tribe</b>	<b>(530) 493-1600</b>
<b>Yurok Tribe Spill Hotline</b>	<b>(707) 954-0462*</b>
<b>Yurok Tribe Office of Emergency Services – Duty Officer</b>	<b>(707) 951-6844*</b>
<b>Yurok Tribe Weitchpec Office</b>	<b>(530) 625-4130</b>
<b>Yurok Tribe Klamath Office</b>	<b>(707) 482-1350</b>
<b>Hoopa Tribal Police Dispatch and Volunteer Fire Rescue</b>	<b>(530) 625-9242*</b>
<b>Pulikla Tribe of Yurok People</b>	<b>(707) 482-2431</b>

**Local Government (City and County)**

<b>Siskiyou County OES</b>	<b>(530) 841-2166 After Hours 911*</b>
<b>Humboldt County OES</b>	<b>(707) 268-2500 Business Hours (707) 445-7251 After Hours</b>
<b>Del Norte County OES</b>	<b>(707) 464-7255 After Hours 911*</b>

**Affected or Adjacent Agencies to Notify Early-On as Appropriate; If In Doubt, Notify****Water Districts, Water Intakes and County Water Agencies**

<b>Crescent City Water</b>	<b>(707) 464-6517</b>
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<b>* Staffed 24-Hours/Day</b>	
<b>Affected or Adjacent Agencies to Notify Early-On as Appropriate; If In Doubt, Notify (continued)</b>	
<b>Public Works and Traffic Control</b>	
Siskiyou County Public Works	(530) 842-8250
Humboldt County Department of Public Works	(707) 445-7021 After Hours CHP
Del Norte County Roads Division	(707) 464 7238
Statewide Traffic Safety & Signs, Redding	(530) 222-8023
<b>Additional Contact Information as Appropriate; If In Doubt, Notify</b>	
<b>Federal Agencies</b>	
U.S. Department of the Interior, Regional Environmental Officer	(415) 420-0524
U.S.D.A. Forest Service, Forest Spill Coordinator, Belinda Walker, Asst. Regional Environmental Engineer	(909) 229-5201
U.S. Coast Guard Sector SF Incident Management Division	(415) 399-3543
Bureau of Land Management - Redding	(530) 224-2100
U.S. Fish & Wildlife Service, Oil Spill Response Coordinator, Wendy Bragg	(916) 930-5636
National Marine Fisheries Service, NRDA Lead, Bob Pagliuco	(707) 217-7176
NOAA Spill Hotline, HazMat Duty Officer	(206) 526-4911*
FEMA Region IX, 24-Hour Duty Officer	(510) 627-7700* (800) 395-6042*
<b>State Agencies</b>	
CDFW Office of Spill Prevention and Response, Spill Desk (Report Oil Spills to the State Warning Center listed above)	(800) 852-7550
Calif. Department of Fish and Wildlife, Region 1, Regional Manager, Tina Bartlett	(530) 225-2363
Calif. Environmental Protection Agency	
CalEPA Duty Officer Email: <a href="mailto:epadofficer@calepa.mail.onmicrosoft.com">epadofficer@calepa.mail.onmicrosoft.com</a>	
Jason Boetzer, REHS Deputy Secretary Local Program Coordination and Emergency Management	o: (916) 327-9558 c: (916) 715-3005
John Elkins Environmental Program Manager Emergency Response, Refinery Safety, CalARP, & HMBP	c: (916) 804-8349
Kristi Placencia Senior Emergency Services Coordinator Emergency Response	o: (916) 327-7780 c: (916) 601-7845
CAL FIRE - Office of the State Fire Marshal, Pipeline Safety - Sacramento	(916) 263-6300
Calif. Regional Water Quality Control Board (Redding)	(530) 224-4857

**\* Staffed 24-Hours/Day****Additional Contact Information as Appropriate; If in Doubt, Notify (continued)**

State Water Resources Control Board, Emergency Management Program	Sarah Ries (916) 809-2558* Laura Fisher (916) 747-5501*
State Water Resources Control Board, Division of Drinking Water, District 1 - Klamath	OES Warning Center (800) 852-7550* or (530) 224-4800 Ask for SWRCB - Division of Drinking Water - Field Operations Branch
Calif. Department of Water Resources	(916) 574-2714
Calif. Geologic Energy Management Division	(916) 322-1110
Calif. Department Toxic Substance Control – Duty Officer	(800) 852-7550* (800) 260-3972
Calif. Department of Public Health, Duty Officer	(916) 328-3605*
<b>California Native American Tribes and Historic Contacts (Individual California Native American tribal contacts can be found on page 243)</b>	
Native American Heritage Commission (NAHC)	(916) 373-3710
Andrew Green	(916) 373-3710
<b>California Historic Resources Information System (CHRIS)</b>	
Ryan Bradshaw, Northeast CHRIS Information Center	(530) 898-6256
Bryan Much, Northwest CHRIS Information Center	O: (707) 588-8455 C: (707) 332-1117
<b>Emergency Response Resources</b>	
<b>Hospitals</b>	
Mercy Medical Center Mt. Shasta	(530) 926-6111
Fairchild Medical Center - Yreka	(530) 842-4121
Sutter Coast Hospital – Crescent City	(707) 464-8511
<b>Ambulance</b>	
Mountain Medics Inc	(530) 918-8530
Mt Shasta Ambulance Services	(530) 926-2665
Northern California EMS, Inc.	(530) 229-3979
Reach Air Medical Services	(530) 244-5192
American Medical Response	(530) 246-9111
Happy Camp Volunteer Ambulance	(530) 493-2643
Hoopa K'ima:w Ambulance Service	(530) 625-4520
Del Norte Ambulance	(707) 487-1116
Cal-Ore Life Flight (Del Norte County Regional Airport)	(707) 465-3804



* Staffed 24-Hours/Day	
Emergency Response Resources (continued)	
Airports	
Siskiyou County Airport	(530) 842-8220
California Redwood Coast-Humboldt County Airport	(707) 839-5401
Del Norte County Regional Airport	(707) 464-7288
* Staffed 24-Hours/Day	
CHEMTREC 24-Hour Hotline	(800) 424-9300*
CHEMTREC provides emergency information for chemical releases and fire control measures, assistance with chemical identification, and notification of manufacturer and/or shipper.	
Poison Control Centers 24-Hour Hotline	(800) 222-1222*
Poison Control Centers provide poison/exposure information to emergency personnel and the public and has regional hospital capabilities for exposed victims. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego.	
Footnotes	
<p>†California State Warning Center (California Governor's Office of Emergency Services, Cal OES) State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES [California Government Code (GC) §8670.25.5; California Water Code (WC) §13272, California State Oil Spill Contingency Plan]. If the release of oil is on land and is not discharged or threatening to discharge into State Waters; and (a) does not cause harm or threaten to cause harm to the public health and safety, the environment, or property; AND (b) is under 42 gallons, then no notification to the CSWC is required.</p>	
<p>‡National Response Center Any person in charge of a vessel or of an onshore or offshore facility is subject to the federal reporting requirements of the Discharge of Oil regulation if it discharges a harmful quantity of oil to U.S. navigable waters, adjoining shorelines, or the contiguous zone. A harmful quantity is any quantity of discharged oil that violates state water quality standards, causes a film or sheen on the water's surface, or leaves sludge or emulsion beneath the surface. A facility should report discharges to the National Response Center.</p> <p>The requirement for reporting oil spills stems from the Discharge of Oil Regulation, known as the "sheen rule." Under this regulation, oil spill reporting does not depend on the specific amount of oil spilled, but on the presence of a visible sheen created by the spilled oil. If a facility or vessel discharges oil to navigable waters or adjoining shorelines, waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act of 1974, or which may affect natural resources under exclusive U.S. authority, the owner/operator is required to follow certain federal reporting requirements. These requirements are found in two EPA regulations – 40 CFR part 110, Discharge of Oil regulation, and 40 CFR part 112, Oil Pollution Prevention regulation. The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center. The Oil Pollution Prevention regulation, part of which is commonly referred to as the "SPCC rule," identifies certain types of discharges from regulated facilities that also need to be reported to EPA.</p> <p><a href="https://www.epa.gov/sites/production/files/2014-06/documents/spccfactsheetspillreportingdec06-1.pdf">https://www.epa.gov/sites/production/files/2014-06/documents/spccfactsheetspillreportingdec06-1.pdf</a></p>	
Contingency Plan holders in the State of California must begin notification procedures within 30 minutes of learning of a spill and must complete notifications to Cal OES, NRC, QI, OSRO, SMT, and if there is a threat to wildlife, OWCN, within 2 hours from the initiation of making notifications.	

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## **Before you print this document:**

**This document is intended, and designed, to be printed out on 2-sided pages.**

**The following pages are provided in “landscape” orientation, 8.5 x 11:**

- Chapter 1, Figure 1-1, pages 5-6
- Chapter 3, Figure 3-1, pages 27-28
- Chapter 3, Figure 3-2, pages 49-50
- Chapter 3, Figure 3-3, pages 67-68
- Chapter 3, Figure 3-4, pages 89-90
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- Chapter 3, Figure 3-6, pages 115-116
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- Chapter 3, Figure 3-10, pages 169-170
- Chapter 3, Figure 3-11, pages 181-182
- Chapter 3, Figure 3-12, pages 195-196
- Appendix G, Figure G-2, pages 295-296

**The following pages are provided in “landscape” orientation, paper size 11 x 17:**

- Chapter 3, Table 3-1, pages 31-46
- Chapter 4, Table 4-1, pages 211-234
- Appendix F, Figure F-2, Table F-1 through F-4 and Figure F-3, pages 269-282

**The following pages are provided in “portrait” orientation, 8.5 x 14:**

- Appendix G, Table G-2, pages 293-294

**All other chapters and appendices are oriented in “portrait,” 8.5 x 11.**

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## **Preface: Lower Klamath Project Dam Removal**

The California Department of Fish and Wildlife, Office of Spill Prevention and Response began preparation of the Klamath River Geographic Response Plan (GRP) in 2019 prior to dam removal agreements being implemented. Field work between two Northern Field Response Team Environmental Scientists was conducted along 193 river miles in May and September of 2019. The upstream boundary was identified as Iron Gate Dam to incorporate the Central Oregon and Pacific Railroad rail bridge and line over and along the Klamath River near Hornbrook due to the perceived threat of oil transport by rail, as well as the river access site at the Iron Gate Fish Hatchery. The downstream boundary terminates at the mouth of the river where it coincides with Sector San Francisco Area Contingency Plan 1.

In November of 2020 a Memorandum of Agreement was reached to move forward with the removal of the Lower Klamath Project dams. Between January of 2021 and November of 2022, a series of steps including submission and approval of license transfer/surrender through the Federal Energy Regulatory Commission, environmental consultations and permitting, and filing of an Environmental Impact Report occurred. Dam removal activities on the upstream-most dam began in 2023 with the final dam at Iron Gate being removed in September 2024.

GRP development continued moving forward after the completion of field data collection in 2019 and will be finalized with the same boundary and location of first response strategy location at the former Iron Gate Dam Hatchery location. GRPs are updated every 5 years; if warranted, any major changes to response strategy locations downstream of the former Iron Gate Dam location that are significantly impacted by dam removal may need updating sooner than 5 years and will be evaluated.

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# **Klamath River**

## **Geographic Response Plan**

### **Purpose and Use of this Plan**

The California Department of Fish and Wildlife (CDFW), Office of Spill Prevention and Response (OSPR) developed this Geographic Response Plan (GRP) for inland waters of California. This GRP includes response strategies, response methods, and shoreline countermeasures to be used by spill response personnel to rapidly and efficiently address actual or threatened oil spill releases to the Klamath River. This GRP was developed to facilitate oil spill response preparedness and to expedite spill response activities in the GRP coverage area and is meant to aid the response community during the initial phase of an oil spill. The GRP provides tactical response strategies and identifies available access to the shoreline. By using this document, it is hoped that immediate and proper action can be taken to reduce potential impacts that oil may have on the environment as well as any sensitive resources in the area.

The strategies shown in this GRP were developed using the best information available at the time of preparation. However, no one strategy can effectively address all environmental conditions considering seasonal, annual, and localized site-specific conditions. An on-site evaluation of actual conditions is often needed to determine whether a response strategy is safe to deploy and whether it will be effective under existing environmental conditions or effective for the particular type of oil involved. Responders must use on-scene judgment based on real-time observations to ensure a safe and effective response. The strategies discussed in this GRP have been designed for use with persistent oils that float on water and may or may not be suitable for other oil products or hazardous substances.

After a spill occurs, efforts to control and contain the spill at or near the source should be a top priority. Beyond those efforts, the appropriate booming, damming, and notification strategies provided in Chapter 3 of this GRP should be implemented as soon as possible, unless overflight information, spill trajectory models, or circumstances unique to a particular spill situation dictate otherwise.

From an operational perspective, this GRP offers guidance to responders during the initial phases of an oil spill by:

- Providing tactical response strategies to be implemented during the early hours of an oil spill.
- Providing detailed information for booming and damming strategies that could be utilized to minimize impacts on predetermined sensitive resources.
- Providing sufficient information for responders to prepare the initial Incident Command System (ICS) 201, 208, and 232 documents and the initial Incident Action Plan.

OSPR is responsible for long-term maintenance of this GRP; it will be updated and maintained periodically to ensure the information contained within remains current and relevant. Revisions to the GRP will be completed every five years. Contact information will be updated on an annual basis.

## **Purpose**

1. This GRP establishes spill response guidance for oil spill incidents occurring within the Klamath River area. The GRP boundary begins at the former location of the Iron Gate Dam near the community of Hornbrook and continues to the Pacific Ocean in the community of Requa. The GRP area is within Siskiyou, Del Norte, and Humboldt Counties and Local Emergency Planning Committee Region II and III.

2. This GRP is the principal guide for response personnel, response organizations and agencies within the GRP boundary area, its incorporated cities, and other local government entities responding to and minimizing the impacts of oil spill incidents. This GRP is intended to facilitate multi-agency and multi-jurisdictional coordination, pursuant to the ICS among local, state, and federal agencies, as well as the responsible party, in oil spill incidents.

3. This GRP is an operational plan as well as a reference document. It may be used for pre-spill planning and actual spill response. Agencies with jurisdictional roles and responsibilities for oil spills are encouraged to develop standard operating procedures and spill response checklists based on the provisions of this GRP.

## **Response Strategy Selection**

The bulk of this GRP is contained in Chapter 3. It provides information on response strategies including detail sheets with specific information on each identified response site and access/observation site. The response strategies have been identified by available access points and the amount of oil spill response resources that can be deployed from those locations. Operational division and segment maps as well as information on staging areas are also provided in the chapter. When a spill occurs, the response strategies provided in Chapter 3 should be implemented as soon as possible. Unless circumstances unique to a particular spill situation dictate otherwise, the matrix in Section 3.4 of the chapter should be used to determine strategy deployment locations. The movement of oil on water and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting strategy implementation priorities.

Once the Unified Command (UC) is formed, additional operational strategies and tactics should be relayed to response personnel in the field with updates to the ICS 232 or using the ICS 204. Because GRPs are one of the primary strategy tools used during an initial phase of the response and are fairly broad in their scope, they are not intended to minimize impacts on all possible sensitive areas that could be affected by an oil spill. Likewise, this GRP is not intended to be an exhaustive list for all of the tactical strategies that could, or should, be implemented during a spill response.

## **Guiding Principles for GRPs**

1. The safety and health of responders and the public always takes precedence over the protection of sensitive environmental or economic resources.
2. Source control and containment are always a higher priority over GRP strategy deployments but should occur concurrently if resources are available.
3. Environmental conditions (velocity/flow, water levels, gradient), together with the physical limitations of existing spill response technology, may preclude the effective protection of some areas.
4. Once a coordinated response has been established during an oil spill incident, booming strategy selection and prioritization are refined and supplemented based on real-time assessments. The UC has the authority to supersede the strategies proposed in this GRP.
5. Response personnel may find it necessary to deviate from the exact details provided for deploying a particular response strategy; response personnel should use their best judgment to modify existing strategies based on real-time conditions and notify UC accordingly. Response personnel should notify the Planning (i.e., Environmental Unit) and/or Operations Section staff regarding any opportunities for deploying additional strategies that might be used to take advantage of incident-specific conditions.

## **Control and Containment**

Control and containment of an oil spill at the source is a higher priority than implementation of GRP response strategies. In the responder's best judgment, if control and initial containment of an oil spill at the source is not feasible or the source is controlled but oil has spread beyond initial containment, then the response strategies laid out in Chapter 3 of this GRP take precedence until a UC is formed. Spill response priorities beyond those described in this GRP should be based upon observations and spill trajectory information. During a spill, modifications to the strategies provided in Chapter 3 of this GRP may be made if approved by the Incident Commander or UC.

## **Resources-At-Risk**

Chapter 4 of this GRP outlines information on the environmental, economic, California Native American Tribe, and cultural and historic resources-at-risk in the area that could be injured or damaged if impacted by oil or cleanup operations and identifies key contacts for notification. Chapter 4 also provides information on oiled wildlife, wildlife avoidance measures, and the Wildlife Response Plan developed by OSPR in coordination with the Oiled Wildlife Care Network and other trustee agencies.



## **Appendices**

The appendices section provides information on site description, local and regional assets for oil spill response equipment, and other relevant emergency response documents for the area.

### **Companion Manual**

The [GRP Companion Manual](#) contains information common to all GRPs. The [GRP Companion Manual](#) sections include response methods, shoreline cleanup, applied response technologies, waste management, mutual aid, volunteers, non-floating oils, and procedures for the discovery of human remains and cultural and historic resources.

### **Standardized Response Language**

Oil spills are managed under the National Contingency Plan and the National Incident Management System serves as the primary guidance for all agencies during response. This GRP uses standard National Incident Management System, ICS terminology.

### **Drills and Exercises**

If an equipment deployment evaluation program (similar to the Sensitive Site Strategy Evaluation Program for Area Contingency Plans) is developed for inland GRPs, a corresponding section will be added to this GRP. As appropriate, this GRP can be exercised during tabletop drills with contingency plan holders to test the efficiency and user-friendly aspects of the document and make suggestions for updates as necessary.

# Klamath River Geographic Response Plan

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# **Klamath River**

## **Geographic Response Plan**

### **Chapter 1 – Introduction**

#### **1.0 Introduction**

The California Department of Fish and Wildlife, Office of Spill Prevention and Response (OSPR) is developing Geographic Response Plans (GRPs) for selected inland waters of California. These plans are being prepared for the State of California and are the responsibility of OSPR. GRPs are being developed through committees, workshops, and meetings with federal, state, and local oil spill emergency response experts, California Native American Tribal representatives, industry, local governments, first responders, and environmental organizations. Please see Appendix A for the list of contributors who helped to develop the structure and content of this GRP.

This GRP serves as guidance for Federal and State On-Scene Coordinators and first responders during the initial phase of an oil spill response. This plan has been developed for the Klamath River within Siskiyou, Humboldt and Del Norte Counties. The upper extent of the GRP boundary begins at the base of the former location of the Iron Gate Dam east of the town of Hornbrook (Figure 1-1). The boundary terminates where the river meets the ocean in the community of Requa which coincides with the United States Coast Guard Sector San Francisco Area Contingency Plan 1. The defined boundary encompasses approximately 193 river miles.

An area site description and information on physical features, hydrology, winds, climate, and risk are included in Appendix B of this document.

Changes and updates to this document are expected as response strategies are optimized through drills, site visits, and use in actual spill situations. OSPR is responsible for long-term maintenance of this GRP; it will be updated and maintained periodically to ensure the information contained within remains current and relevant. Revisions to the GRP will be completed every five years. Contact information will be updated on an annual basis. OSPR values input from interested parties and welcomes suggestions about how the plan might be improved. Please submit comments by mail using the form and information provided in Appendix C of this document or through the email address provided for the GRP contact on the OSPR Website at <http://www.wildlife.ca.gov/OSPR/Contingency>. A Record of Changes, Appendix D, will be kept as updates are made.

Other Relevant Emergency Response Plans can be found in Appendix E; for the Klamath River GRP, this includes emergency plans for Siskiyou, Humboldt and Del Norte Counties, Local Emergency Planning Committee Region II and III, and the Sector San Francisco Area Contingency Plan 1.

## **1.1 Authority**

### **State Government**

The Administrator of OSPR has the primary authority to serve as the state incident commander, State On-Scene Coordinator, and direct the removal, abatement, response, containment, and cleanup efforts, including decisions regarding the utilization of in-situ burning, dispersants, and cleanup agents, with regard to all aspects of any oil spill into marine and inland surface waters of the state, but not ground waters. This authority may be delegated. [FGC §5655(d), §5655(e)(2); GC §8670.62, §8670.7].

### **Federal Government**

The United States Environmental Protection Agency shall provide a Federal On-Scene Coordinator (FOSC) for discharges or releases into or threatening the inland zone. The term inland zone, defined as the environment inland of the coastal zone, delineates an area of federal responsibility for response action. The United States Coast Guard shall provide an FOSC for oil discharges within or threatening the coastal zone. Precise boundaries are determined by United States Environmental Protection Agency/United States Coast Guard agreements and identified in federal regional contingency plans. The boundary in California typically follows Highway 1 and includes the San Francisco Bay and Sacramento-San Joaquin Delta as part of the coastal zone. The basic framework for the response management structure is a system (e.g., an incident command system), that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the On-Scene Coordinator maintains authority. National Contingency Plan – 40 CFR §300.105 and 40 CFR §300.120.

### **Responsible Party**

The Responsible Party (RP) has the primary responsibility to conduct spill cleanup, in coordination with the Unified Command (UC), following the procedures listed in their facility (e.g., fixed facility, pipeline, railroad) response plan; if no plan exists, the RP will nonetheless participate in the UC to conduct spill cleanup. The basic framework for the response management structure is a system (e.g., National Incident Management System, Incident Command System) that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the FOSC maintains authority. The RP will participate in the UC alongside the FOSC and State On-Scene Coordinator (and Local Government On-Scene Coordinator if requested). National Contingency Plan - 40 CFR §300.105(d), (e)(1) Figure 1a, and §300.135(d).

### **Local Government**

When an oil spill occurs, the UC (On-Scene Coordinators and RP) will evaluate the nature and severity of the spill, jurisdictions that may be affected, potential for public involvement, and need for local agency support. The UC may exercise the option to appoint a Local Government On-Scene Coordinator as a participant within the UC. National Contingency Plan, §300.135(d).



## **Regional Response Team IX**

The FOSC can request the use of Applied Response Technology (ART) during an oil spill by making a formal request of Regional Response Team (RRT) IX. It is the policy of RRT IX to respond to all such FOSC requests within 2 hours. RRT approvals to use ART are only issued to the FOSC, although it is expected that the FOSC will want agreement from the UC members with the ART actions that will be taken.

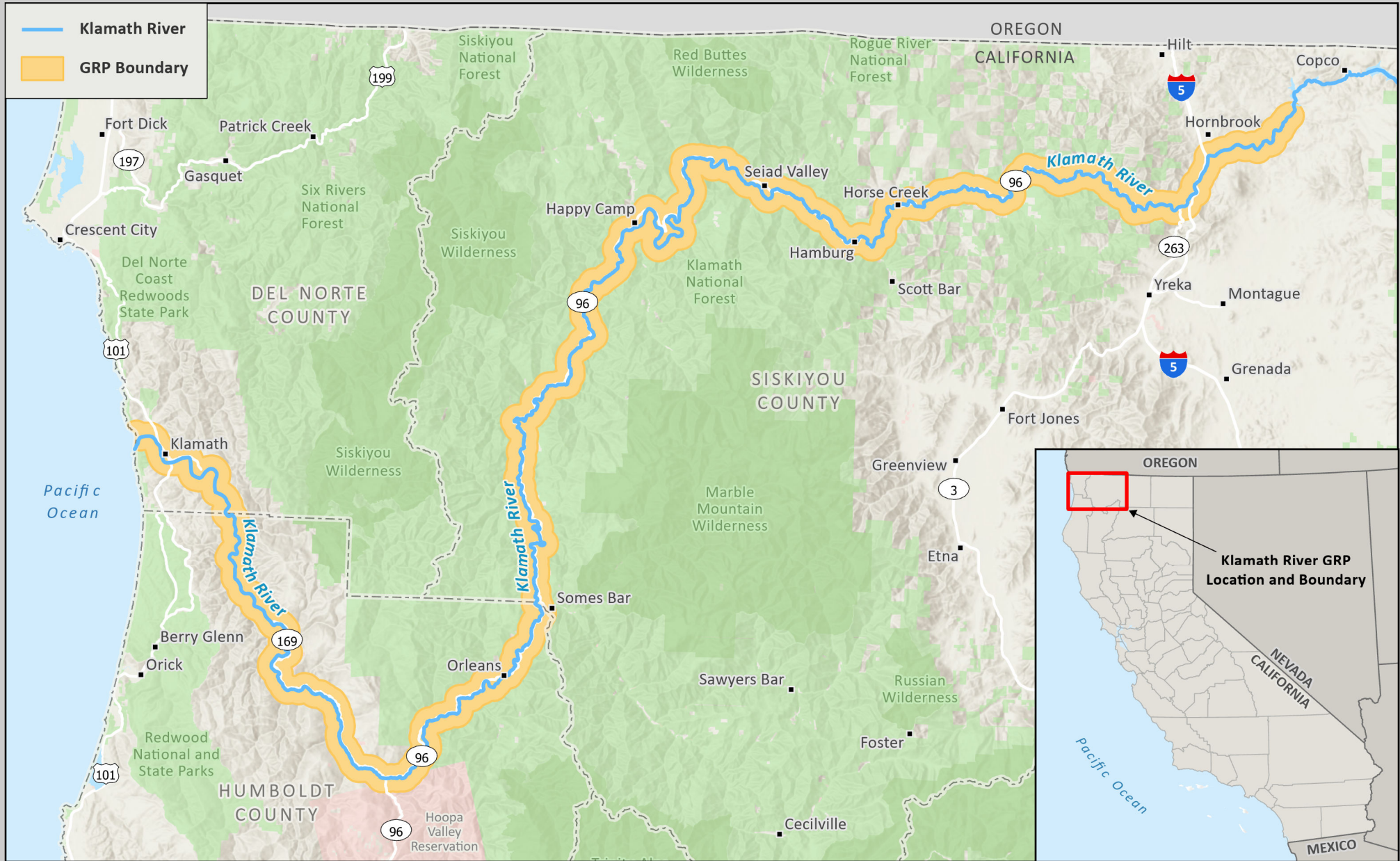
OSPR is a member of RRT IX. In addition to their voting role on the RRT, the OSPR Administrator has a separate approval authority granted under state law when an ART is considered for use in, on, or near state waters. See California Code of Regulations on the use of Response Technologies, [Licensing and Use of Oil Spill Cleanup Agents regulations 14 CCR 884-886.4 \(ca.gov\)](#), and the RRT IX Regional Contingency Plan [Dispersant Use Plan for California Waters](#).

RRTs are composed of representatives from field offices of the federal agencies that make up the [National Response Team](#), as well as state representatives. The four major responsibilities of RRTs are: Response, Planning, Training, and Coordination. (<https://www.epa.gov/emergency-response/regional-response-teams>).

See the [GRP Companion Manual](#), Section 3, for detailed information on ART.

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Figure 1-1: Klamath River GRP Location and Boundary Map

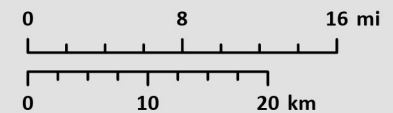


**Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response**

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 03/26/2024

Map Scale: 1:630,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

**Klamath River  
Geographic Response Plan (GRP)  
Location and Boundary**



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# **Klamath River**

## **Geographic Response Plan**

### **Chapter 2 - Emergency Management, Incident Objectives, and Response Considerations**

#### **2.0 Chapter Overview**

This chapter discusses the emergency management aspect of an oil spill as it applies to first responders and the public. This chapter includes information on site safety, site assessment, responder and public safety, public health [including information on Certified Unified Program Agencies (CUPAs)], area and traffic control, and fisheries closures; all of which are discussed below along with response equipment availability and on-site considerations.

California's emergency assistance is based on a statewide mutual aid system designed to ensure additional resources are provided to the state's political subdivisions whenever their own resources are overwhelmed or inadequate. Mutual Aid is discussed below in Section 2.15 as well as in the [Geographic Response Plan \(GRP\) Companion Manual \(CM\)](#).

The first emergency responder to arrive at the incident site will assume the role of Incident Commander (IC). The primary responsibility of this first responder is to protect the health and safety of the public (including potential responders) at the scene. As additional ICs from local, state, and federal agencies, or the Responsible Party (RP), arrive on-scene, they will be incorporated into a Unified Command (UC), as appropriate.

The IC will establish an Incident Command Post (ICP) upon arrival, a safe distance from the incident until hazards are removed, controlled, or neutralized. The ICP should be located far enough away from the incident to avoid contamination or other dangers, and close enough to the incident to maintain reasonable contact with operational personnel.

The IC will be responsible for coordinating multi-agency operations (e.g., fire, sheriff, highway patrol). All emergency responders shall report to the ICP or the staging area as designated by the IC immediately upon arrival to the scene. All emergency response operations (e.g., spill characterization, containment) shall be coordinated through the IC or a duly appointed Operations Section Chief.

#### **Incident Objectives**

The following actions should be taken for spill response personnel to evaluate the oil product and take appropriate emergency actions to save lives, reduce injuries, and prevent or minimize damage to the environment and property:

1. Provide for the safety and security of responders and maximize the protection of public health and welfare.
2. Identify and report the oil spill to appropriate agencies within required notification time limits.
3. Conduct an operational risk assessment, secure the source and affected area, isolate the hazard, and deny the entry of unauthorized persons into the area.
4. Provide rapid and effective warning, information, and instructions to threatened populations, including the unhoused by engaging local health agencies
5. Implement response strategies, deploy spill response equipment, commence shoreline countermeasures, and return to normal conditions as quickly as possible.

## **2.1 Safety**

The first emergency responder to arrive at the incident site's primary responsibility is to protect the health and safety of the public and responders on scene. This protection will be accomplished by restricting access to the scene, initiating containment if it can be done safely, and isolating contaminated persons and materials until arrival of the supporting agencies.

Rendering emergency care and initiating decontamination of affected persons is always a high priority but only if it is within the first responder's level of training and only if it can be done safely.

Site perimeter security and traffic control are the responsibility of the law enforcement agency with traffic investigation authority and should be initiated as soon as possible to minimize contamination of citizens and to allow first responder crews to perform their tasks without interference. The following guidance, considerations, and actions are to provide for the safety of responders and the public during an oil spill incident:

### **Responder Safety**

- Resist Rushing In! Respond safely, slowly, and methodically.
- Approach cautiously from uphill, upwind, or upstream.
- Stay clear of vapor, fumes, smoke, and spills.
- Don't assume that gases or vapors are harmless because of lack of a smell – odorless gases or vapors may be harmful.
- Vapors may cause dizziness or asphyxiation without warning.
- Fire may produce irritating, corrosive and/or toxic gases.
- Many gases/vapors are heavier than air and will spread along the ground and collect in low or confined areas (sewers, basements, tanks) – control ignition sources.
- Keep out of low areas.
- Enter only when wearing appropriate protective gear and in accordance with your training, resources and capabilities.
- Establish an ICP and lines of communication.
- Continually reassess the situation and modify the response accordingly.



- If there are unhoused encampments in the area, consider the following potential hazards:
  - Being approached by aggressive or unpredictable persons or pets, weapons.
  - Biological hazards including human waste, needles/syringes/sharps, bedbugs and lice.
  - Chemical hazards including petroleum products, aerosols, paints, solvents, and drug labs.
  - Open flames/ignition sources or electrical hazards.
- Consider your own safety first, then the safety of people in the immediate area. Rescue attempts and protecting the environment or property must be weighed against you becoming part of the problem.

### **Area Assessment**

- Is there a fire, spill, or leak?
- What are the weather conditions?
- What is the terrain like?
- Who/what is at risk – people, the environment, or property?
- Are there unhoused encampments in the area?
- What actions should be taken – evacuation or shelter-in-place?
- What resources are required (human and equipment)?
- What can be done immediately?

### **Site Safety**

- Secure the scene:
  - Isolate the area and protect yourself and others.
- Use the [National Oceanic and Atmospheric Administration, Computer-Aided Management of Emergency Operations, or CAMEO, Chemicals 2024 Emergency Response Guidebook \(ERG\)](#) or the [United States Department of Transportation \(USDOT\) ERG](#) recommendations for establishing safe distances and safety information. See the [GRP CM, Section 5](#), for Web Links to Information Resources.
- Fire/Explosion – Consider a blast radius of 0.6 miles (1 km).
- Gather intelligence from a safe distance before conducting an on-site assessment – understand the problem:
  - Train consist/waybill.
  - Observe placards and types of containers/railcars.
  - Use the appropriate monitoring devices to detect hazardous materials.
  - One product or multiple commodities. If multiple materials are involved, what is the potential outcome of their commingling, will there be reactivity?
- Chemical Transportation Emergency Center, or CHEMTRC, provides two types of assistance during a hazardous material incident:
  - Relays information in regard to the specific chemical, and
  - Will contact the chemical manufacturer or other expert for additional information or on-site assistance.
  - **24-Hour Hotline: (800) 424-9300.**
- If the substance cannot be identified, monitoring and sampling may be needed to determine the substances' physical and chemical properties, concentrations, and its degree of hazard.



- To minimize danger to personnel, this function should be performed by persons who are properly trained and are using the appropriate personal protective equipment such as a trained hazardous materials response team following established protocols.
- Position vehicle away from the incident and use binoculars.
- Establish a dedicated Safety Officer.
- Develop an initial Site Safety Plan.
- Verify all information/intelligence.
- Consider all modes of operation:
  - Offensive
  - Defensive
  - Non-Intervention
- Eliminate any ignition sources including those associated with unhoused encampments.
- Consider current and expected weather.
- Consider worst-case scenario.
- Prepare for first responder rescue.
- Establish an accountability system for incident personnel.
- Establish a buddy-system for entering or passing by unhoused encampments.

### **Public Safety (Notify and Integrate Local, State, and Federal Public Health Agencies)**

- Identify threats to health and safety.
- Keep unauthorized persons away – initiate site access control.
- As an immediate precautionary measure, isolate spill or leak in all directions as recommended by the USDOT ERG.
- Establish a Public Information Officer/Joint Information Center.
- Establish a Law Enforcement Branch:
  - Evacuation
    - Establish evacuation groups/divisions as needed.
    - Identify residents, unhoused encampments, businesses, public buildings and other areas from which occupants and property may need to be evacuated.
    - Locate and identify special needs individuals that require extraordinary care.
    - Provide security for evacuated areas.
  - Shelter-In-Place
    - Create a temporary safe refuge area by using the residence or business place.
    - Identify through CUPA (Section 2.9 below) or County Health (if not the CUPA), a shelter-in-place location for evacuated unhoused encampments.
    - Ensure, through community outreach, that the public understands what shelter in place means.
    - Limit travel in the affected area, when the process of evacuation puts the public in harm's way.
    - Provide clear information and instruction on the shelter in place process.
- Resource Notifications:
  - Identify resources to assist with shelter in place operations:
    - Local Office of Emergency Services
    - Public Health Services/Offices

- Local hospitals and disaster control facilities
- Public Information Officer
- Utilize mass notification systems:
  - Reverse 911
  - Television, radio
  - Websites, social media
  - Local sirens
- Poison Control Centers:
  - Provide poison/exposure information to emergency personnel and the public. For exposed victims, can provide regional hospital capabilities. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego. **24-Hour Hotline: (800) 222-1222\***.

### **Isolation, Deny Entry, Traffic and Access**

- Control all access/entry points to the incident.
- Control perimeter between all entry points.
  - Determine perimeter size using the [National Oceanic and Atmospheric Administration, Computer-Aided Management of Emergency Operations, or CAMEO, Chemicals 2024 ERG](#) or the [USDOT ERG](#).
- Control access inside perimeter, including responders.
- Establish zones:
  - Exclusion/Hot Zone
  - Contamination Reduction/Warm Zone
  - Support/Cold Zone
- Establish traffic pattern.

### **Communication Frequencies**

- The local, responding fire department will establish the communication frequency for the incident, followed by law enforcement and the UC establishing a formal Communications Plan, Incident Command System (ICS) Form 205.

## **2.2 Source Control**

Efforts to control and contain the spill at or near the source should be a top priority after a spill occurs. An on-site evaluation of actual conditions is needed to determine whether a response strategy, including source control, is safe to deploy, effective under existing environmental conditions, and effective for the particular type of oil involved. If, in the responder's best judgment, control and initial containment of an oil spill at the source is not feasible, or the source is controlled but oil has spread beyond initial containment, then the response strategies laid out in Chapter 3 of this GRP take precedence until a UC is formed. If, in the responder's judgement, it is determined to be safe to implement source control actions, the following methods may be applicable.

Offensive source control strategies (stop, control, or stabilize the release) typically include the following:

- Plug and patch
- Absorb/adsorb

- Transfer (e.g., sting tanks)
- Containerize
- Stop (shut off valve)

Defensive containment strategies (restrict, slow, or redirect the spread of oil) typically include the following:

- Containment boom
- Berm or dam:
  - Simple berm or dam constructed of dirt, sandbags, hay bales, fire hose, or lumber.
  - Underflow dam for product that floats on top of water.
  - Overflow dams for product that sinks in water.

Once a UC has formed, with input from the Environmental Unit, and under the direction of the Recovery and Protection Branch Director, the Salvage/Source Control Group Supervisor coordinates and directs all salvage/source control activities related to the incident.

## 2.3 River Streamflow Velocity and Time to Travel

The United States Geological Survey ([USGS National Water Dashboard](#)) provides current river stage and discharge data for the Klamath River including surface velocity in feet/second. Table 2-1 below provides the monthly average surface velocity for each of the four USGS stream gauges between Iron Gate Dam and the community of Klamath, CA near the river mouth. Appendix F provides a map of gauge locations, additional gauge data information, and instructions on how to retrieve surface velocity.

**Table 2-1: Klamath River Monthly Mean Surface Velocity (feet/second), 2019-2023**

Gauge Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Iron Gate Dam	2.45	2.57	2.55	4.03	3.19	2.64	2.63	2.58	2.67	2.61	2.33	2.27
Seiad Valley	3.15	3.5	2.58	4.64	4.17	2.53	2.02	1.99	N/A	2.17	2.31	2.4
Orleans	3.04	2.18	3.41	3.39	3.26	1.72	1.10	0.85	0.80	1.06	1.035	2.93
Klamath	4.47	4.89	5.41	5.79	N/A	3.22	2.13	2.08	2.01	2.21	2.66	3.00

Additional real-time river discharge data, in cubic feet per second, can be found on the Karuk Tribe's website, [Data - Karuk Tribe Water Quality](#). Additional gauge information on this website includes water temperature, dissolved oxygen, turbidity and other water quality parameters.

The [USGS Stream Stats Time of Travel Tool](#) can help estimate travel distance from point of release based on current flow conditions. See Appendix F for a brief job aid to run the Time of Travel Tool.

Additional flow data resources can be found in Section 5 of the [GRP CM](#), Web Links to Information Resources.

## 2.4 Regional Response Trailer Locations

The California Department of Fish and Wildlife (CDFW) Office of Spill Prevention and Response (OSPR) administers an Oil Spill Response Equipment Grant Program; the objective is to award grants to local government agencies including cities, counties, port districts, and California Native American Tribal governments for the purchase of oil spill response equipment. The grant award also includes staging location, equipment familiarization, hands-on boom deployment training and delivery. The purpose of this program is to support local first responders and protect these agencies' economic interests during an oil spill response. Table 2-2 below provides information on the nearest response equipment trailers to the GRP boundary. Equipment trailers are staged in various locations throughout the state and can be accessed during a response. The location of OSPR-granted response trailers can be found on the [Environmental Response Management Application Southwest's](#) website.

**Table 2-2: Regional Response Trailer Locations**

Contact Name	Equipment Location	Boom	Contact Name and Phone Number
Castella Fire Protection District	29382 Main Street Castella, CA 96017	6 in x 12 in, 1,000 feet	Patrick Hines Office: (530) 235-4581 Cell: (530) 917-9344  Dan Padilla Dunsmuir Fire Department (530) 235-4822 ext. 106
Yurok Tribe Environmental Program	190 Klamath Blvd Klamath, CA 95548	6 in x 12 in, 1,000 feet	Macy Matilton (707) 954-0462 mmatilton@yuroktribe.nsn.us
Crescent City Harbor District	101 Citizens Dock Road Crescent City, CA 95531	6 in x 12 in, 1,000 feet	Harbor Master Office: (707) 464-6174 Maintenance Cell: (707) 954-4588 (24/7)
Cher-Ae Heights Indian Community of the Trinidad Rancheria	1 Cher-Ae Lane Trinidad, CA 95570	6 in x 12 in, 1,000 feet	Ron Sundberg (707) 599-0135 (707) 825-2731 ronsundberg@trinidadrancheria.com

## 2.5 Local/Regional Asset Resources

Appendix G contains information on Local/Regional Asset Resources including the location and contact information for the following:

- Water supplies and foaming operations for firefighting
- Air monitoring equipment
- Communication equipment
- Unoccupied Aircraft System equipment and pilots
- Certified HazMat Teams
- Swift Water Rescue Teams

In addition to the local/regional assets and response trailer locations, Oil Spill Response Organizations are kept on contract by the RP and retain an extensive inventory of response equipment that can be called upon to deploy in an expedited time frame.

## 2.6 Unoccupied Aircraft System

CDFW has an Unoccupied Aircraft System (UAS) Program that manages the use of UAS within the Department. OSPR has adapted this technology to assist with oil spill response. Opportunities exist to utilize UAS with situation data collection and Shoreline Cleanup Assessment Technique whereas constraints for UAS may include restricted airspace near major airports and potential disturbance to biological resources. Additionally, many industry partners and their contractors and/or consultants are testing and utilizing UAS capabilities for spill response. See Appendix G for additional UAS equipment and pilots.

## 2.7 Incident Command Post Locations

The ICP will likely be near the incident during initial response, possibly working from a first responder vehicle. As the incident progresses and responding staff continue to be deployed, the need for an off-site ICP providing space, electricity, and additional amenities and resources becomes apparent. Table 2-3 provides a list of locations near the Klamath River GRP boundary that can serve as an ICP for spill response activities. Appendix G includes an ICP Facility Assessment Check Sheet to evaluate potential ICP locations including proximity to services, cell phone coverage, location physical characteristics/size, parking, and site security.

**Table 2-3: Incident Command Post Locations (Listed upstream to downstream)**

Location	Address	Contact Name and Phone Number
California Department of Forestry and Fire Protection (CAL FIRE) Northern Region, Siskiyou Unit, Hornbrook Fire Station	14638 Bradley-Henley Road P.O. 318 Hornbrook, CA 96044	(530) 475-3582
Hornbrook Fire Protection District	16100 Front Street Hornbrook, CA 96044	(707) 260-4858
CAL FIRE Siskiyou Unit	1809 Fairlane Road, Yreka, CA 96097	(530) 842-3516
Yreka Fire Department	401 W Miner Street, Yreka, CA 96097	(530) 841-2383
Klamath National Forest Headquarters	1711 S Main St, Yreka, CA 96097	(530) 842-6131
Seiad Volunteer Fire Department	44601 CA-96, Seiad Valley, CA 96086	(530) 496-3164

**Table 2-3: Incident Command Post Locations (continued)**

<b>Location</b>	<b>Address</b>	<b>Contact Name and Phone Number</b>
United States Department of Agriculture (USDA) Forest Service Station-Seiad	44600 CA-96 Seiad Valley, Ca 96086	Happy Camp/Oak Knoll Ranger District (530) 493-2243  Supervisor's Office (Headquarters) (530) 842-6131
California Department of Transportation (Caltrans)-Seiad Valley Maintenance Station	14 Diamond J Road Seiad Valley, CA 96086	Caltrans District 2 Redding, CA (530) 225-3426
Happy Camp/Oak Knoll Ranger District	63822 CA-96 Happy Camp, CA 96039	Happy Camp/Oak Knoll Ranger District (530) 493-2243  Supervisor's Office (Headquarters) (530) 842-6131
Happy Camp Community Center	38 Park Way Happy Camp, CA 96039	(530) 493-5117
USDA Forest Service Work Station	Happy Camp, CA 96039	Happy Camp/Oak Knoll Ranger District (530) 493-2243  Supervisor's Office (Headquarters) (530) 842-6131
Happy Camp Fire Protection District	P.O. Box 189 26 Fourth Ave Happy Camp, CA 96039	(530) 493-2312
Ukonom Ranger Station USDA Forest Service	Somes Bar, CA 95568	(530) 627-3291
USDA Forest Service Orleans Ranger Station	1 Ishi-Pishi Road Orleans, CA 95556	(530) 627-3291
Orleans Volunteer Fire Department	38162 CA-96, Orleans, CA 95556	(530) 627-3344
Hoopa Fire Department and Office of Emergency Services	11121 CA-96, Hoopa, CA 95546	(530) 625-4366
Yurok Fire Department	123 Owl Creek Road, Tulley Creek, CA 95546	Fire Chief (707) 784-7870
Yurok Fire Station	30 Plox Sow Road, Pecwan, CA 95546	Yurok Fire Duty Officer (707) 457-0297
CAL FIRE Terwer Valley Station	180 Terwer Valley Road Klamath, CA 95548	(707) 482-7355  Humboldt-Del Norte Unit (707) 725-4413

**Table 2-3: Incident Command Post Locations (continued)**

Location	Address	Contact Name and Phone Number
Klamath Community Center	219 Salmon Ave Klamath, CA 95548	(707) 482-0107
Holiday Inn Express Klamath- Redwood National Park Area	171 Klamath Blvd, Klamath, CA 95548	(707) 482-1777
Ada Charles Community Center/Yurok Office of Emergency Services, Emergency Support Center	225 Klamath Blvd, Klamath, CA 95548	(707) 951-3738

## 2.8 Public Works

Public works departments are critical for spills involving storm drains as they have access to storm sewer system diagrams showing input and outfall points, which may be essential for response. Open channels and storm drains are often the conduit for oil getting into the mainstem of a river. Rapidly coordinating with the local public works departments to obtain information on storm drain systems is recommended, see the Contact Sheet at the beginning of the GRP for public works contact information. Local street and road departments are also responsible for maintaining roadways in their jurisdiction and may assist with road closures, cleanup, or decontamination.

Local water supply agencies (which may be a public works department) are responsible for maintenance of community water systems. They may provide remedial actions in coordination with the Regional Water Quality Control Board and the Department of Water Resources when an oil spill incident may affect water sources such as treatment plants and pumping stations. See section 2.9, Public Health, for small public water systems.

### Water Intakes

There are numerous community services districts and California Native American Tribal drinking water assets along the Klamath River within the GRP boundary. A majority of the water intakes are along a tributary to the Klamath River or a groundwater well and may not be impacted by an oil spill in the main stem of the Klamath River. Table 4-2, Resources-At-Risk Matrix, Economic Resources, page 239, lists the contacts for the community services districts and California Native American Tribes with drinking water intakes/assets between Iron Gate Dam and the river mouth near Requa. These California Native American Tribes and community services districts may not receive California Governor's Office of Emergency Services (Cal OES) State Warning Center reports and may not be aware of a spill into the river.

Outreach was conducted to each community service district and California Native American Tribe with drinking water assets along the Klamath River. All of those that responded indicated that drinking water intakes existed along tributaries to the Klamath River and not within the main stem of the river. They indicated that they would not be impacted by a spill to the river. As a matter of courtesy, outreach to the community services districts and California Native American Tribes should be



conducted in the event of an oil spill to the Klamath River. Please see Table 4-2, Resources-At-Risk Matrix, Economic Resources, page 239 for contact information.

The State Water Resources Control Board (SWRCB), Division of Drinking Water, District 1 (Klamath) includes the GRP boundary for the Klamath River: There is a 24-hour Duty Officer available; they will receive notification of a spill/emergency from the Cal OES State Warning Center. In order to connect with the 24-hour duty officer, contact the Cal OES State Warning Center (800-855-7550) and ask for SWRCB - Division of Drinking Water Duty Officer. See Appendix G for Division of Drinking Water District Map with office phone numbers.

## **2.9 Public Health**

Local health agencies like Public Health, CUPAs and Environmental Health Departments are responsible for protecting public health and often coordinate with fire departments and health systems. County and city health officers have authority within their jurisdictions to take any preventive measures which may be necessary to protect and preserve public health. Public Health and Environmental Health Officers can provide assistance with assessing health impacts associated with an oil or hazardous materials release, contributing to key public health messaging, and coordinating with local air districts for community air monitoring. The local Public Health Officer has broad authority to take actions necessary to protect the public's health and may be a key partner in decisions around evacuation and restrictions against public access. For additional information on Public Health Officer authorities see:

<https://www.cdph.ca.gov/Programs/CCLHO/CDPH%20Document%20Library/HOResplnEmergencies1998.pdf>.

### **Community Air Monitoring**

Local agencies, including air districts, can provide valuable support to the local public health agencies during an oil spill, and be actively involved in situations where public and environmental health are threatened by an oil or hazardous materials release, particularly with respect to community air monitoring. For a directory of local air quality management and air pollution control districts, please see the California Air Resources Board website at:

<https://www.arb.ca.gov/capcoa/roster.htm>.

### **Water (Systems) Monitoring**

Public water systems with 200 service connections or less and small state systems with 5 to 14 connections may be overseen by local primacy agencies (e.g., water districts), or by the SWRCB Division of Drinking Water. The environmental health agency or local primacy agency may be a great resource for identifying Individual Water Systems, with less than 5 service connections, at risk from a particular release. A map of the County Local Primacy Agencies (LPAs) can be found here: [California LPA Counties](#), along with contacts for LPA Counties: [LPA Contact Information](#). See Section 2.8, Public Works, for more information on large, public water agencies and districts.

#### **2.9.1 Certified Unified Program Agencies**

Senate Bill 1082 (1993) required the Secretary of the California Environmental Protection Agency (CalEPA) to establish a “unified hazardous waste and hazardous materials

management" regulatory program (Unified Program). A local agency, such as a county or city, applies to CalEPA for certification as the Unified Program Agency, responsible for implementing the Unified Program within its jurisdiction. The Unified Program protects California's environment and public health from hazardous materials and hazardous waste by ensuring adherence to established regulatory standards throughout the state that are consolidated, coordinated, and consistent relative to the implementation and enforcement of environmental and release prevention programs. The Unified Program consolidates, coordinates, and makes consistent the following six existing programs:

- Hazardous Materials Release Response Plans and Inventories,
- California Accidental Release Prevention Program,
- Underground Storage Tank Program,
- Aboveground Petroleum Storage Act,
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs,
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

A list of CUPAs is maintained by CalEPA's Unified Program Section (see <https://cersapps.calepa.ca.gov/Public/Directory/>) through the Department of Toxic Substances Control. Table 2-3 below lists the CUPAs for Siskiyou, Humboldt, and Del Norte Counties (current as of 03/2025). CUPAs are typically fire departments or environmental health departments that may provide resources and liaison functions during oil and hazardous materials spills. Some CUPAs have emergency response capabilities with Health Officer authority.

**Table 2-4: Siskiyou, Humboldt and Del Norte County CUPAs**

Agency Name	Address	Phone Number
Siskiyou County Community Development	806 South Main Street Yreka, CA 96097	(530) 841-2100
Humboldt County Division of Environmental Health	100 H Street, Suite 100 Eureka, CA 95501	(707) 445-6215
Del Norte Environmental Health Division	981 H Street Crescent City, CA 95531	(707) 465-0426

## 2.9.2 Public Health Assessment Unit

A Public Health Assessment Unit (PHAU) in the Planning Section may be considered when an incident presents potential public health exposures of concern. PHAU is staffed by public health agencies with duties and authorities to ensure public health within their areas of responsibility. The Unit coordinates public health monitoring and sampling, interprets analytical data, and informs risk messaging to support public health decisions and the needs of interested parties. It provides a space for local and state health agencies to take the lead on public health exposure assessments to inform protective actions consistent with containment and cleanup requirements in coordination with the Federal On-Scene Coordinator (FOSC), as outlined in the National Contingency Plan (40 CFR 300.180(f)).

PHAU conducts exposure assessments for contaminants in air, water, sediment, food such as fish and shellfish, and/or other exposure routes associated with an oil or hazardous materials release. PHAU is comprised of local health agencies (Environmental Health Departments and/or CUPAs) working with local public health officers and air districts with the support of Sampling, Analysis, and Risk Assessment Technical Specialists from state and federal health agencies. These agencies include CalEPA boards, departments, and offices [e.g., Office of Environmental Health Hazard Assessment (OEHHA); California Air Resources Board; and SWRCB], the California Department of Public Health, and United States Environmental Protection Agency. A PHAU Coordinator Technical Specialist (typically from OSPR) provides administrative support and facilitates the flow of information among PHAU and the UC, Safety Officer, Joint Information Center, and Liaison Officer. PHAU's monitoring, sampling, and analytical work may be conducted by a response contractor working in coordination with the public health agencies.

PHAU establishment may be initiated by the FOSC or other UC representatives. Public health agencies and officials may also request formation of a PHAU by submitting a request to the UC through the Liaison Officer.

## **Fisheries Closures**

Fish and Game Code 5654 requires the Director of CDFW to close affected waters to the commercial, recreational, subsistence, and aquaculture take or harvest of all fish and shellfish within 24 hours of notification of an oil spill or discharge. As soon as practicable during an incident response with potentially impacted fisheries, the responding OSPR Environmental Scientist will notify the OSPR Fisheries Coordinator and provide the following information (as available):

- Location
- Product
- Volume
- Weather
- Known fisheries
- Known media interest
- Spill trajectory

The OSPR Fisheries Coordinator will work with OEHHA to determine whether a closure is warranted, and if so, the geographical boundaries of the closure [FGC §5654, 7715]. Per the Code, closure is not required if OEHHA finds, within 24 hours of the spill notification, that a public health threat does not or is not likely to exist. Once in place, closures may be reopened within 48 hours if OEHHA determines there is no longer a health threat. Closures lasting more than 48 hours require the Director of CDFW to order expedited sampling. OSPR and OEHHA, working together, will develop and execute a sampling and analysis plan. Once safety thresholds are met, CDFW will reopen closed fisheries.

## **2.10 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 downstream GRP response strategies, especially when concurrent response activities are not possible.
- How far downstream or out into the river environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?
- Will equipment or vehicles need to be staged on or near a roadway? If so, traffic control may be required. See Contact Sheet for California Highway Patrol, Caltrans and Statewide Traffic Safety & Signs contact information.

### **During Strategy Implementation (Things to Remember)**

- On-scene conditions (weather, river stage and flow, wind, 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 when data were gathered during field visits. Response managers and responders must remain flexible and modify the strategies provided in the next 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 deployment of oil containment boom or underflow dams is anticipated to be a component of response operations at all locations.

### **After Strategy Implementation (Things to Understand)**

- Oil containment boom and underflow dams should be maintained and periodically monitored to ensure their effectiveness. Changes in river stage and flow will likely require modifications to boom deflection angles (see Section 1 of the [GRP CM](#)). Depending on conditions, some booming strategies or underflow dams 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 UC.

## **2.11 Transitioning from Initial Response to a Unified Command**

Incidents usually occur without warning. The period of Initial Response and Assessment occurs in all incidents. Short-term responses, which are small in scope and/or duration (e.g., a few resources

working during one operational period), can often be coordinated using only an Incident Briefing Form (ICS 201).

During the transfer-of-command process from the initial IC to the next IC, or a more formal UC, an Incident Brief utilizing the ICS 201 provides an incoming IC/UC with basic information regarding the current incident situation and resources allotted to the response. Most importantly, the ICS 201 functions as the Incident Action Plan for the initial response, remains in force, and continues to be updated until the response ends or the Planning Section generates the incident's first comprehensive Incident Action Plan. It is also suitable for briefing individuals newly assigned to the Command and General Staff on incoming tactical resources, as well as needed assessment briefings for the Incident Management Team. Per the Oil Pollution Act of 1990, the UC consists of an FOOSC, State On-Scene Coordinator, and the RP.

## **2.12 Command Staff**

Command Staff report directly to the UC under the Incident Command System. Command Staff roles consist of the Public Information Officer (PIO), Liaison Officer (LOFR), and Safety Officer (SOFR). The Command Staff is assigned to carry out staff functions needed to support the Incident Commander. Command Staff positions are established to assign responsibility for key activities not specifically identified in the General Staff functional elements.

The PIO is responsible for the coordination and release of all information to the response workers, the media, and the public. In addition, the PIO is responsible for press releases and the scheduling of press conferences related to the incident. The PIO may also establish a Joint Information Center, which is a coordination with the media and other agencies, to facilitate the coordinated release of available information. For additional information on Command Staff, see Section 6 of the [GRP CM](#).

The LOFR is responsible for effectively engaging with California Native American Tribes, agencies, elected officials, and other interested parties in support of the incident. Forward-leaning, comprehensive LOFR efforts can help coordinate agency resources effectively and can impact public perception of the success or appropriateness of response activities. These factors are critical to overall response success. The LOFR works closely with the PIO, the Volunteer Unit Leader, and the PHAU Leader. For additional information on Command Staff, see Section 6 of the [GRP CM](#).

The SOFR is responsible for the safety of all responders associated with the response and compliance with applicable safety laws and regulations. Also, the SOFR is responsible for assessing hazardous and unsafe situations and developing measures for assuring personnel safety. This responsibility is limited to the boundaries of the response and does not extend to public safety measures not under the incident control and authority of the IC/UC. For additional information on Command Staff, see Section 6 of the [GRP CM](#).

## **2.13 Environmental Justice Considerations**

The LOFR, in coordination with the PIO, should also consider how to ensure appropriate engagement with disadvantaged or vulnerable community groups potentially impacted by the incident. This may

include translation services for materials and press conferences, outreach to key leaders within particular communities, and identifying effective communication pathways.

OEHHAs [CalEnviroScreen](#) is a tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. LOFRs are encouraged to use this tool to help identify at-risk communities, potential language barriers, public health considerations, and food security concerns, and coordinate with appropriate Incident Management Team staff [PIO, PHAU, SOFR, Natural Resource Damage Assessment (NRDA)] or other agencies to address these issues.

## **2.14 Volunteers**

Volunteers do not participate in the majority of oil spill responses in general. In cases when there has been no volunteer interest, the ICS structure may not contain any positions specifically dedicated to volunteer management. Volunteers are only utilized if there is a specific role for them to fill. As the IC/UC becomes aware of individuals or organizations interested in providing volunteer services, the IC/UC should activate a volunteer coordinator to address volunteer interest. Only volunteers approved by the IC/UC are allowed to participate in spill response activities. For additional information on volunteers, see Section 7 of the [GRP CM](#).

## **2.15 Natural Resource Damage Assessment**

The overall goals of the NRDA process are to restore the injured natural resources to pre-spill conditions and to obtain compensation for all documented losses. NRDA is conducted by state and federal trustees, often in cooperation with the responsible party, and is a separate process from the response. Assessment of injuries and damages resulting from spilled oil needs to begin as soon as possible following the initial release of the pollutant. This necessitates that NRDA activities be conducted simultaneously with response efforts. The LOFR will coordinate with the NRDA representative on NRDA resources and activities with the UC during spill response. Portions of the NRDA process should be integrated into the ICS to improve communication, expedite both response and NRDA activities, and make efficient use of personnel and equipment. To avoid potential conflicts in duties, it is recommended that members of the NRDA Team not have responsibilities for the spill cleanup or general response activities. For additional information on the NRDA Process, see [GRP CM](#) Section 8.

## **2.16 Mutual Aid**

California's emergency assistance is based on a statewide mutual aid system designed to ensure additional resources are provided to the state's political subdivisions whenever their own resources are overwhelmed or inadequate. The basis for this system is the California Disaster and Civil Defense Master Mutual Aid Agreement, which is entered into, by and among, the State of California, its various departments and agencies, and the various political subdivisions, municipal corporations, and public agencies to assist each other by providing resources during an emergency (Cal OES, 2017).

California has been divided into six mutual aid regions for coordination purposes. The purpose of a mutual aid region is to provide for the most effective application and coordination of mutual aid and other emergency related activities (Cal OES, 2017). Figure 6-1, Mutual Aid Regions, in Section 6 of the [GRP CM](#) illustrates the six mutual aid regions, which have the same boundaries as the Local Emergency Planning Committees.

Formal mutual aid requests follow specified procedures and are processed through pre-identified mutual aid coordinators. In the event of an oil spill, mutual aid requests should only be pursued at the direction of the UC. Mutual aid requests follow discipline-specific chains (i.e., fire, law enforcement, emergency manager) from one level of government to the next. The mutual aid coordinator receives the mutual aid request and coordinates the provision of resources from within the coordinator's geographic area of responsibility. In the event resources are unavailable at one level of government, the request is forwarded to the next higher level of government to be filled (Cal OES, 2017).

Details on Mutual Aid as outlined in the State of California State Emergency Plan, 2017, can be found in Section 9 of the [GRP CM](#).

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# Klamath River

## Geographic Response Plan

### Chapter 3 – Response Site Strategies

#### 3.0 Chapter Overview

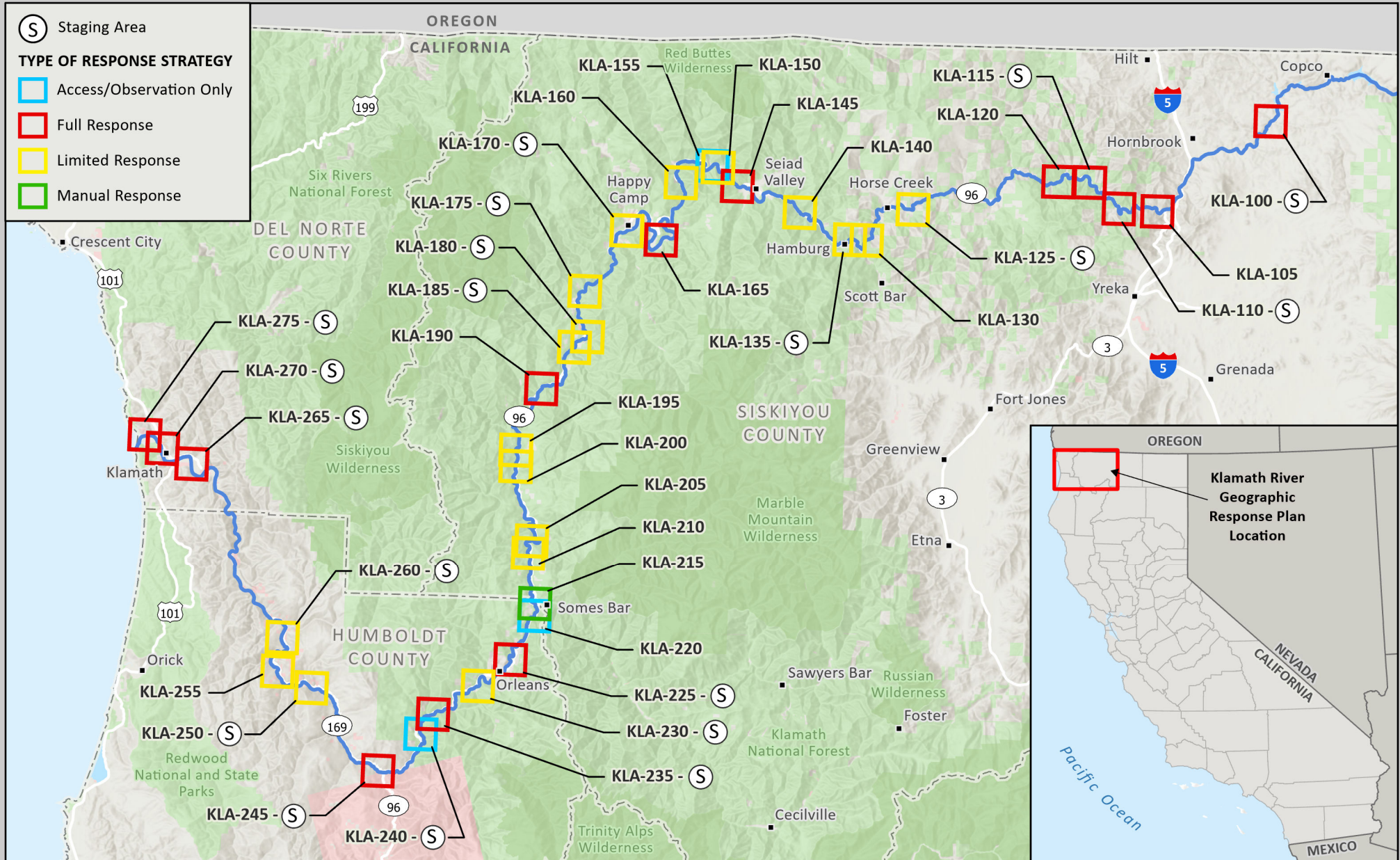
This section provides information on Geographic Response Plan (GRP) response strategies. First responders should prioritize the order in which strategies should be implemented based primarily on the release origin point and the nearest appropriate downstream access point for response operations, given the time required to mobilize and deploy response assets. These strategies are intended to be implemented immediately during the initial phase of incident response and may continue to be utilized as long as necessary at the discretion of the Incident Command/Unified Command. Unless circumstances unique to a particular spill situation dictate otherwise, the response strategy summary matrix in Section 3.4 should be used to decide the order in which GRP strategies are deployed. The downstream movement of oil and the time it takes to mobilize response resources to deploy GRP strategies must always be considered when setting implementation priorities. Area maps, operational division maps, and information on staging areas and boat launch locations are also provided in this chapter. Information on resources-at-risk and oiled wildlife can be found in Chapter 4 of this plan, and information on response methods and shoreline countermeasures can be found in Sections 1 and 2 of the [GRP Companion Manual](#).

#### 3.1 Response Strategy Map Index

The following map (Figure 3-1) provides an index of the response strategy locations for the Klamath River GRP. Each colored block (red, yellow, green or blue) represents the map area for the corresponding response strategy detail sheet. Detailed information for each strategy location can be found in the response strategy summary matrix in Section 3.4 and the response strategy detail sheets in Section 3.5. Operational division maps can also be found in Section 3.5 before each grouping of response strategy and access/observation detail sheets.

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Figure 3-1: Klamath River GRP Response Strategy Map Index

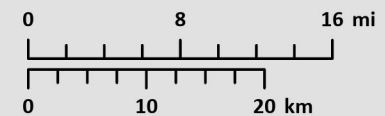


**Calif. Dept. of Fish and Wildlife**  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 04/22/2024

Map Scale: 1:640,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

## Klamath River Geographic Response Plan (GRP) Strategy Map Index

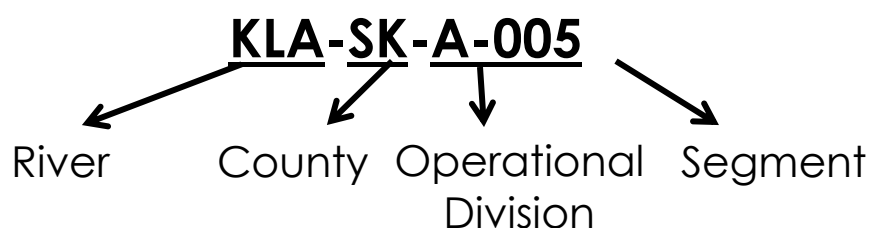


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### 3.2 Naming Conventions – Operational Division and Segments and Site Strategies

Operational divisions and segments are presented in this GRP to assist in rapid response planning by dividing the area of concern into smaller zones to provide for quicker operational planning, implementation, and monitoring for each area (operational division and/or segment). Operational divisions are subdivided into smaller segments that can be used for response work assignments including Shoreline Cleanup Assessment Technique (SCAT) and shoreline cleanup.

Each segment listed in this document has a unique identifier that includes three letters denoting the associated waterbody or area/GRP name (e.g., Cajon Pass = CAJ) and two letters denoting the county. The operational division consists of a single letter and the segment is a three-digit number starting with 005 and increasing in number by increments of 5. For rivers that border two counties, the county on the north or west side of the river, respectively, will be the denoted county. Operational divisions (and therefore segments) do not cross county lines.



**KLA = Klamath River**

**SK = Siskiyou**

**HM = Humboldt**

**DN = Del Norte**

**Operational Division = A, B, C, D, etc.**

**Segment = 005, 010, 015, etc.**

An existing segment may need modification during the course of conducting SCAT, or a new segment may need to be added; please consult with the SCAT Coordinator or Environmental Unit Leader who will determine the proper naming convention for new or modified segments.

Each Access/Observation or Response Site Strategy is uniquely identified by the waterbody three-letter code, followed by a three-digit number starting with 005 (e.g., KLA-005) and increasing in number by increments of 5 (e.g., 005, 010, 015). The unique identifier for each Access/Observation or Response Site Strategy is found in the top header of each strategy sheet and corresponds to the locations on the Index Map, Division Maps, and Response Strategy Summary Matrix.

The site strategy numbering is independent of the segment numbering.

### 3.3 General Response Priorities

The following list provides considerations for prioritizing response activities and the implementation of GRP strategies after an oil spill into the Klamath River:


- Safety is always the number one priority. Do not implement GRP strategies or take actions that will unduly jeopardize public, worker, or personal safety.
- Make appropriate notifications.
- Control and contain the source of the spill; mobilize resources to the spill location. Source control and containment are always a higher priority than the implementation of GRP strategies.
- Determine the order in which GRP strategies should be implemented based on the location of the spill or affected area and the downstream trajectory of the oil based on surface water velocity.
- Generally, GRP strategies should be simultaneously deployed closer to the spill and downstream, well beyond the furthest extent of the spill, and then continued upstream towards the spill source.
- As response resources become increasingly available, implement the GRP strategies more broadly. As the response proceeds under an organized command structure, GRP strategies and priorities may be modified based on incident-specific conditions.

### 3.4 Response Strategy Summary Matrix

Table 3-1 lists the response strategy and access/observation sites for the Klamath River GRP from upstream to downstream. Each site is color coded to represent response sites with full response capability, limited response capability, and manual response capability. Access/observation sites are color coded in blue and staging areas are denoted with the letter “S” inside of a circle. Each response strategy and access/observation site has a unique identifier as detailed in Section 3.2 above.





Table 3-1: Response Strategy Summary Matrix

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-100</a> <div>S</div>	<b>Iron Gate Fish Hatchery</b> 8636 Lakeview Road Hornbrook, CA 96044	41.9311, -122.4423	Deflection boom and product collection. Protect shoreline at collection area.	500 feet swift water boom, 1,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Deploy 350 feet of swiftwater boom from river-left shoreline to collection point on river-right shoreline. Deploy additional 150 feet of boom for shoreline protection at collection point.	Unimproved dirt boat launch. Stage equipment and wastes at Iron Gate Fish Hatchery.	Seasonal swift water hazard. Potential toxic algal blooms in summer. Iron Gate Fish Hatchery is located above river-left shoreline.	CORP MP 390.94	<a href="#">49</a>	<a href="#">51</a>
<a href="#">KLA-105</a>	<b>Ash Creek River Access</b>	41.82891, -122.60484	Deflection boom with product collection and shoreline protection.	500 feet swift water boom, 1,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 300 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved boat launch for rafts and kayaks exists at the response site location. Stage equipment and manage wastes in open area above boat launch. <div></div>	Seasonal swift water hazard. Potential toxic algal blooms in summer. Approach river access from Eastbound Hwy 96.	Hwy 96 SIS 102.58	<a href="#">49</a>	<a href="#">55</a>
<a href="#">KLA-110</a> <div>S</div>	<b>Tree of Heaven Campground</b>	41.83091, -122.66113	Deflection boom with product collection and shoreline protection.	650 feet swift water boom, 1,300 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Small boat launch for rafts, kayaks, or shallow draft vessels located at small public campground with basic amenities. Stage equipment and manage wastes in parking lot of campground.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 99.00	<a href="#">49</a>	<a href="#">59</a>






Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-130</a>	Blue Heron River Access	41.78750, -123.02958	Deflection boom with product collection and shoreline protection.	600 feet swift water boom, 1,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved dirt boat launch located on-site. Stage equipment and manage wastes in dirt parking area near boat launch.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 72.17	<a href="#">67</a>	<a href="#">77</a>
<a href="#">KLA-135</a>  <div>S</div>	Sarah Toffen Campground	41.78804, -123.05320	Deflection boom with product collection and shoreline protection.	600 feet swift water boom, 1,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved dirt boat launch is located at river's edge. Campground has water and restroom on site. Stage equipment and manage wastes in campground parking area.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 70.00	<a href="#">67</a>	<a href="#">81</a>
<a href="#">KLA-140</a>	Rocky Point River Access	41.81598, -123.12740	Deflection boom with product collection and shoreline protection.	650 feet swift water boom, 1,300 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved sandy boat launch is located at river's edge. Stage equipment and manage wastes in large dirt parking area on-site. 	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 64.46	<a href="#">67</a>	<a href="#">85</a>


Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-145</a>	Sluice Box River Access	41.84246, -123.22015	Deflection boom with product collection and shoreline protection.	550 feet swift water boom, 1,100 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 350 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved sandy boat launch is located at river's edge. Stage equipment and manage wastes in large dirt parking area on-site. 	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 59.00	<a href="#">89</a>	<a href="#">91</a>
<a href="#">KLA-150</a>	Portugese Creek River Access	41.86248, -123.24914	Deflection boom with product collection and shoreline protection.	700 feet swift water boom, 1,400 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 500 feet of swiftwater boom toward eddy at boat launch. Consider hi-line rigging for boom deployment. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Unimproved gravel boat launch is located at river's edge. There is a steep drop off at the launch site. Stage equipment and manage wastes in large dirt parking area on-site.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 56.68	<a href="#">89</a>	<a href="#">95</a>

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-155</a>	Fort Goff Campground	41.864997, -123.25769	Access/ Observation Only	N/A	N/A	Access to river by narrow footpath within campground.	This is a USDA Forest Service Campground with a small, paved parking lot that fits roughly 6 standard size vehicles. 1 vault toilet. Campground has 5 walk in campsites with picnic benches and fire pits. No running water. Payphone at parking lot owned by Siskiyou Telephone Company.	Slips/trips/falls hazard associated with trail down to river. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 56.00	<a href="#">99</a>	<a href="#">101</a>
<a href="#">KLA-160</a>	Seattle Creek River Access	41.84430, -123.30241	Deflection boom with product collection and shoreline protection.	600 feet swift water boom, 1,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Nothing larger than a 70-bbl vacuum truck recommended. There is limited parking area available. May need to stage equipment in turnouts along Hwy 96, or back up river at the Portuguese Creek River Access. Consult Caltrans and USDA Forest Service regarding additional staging locations.	Narrow access road with sharp turns leads to river access point. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 51.00	<a href="#">99</a>	<a href="#">103</a>

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
KLA-165	Gordon's Ferry River Access	41.78078, -123.32871	Deflection boom with product collection and shoreline protection.	1,100 feet swift water boom, 2,200 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above boat launch and deploy 900 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Recommend nothing larger than 70 bbl vacuum truck. Unimproved gravel boat launch located on-site. There is limited parking and space for staging equipment near the boat launch. Crews may need to stage equipment at turnouts along Gordon's Ferry Road or along Hwy 96 closer to Happy Camp.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 44.25	99	107
KLA-170	Indian Creek River Access	41.78986, -123.37937	Deflection boom with product collection and shoreline protection. Swift river velocity may impact efficacy of oil collection operations.	800 ft swift water boom, 1,600 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above confluence with Indian Creek and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Stage equipment and manage wastes in large parking area above boat launch.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 41.00	99	111



Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<div>KLA-185</div> <div>S</div>	Independence River Access	41.65993, -123.44988	Deflection boom with product collection and shoreline protection.	800 feet swift water boom, 2,500 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above the bridge and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection	There is an unimproved gravel boat launch at the edge of the river. Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch. Additional staging area available at the Independence Rest Area located along Hwy 96 just upstream of the bridge.	There is a shallow sandbar located about 10 feet off the shoreline at the unimproved boat launch. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 28.45	<a href="#">115</a>	<a href="#">125</a>
<div>KLA-190</div>	Coon Creek River Access	41.61338, -123.49551	Deflection boom with product collection and shoreline protection.	850 ft swift water boom, 2,500 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-left shoreline above the boat launch site and deploy 650 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	There is an unimproved gravel boat launch at the edge of the river. Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch. <div>  </div>	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 23.77	<a href="#">115</a>	<a href="#">129</a>

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-195</a>	Persido Bar River Access	41.54500, -123.52969	Deflection boom with product collection and shoreline protection.	1,100 feet swift water boom, 3,000 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above the boat launch site and deploy 900 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	There is an unimproved gravel boat launch at the edge of the river. Need 4WD to launch due to loose unconsolidated sandy put-in point. Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch. There may be an additional staging area along Hwy 96 near river access point.	Need 4WD vehicle to launch raft or kayak due to loose unconsolidated sandy launch site. Rapids begin about 300 yards downstream of launch site. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 13.46	<a href="#">133</a>	<a href="#">135</a>
<a href="#">KLA-200</a>	Ti Bar River Access	41.52716, -123.52869	Deflection boom with product collection and shoreline protection.	800 feet swift water boom, 2,500 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above the boat launch site and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	There is an unimproved gravel boat launch at the edge of the river. You cannot drive to the river's edge. Kayaks or inflatable rafts recommended. Boat launch is across from the restroom. Stage equipment and manage wastes at parking area above the unimproved boat launch. 	Responders cannot drive to the river's edge. Raft or kayaks recommended. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 12.09	<a href="#">133</a>	<a href="#">139</a>





Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-205</a>	<b>Stuarts Bar River Access</b>	41.44627, -123.50181	Deflection boom with product collection and shoreline protection.	600 feet swift water boom, 2,000 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above the boat launch site and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	There is an unimproved cobble boat launch at the river's edge. Rafts or kayaks recommended. Stage equipment and manage wastes at parking area above the unimproved boat launch.	Steep winding dirt access road leads to an unimproved cobble boat launch at the edge of the river. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 4.89	<a href="#">143</a>	<a href="#">145</a>
<a href="#">KLA-210</a>	<b>Green Riffle River Access</b>	41.43300, -123.50658	Deflection boom with product collection and shoreline protection.	650 feet swift water boom, 2,000 feet sorbent boom	Kayaks, rafts, or shallow draft vessels recommended.	Start from river-right shoreline above the boat launch site and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.	Steep winding dirt access road leads to an unimproved cobble and sand boat launch site at the edge of the river. There is soft unconsolidated sand near the launch site. Recommend use of 4WD vehicles near the river. There is an unimproved cobble boat launch at the river's edge. Rafts or kayaks recommended. Stage equipment and manage wastes at parking area above the unimproved boat launch.	THIS IS THE LAST TAKE OUT POINT ABOVE ISHI PISHI FALL (CLASS 6). Recommend use of 4WD vehicles near the river. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 SIS 4.57	<a href="#">143</a>	<a href="#">149</a>



Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<a href="#">KLA-215</a>	Ishi Pishi River Access	41.437709, -123.49377	Manual shoreline collection and cleanup. In low flow conditions, deflection boom with product collection and shoreline protection may be feasible.	1,000 feet sorbent boom, consider 1,200 feet swift water boom if conditions allow.	Hand launch possible for small vessel, kayaks, rafts.	Manually cleanup shoreline accessible from this location. Line shoreline with sorbent boom and use pads for collection. In low summer flows it may also be possible to use swift water boom to create a collection pocket. Start from river left shoreline above site and deploy 1000 feet of swift water boom toward river right shoreline. Collect product with sorbent materials. Consider additional 200 feet of swift water boom for shoreline protection at collection site.	Narrow gravel road accessible by work trucks, restricted turn around and parking at bottom. No amenities. Small parking area can provide staging area for equipment and waste management. Salmon River Outpost nearby provides groceries and supplies.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	N/A	<a href="#">153</a>	<a href="#">155</a>
<a href="#">KLA-220</a>	Ikes Falls River Access	41.36395, -123.49351	Access/ Observation Only	N/A	N/A	Gradient of the river here is medium-high during summer flows and there is no opportunity to respond here.	The access road is narrow and steep but should provide access to most vehicles. Limited parking and tight turnaround at bottom, high clearance vehicle recommended.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 HUM 43.66	<a href="#">153</a>	<a href="#">159</a>
<a href="#">KLA-225</a>	Dolans Bar River Access	41.318521, -123.526003	Deflection boom with product collection and shoreline protection.	1,100 feet swift water boom, 2,200 feet sorbent boom	Unimproved launch site on gravel bar for small vessels.	Deploy up to 900 feet of swift water boom from river right to collection area on river left. Consider adding 200 feet of swift water boom for shoreline protection at collection site. Collect floating product with sorbents or skimmer if feasible.	Stage equipment and manage wastes away from river on gravel bar. Public outhouse at site.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 HUM 39.89	<a href="#">153</a>	<a href="#">161</a>



Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<div>KLA-230</div> <div>S</div>	Ullathorne River Access	41.28780, -123.57096	Deflection boom with product collection and shoreline protection.	1,200 feet swift water boom, 2,400 feet sorbent boom	No improved launch facility nearby but hand launch of small vessels is feasible, shallow draft vessel recommended.	Deploy up to 1000 feet of swift water boom from RL to a collection pocket near the launch site on RR. Consider additional 200 feet of swift water boom for shoreline protection. Collect floating product with sorbents for disposal.	Area above response site or highway shoulder are large enough to provide small staging area and waste management area but there are no improvements at site. <div></div>	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 HUM 36.35	<a href="#">153</a>	<a href="#">165</a>
<div>KLA-235</div> <div>S</div>	Big Bar River Access	41.25154, -123.63506	Deflection boom with product collection and shoreline protection.	700 feet swift water boom, 1,400 feet sorbent boom	Unimproved launch site on gravel bar for small vessels.	Start from river-left shoreline above gravel bar and deploy up to 500 feet of swift water boom toward eddy on river right. Collect product with sorbents or skimmer and pump directly to vacuum truck or tanks on shore if feasible. Consider additional 200 feet of boom for shoreline protection.	Stage equipment and manage wastes away from river on highway shoulder or access road above gravel bar. <div></div>	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 HUM 30.25	<a href="#">169</a>	<a href="#">171</a>
<div>KLA-240</div> <div>S</div>	Aikens Creek Recreation Area	41.229962, -123.652989	Access/ Observation Only	N/A	N/A	Gradient of the river here is medium-high during summer flows and there is no opportunity to respond here.	This site is managed by the Six Rivers National Forest and features an unimproved campground and large parking area off the highway that could serve as a local staging area.	The river is approximately 110 yards from the end of the road but there is 4WD and foot access to the gravel bar in low flow conditions. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 96 HUM 28.23	<a href="#">169</a>	<a href="#">175</a>

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
KLA-245 	Weitchpec	41.187520, -123.71255	Deflection boom with product collection and shoreline protection.	700 feet swift water boom, 1,400 feet sorbent boom	Unimproved launch site on gravel bar for small vessels.	Start from RL shoreline below confluence and deploy up to 500 feet of swift water boom toward eddy along river bar on RR. Collect product with skimmer and pump directly to vacuum truck or tanks on shore or use sorbents. Deploy additional 200 feet of boom for shoreline protection at collection site.	Stage equipment and manage wastes away from river on gravel bar.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 169 HUM 33.7	<a href="#">169</a>	<a href="#">177</a>
KLA-250 	Youngs Bar	41.27523, -123.81352	Deflection boom with product collection and shoreline protection.	1,200 feet swift water boom, 2,400 feet sorbent boom	No improved launch facility nearby but small motorized vessels can be launched on site from gravel bar	Deploy up to 1,000 feet swift water boom from RL to a collection pocket on RR at gravel bar. Consider adding 200 feet swift water boom for shoreline protection at collection site. Collect floating product with sorbents for disposal, or skimmer if conditions allow.	Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 169 HUM 23.17	<a href="#">181</a>	<a href="#">183</a>
KLA-255	Notcho	41.29235, -123.86317	Deflection boom with product collection and shoreline protection.	1,050 feet swift water boom, 2,100 feet sorbent boom	No improved launch facility nearby but small vessels can be launched on site from gravel bar	Deploy up to 850 feet swift water boom from RL to a collection pocket on RR. Consider adding 200 feet additional boom for shoreline protection at collection site. Collect floating product with sorbents for disposal. Deploy cascading sections of boom if needed (400-600 ft).	Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep.	Collection may be difficult due to steep bank. Exercise caution for foot access. Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 169 HUM 19.8	<a href="#">181</a>	<a href="#">187</a>

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<div>KLA-260</div> <div>S</div>	Sregon	41.32929, -123.85863	Deflection boom with product collection and shoreline protection.	1,450 feet swift water boom, 2,900 feet sorbent boom	No improved launch facility nearby but small vessels can be launched on site from gravel bar.	Deploy up to 1250 feet swift water boom from RL to a collection pocket on RR. Consider adding 200 feet additional boom for shoreline protection at collection site. Collect floating product with sorbents for disposal. Deploy cascading sections of boom if needed (400-600 ft).	Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	Hwy 169 HUM 15.51	<a href="#">181</a>	<a href="#">191</a>
<div>KLA-265</div> <div>S</div>	Roy Rook Launch Facility	41.51590, -124.00050	Deflection boom with product collection and shoreline protection.	1,700 feet swift water boom, 3,400 feet sorbent boom	This site features an improved boat launch and seasonal dock managed by Del Norte County.	Deploy up to 1500 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 ft). Recover oil with skimmer and sorbents. On water skimming may be possible.	Parking area at boat launch is large enough to serve as staging and waste management areas but there are no amenities. Coordinate response here with Yurok Tribe and Del Norte County Parks & Recreation.	Seasonal swift water hazard. Potential toxic algal blooms in summer.	N/A	<a href="#">195</a>	<a href="#">197</a>





Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
<div>KLA-270</div> <div>S</div>	County Boat Ramp	41.54530, -124.07100	Deflection boom with product collection and shoreline protection.	2,150 feet swift water boom, 4,300 feet sorbent boom	This site features an improved boat launch managed by Del Norte County.	Deploy up to 1950 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 ft). Recover oil with skimmer and sorbents. On water skimming may be possible. Tidal area, recovery may be most effective on ebb.	Parking area at boat launch is large enough to serve as staging and waste management areas but there are no amenities. Coordinate response here with Yurok Tribe and Del Norte County Parks & Recreation. 	Seasonal swift water hazard. Potential toxic algal blooms in summer.	N/A	<a href="#">195</a>	<a href="#">201</a>
<div>KLA-275</div> <div>S</div>	Requa Boat Ramp	41.54539, -124.07095	Deflection boom with product collection and shoreline protection.	3,800 feet swift water boom, 7,600 feet sorbent boom	This site features an improved boat launch and seasonal dock.	Deploy up to 3600 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 feet). Recover oil with skimmer and sorbents. On water skimming may be possible. Tidal area, recovery may be most effective on ebb.	Parking area at boat launch is large enough to serve as staging and waste management areas. Seasonal dock, campground, and rest rooms on site. Coordinate response here with Yurok Tribe. 	Seasonal swift water hazard. Potential toxic algal blooms in summer.	N/A	<a href="#">195</a>	<a href="#">205</a>

Table Legend
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RED	Full Response	Access to site for large equipment and full deployment
YELLOW	Limited Response	Access to site may be limited; have to cross railroad tracks, etc., may not get large equipment to site.
GREEN	Manual Response	Sorbent boom clean-up; slow, backwater areas.
BLUE	Access/ Observation	Site provides access to the shoreline edge of waterbody as an observation site. May provide location for SCAT Teams or NRDA to deploy and survey for oil.
	Staging Areas	Sites that can accommodate staging are denoted by the S inside a circle.
	Boat Launch	Sites with a developed boat launch.

### 3.5 Response Strategy Detail Sheets

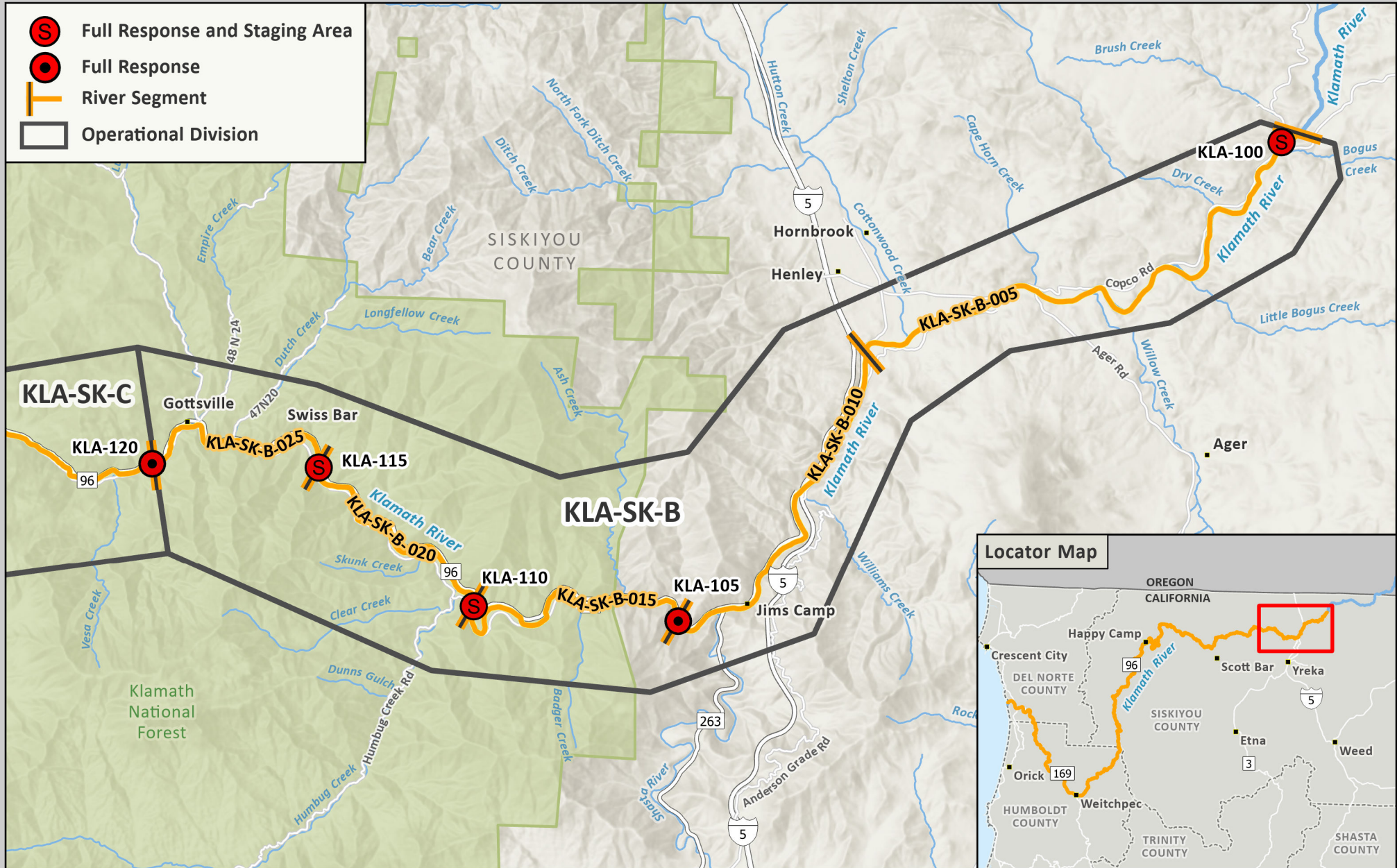
Section 3.5 contains the color-coded full response strategy (red), limited response strategy (yellow), manual response strategy (green) and access/observation site (blue) detail sheets with corresponding unique identifier and site name listed in the header. Before each grouping of detail sheets, the operational division map will show the location of each site and any staging areas. Description of color coding and response strategy type are listed below:

<b>RED</b>	<b>Full Response</b>	Access to site for large equipment and full deployment.
<b>YELLOW</b>	<b>Limited Response</b>	Access to site may be limited; have to cross railroad tracks, etc., may not get large equipment to site.
<b>GREEN</b>	<b>Manual Response</b>	Sorbent boom clean-up; slow, backwater areas.
<b>BLUE</b>	<b>Access/ Observation</b>	Site provides access to the shoreline or edge of waterbody and/or provides an observation site. Observation site may not be at the water's edge. Both may provide locations for SCAT teams or Natural Resources Damage Assessment to deploy/survey for oil.

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Figure 3-2: Klamath River GRP Division KLA-SK-B Map

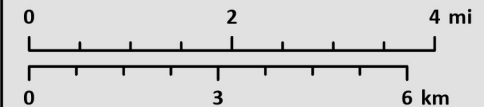


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:120,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

## Klamath River Geographic Response Plan Division KLA-SK-B

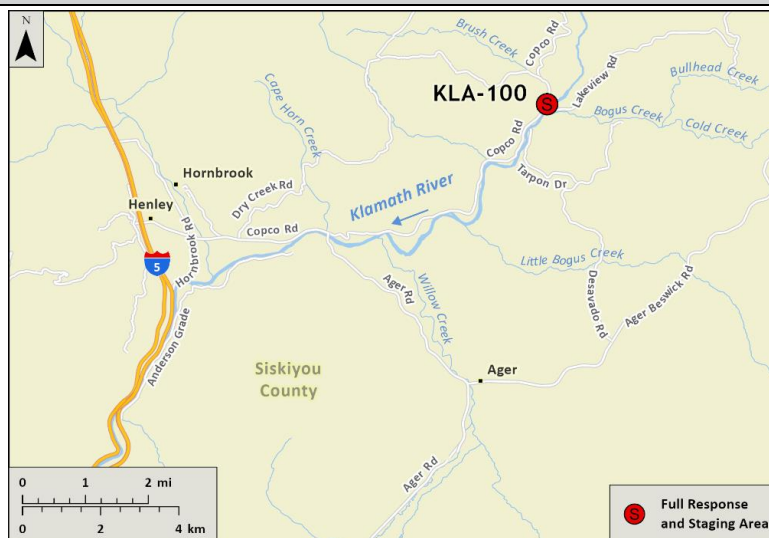


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<b>Driving Directions:</b>	<p>From North: Take I-5 South, take Exit 789 toward Henley Hornbrook off-ramp. Turn left onto Copco Road and head east for approximately 8 miles.</p> <p>From South: Take I-5 North, take Exit 789 toward Henley Hornbrook off-ramp. Turn right onto Copco Road and head east for approximately 8 miles.</p> <p>Response site located immediately downstream of the Lakeview Road bridge on the north side of the Klamath River.</p>		
<b>Latitude/Longitude:</b> 41.9311, -122.4423	<b>Highway Postmile:</b> N/A	<b>Railroad Milepost:</b> CORP MP 390.94 is located approximately 5.6 miles downstream of hatchery.	<b>Cell Service:</b> No - Verizon Tested

**Nearest Address:** 8636 Lakeview Road, Hornbrook, CA 96044

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://cnrfc.noaa.gov/hydrology/river-guidance-graphical-rvf-irgc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)
- Wild horses utilize roadway and can pose a hazard to vehicles and responders.

**NOTE: Removal of Iron Gate Dam was completed in September 2024. Access is limited by chain link fences/construction.**

### Resources-At-Risk

**Ecological:** Pacific Lamprey, Coho Salmon, Chinook Salmon, Klamath Largescale Sucker, Klamath River Lamprey, Lost River Sucker, Lower Klamath Marbled Sculpin, Western Pond Turtle

**Economic:** Iron Gate Fish Hatchery, fishing guide services

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-B-005	<b>Site Description and Field Notes:</b> Iron Gate Fish Hatchery is permanently closed but still allows responders access to the river for on water recovery. Removal of the Iron Gate Dam may have changed the strategy for this location.			
<b>Gradient:</b> Low to medium	<b>River Width:</b> 32.91 m (108 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located at response site.
<b>Site Contact/s:</b>	Fall Creek Fish Hatchery CDFW, Region 1 Redding Office (530) 225-2300		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Exposed rocky cliffs with boulder talus base (1C), vegetated steeply sloping bluffs (8F).			

## Site Images

Upstream, photo date 3/19/2025



Downstream, photo date 7/18/2019



Straight Across, photo date 7/18/2019



Previous Iron Gate Dam location, 3/19/2025



RR = River Right RL = River Left

Photo Date: See Above

**Site Objectives:** Deflection boom and product collection. Protect shoreline at collection area.

**Implementation:** Deploy 350 feet of swiftwater boom from river-left shoreline to collection point on river-right shoreline. Deploy additional 150 feet of boom for shoreline protection at collection point.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and wastes at Iron Gate Fish Hatchery.

### Response Strategy Map (overview)



### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	500	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

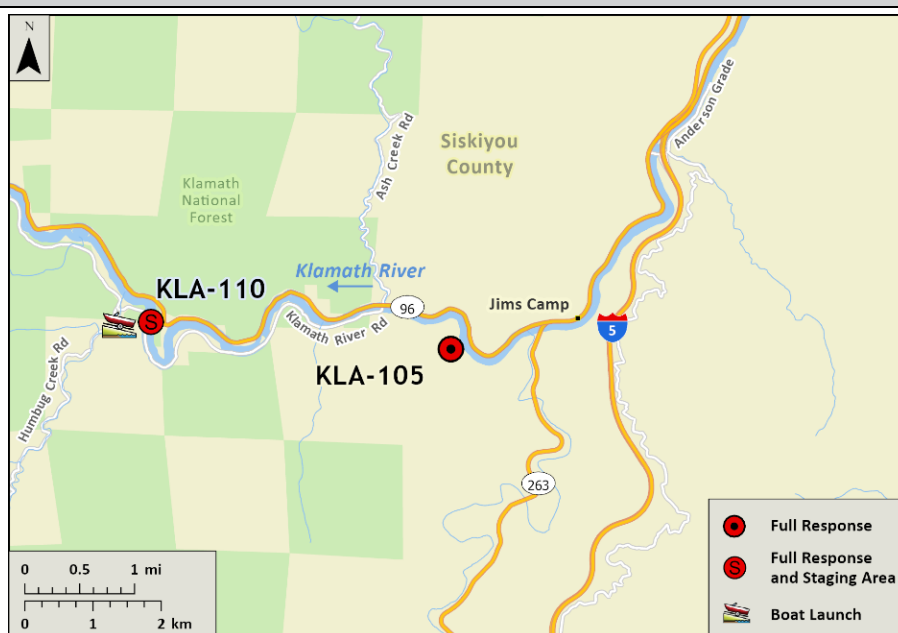
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Driving Directions:	From North: Take I-5 South, take Exit 786 and turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. Continue 0.4 miles west after crossing over Ash Creek and turn left onto dirt access path leading to unimproved boat launch at the river.		
	From South: Take I-5 North, take Exit 786 and merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 0.4 miles west and turn left onto dirt access path leading to unimproved boat launch at the river.		
Latitude/Longitude 41.82891, -122.60484	Highway Postmile: N/A	Railroad Milepost: N/A	Cell Service: No - Verizon Tested

**Nearest Address:** N/A

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance-graphical-rvf-irgc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism.

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-B-015	<b>Site Description and Field Notes:</b> The entrance to this location is a short dirt road to a small turnaround. The ramp to the river is sand and not designed for trailers and RV's. There is limited parking and no facilities. Elevation is at 2300 ft.			
<b>Gradient:</b> Low (summer flow)	<b>River Width:</b> 29.26 m (96 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Fishing, rafting, kayaking, water contact	<b>Boat Launches:</b> Unimproved boat launch for rafts and kayaks exists at the response site location.
<b>Site Contact/s:</b>	Bureau of Land Management Redding Field Office (530) 224-2100 M-F 8 to 5 (530) 941-1741 After Hours		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping banks (8F); Vegetated low banks (9B).			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 8/1/2019

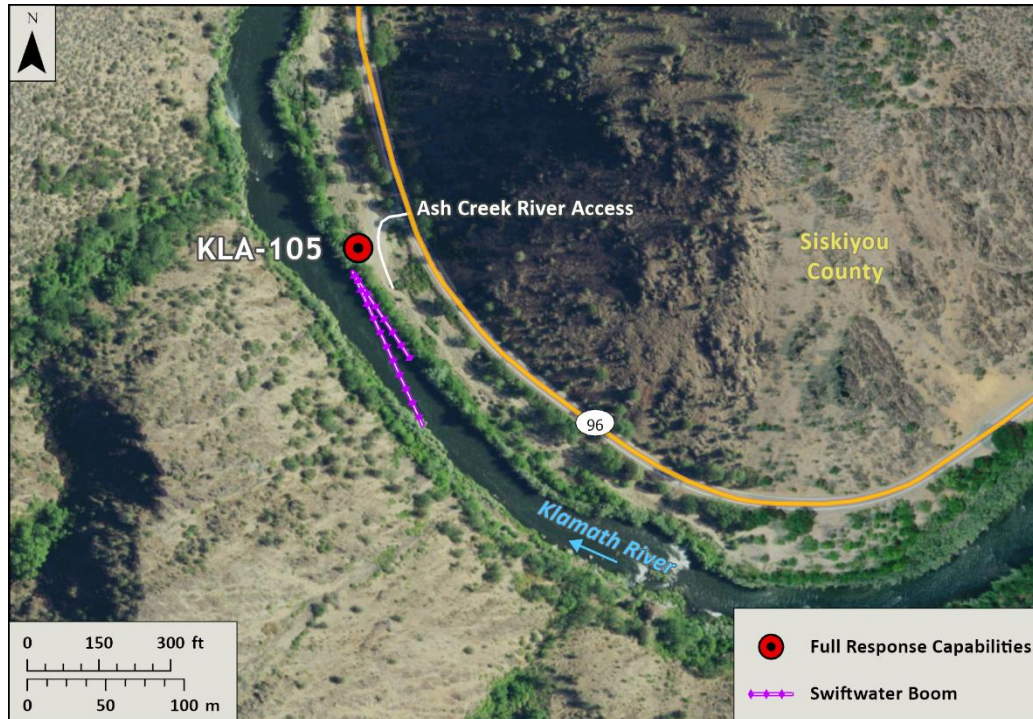


**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 300 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in open area above boat launch.

### Response Strategy Map (overview)



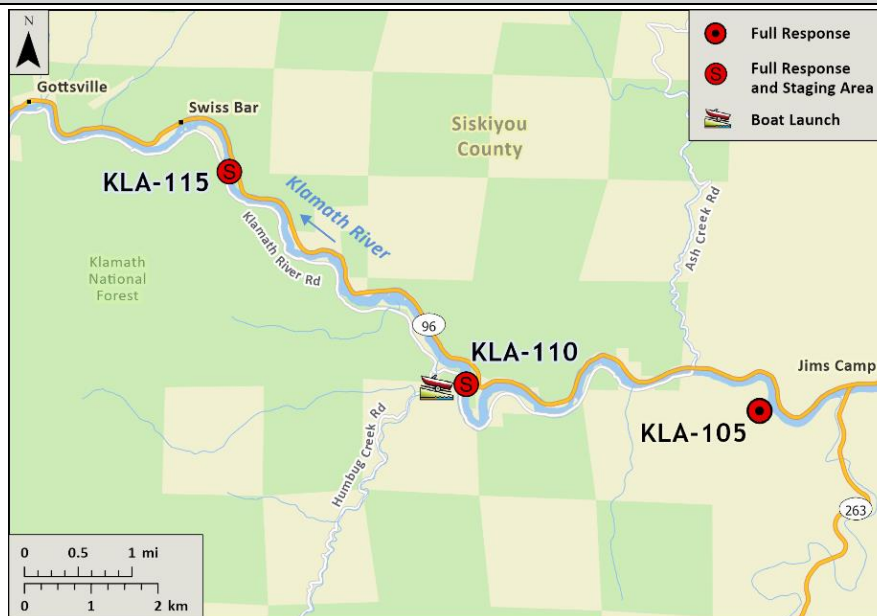
### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	500	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. Continue 2.5 miles west after crossing over Ash Creek and turn left into Tree of Heaven Campground.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 2.5 miles west and turn left into Tree of Heaven Campground.		
<b>Latitude/Longitude:</b> 41.83091, -122.66113	<b>Highway Postmile:</b> Hwy 96 SIS 99.00	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> Salmon River and Scott River Ranger Districts, Yreka, CA 96097			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-irgc1).
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-B-020	<b>Site Description and Field Notes:</b> This is a popular location for recreators for its shady and grassy campsites. Drinking water and vault bathrooms available on site. There is a concrete ramp to the river in this location. Elevation is at 2100 ft.			
<b>Gradient:</b> Low (summer flow)	<b>River Width:</b> 45.72 m (150 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Small boat launch located at campground. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping banks (8F); Vegetated low banks (9B).			

## Site Images

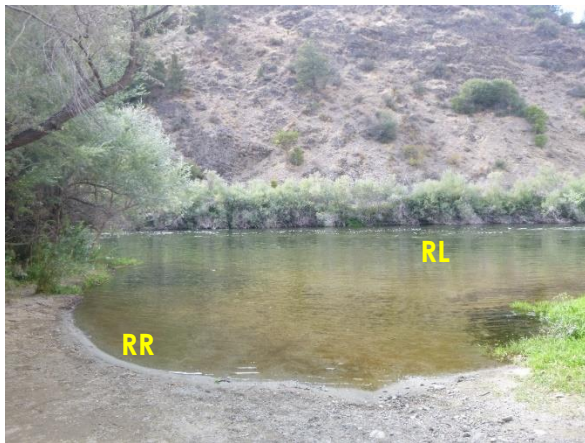
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

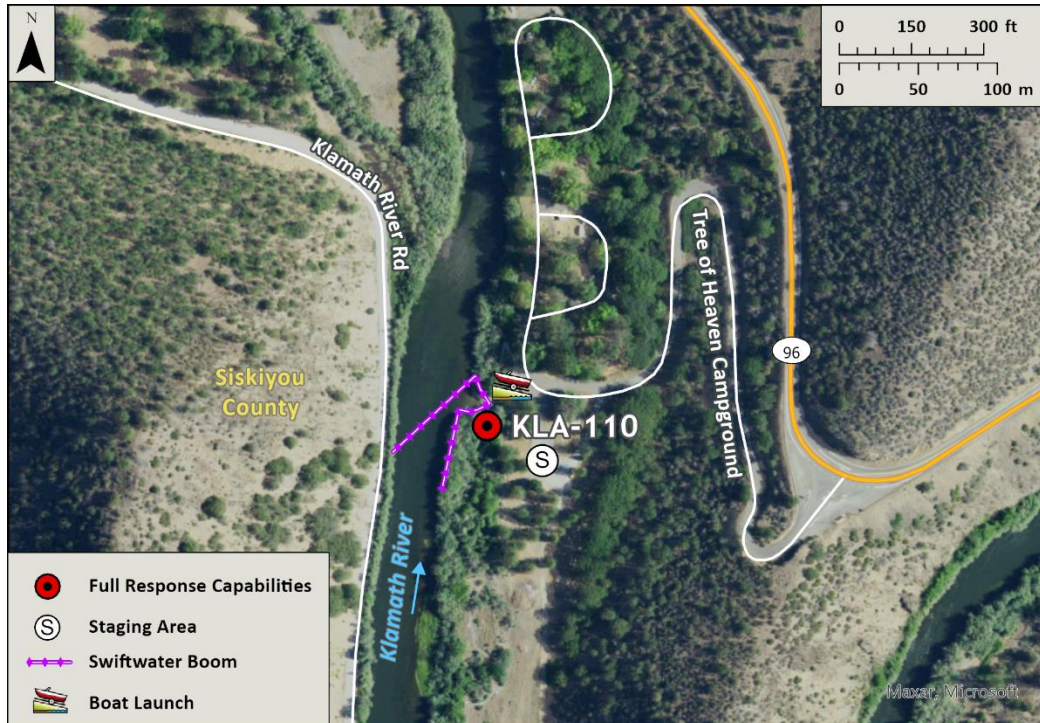


**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in parking lot of campgrounds.

**Response Strategy Map (overview)**



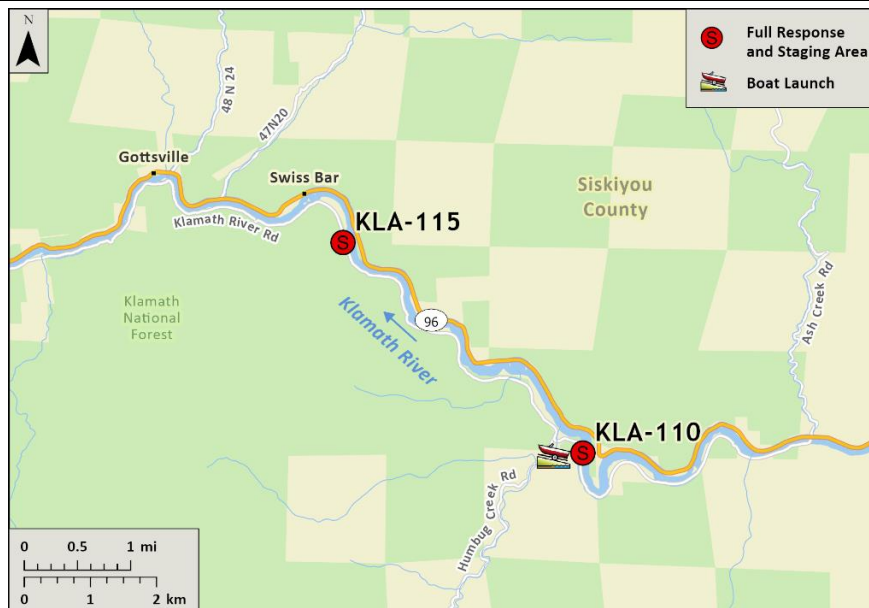
**Table of Response Resources**

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	650	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,300	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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<b>Driving Directions:</b>	<p>From North: Take I-5 South then take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. Continue 6 miles west after crossing over Ash Creek and turn left into dirt road leading to boat launch near river.</p> <p>From South: Take I-5 North then take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 6 miles west and turn left into dirt road leading to boat launch near river.</p>		
<b>Latitude/Longitude:</b> 41.85861, -122.70483	<b>Highway Postmile:</b> Hwy 96 SIS 95.52	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> Oak Knoll Ranger District, Yreka, CA 96097			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-irgc1).
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-B-025	<b>Site Description and Field Notes:</b> This wooded area has a gravel road that leads to the river's edge. It has picnic tables and dispersed campsites. No restrooms or potable water on site. Elevation is at 2000 ft.			
<b>Gradient:</b> Low (summer flow)	<b>River Width:</b> 42.98 m (141 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Small unimproved dirt boat launch located near river. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping bluffs (8F); Vegetated low banks (9B).			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 11/25/2019



**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in dirt parking area near boat launch.

**Response Strategy Map (overview)**

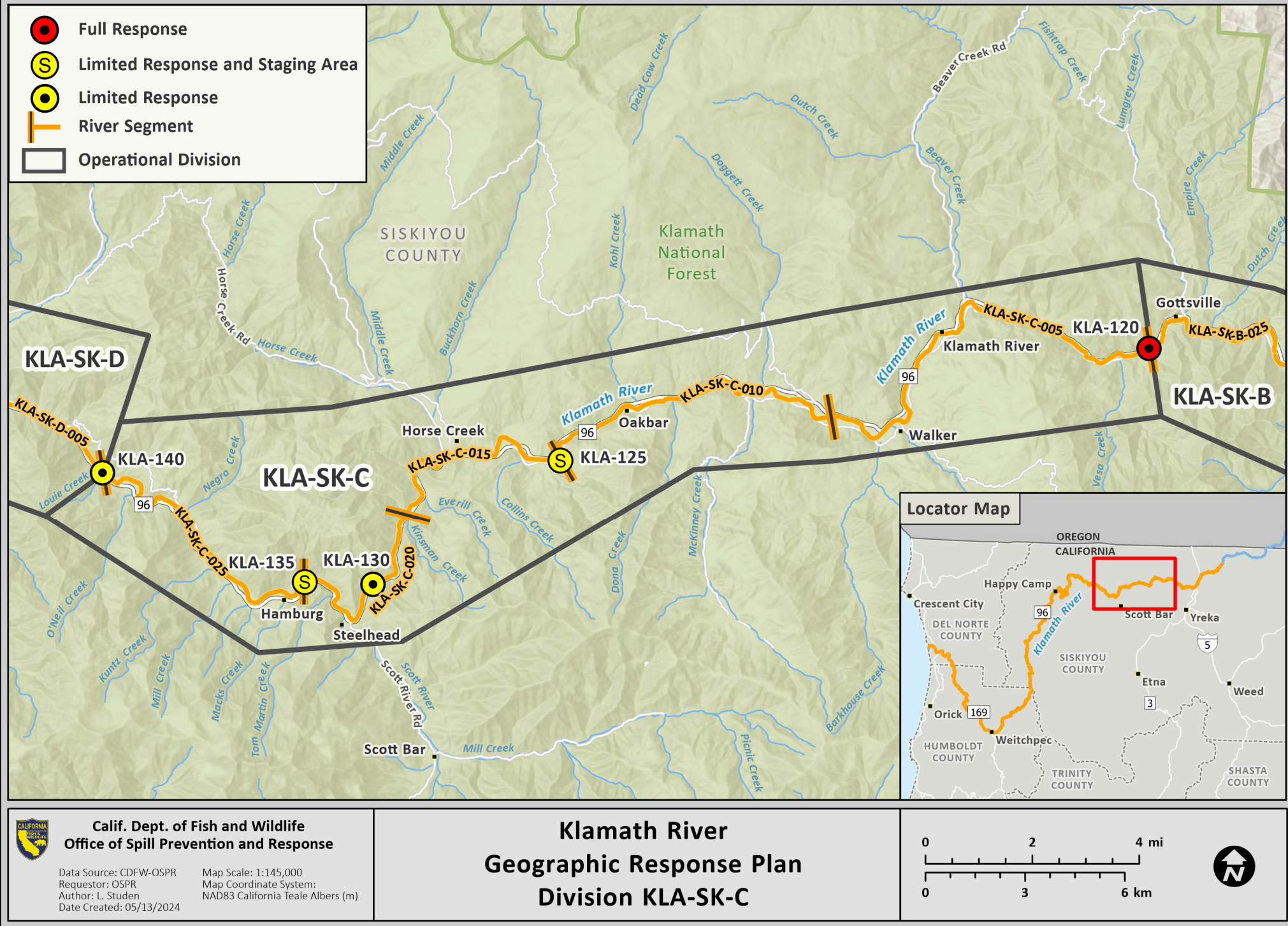


**Table of Response Resources**

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	650	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,300	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120l	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Figure 3-3: Klamath River GRP Division KLA-SK-C Map

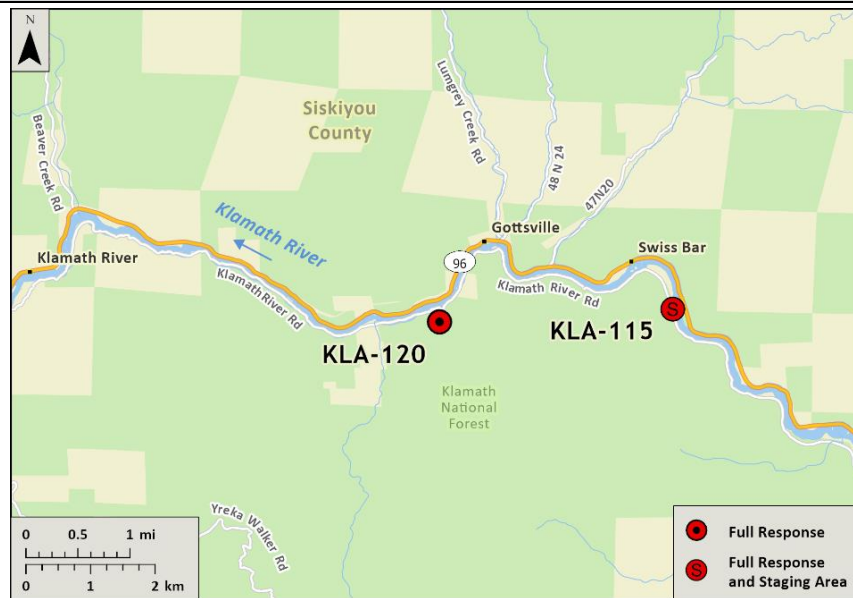


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<b>Driving Directions:</b>	<p>From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. Continue 9.5 miles west after crossing over Ash Creek and turn left into dirt road leading to boat launch near river.</p> <p>From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 9.5 miles west after crossing over Ash Creek and turn left into dirt road leading to boat launch near river.</p>		
<b>Latitude/Longitude:</b> 41.85824, -122.75018	<b>Highway Postmile:</b> Hwy 96 SIS 92.14	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> 21 Miles from Yreka, CA			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance/graphical-rvf-irgc1-noaa.gov).
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-C-005	<b>Site Description and Field Notes:</b> This site has a sandy road and concrete ADA accessible sidewalk down to the water's edge. There is an ADA accessible vault restroom, parking area and dispersed camping area. No potable water available at this location. Elevation is at 2000 ft.			
<b>Gradient:</b> Medium	<b>River Width:</b> 33.83 m (111 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping bluffs (8F); Vegetated low banks (9B).			

## Site Images

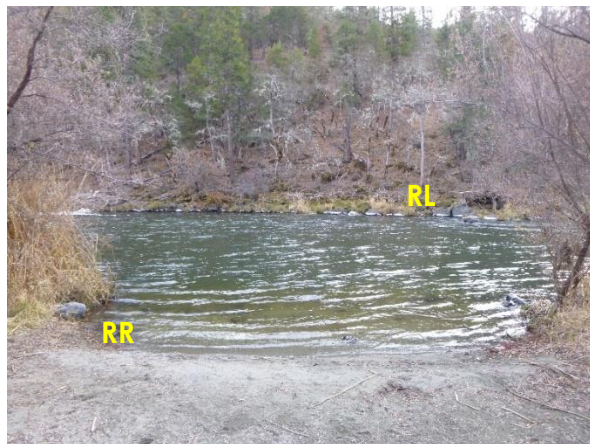
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 11/25/2019

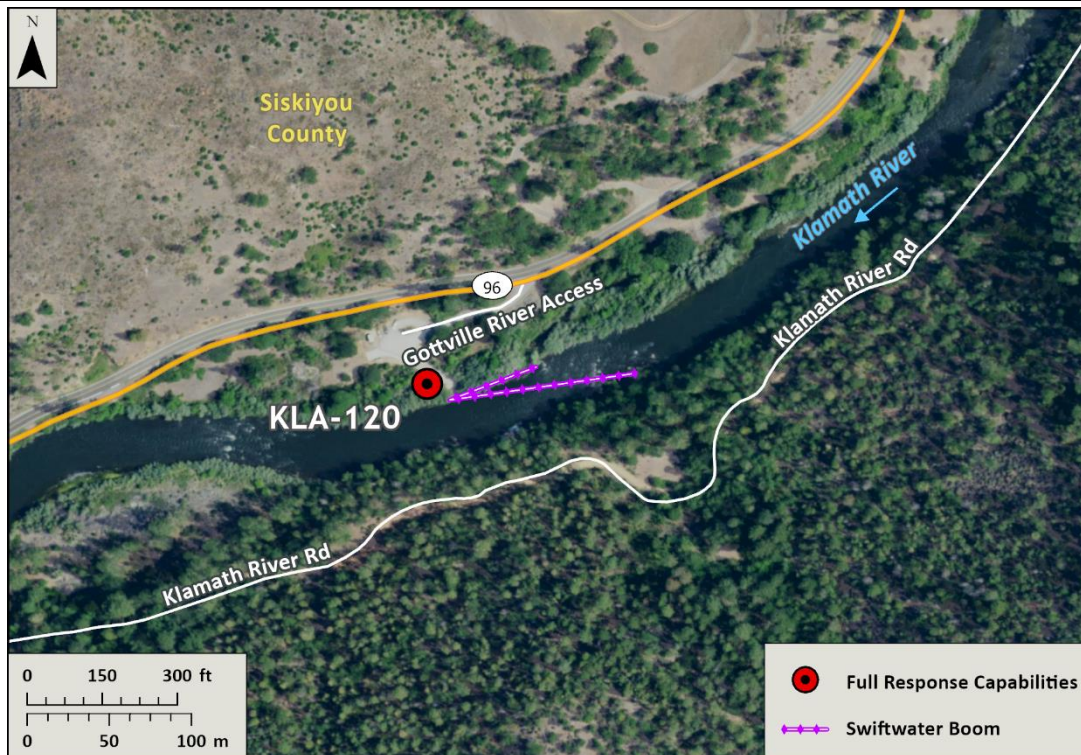


**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 350 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in dirt parking area near boat launch.

### Response Strategy Map (overview)



### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	550	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,100	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

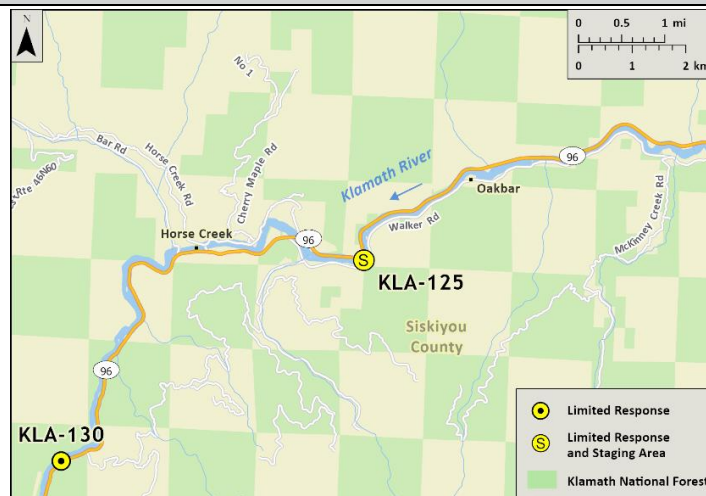
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Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 24 miles west after crossing over Ash Creek and turn left into dirt road leading to boat launch near river.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 24 miles west after crossing over Ash Creek and turn left into dirt road leading to boat launch near river.		
	NOTE: APPROACH RIVER ACCESS FROM EASTBOUND HWY 96		
Latitude/Longitude: 41.82318, -122.96176	Highway Postmile: Hwy 96 SIS 78.00	Railroad Milepost: N/A	Cell Service: No - Verizon Tested

**Nearest Address:** Oak Knoll Ranger District, Horse Creek, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-irgc1-noaa.gov).
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)
- Poison oak located on-site.

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

### Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-C-015	<b>Site Description and Field Notes:</b> Gravel road leads to the water's edge and is a popular location for fishing access and launching kayaks and rafts. There are several dispersed camp sites but no water or amenities. Elevation is at 1600 ft.			
<b>Gradient:</b> Low (summer flow)	<b>River Width:</b> 42.06 m (138 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated steeply sloping bluffs (8F); vegetated low banks (9B)			

### Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in dirt parking area near boat launch.

### Response Strategy Map (overview)



Table of Response Resources

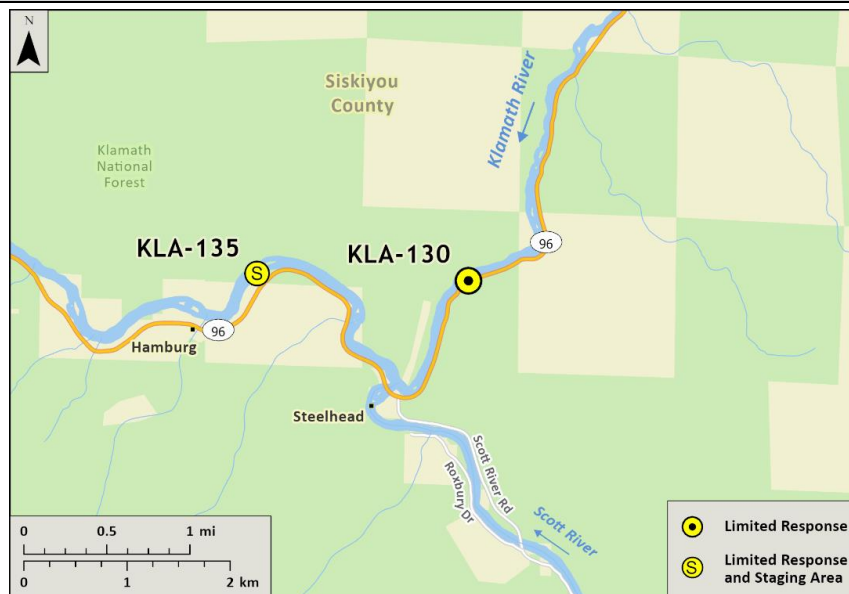
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	650	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,300	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 29.8 miles west after crossing over Ash Creek and turn into Blue Heron River Access leading to boat launch near river.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 29.8 miles west after crossing over Ash Creek and turn into Blue Heron River Access leading to boat launch near river.		
<b>Latitude/Longitude:</b> 41.78750, -123.02958	<b>Highway Postmile:</b> Hwy 96 SIS 72.17	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> Hamburg (limited Services) 3 miles, Seiad Valley 13 miles			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-irgc1-noaa.gov/)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Townsend's Big-eared Bat, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Scott Bar Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-C-020	<b>Site Description and Field Notes:</b> There is a graded gravel ramp to the water's edge. This is another popular fishing access point. No amenities but larger vehicles such as RVs and trailers can access this area. Elevation is at 1500 ft.			
<b>Gradient:</b> Low to Medium	<b>River Width:</b> 33.83 m (111 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

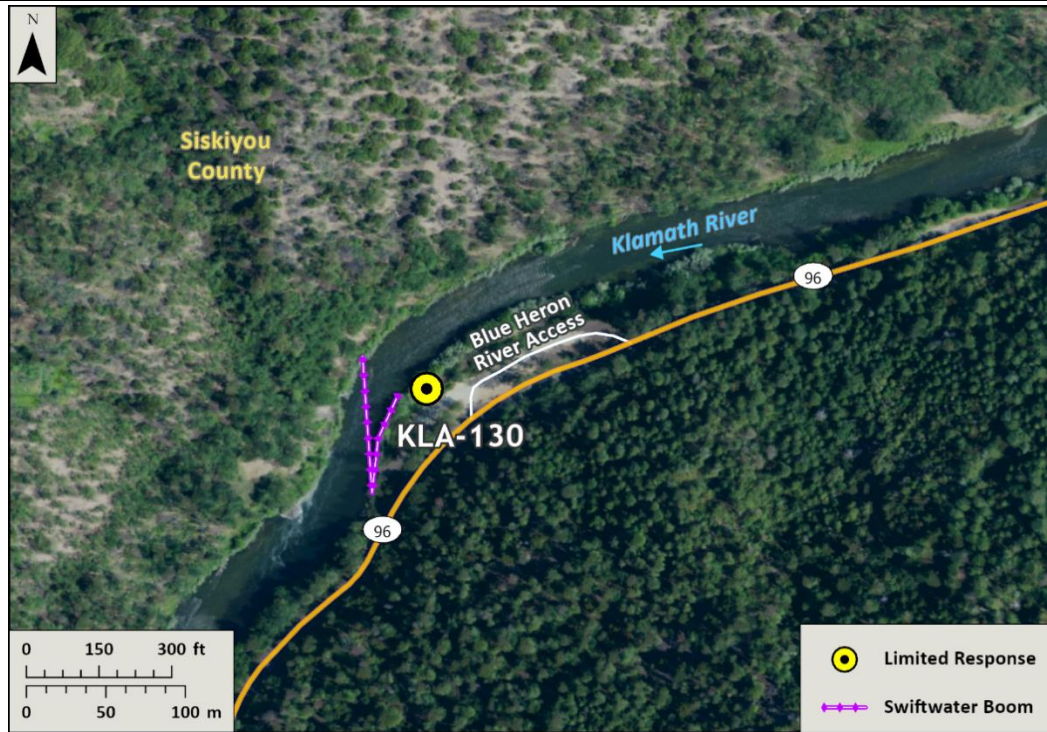
Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in dirt parking area near boat launch.

### Response Strategy Map (overview)



### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	600	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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**Driving Directions:**

From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 32.1 miles west after crossing over Ash Creek and enter campground.

From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 32.1 miles west after crossing over Ash Creek and enter campground.

Unimproved dirt boat launch is located at river's edge.

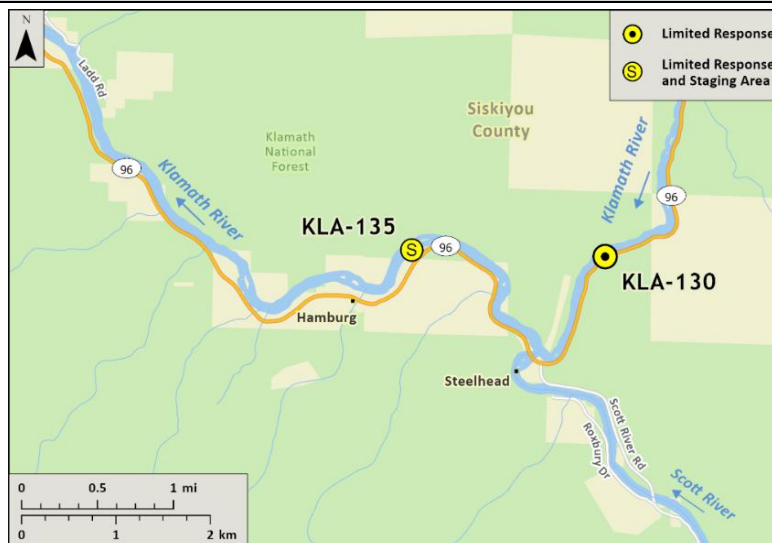
**Latitude/Longitude:**  
41.78804, -123.05320

**Highway Postmile:**  
Hwy 96 SIS 70.00

**Railroad Milepost:** N/A

**Cell Service:** No -  
Verizon Tested

**Nearest Address:** 63822 State Hwy. 96, Happy Camp, CA 96034

**Overview Street Map****Hazards, Restrictions and Advice for Responders**

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://cwrfc.org/hydrology/river-guidance-graphical-rvf-irgc1-noaa.gov)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

**Resources-At-Risk**

**Ecological:** Townsend's Big-eared Bat, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Scott Bar Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

### Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-C-025	<b>Site Description and Field Notes:</b> This shaded campground has water and vault toilets and a sandy launch area for drift boats, rafts and kayaks. Elevation is at 1400 ft.			
<b>Gradient:</b> Low	<b>River Width:</b> 41.15 m (135 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated steeply sloping bluffs (8F); Vegetated low banks (9B)			

### Site Images

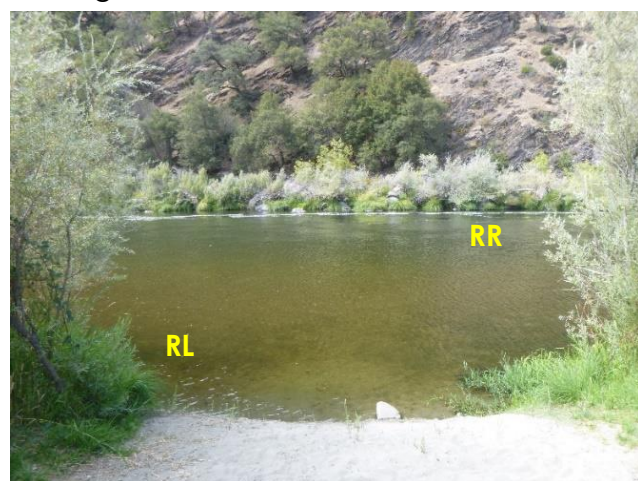
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in campground parking area.

### Response Strategy Map (overview)

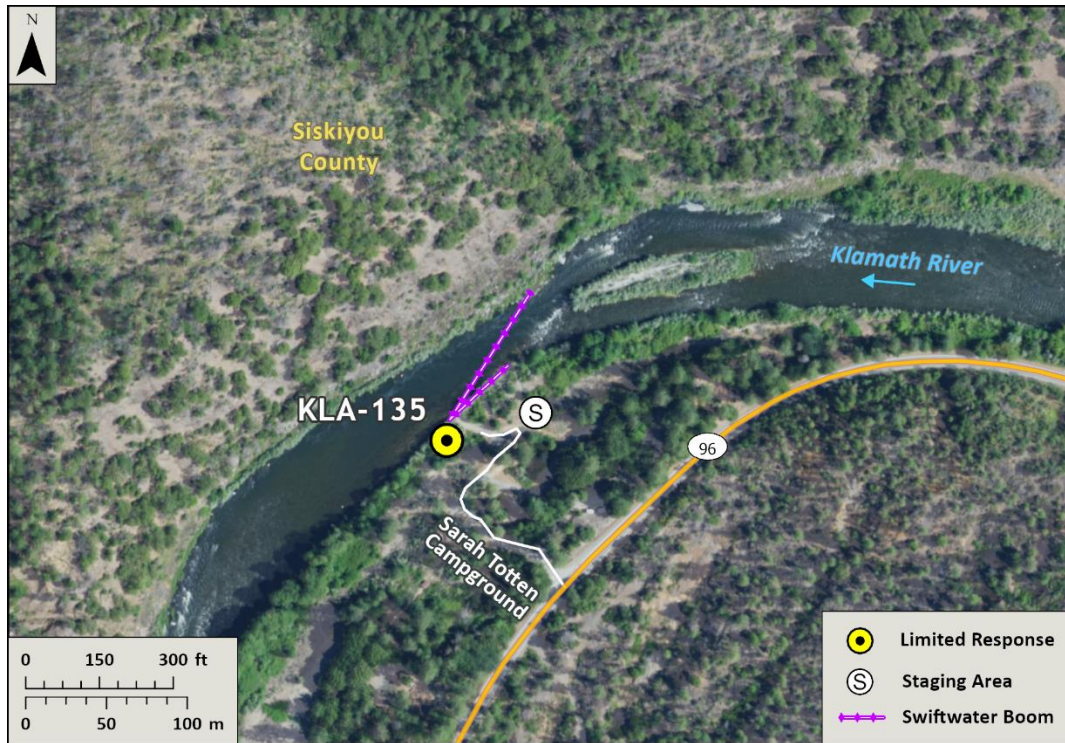


Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	600	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 37.7 miles west after crossing over Ash Creek and turn into Rocky Point River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 37.7 miles west after crossing over Ash Creek and turn into Rocky Point River Access.		
	Unimproved sandy boat launch is located at rivers edge.		
Latitude/Longitude: 41.81598, -123.12740	Highway Postmile: Hwy 96 SIS 64.46	Railroad Milepost: N/A	Cell Service: No - Verizon Tested
Nearest Address: 5.5 miles from Seiad Valley			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - IRGC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-irgc1-noaa.gov/)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Scott Bar Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-D-005	<b>Site Description and Field Notes:</b> This access point has a gravel ramp that leads to the river's edge. Parking is limited and portable toilets are made available by the USFS during the summer months. No potable water. Elevation is at 1300 ft.			
<b>Gradient:</b> Low (Summer Flow)	<b>River Width:</b> 42.98 m (141 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved sandy boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F); vegetated low banks (9B)			

## Site Images

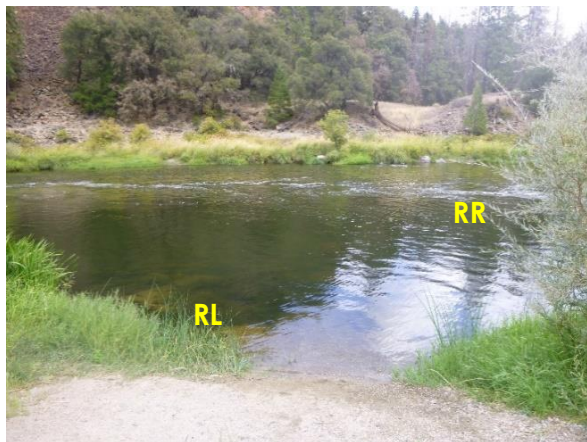
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above boat launch and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in large dirt parking area on-site

### Response Strategy Map (overview)



Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	650	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,300	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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**Figure 3-4: Klamath River GRP Division KLA-SK-D Map**

This map displays the Klamath River Geographic Response Plan (GRP) for Division KLA-SK-D. The map shows the river's course through Siskiyou County, Oregon, and its proximity to the California border. Key features include:

- Legend:**
  - Full Response
  - Limited Response
  - ▲ Access/Observation
  - River Segment
  - Operational Division
- Operational Divisions:** KLA-SK-E, KLA-SK-D, and KLA-SK-C.
- Key Locations and Features:**
  - Fort Goff:** Marked with a yellow circle (Limited Response) and a blue triangle (Access/Observation).
  - Seiad Valley:** A central location on the river.
  - Seiad Creek Rd, Grider Rd, Ladd Rd:** Major roads shown.
  - Creeks:** Bittenbender Creek, Schoolhouse Creek, Seiad Creek, Grider Creek, Walker Creek, Gard Creek, Salt Creek, No Name Creek, Louie Creek, and O'Neill Creek.
  - Forest:** Klamath National Forest.
- Response Status:**
  - KLA-155:** Access/Observation (blue triangle).
  - KLA-150:** Limited Response (yellow circle).
  - KLA-145:** Full Response (red circle).
  - KLA-140:** Limited Response (yellow circle).
- River Segments:** KLA-SK-E, KLA-SK-D-010, KLA-SK-D-005, and KLA-SK-C-025.
- Locator Map:** Shows the division's location within Oregon and its proximity to California, with a red box indicating the area shown in the main map.
- Scale and Orientation:**
  - Scale: 1:60,000.
  - Map Coordinate System: NAD83 California Teale Albers (m).
  - Scale bar: 0 to 2 miles / 0 to 3 kilometers.
  - North arrow pointing up.

**Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response**

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:60,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

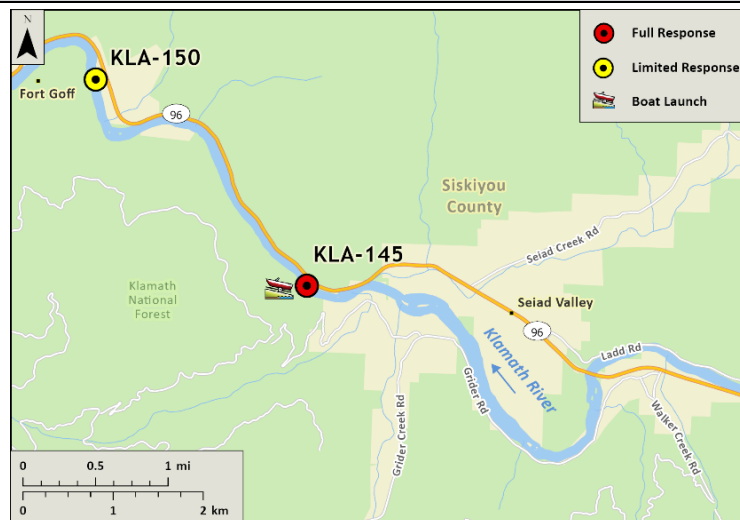
**Klamath River  
Geographic Response Plan  
Division KLA-SK-D**

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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 43.2 miles west after crossing over Ash Creek and turn into Sluice Box River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 43.2 miles west after crossing over Ash Creek and turn into Sluice Box River Access.		
	Unimproved sandy boat launch is located at rivers edge.		
<b>Latitude/ Longitude:</b> 41.84246, -123.22015	<b>Highway Postmile:</b> Hwy 96 SIS 59.00	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested

**Nearest Address:** Seiad Valley 1 mile east of site

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Siskiyou Mountains Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.



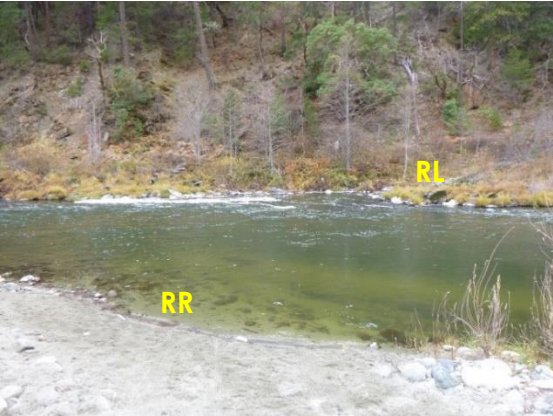
**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-D-010	<b>Site Description and Field Notes:</b> There is a graded gravel road that leads to the river's edge. USFS provides portable toilets for this area during the summer months. This is a popular wildlife viewing and rafting location with large parking lot but limited number of dispersed campsites. Elevation is at 1300 ft.			
<b>Gradient:</b> Low to Medium	<b>River Width:</b> 32.92 m (108 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved dirt boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right   RL = River Left</b>	<b>Photo Date:</b> 11/25/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 350 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in large dirt parking area on-site.

### Response Strategy Map (overview)



Table of Response Resources

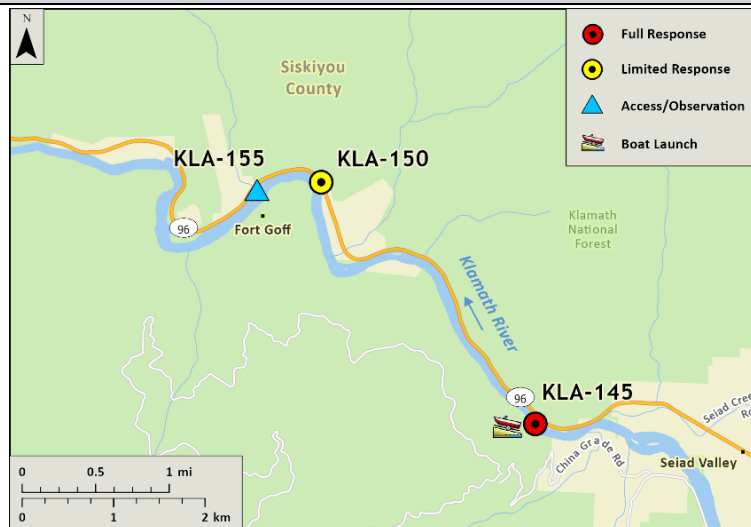
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	550	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,100	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 45.5 miles west after crossing over Ash Creek and turn into Portuguese Creek River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 45.5 miles west after crossing over Ash Creek and turn into Portuguese Creek River Access.		
	Unimproved gravel boat launch is located at rivers edge. There is a steep drop off at the launch site.		
<b>Latitude/Longitude:</b> 41.86248, -123.24914	<b>Highway Postmile:</b> Hwy 96 SIS 56.68	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> Seiad Valley, 2 miles east of site			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-seic1-noaa.gov)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Siskiyou Mountains Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-E-005	<b>Site Description and Field Notes:</b> This site has a gravel ramp down to the water's edge. No water or other amenities available.			
<b>Gradient:</b> Medium	<b>River Width:</b> 49.38 m (162 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch with steep drop off located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

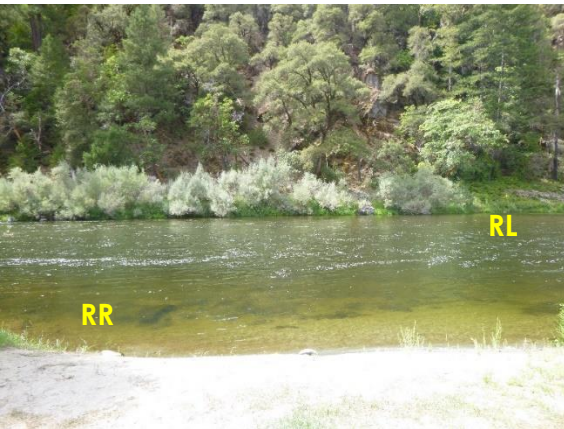
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 500 feet of swiftwater boom toward eddy at boat launch. Consider hi-line rigging for boom deployment. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in large dirt parking area on-site.

### Response Strategy Map (overview)



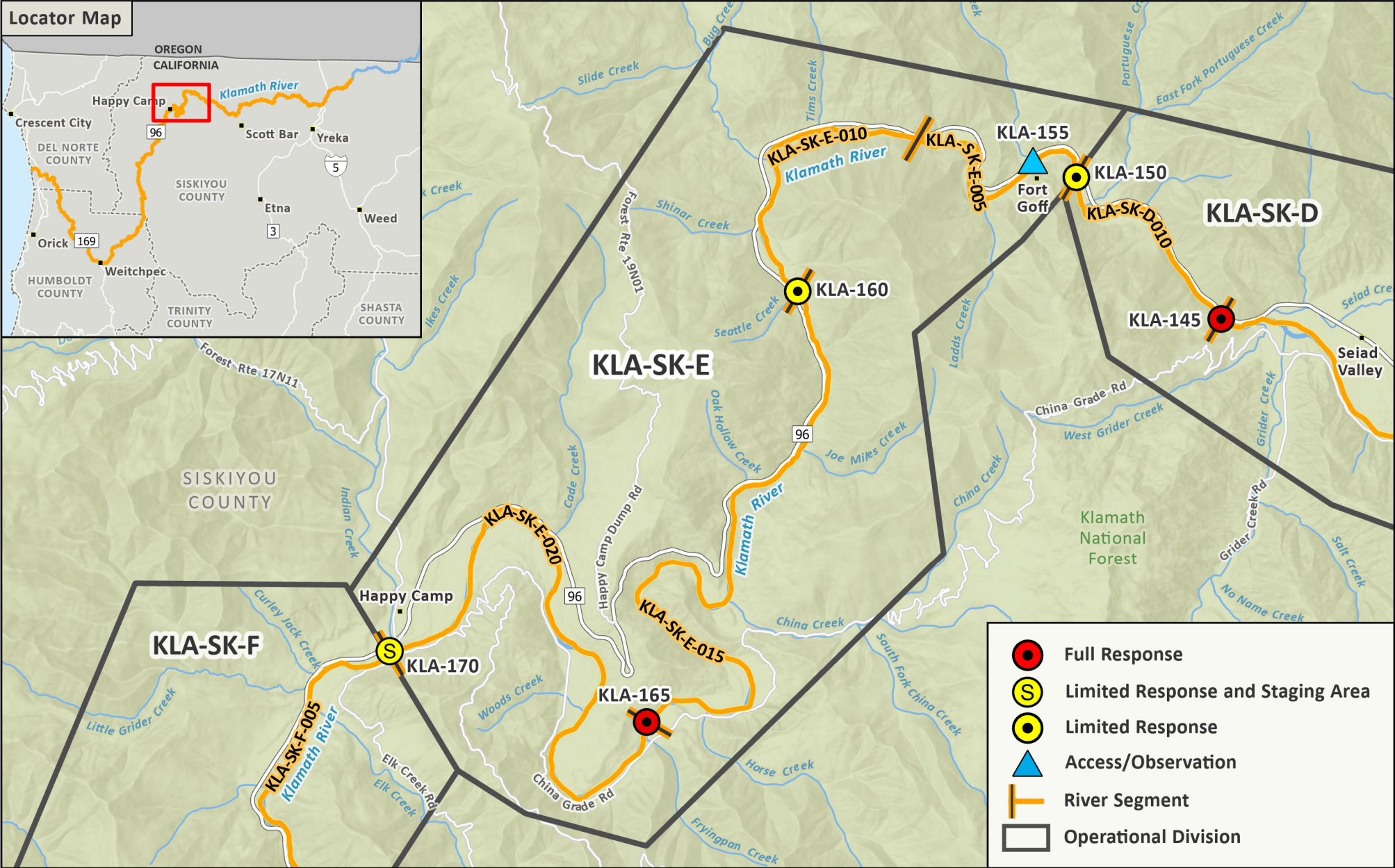
### Table of Response Resources


Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	700	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,400	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Figure 3-5: Klamath River GRP Division KLA-SK-E Map





**Calif. Dept. of Fish and Wildlife**  
**Office of Spill Prevention and Response**


Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:85,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

**Klamath River**  
**Geographic Response Plan**  
**Division KLA-SK-E**

0 1 2 mi

0 2 4 km

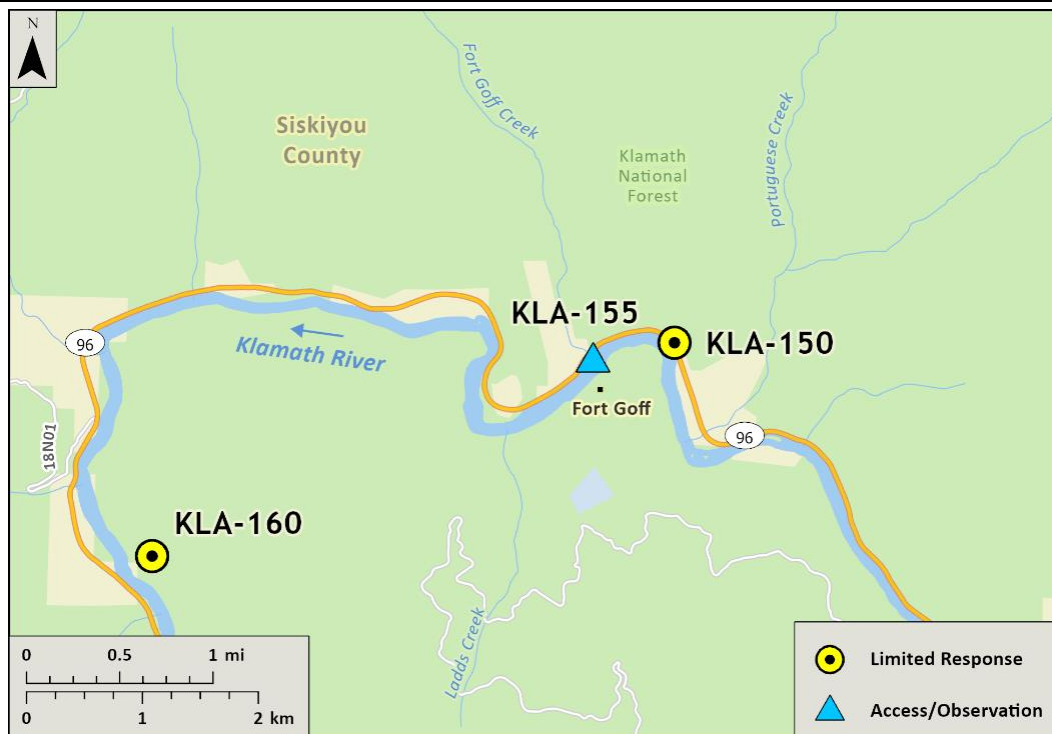


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<b>Driving Directions:</b>	<p>From North, take I-5 South: take Exit 786 and turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 50 miles west after crossing over Ash Creek and turn into the paved parking lot of Fort Goff Campground.</p> <p>From South, take I-5 North: take Exit 786 and merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 50 miles west after crossing over Ash Creek and turn into the paved parking lot of Fort Goff Campground.</p>		
<b>Latitude/Longitude:</b> 41.864997, -123.25769	<b>Highway Postmile:</b> Hwy 96 SIS 56.00	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No Service - Verizon Tested. Pay phone on site.

**Nearest Address:** The town of Seiad Valley is 3 miles east of this site.

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance-graphical-rvf-seic1)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)
- Slips-trips-and-falls hazard accessing the river via a narrow foot trail that leads to an area of large rocks and boulders.
- Campground has no running water to drink.



## Site Description and Field Notes

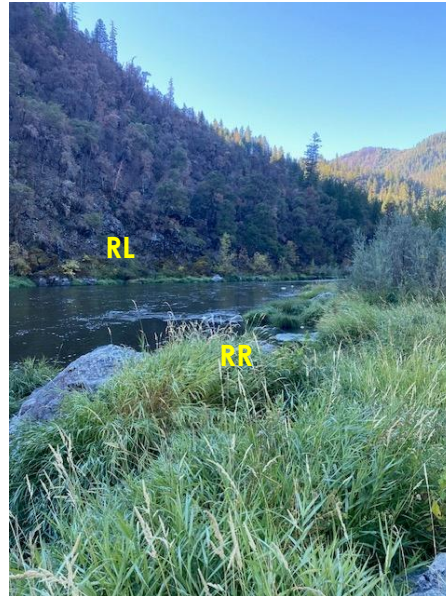
<b>Site Location/Segment:</b> KLA-SK-E-005	<b>Site Description and Field Notes:</b> This is a US Forest Service Campground with a small, paved parking lot that fits 6-10 standard size vehicles. 1 pit toilet bathroom. Campground has several picnic benches and fire pits. No running water. Payphone at parking lot owned by Siskiyou Telephone Company.	
<b>Site Contact/s:</b>	US Forest Service Recreation (530) 493-1718	Karuk Tribe (530) 493-1600

## Site Images

Upstream



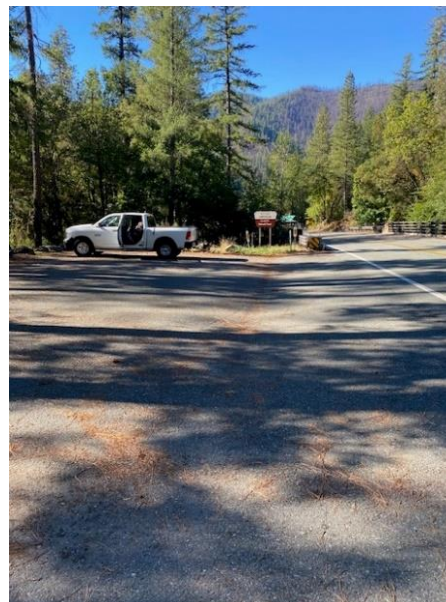
Downstream



Straight Across



Entrance

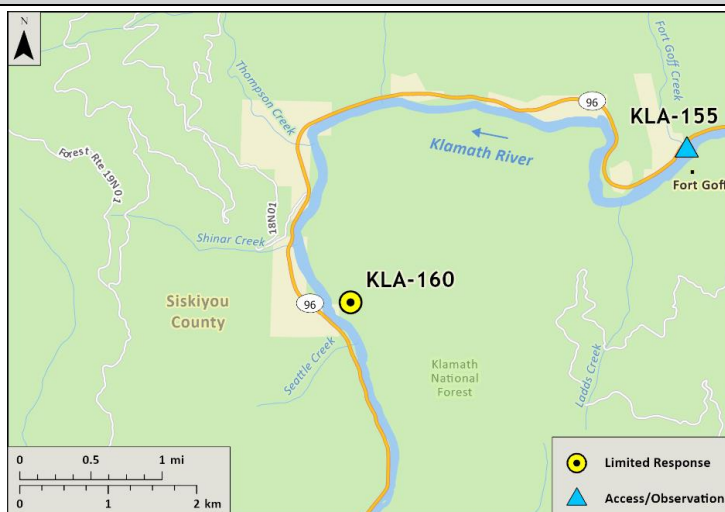


RR = River Right RL = River Left

Photo Date: 10/05/2023

Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 51.5 miles west after crossing over Ash Creek and turn into Seattle Creek River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 51.5 miles west after crossing over Ash Creek and turn into Seattle Creek River Access.		
	Unimproved gravel boat launch is located at rivers edge.		
Latitude/Longitude: 41.84430, -123.30241	Highway Postmile: Hwy 96 SIS 51.00	Railroad Milepost: N/A	Cell Service: No - Verizon Tested
Nearest Address: 9 miles from Happy Camp			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Narrow access road with sharp turns leads to river access point.
- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-seic1-noaa.gov)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Siskiyou Mountains Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

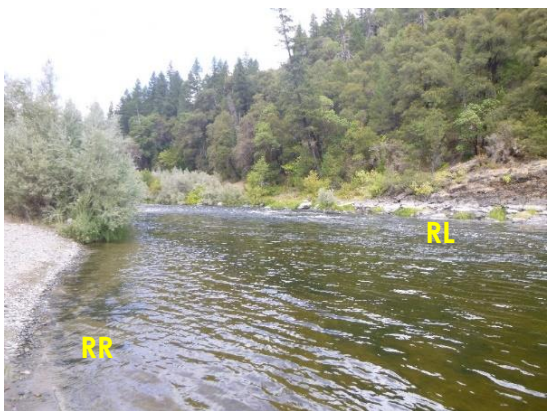
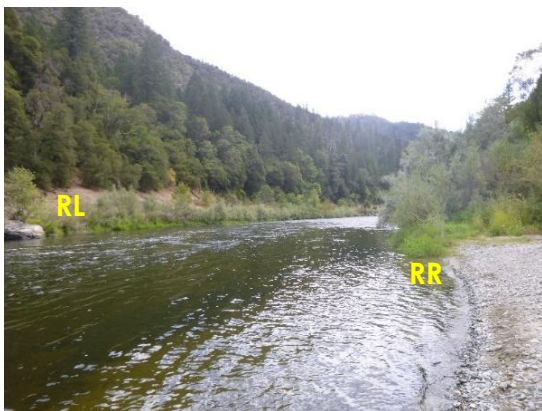
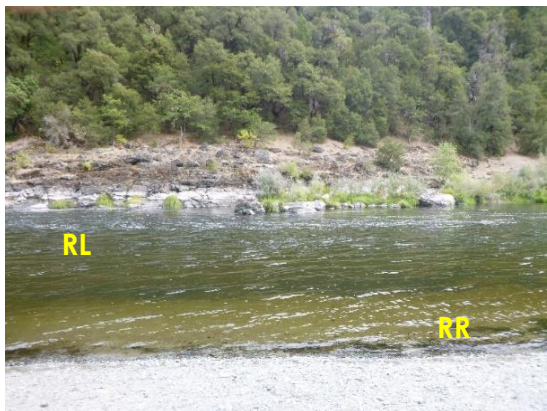
**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-E-015	<b>Site Description and Field Notes:</b> There is a graded gravel ramp that leads to the river's edge. No amenities and limited parking on site. Elevation is at 1100 ft.			
<b>Gradient:</b> Medium	<b>River Width:</b> 39.32 m (129 ft)	<b>Vehicular Access:</b> Most vehicle types can access this location. Nothing larger than a 70-bbl vacuum truck recommended. There is limited parking area available.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right   RL = River Left</b>	<b>Photo Date:</b> 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** There is limited parking on site. May need to stage equipment in turnouts along Hwy 96, or back up river at the Portuguese Creek River Access. Consult Caltrans and USFS regarding additional staging locations.

### Response Strategy Map (overview)



### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	600	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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### Driving Directions

From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 58.3 miles west after crossing over Ash Creek and turn left onto Gordon's Ferry Road. Continue 2 miles to unimproved gravel boat launch at rivers edge. The last 1.5 miles of this road is graded dirt.

From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 toward Happy Camp/Willow Creek and cross over the Ash Creek bridge. Continue 58.3 miles west after crossing over Ash Creek and turn left onto Gordon's Ferry Road. Continue 2 miles to unimproved gravel boat launch at rivers edge. The last 1.5 miles of this road is graded dirt.

**Latitude/Longitude:**  
41.78078, -123.32871

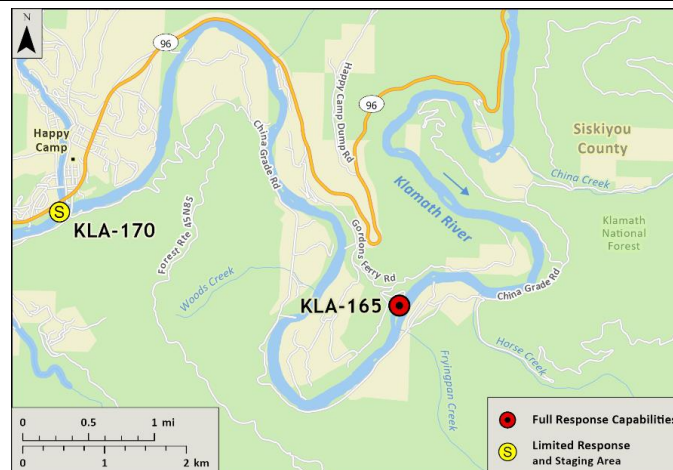
**Highway Postmile:**  
Hwy 96 SIS 44.25

**Railroad Milepost:**  
N/A

**Cell Service:** Spotty - Verizon tested. Service available in Happy Camp

**Nearest Address:** 4 miles from Happy Camp

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-E-020	<b>Site Description and Field Notes:</b> This popular fishing access point is mostly paved with an improved gravel section leading down to the river. The last ½ mile is steep, narrow and windy which would not be suitable for large vehicles and equipment. No water or restrooms on site. Elevation is at 1100 ft.			
<b>Gradient:</b> Low	<b>River Width:</b> 89.61 m (294 ft)	<b>Vehicular Access:</b> Most vehicle types can access this location. Recommend nothing larger than 70 bbl vacuum truck.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping banks (8F); Vegetated low banks (9B).			

## Site Images

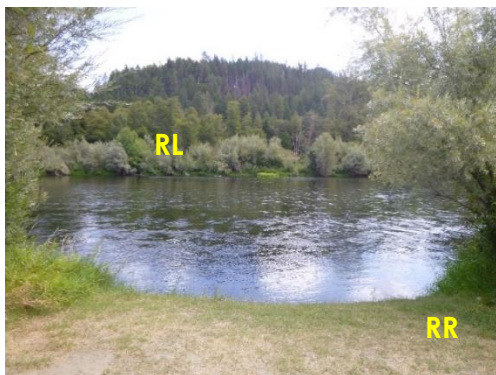
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019



**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above boat launch and deploy 900 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** There is limited parking and space for staging equipment near the boat launch. Crews may need to stage equipment at turnouts along Gordon's Ferry Road or along Hwy 96 closer to Happy Camp.

### Response Strategy Map (overview)

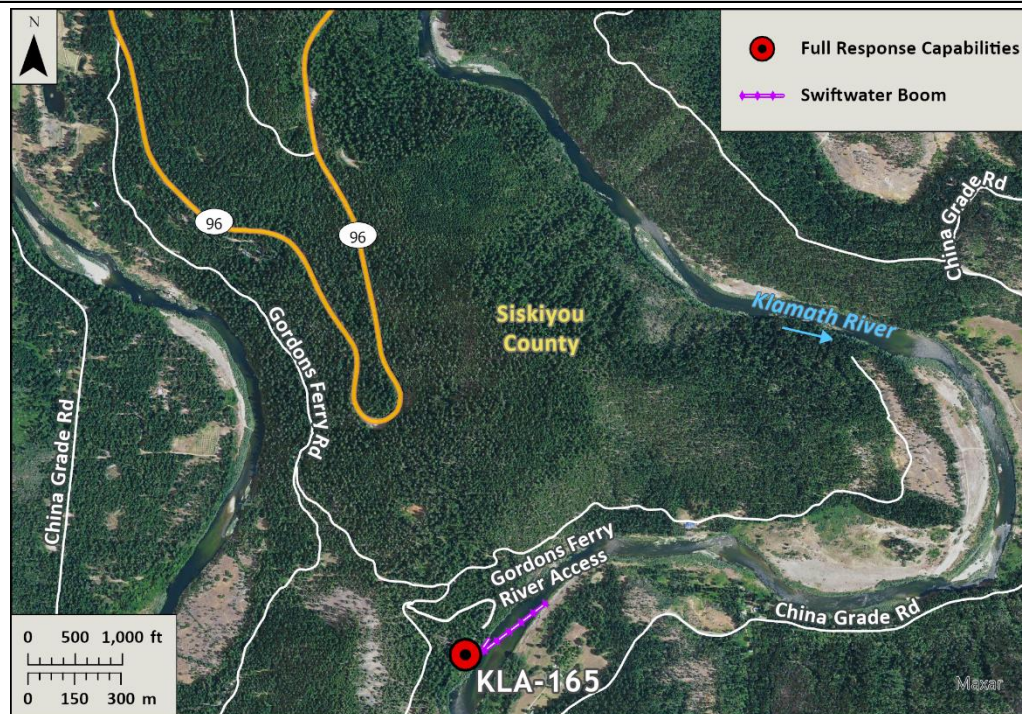


Table of Response Resources

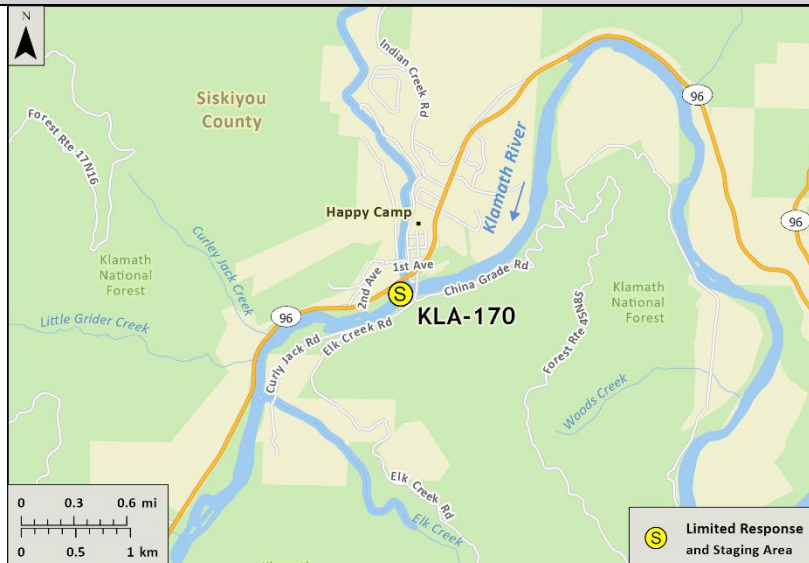
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	1,100	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 1 mile west to the Indian Creek River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 1 mile west to the Indian Creek River Access.		
	There is an unimproved gravel boat launch at the confluence of Indian Creek and the Klamath River.		
Latitude/Longitude: 41.78986, -123.37937	Highway Postmile: Hwy 96 SIS 41.00	Railroad Milepost: N/A	Cell Service: Yes - Verizon Tested

**Nearest Address:** 1 mile from Happy Camp, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance/graphical-rvf-seic1-noaa.gov/)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

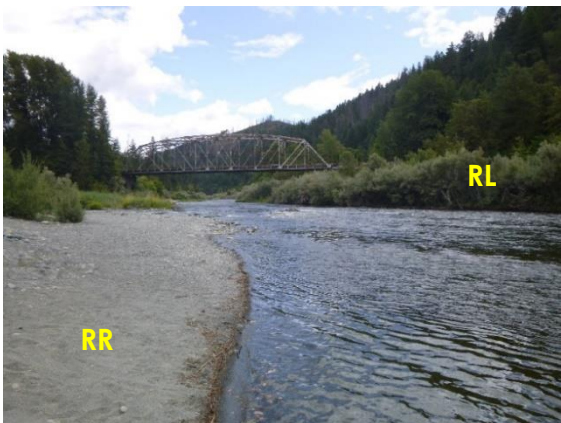


**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

### Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-F-005	<b>Site Description and Field Notes:</b> This access point is a popular destination for those seeking to recreate on the river. There is a vault restroom, large parking area, but no potable water. A gravel road leads down to the water's edge. Elevation is at 1000 ft.			
<b>Gradient:</b> Medium to High	<b>River Width:</b> 42.98 m (141 ft)	<b>Vehicular Access:</b> Most vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F); Vegetated low banks (9B)			

### Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right    RL = River Left</b>	<b>Photo Date:</b> 9/10/2019



**Site Objectives:** Deflection boom with product collection and shoreline protection. Swift river velocity may impact efficacy of oil collection operations.

**Implementation:** Start from river-left shoreline above confluence with Indian Creek and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in large parking area above boat launch.

### Response Strategy Map (overview)



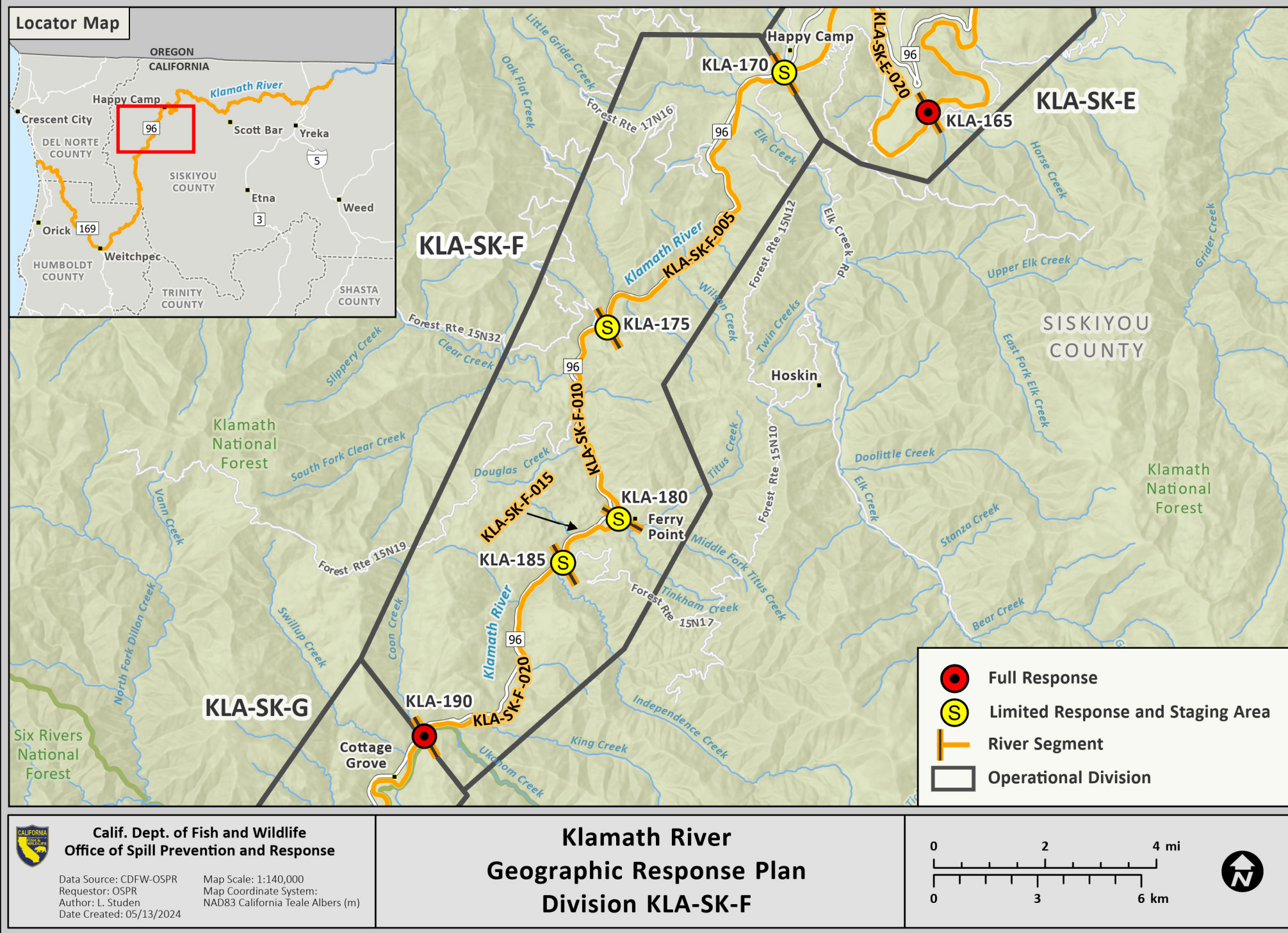
Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	800	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,600	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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Figure 3-6: Klamath River GRP Division KLA-SK-F Map

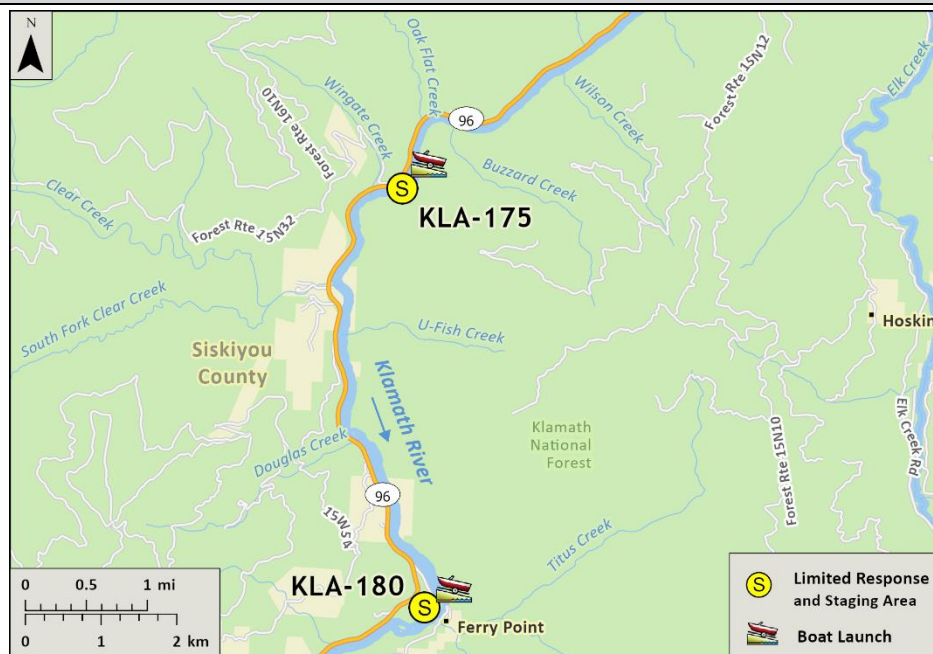


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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 8.3 miles west to the Wingate Bar River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 8.3 miles west to the Wingate Bar River Access.		
<b>Latitude/Longitude:</b> 41.72260, -123.43704	<b>Highway Postmile:</b> Hwy 96 SIS 33.77	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested

**Nearest Address:** 8.3 miles from Happy Camp, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

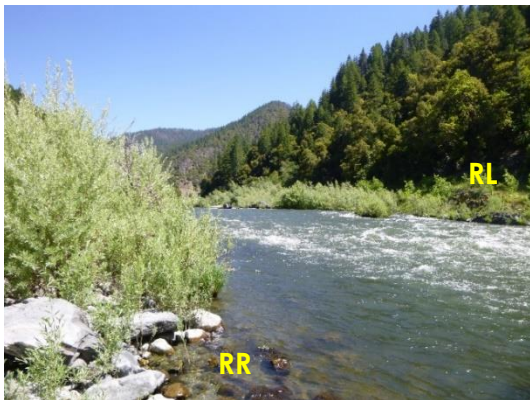


## Site Description and Field Notes

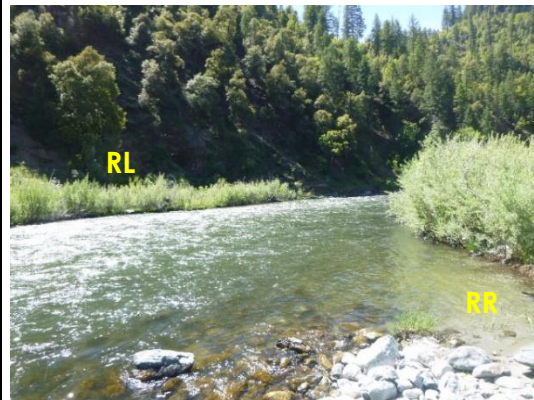
<b>Site Location/Segment:</b> KLA-SK-F-010	<b>Site Description and Field Notes:</b> This site has a graded gravel road that leads to the river's edge. USFS provides portable toilets at the parking area during summer months. No potable water available. Elevation is at 1000 ft.			
<b>Gradient:</b> High	<b>River Width:</b> 31.09 m (102 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/26/2020



**Site Objectives:** Deflection boom with product collection and shoreline protection. Swift river velocity may impact efficacy of oil collection operations. If river velocity is too high for booming, consider manual site cleanup with additional shoreline protection.

**Implementation:** Start from river-left shoreline above unimproved boat launch and deploy 350 feet of swiftwater boom toward small eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes in parking area above boat launch.

### Response Strategy Map (overview)

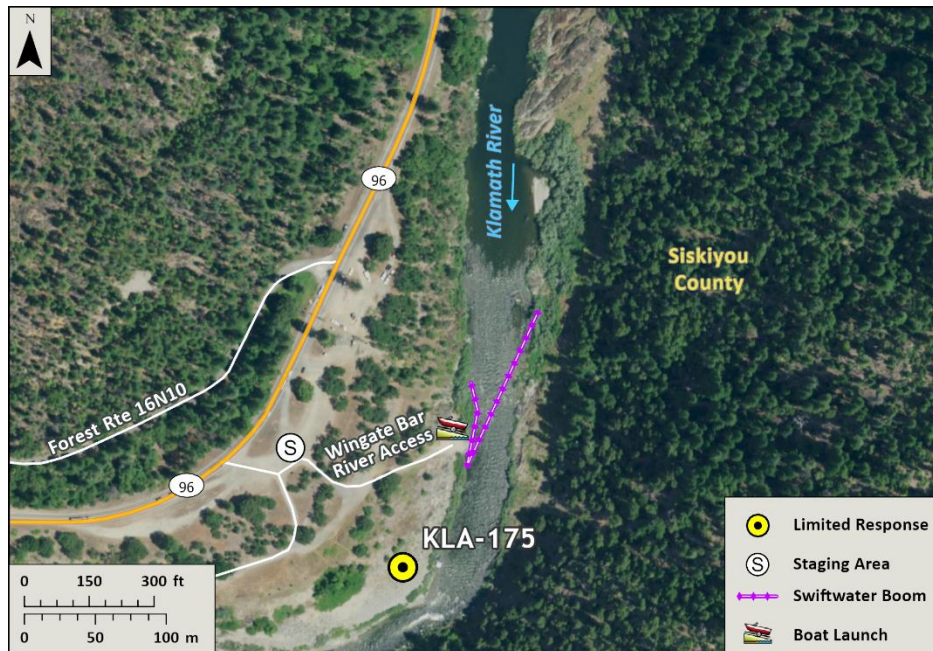


Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	550	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	1,100	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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**Driving Directions:**

From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 12.1 miles west to the Ferry Point River Access.

From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 12.1 miles west to the Ferry Point River Access.

**Latitude/Longitude:**

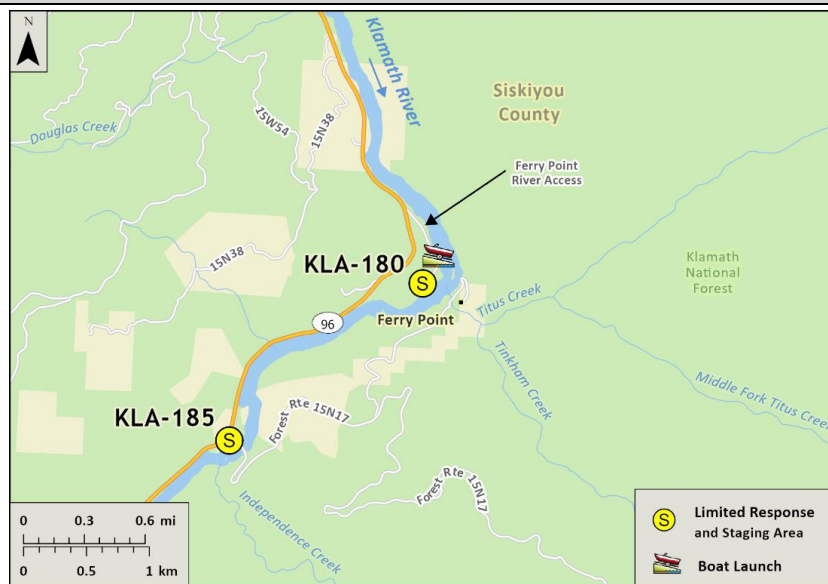
41.6720, -123.4311

**Highway Postmile:**

Hwy 96 SIS 30.05

**Railroad Milepost:** N/A**Cell Service:** No -

Verizon Tested

**Nearest Address:** 12 miles from Happy Camp, CA**Overview Street Map****Hazards, Restrictions and Advice for Responders**

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

**Resources-At-Risk**

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Southern Torrent Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

### Site Description and Field Notes

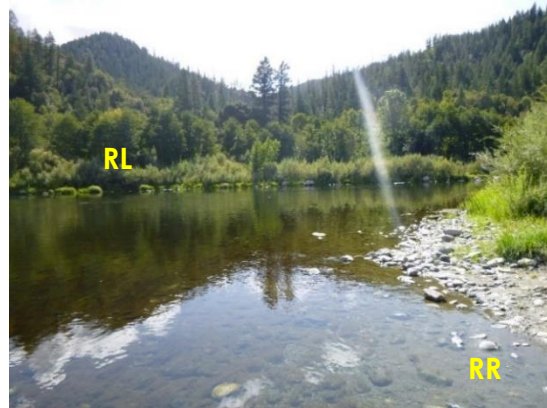
<b>Site Location/Segment:</b> KLA-SK-F-015	<b>Site Description and Field Notes:</b> This site has a ½ mile graded gravel road that leads down to the water's edge. Vault toilets, large parking area, but no potable water available on site. Elevation is at 950 ft.			
<b>Gradient:</b> Low	<b>River Width:</b> 86.87 m (285 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F); Vegetated low banks (9B)			

### Site Images

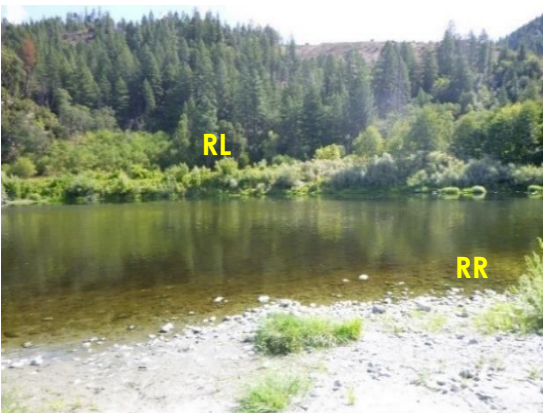
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019



**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above unimproved boat launch and deploy 900 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** There is a large flat area near the river that, as a metric, can support 12 full size RV's as well as additional on road vehicles, which makes it a suitable location to stage equipment and manage wastes on-site.

### Response Strategy Map (overview)

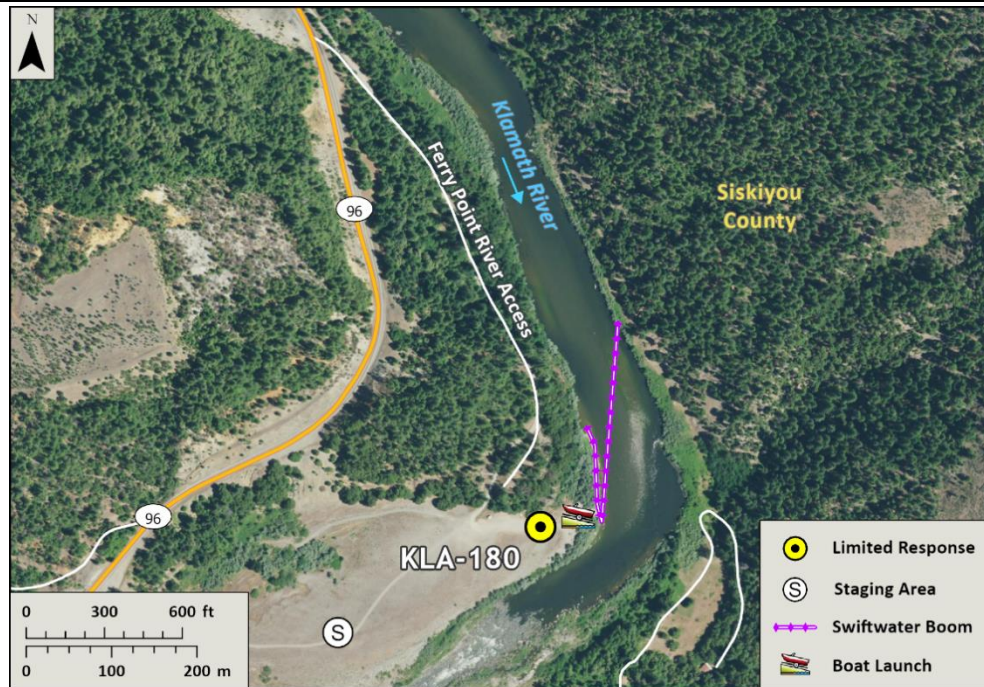


Table of Response Resources

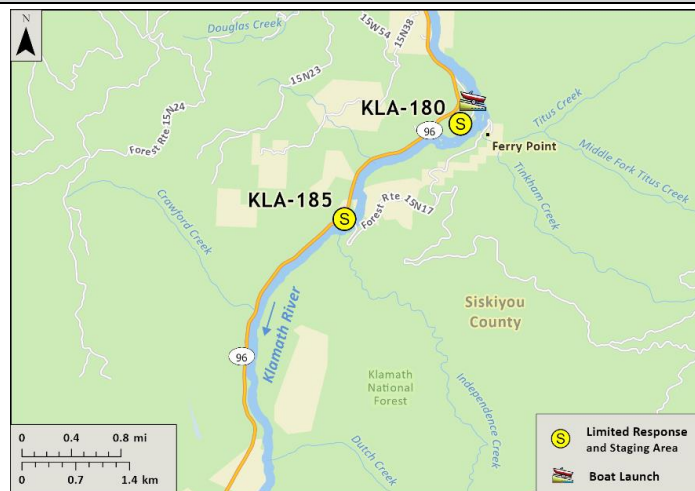
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	1,100	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	3,000	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 13.7 miles west to the Independence River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 13.7 miles west to the Independence River Access.		
	There is an unimproved gravel boat launch at the edge of the river.		
<b>Latitude/Longitude:</b> 41.65993, -123.44988	<b>Highway Postmile:</b> Hwy 96 SIS 28.45	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> 13. 7 miles from Happy Camp, CA			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- There is a shallow sandbar located about 10 feet off the shoreline at the unimproved boat launch.
- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-seic1-noaa.gov/)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Fisher – West Coast DPS, Townsend's Big-eared Bat, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Southern Torrent Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

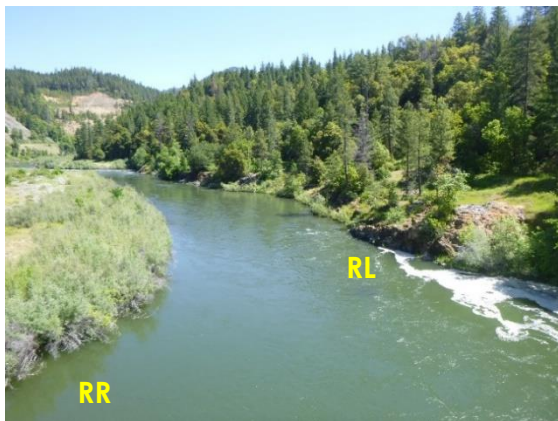
**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-F-020	<b>Site Description and Field Notes:</b> This rest area has a graded gravel road that leads down to the river's edge on the southwest side of the bridge. Vault toilet, but no potable water available on site. Elevation is at 925 ft.			
<b>Gradient:</b> Low to medium	<b>River Width:</b> 56.69 m (186 ft)	<b>Vehicular Access:</b> General work trucks and 70-bbl vac trucks can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/26/2020

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above the bridge and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch. Additional staging area available at the Independence Rest Area located along Hwy 96 just upstream of the bridge.

### Response Strategy Map (overview)



Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	800	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,500	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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<b>Driving Directions:</b>	<p>From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 18.4 miles west to the Coon Creek River Access.</p> <p>From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 18.4 miles west to the Coon Creek River Access.</p>		
<b>Latitude/Longitude:</b> 41.61338, -123.49551	<b>Highway Postmile:</b> Hwy 96 SIS 23.77	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> 18.4 miles from Happy Camp, CA			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance-graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Fisher – West Coast DPS, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Southern Torrent Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-G-005	<b>Site Description and Field Notes:</b> This site has a paved road down to the river's edge but no room to turn around or park. Portable toilets for this area are provided by USFS during the summer months. No potable water available on site. Elevation is at 900 ft.			
<b>Gradient:</b> Low	<b>River Width:</b> 62.18 m (204 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft, kayaks, or shallow draft vessels recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Gravel bars and gently sloping banks (6A); Vegetated steeply sloping bluffs (8F); Vegetated low banks (9B)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

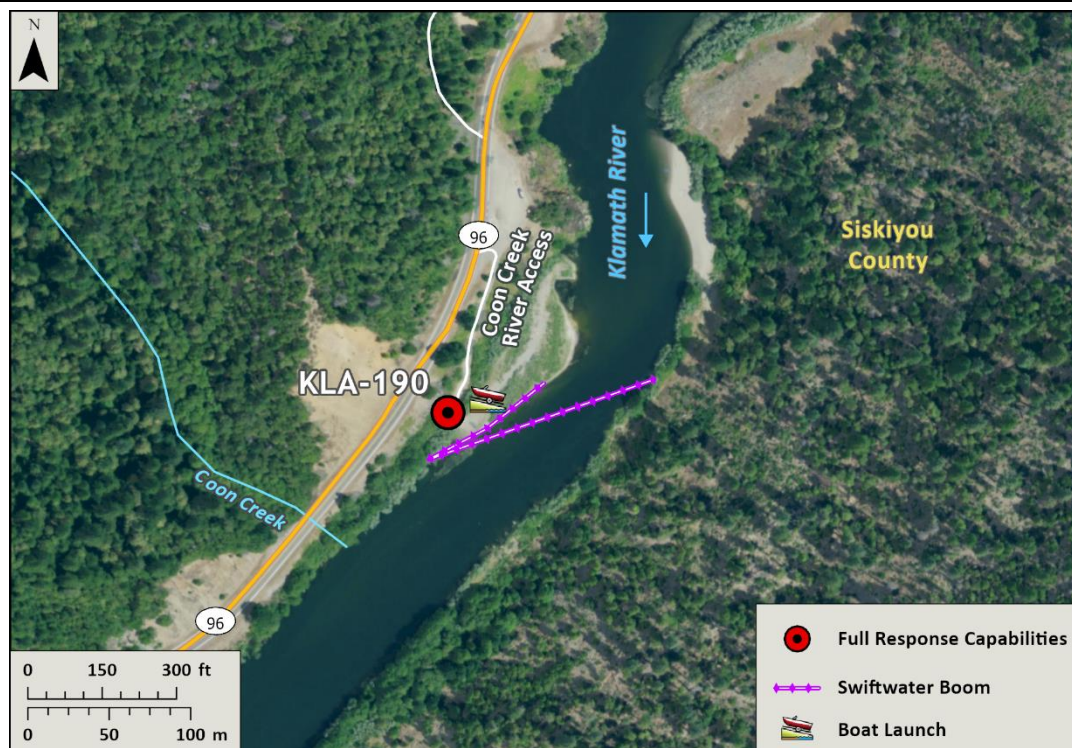
Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above the boat launch site and deploy 650 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch.

**Response Strategy Map (overview)**



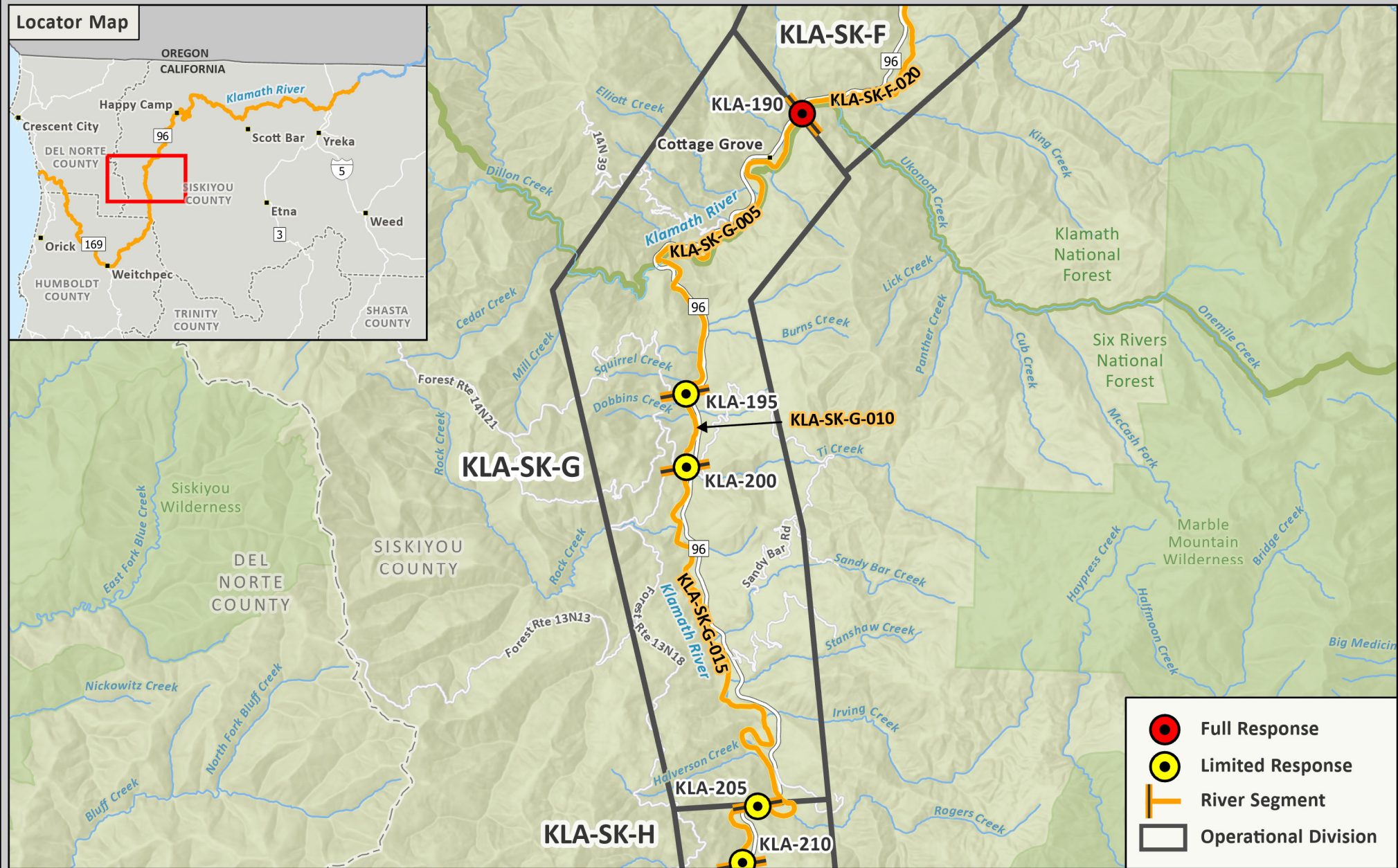
**Table of Response Resources**

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	850	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,500	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Figure 3-7: Klamath River GRP Division KLA-SK-G Map

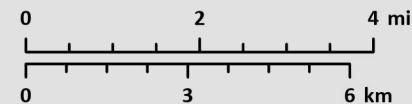


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:140,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

## Klamath River Geographic Response Plan Division KLA-SK-G



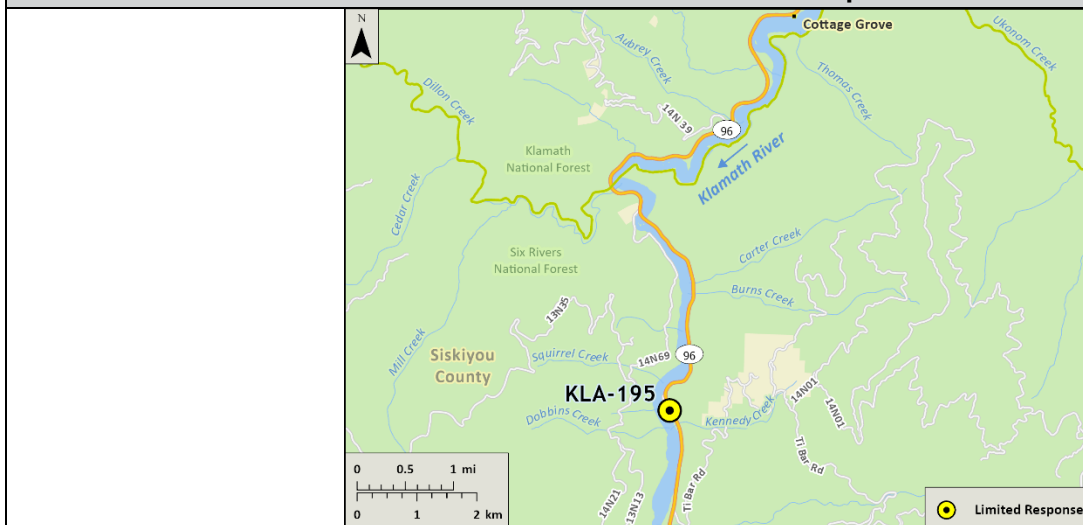


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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 25.7 miles west to the Persido Bar River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 25.7 miles west to the Persido Bar River Access.		
<b>Latitude/Longitude:</b> 41.54500, -123.52969	<b>Highway Postmile:</b> Hwy 96 SIS 13.46	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested

**Nearest Address:** 19 miles from Orleans, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Need 4WD vehicle to launch raft or kayak due to loose, unconsolidated sandy launch site. Rapids begin about 300 yards downstream of launch site.
- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-seic1-noaa.gov)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, Fisher – West Coast DPS, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Southern Torrent Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism



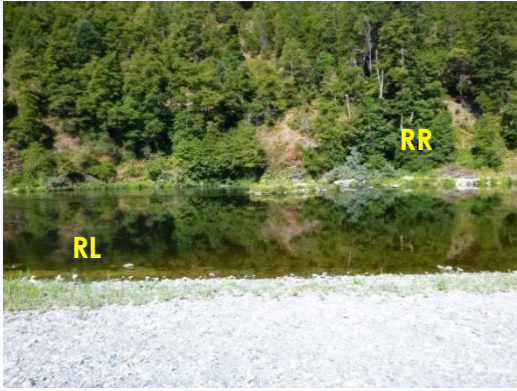
**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-G-010	<b>Site Description and Field Notes:</b> Large boat launch allows enough space for drift boats as well as jet boats to launch. It is also a popular place for rafters. Because of its popularity due to heavy use, parking is only permitted at the south end of the river bar. One Vault toilet but no potable water on site.			
<b>Gradient:</b> Low	<b>River Width:</b> 82.30 m (270 ft)	<b>Vehicular Access:</b> Need 4WD to get to the river's edge. May be able to get 70-bbl vac truck down to gravel bar above launch site.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved gravel boat launch located on-site. Raft or kayaks recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right    RL = River Left</b>	<b>Photo Date:</b> 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above the boat launch site and deploy 900 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at the dirt parking area above the unimproved boat launch. There may be additional staging area along Hwy 96 near river access point.

### Response Strategy Map (overview)

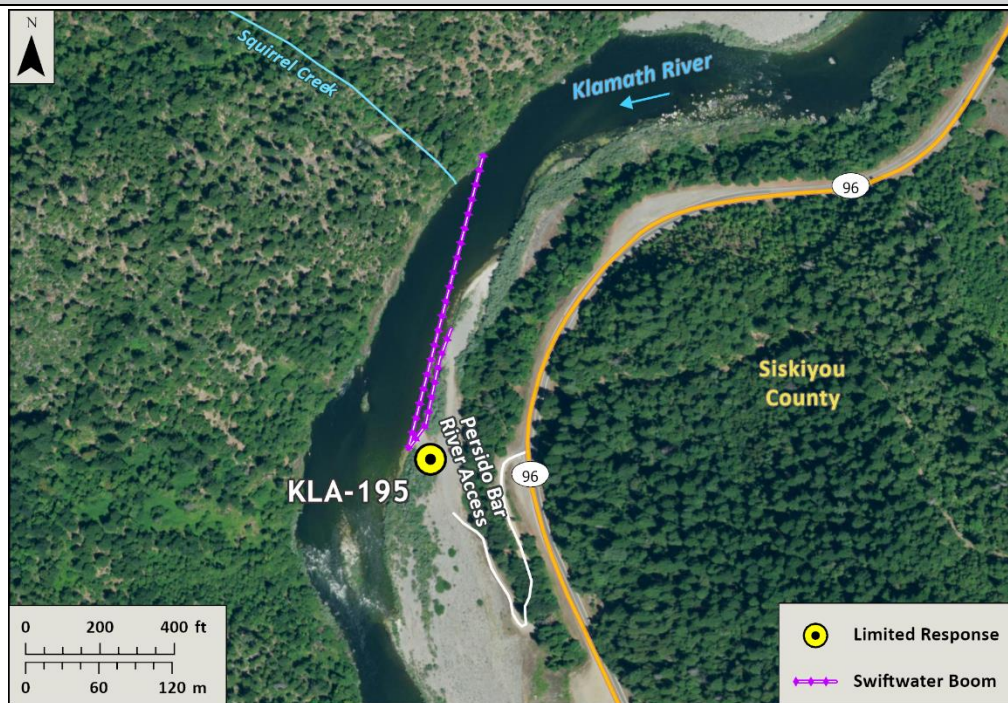


Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	1,100	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	3,000	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks or rafts recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

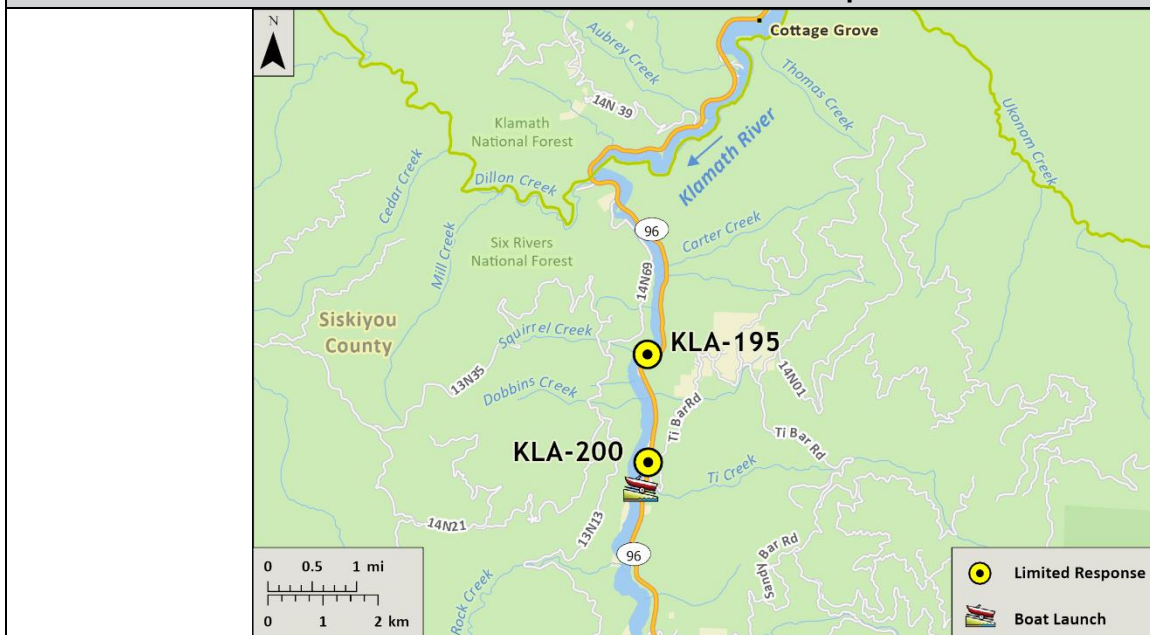
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<b>Driving Directions:</b>	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 26.9 miles west to the Ti Bar River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 26.9 miles west to the Ti Bar River Access.		
<b>Latitude/Longitude:</b> 41.52716, -123.52869	<b>Highway Postmile:</b> Hwy 96 SIS 12.09	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested

**Nearest Address:** 17 miles from Orleans, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://cnrfc.noaa.gov/hydrology/river-guidance/graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Lower Klamath Marbled Sculpin, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Pacific Tailed Frog, Southern Torrent Salamander, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

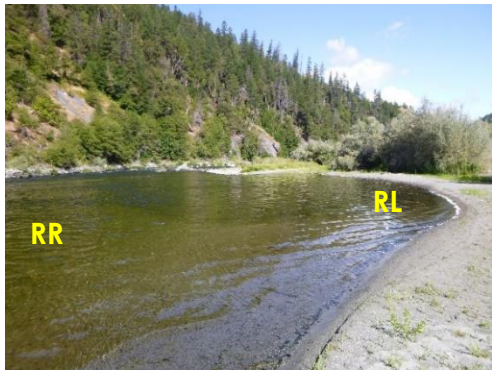
**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-G-015	<b>Site Description and Field Notes:</b> There is a paved road at this site with a gravel dirt road that leads to the river's edge. The launch has a steep drop off with may require a 4-wheel drive vehicle to successfully launch. This site is not suitable for jet boats. A toilet but no potable water is available.			
<b>Gradient:</b> Low	<b>River Width:</b> 59.44 m (195 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Unimproved sandy boat launch located across from the restroom. Responders cannot drive to the river's edge. Raft or kayaks recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above the boat launch site and deploy 600 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at parking area above the unimproved boat launch.

### Response Strategy Map (overview)



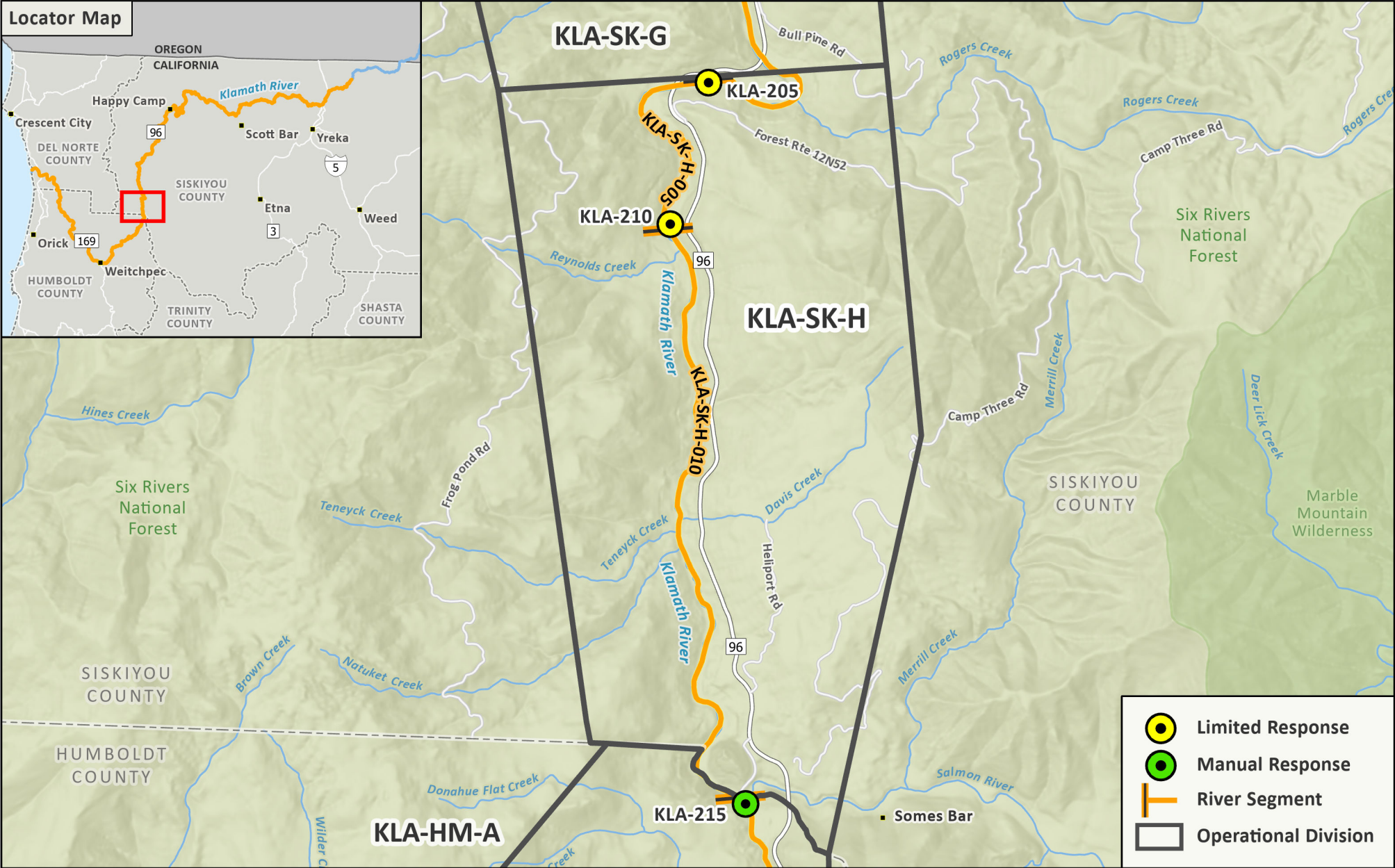
Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	800	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,500	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks or rafts recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Figure 3-8: Klamath River GRP Division KLA-SK-H Map

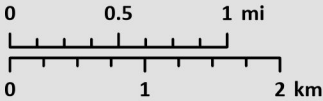


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:56,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

# Klamath River Geographic Response Plan Division KLA-SK-H



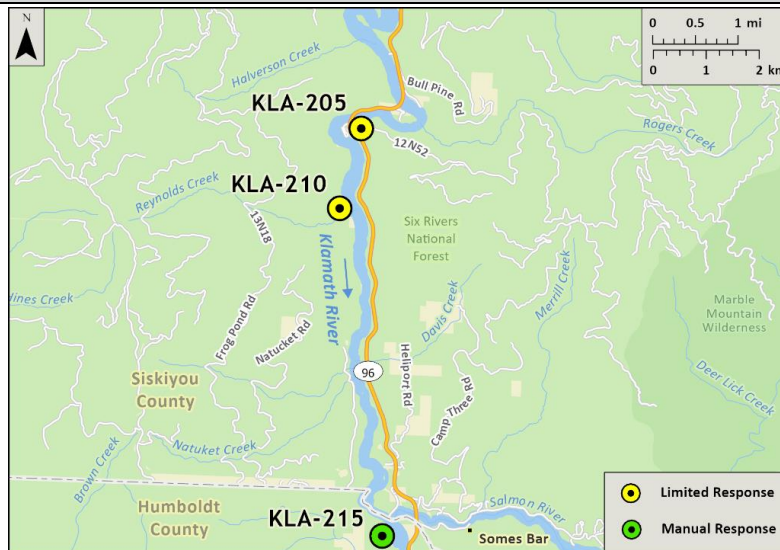


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Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 33.7 miles west to the Stuarts Bar River Access. The dirt access road is off eastbound Hwy 96.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 33.7 miles west to the Stuarts Bar River Access. The dirt access road is off eastbound Hwy 96.		
	Steep winding dirt access road leads to an unimproved cobble boat launch at the edge of the river.		
Latitude/Longitude: 41.44627, -123.50181	Highway Postmile: Hwy 96 SIS 4.89	Railroad Milepost: N/A	Cell Service: No - Verizon Tested

**Nearest Address:** 11 miles from Orleans, CA

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-seic1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Osprey, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-SK-H-005	<b>Site Description and Field Notes:</b> This site is a popular take out point for rafters and drift boats but the dirt/gravel road down to the river is windy and steep with sharp turns that are not feasible for large vehicles to access. No water or restrooms on site.			
<b>Gradient:</b> Low	<b>River Width:</b> 39.62 m (130 ft)	<b>Vehicular Access:</b> High clearance vehicles recommended for accessing river. Responders may be able to get a 70-bbl vac truck to the parking area above the river.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> There is an unimproved cobble boat launch at the river's edge. Rafts or kayaks recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Gravel bars and gently sloping banks (6A); Vegetated steeply sloping banks (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above the boat launch site and deploy 400 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at parking area above the unimproved boat launch.

### Response Strategy Map (overview)



### Table of Response Resources

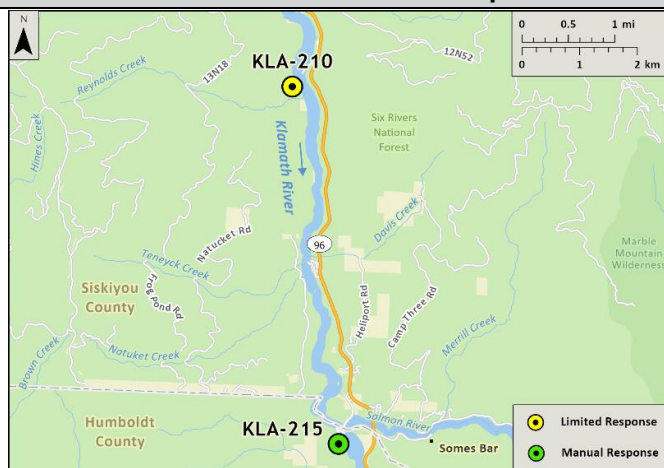
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	600	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,000	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks or rafts recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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Driving Directions:	From North: Take I-5 South and take Exit 786, turn west (left) onto Anderson Grade Road and cross over the Klamath River. Turn south (left) onto Hwy 96 toward Happy Camp/Willow Creek. From the USFS Happy Camp Ranger District office, proceed 34.7 miles west to the Green Riffle River Access.		
	From South: Take I-5 North and take Exit 786, merge directly onto Hwy 96. Continue south and west on Hwy 96 to Happy Camp. From the USFS Happy Camp Ranger District office, proceed 34.7 miles west to the Green Riffle River Access.		
	Steep winding dirt access road leads to an unimproved cobble and sand boat launch site at the edge of the river. There is soft unconsolidated sand near the launch site.		
Latitude/Longitude: 41.43300, -123.50658	Highway Postmile: Hwy 96 SIS 4.57	Railroad Milepost: N/A	Cell Service: No - Verizon Tested
Nearest Address: N/A			

## Overview Street Map



## Hazards, Restrictions and Advice for Responders

**NOTE: THIS IS THE LAST TAKE OUT POINT ABOVE ISHI PISHI FALLS (CLASS 6)**

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnrfc.gov/hydrology/river-guidance/graphical-rvf-seic1-noaa.gov/)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream or inaccessible during high flow conditions.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

## Resources-At-Risk

**Ecological:** Osprey, Chinook Salmon, Coho Salmon, Pacific Lamprey, Klamath River Lamprey, Northern Spotted Owl, Steelhead, Foothill Yellow-legged Frog, Western Pond Turtle

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northeast Information Center at (530) 898-6256.

## Site Description and Field Notes

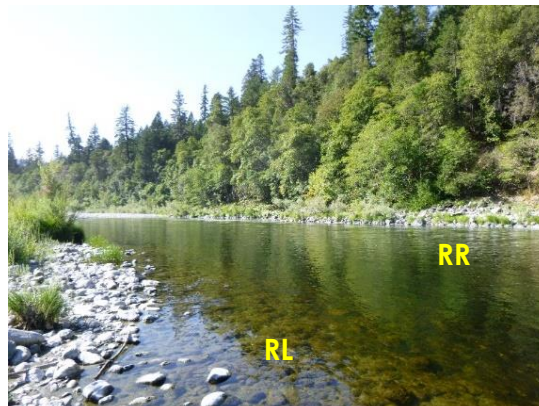
<b>Site Location/Segment:</b> KLA-SK-H-010	<b>Site Description and Field Notes:</b> This site has a steep gravel-dirt access road and is a mandatory take-out point for all vessels because it is the last available river access above Ishi Pishi Falls. No amenities on site.			
<b>Gradient:</b> Low to medium	<b>River Width:</b> 43.89 m (144 ft)	<b>Vehicular Access:</b> 4WD recommended near the river's edge. Responders may be able to get a 70-bbl vac truck to the gravel bar above the boat launch.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> There is an unimproved cobble boat launch at the river's edge. Rafts or kayaks recommended.
<b>Site Contact/s:</b>	USFS – Klamath National Forest Happy Camp Ranger District (530) 493-2243		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5); Vegetated steeply sloping bluffs (8F)			

## Site Images

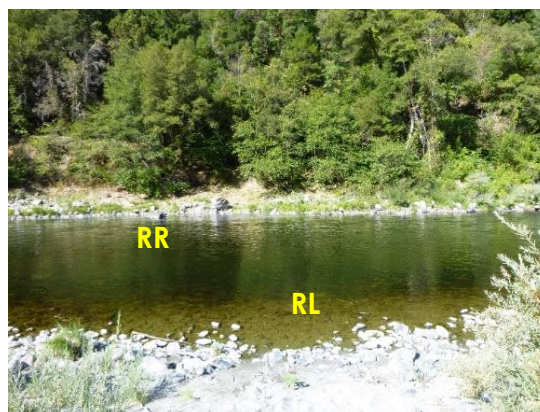
Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/10/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-right shoreline above the boat launch site and deploy 450 feet of swiftwater boom toward eddy at boat launch. Collect product with skimmer and pump directly to vacuum truck or tanks on shore. Deploy additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes at parking area above the unimproved boat launch.

### Response Strategy Map (overview)



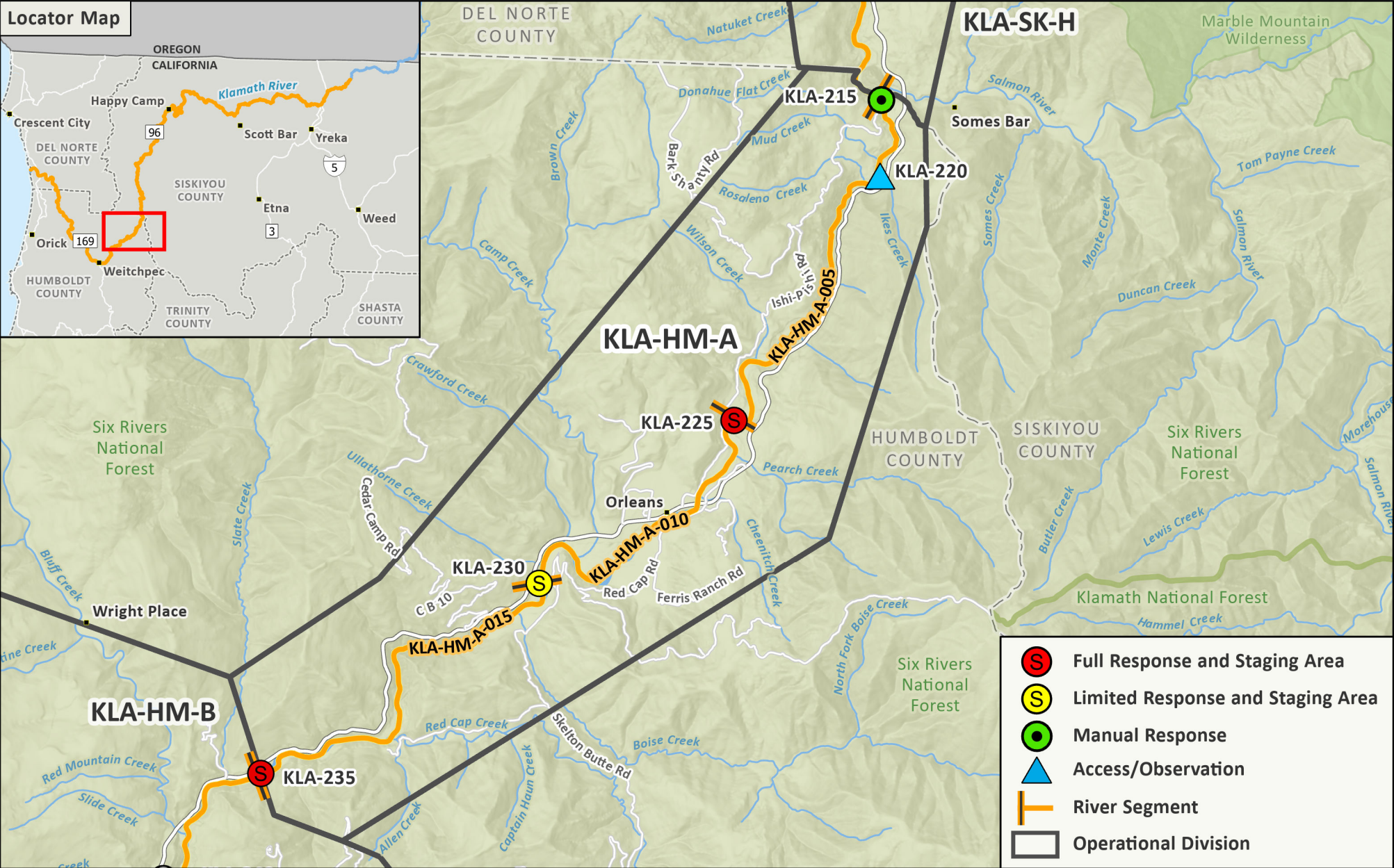
Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swiftwater	8 to 12-in. skirt	Feet	650	Need ancillary equipment including anchors and stakes
Boom	Sorbent	5 to 8-in. dia.	Feet	2,000	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			2	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks or rafts recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		70	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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Figure 3-9: Klamath River GRP Division KLA-HM-A Map

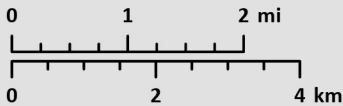


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:105,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

# Klamath River Geographic Response Plan Division KLA-HM-A

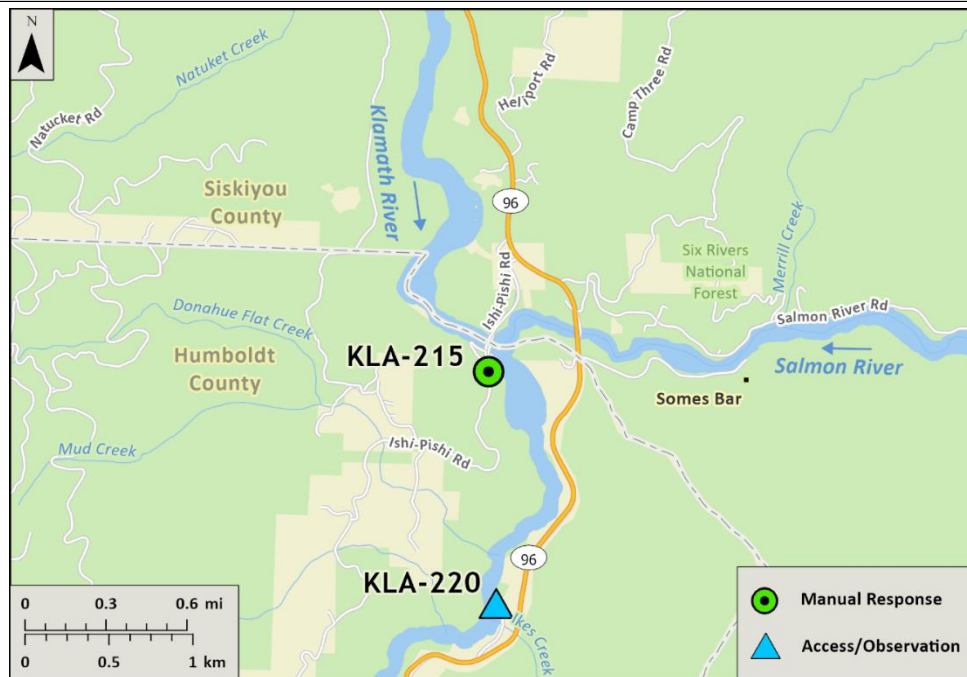




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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east and turn east onto Hwy 96 in Willow Creek and follow 44.5 miles to Ishi Pishi Road (at the Salmon River Outpost). Turn left and follow Ishi Pishi Road across the bridge and turn right into Ishi Pishi River Access, follow dirt road to bottom.</p> <p>From East: Take Hwy 96 west from Happy Camp and follow 37.4 miles to Ishi Pishi Road (at the Salmon River Outpost). Turn right and follow Ishi Pishi Road across the bridge and turn right into Ishi Pishi River Access, follow dirt road to bottom.</p>		
<b>Latitude/Longitude:</b> 41.37709, -123.49377	<b>Highway Postmile:</b> N/A	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> 99531 CA-96, Somes Bar, CA 95568			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water hazards. Uneven and rocky terrain, no improved river access. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnr.gov/hydrology-river-guidance-graphical-rvf-seic1-noaa.gov)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, Great Blue Heron, Northern Spotted Owl, Osprey, Townsend's Big-eared Bat, Chinook Salmon, Coho Salmon, Green Sturgeon, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog

**Economic:** Fishing guide services, local tourism, rafting, kayaking

**Tribal:** Contact the Native American Heritage Commission at (916)-373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-A-005	<b>Site Description and Field Notes:</b> This response site is within Six Rivers National Forest near Somes Bar and is at the confluence of the Salmon and Klamath Rivers. The site is at the end of a narrow dirt road accessible from Ishi Pishi Road and provides river access for manual cleanup. There are no amenities or improvements at this location. Elevation is ~460 feet.			
<b>Gradient:</b> Medium (summer flow)	<b>River Width:</b> 100 m (330 ft)	<b>Vehicular Access:</b> Narrow gravel road accessible by work trucks, restricted turn around and parking at bottom.	<b>Recreational Use:</b> Fishing, rafting, kayaking and human contact.	<b>Boat Launches:</b> Hand launch possible for small vessel, kayaks, rafts.
<b>Site Contact/s:</b>	Six Rivers National Forest Orleans Ranger District (530) 627-3291		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated, steeply sloping bluffs (8F); Rocky shoals, bedrock ledges (2A), Mixed sand and gravel bars and gently sloping banks (5)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/24/2019



**Site Objectives:** Manual shoreline collection and cleanup at this unimproved river access using sorbent materials. In low summer and fall flow, deflection to collection and shoreline protection may be possible with approximately 1200 feet of swift water boom.

**Implementation:** Manually cleanup shoreline accessible from this location. Line shoreline with sorbent boom and use pads for collection. In low summer flows it may also be possible to use swift water boom to create a collection pocket. Start from river left shoreline above site and deploy 1000 feet of swift water boom toward river right shoreline. Collect product with sorbent materials. Consider additional 200 feet of swift water boom for shoreline protection at collection site.

**Staging Area Location and Capabilities/Amenities/Waste Management:** No amenities. Small parking area can provide staging area for equipment and waste management. Salmon River Outpost nearby provides groceries and supplies.

### Response Strategy Map (overview)



Table of Response Resources

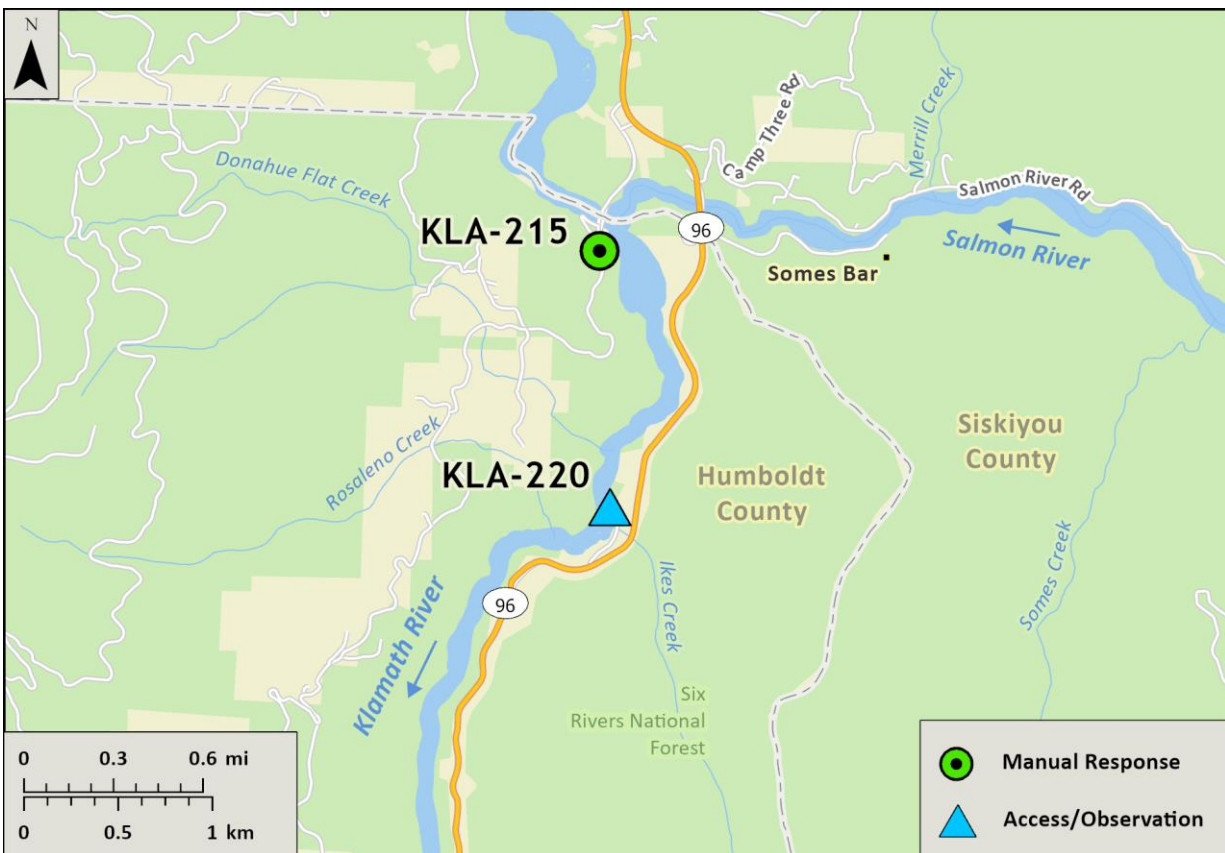
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Sorbent	5 to 8 in. dia.	Feet	1000	Consider addition of 1200-foot swift water boom if flows are low enough for safe deployment
Pads and Sweep	Sorbent		Bale	40	
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators needed if deploying boom, waders, PFDs

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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east to Willow Creek, turn left onto Hwy 96 and follow for 43.66 miles east to Ikes Falls River Access on the left, follow the dirt road to the bottom of the hill.</p> <p>From East: Take Hwy 96 west from Happy Camp, follow for 38.24 miles to Ikes Falls River Access on the right, follow the dirt road to the bottom of the hill.</p>		
<b>Latitude/Longitude:</b> 41.36395, -123.49351	<b>Highway Postmile:</b> Hwy 96 HUM 43.66	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> N/A			

## Overview Street Map



## Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water hazards. Waterfall below observation site. Uneven and rocky terrain, no improved river access. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - SEIC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-seic1)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)
- Access road is narrow and steep with tight turnaround at bottom, high clearance vehicle recommended.

## Site Description and Field Notes

## Site Location/Segment:

KLA-HM-A-005

**Site Description and Field Notes:** This site is managed by Six Rivers National Forest and provides access for observation of the river from the end of the access road; the road does not directly access the shoreline. Gradient of the river here is medium-high during summer flows and there is no opportunity to respond here. The access road is narrow and steep but should provide access to most vehicles. Elevation is ~440 feet.

## Site Contact/s:

Six Rivers National Forest-  
Orleans Ranger District  
(530) 627-3291

Karuk Tribe (530) 493-1600

## Site Images

Upstream



Downstream



Straight Across

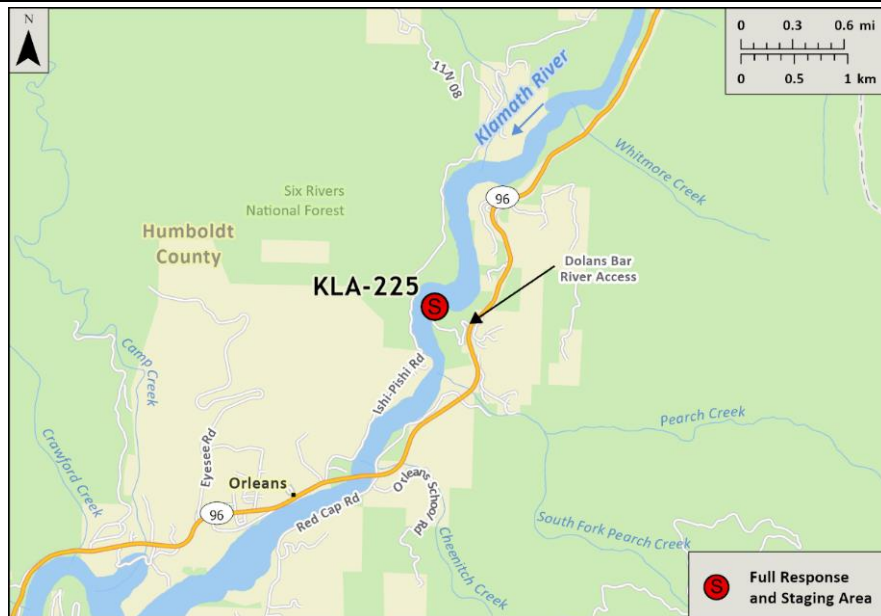


RR = River Right RL = River Left

Photo Date: 9/24/2019

<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east to Willow Creek, turn left on Hwy 96 and travel east for 39.89 miles to the Dolans Bar river access on the left and follow the dirt road to the bottom of the hill. Turn right to upriver end of gravel bar.</p> <p>From East: Take Hwy 96 west from Happy Camp and travel 42 miles to the Dolans Bar river access on the right and follow the dirt road to the bottom of the hill. Turn right to upriver end of gravel bar.</p>		
<b>Latitude/Longitude:</b> 41.318521, -123.526003	<b>Highway Postmile:</b> Hwy 96 HUM 39.89	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> N/A			

## Overview Street Map



## Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns, swift waters in winter and spring. Tribal fishing nets and submerged objects present, uneven terrain at response site. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-onsc1)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)
- Narrow access road.

## Resources-At-Risk

**Ecological:** Bald Eagle, Black Swift, Great Blue Heron, Northern Spotted Owl, Osprey, Chinook Salmon, Coho Salmon, Green Sturgeon, Lower Klamath Marbled Sculpin, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Suckley's Cuckoo Bumble Bee, Western Bumble Bee, Columbia Yellow Cress, Robust False Lupine

**Economic:** Fishing guide services, local tourism, rafting, kayaking, water contact

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-A-010	<b>Site Description and Field Notes:</b> This response site managed by Six Rivers National Forest provides public unimproved river access and the road is accessible to most vehicles. Launch site on gravel bar. Site has a public outhouse. Elevation is ~375 feet.			
<b>Gradient:</b> low (summer flow)	<b>River Width:</b> 92 m (300 ft)	<b>Vehicular Access:</b> Most vehicles can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting, kayaking, water contact.	<b>Boat Launches:</b> Unimproved launch site on gravel bar for small vessels.
<b>Site Contact/s:</b>	Six Rivers National Forest Orleans Ranger District (530) 627-3291		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Exposed rocky banks (1A), Mixed sand and gravel bars and gently sloping banks (5), Vegetated, steeply sloping bluffs (8F)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 7/25/2023

**Site Objectives:** Deflection to collection when flows are low enough to safely implement

**Implementation:** Deploy up to 900 feet of swift water boom from river right to collection area on river left. Consider adding 200 feet of swift water boom for shoreline protection at collection site. Collect floating product with sorbents or skimmer if feasible.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes away from river on gravel bar. Public outhouse at site.

### Response Strategy Map (overview)



### Table of Response Resources

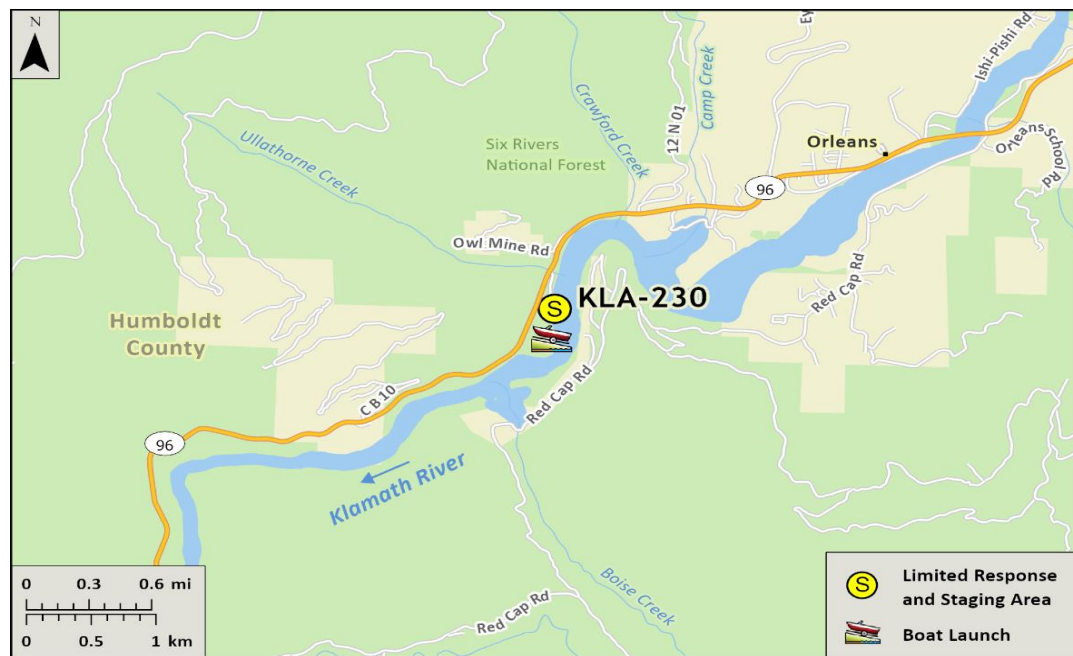
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	1100	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	2200	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			1	1 minimum. Shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east to Willow Creek, turn east onto Hwy 96 and follow 36.35 miles to Ullathorne River Access on the right. Follow gravel road to bottom, turn left on spur at upriver end of the river bar.</p> <p>From East: Take Hwy 96 west from Happy Camp and follow for 45.5 miles to Ullathorne River Access on the left. Follow gravel road to bottom, turn left on spur at upriver end of the river bar.</p>		
<b>Latitude/Longitude:</b> 41.28780, -123.57096	<b>Highway Postmile:</b> Hwy 96 HUM 36.35	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> N/A			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance/graphical-rvf-1/onsc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, Black Swift, Great Blue Heron, Northern Spotted Owl, Osprey, Fisher, Chinook Salmon, Coho Salmon, Green Sturgeon, Lower Klamath Marbled Sculpin, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Southern Torrent Salamander, Suckley's Cuckoo Bumble Bee, Western Bumble Bee, Columbia Yellow Cress, Robust False Lupine, Wolf's Evening Primrose

**Economic:** Fishing guide services, local tourism, rafting, kayaking

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-A-015	<b>Site Description and Field Notes:</b> This response site is within Six Rivers National Forest. The site is at the upriver end of the river bar and provides river access for limited or manual cleanup. There are no amenities at this location. Elevation is ~340 feet.			
<b>Gradient:</b> low (summer flow)	<b>River Width:</b> 100 m (330 ft)	<b>Vehicular Access:</b> Most vehicles can access road to river bar.	<b>Recreational Use:</b> Fishing, rafting, kayaking and human contact.	<b>Boat Launches:</b> No improved launch facility nearby but hand launch of small vessels is feasible, shallow draft vessel recommended.
<b>Site Contact/s:</b>	Six Rivers National Forest Orleans Ranger District (530) 627-3291		Karuk Tribe (530) 493-1600	
<b>ESI Shoreline Type:</b>	Vegetated low banks (9B), Gravel bars and gently sloping banks (6A)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 7/25/2023



**Site Objectives:** Deflect product to the river right shoreline for collection using swift water boom.

**Implementation:** Deploy up to 1000 feet of swift water boom from RL to a collection pocket near the launch site on RR. Consider additional 200 feet of swift water boom for shoreline protection. Collect floating product with sorbents for disposal.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Area above response site or highway shoulder are large enough to provide small staging area and waste management area but there are no improvements at site.

### Response Strategy Map (overview)

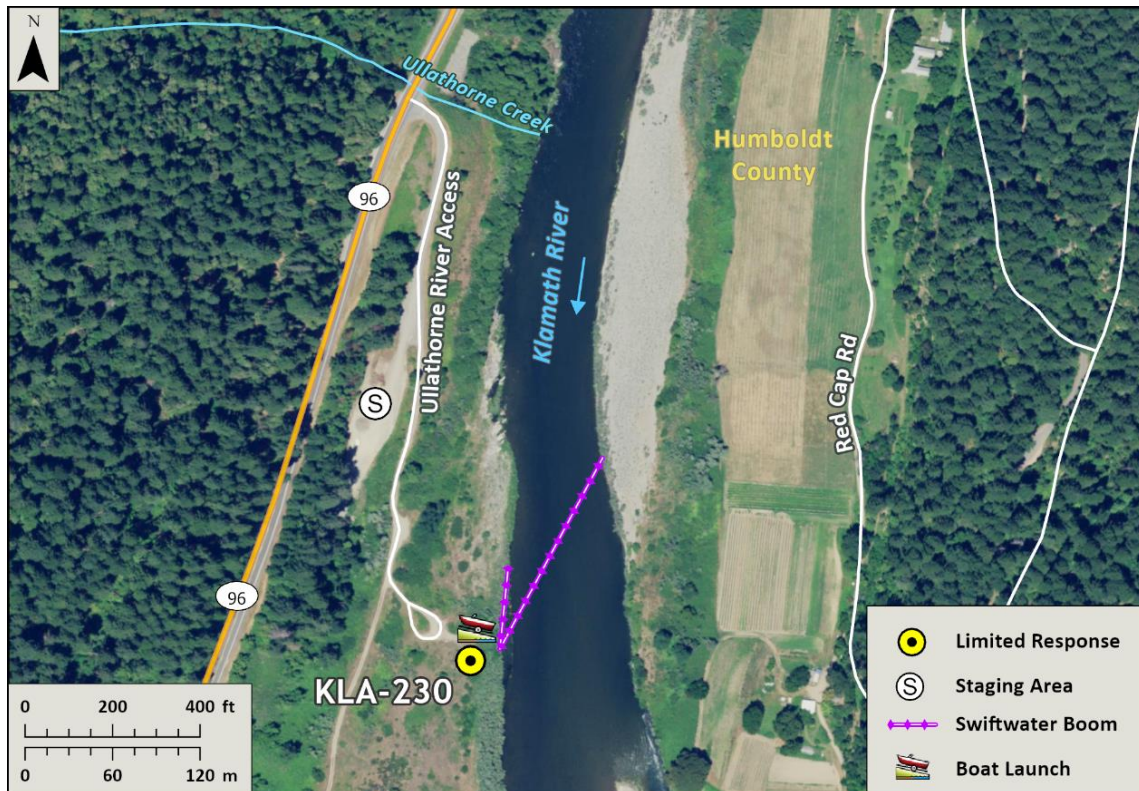


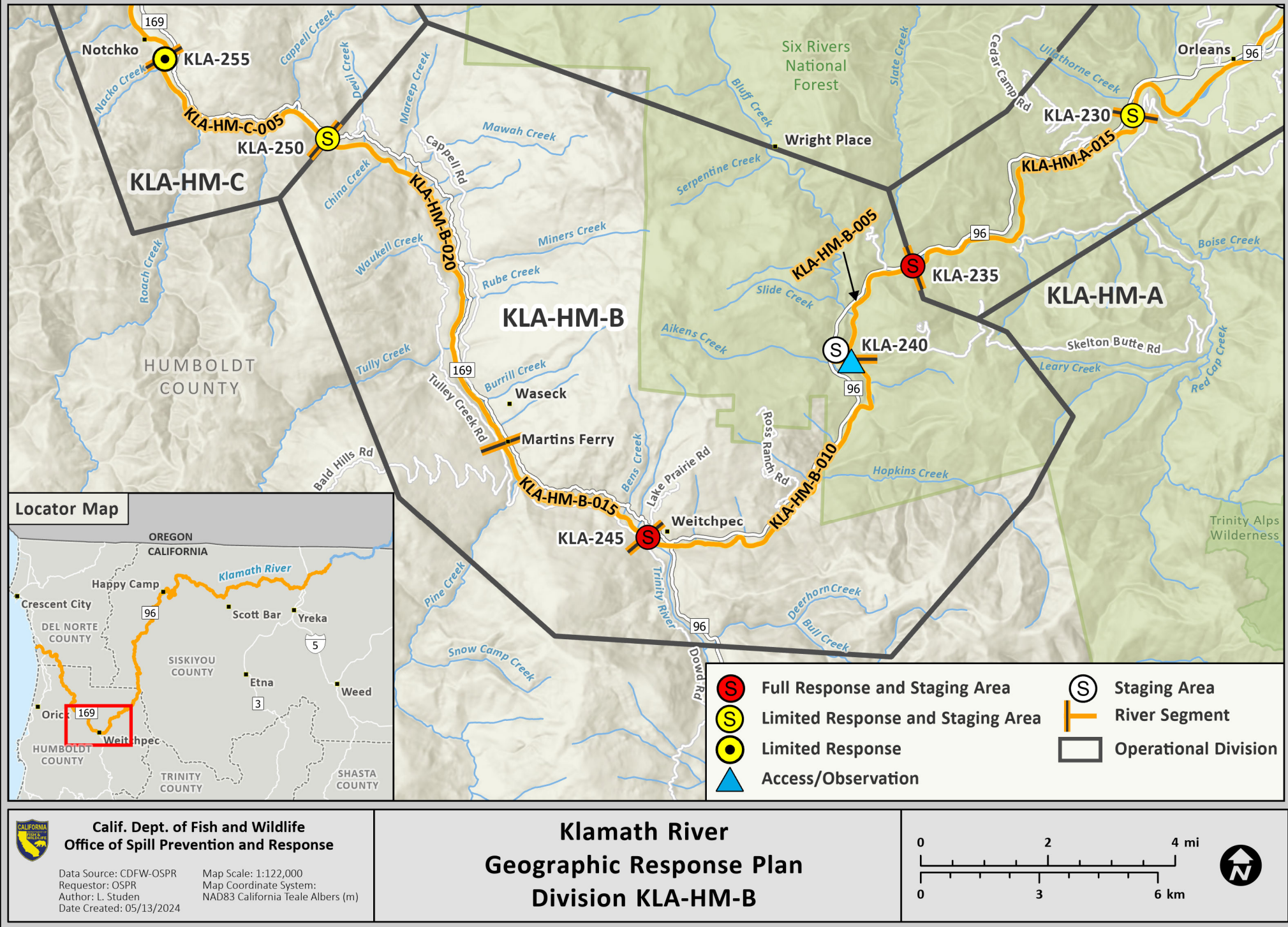
Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift water boom	8 to 12 in. skirt	Feet	1200	Need ancillary equipment including anchors and stakes
Boom	Sorbent boom	5 to 8 in. dia.	Feet	2400	
Pads and Sweep	Sorbent		Bale	40	
Response Vessel				1	1 minimum, hand launch limited to punts, kayaks, and rafts
Personnel			Crew	2 to 4	



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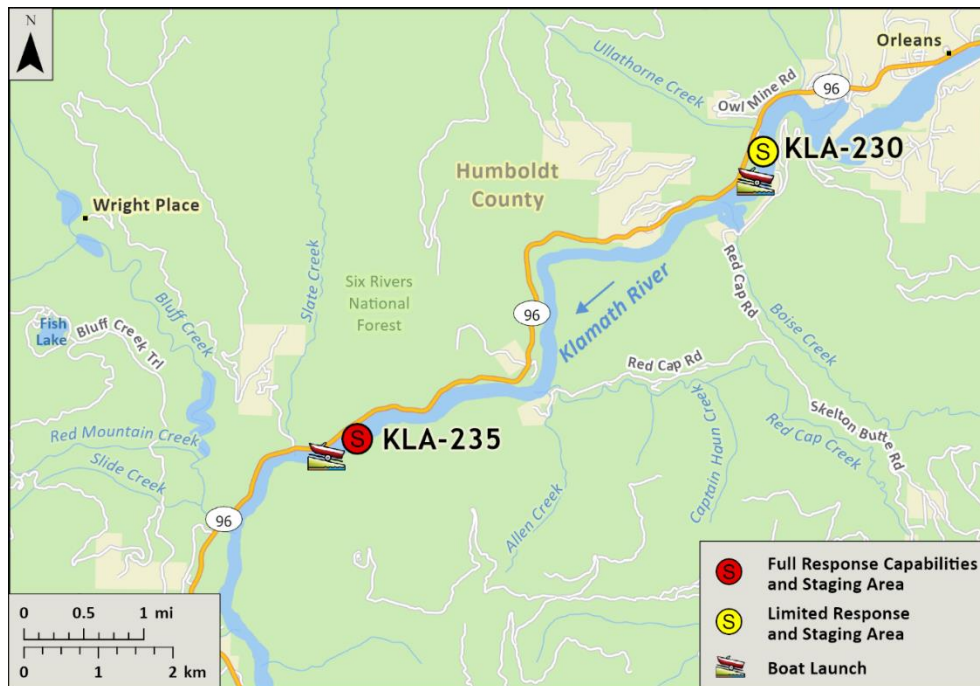
Figure 3-10: Klamath River GRP Division KLA-HM-B Map



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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east to Willow Creek and turn east on Hwy 96 for 30.3 miles to the Big Bar River access road on right, follow gravel road to bottom of hill and onto the river bar.</p> <p>From East: Take Hwy 96 west from Happy Camp and follow for 51.6 miles to the Big Bar River access road on left, follow gravel road to bottom of hill and onto the river bar.</p>		
<b>Latitude/Longitude:</b> 41.25154, -123.63506	<b>Highway Postmile:</b> Hwy 96 HUM 30.25	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> N/A			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance/graphical-rvf-onsc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following website tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** American Goshawk, Bald Eagle, Great Blue Heron, Northern Spotted Owl, Osprey, Fisher, Chinook Salmon, Coho Salmon, Green Sturgeon, Lower Klamath Marbled Sculpin, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Southern Torrent Salamander, Heckner's Lewisia, Pacific Gilia

**Economic:** rafting guide services, fishing guide services

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-B-005	<b>Site Description and Field Notes:</b> This site is managed by Six Rivers National Forest and provides public access to the river. There are no amenities. Elevation is ~285-ft.			
<b>Gradient:</b> Low (summer flow)	<b>River Width:</b> 48 m (156 ft)	<b>Vehicular Access?</b> All vehicle types can access this location	<b>Recreational Use?</b> Camping, fishing, rafting/kayaking, water contact	<b>Boat Launches:</b> Unimproved launch site on gravel bar for small vessels
<b>Site Contact/s:</b> Six Rivers Natl Forest Orleans Ranger District (530) 627-3291	Yurok Tribe Spill Hotline (707) 954-0462		Yurok Tribe Office of Emergency Services - Duty Officer (707) 951-6844	
<b>ESI Shoreline Type:</b>	Vegetative steeply sloping bluffs (8F); Gravel bars and steeply-sloping bluffs (6A)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/24/2019

**Site Objectives:** Deflection boom with product collection and shoreline protection.

**Implementation:** Start from river-left shoreline above gravel bar and deploy up to 500 feet of swift water boom toward eddy on river right. Collect product with sorbents or skimmer and pump directly to vacuum truck or tanks on shore. Consider additional 200 feet of boom for shoreline protection.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes away from river on highway shoulder or access road above gravel bar.

### Response Strategy Map (overview)

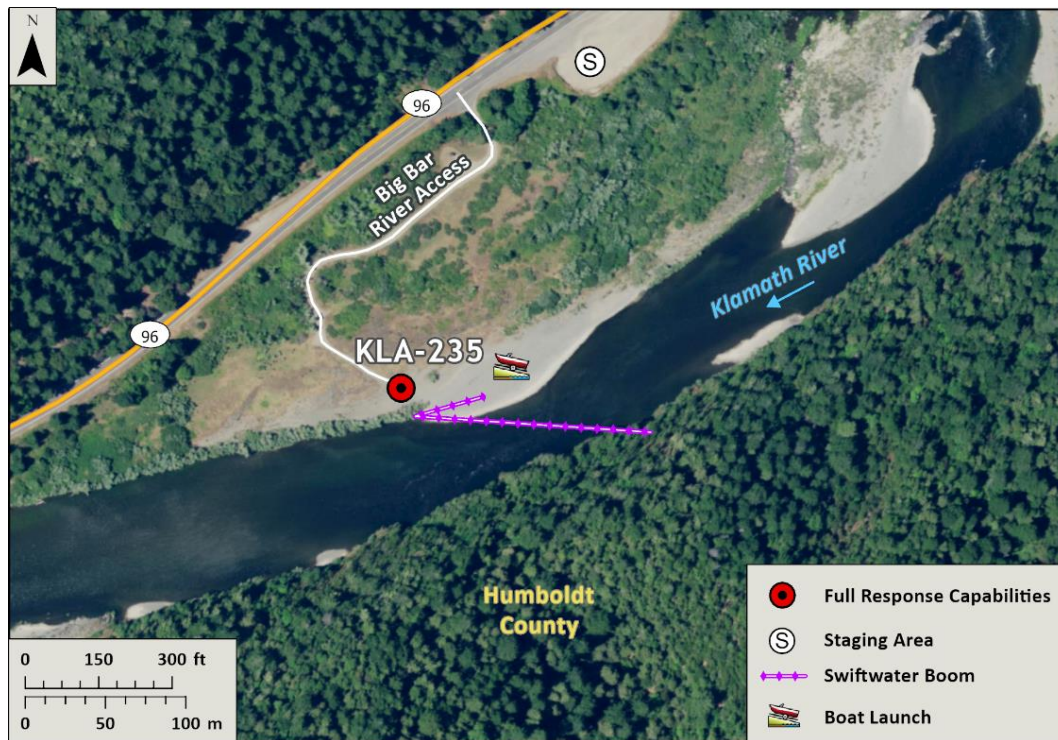


Table of Response Resources

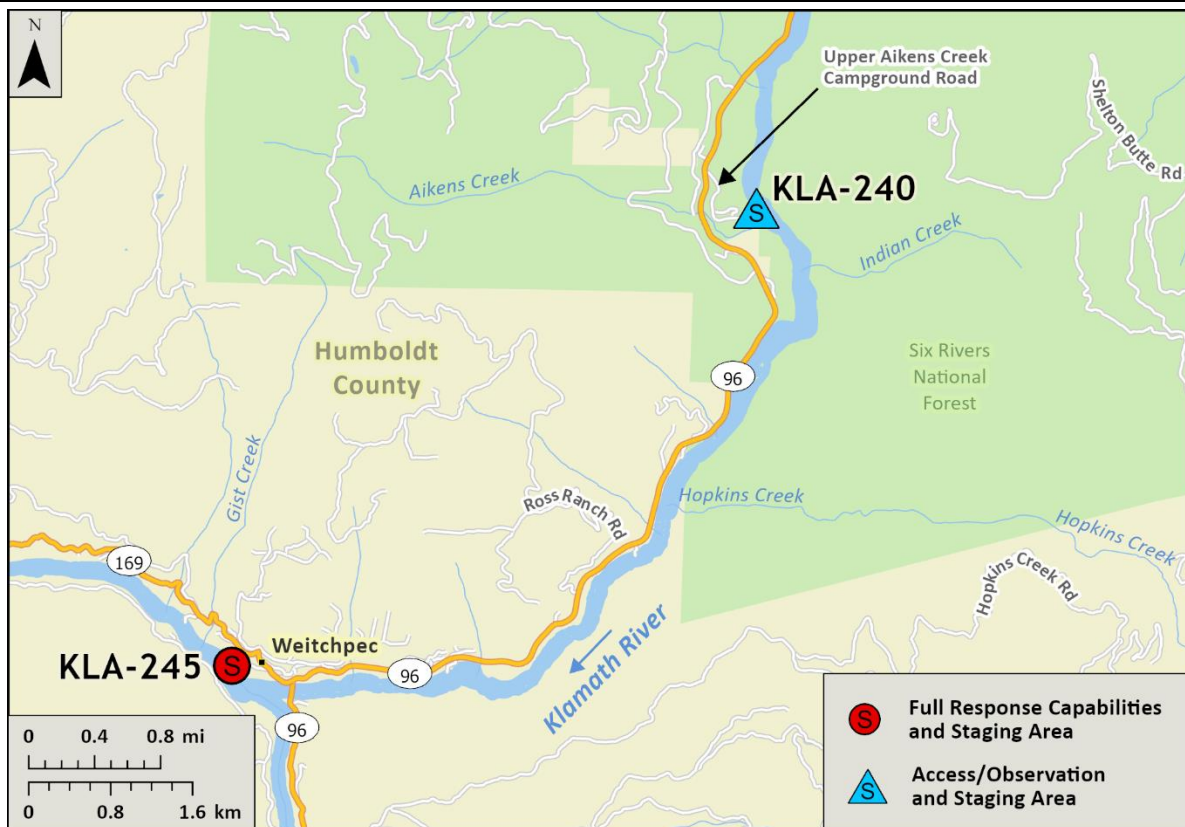
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	700	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	1,400	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			1	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	2 to 4	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed

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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 east to Willow Creek and turn east onto Hwy 96 and follow for 28.2 miles to Aikens Creek Recreation Area access road on the right, follow the dirt road to the end near the river. 4WD/rough road to access river or walk in.</p> <p>From East: Take Hwy 96 west from Happy Camp and travel 53.7 miles to Aikens Creek Recreation Area access road on the left, follow the dirt road to the end near the river. 4WD/rough road to access river or walk in.</p>		
<b>Latitude/Longitude:</b> 41.229962, -123.652989	<b>Highway Postmile:</b> Hwy 96 HUM 28.23	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> N/A			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water hazards in winter and spring. Uneven and rocky terrain, no improved river access. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-onsc1)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)



### Site Description and Field Notes

**Site Location/Segment:**

KLA-HM-B-010

**Site Description and Field Notes:** This site is managed by the Six Rivers National Forest and features an unimproved campground and large parking area off the highway that could serve as a local staging area, but the site doesn't provide easy river access. The river is approximately 110 yards from the end of the road but there is 4WD and foot access to the gravel bar in low flow conditions. Elevation is ~260 feet.

**Site Contact/s:**

Six Rivers Natl Forest  
Orleans Ranger District  
(530) 627-3291

Yurok Tribe Spill Hotline  
(707) 954-0462

Yurok Tribe Office of Emergency  
Services - Duty Officer  
(707) 951-6844

### Site Images

Upstream



Downstream



Straight Across

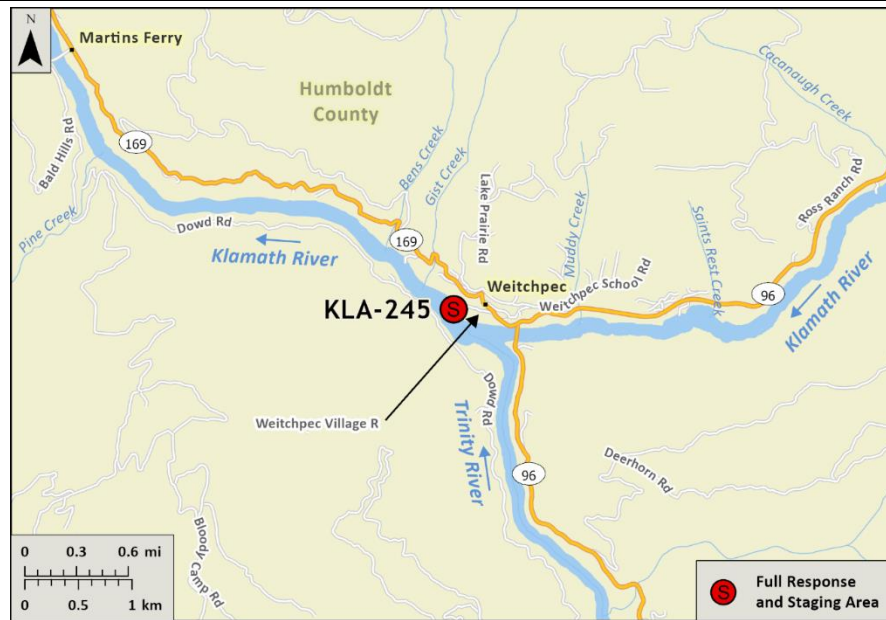


RR = River Right   RL = River Left

Photo Date: 7/25/2023

<b>Driving Directions:</b>	<p>From West: Take Hwy 299 to Willow Creek and travel east on Hwy 96 for 23.5 miles to Weitchpec. Turn left and head west on Hwy 169 for 0.2 miles, turn left on Old Village Rd and follow road down to gravel bar below.</p> <p>From East: Take Hwy 96 west from Happy Camp and travel 59 miles to Weitchpec. Turn right and head west on Hwy 169 for 0.2 miles, turn left on Old Village Rd and follow road down to gravel bar below.</p>		
<b>Latitude/Longitude:</b> 41.187520, -123.71255	<b>Highway Postmile:</b> Hwy 169 HUM 33.7	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon Tested
<b>Nearest Address:</b> End of Old Village Road			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns, swift waters in winter and spring. Tribal fishing nets and submerged objects present, uneven terrain at response site. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](#)
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Great Blue Heron, Northern Spotted Owl, Osprey, Fisher, Chinook Salmon, Coho Salmon, Green Sturgeon, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Southern Torrent Salamander, Western Bumble Bee

**Economic:** Rafting guide services, fishing guide services, tribal fishing

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-B-015	<b>Site Description and Field Notes:</b> This site is at the confluence of the Trinity and Klamath Rivers within the Yurok Reservation and provides access to the river. There are no amenities. There is a store with supplies and fuel in town on Hwy 96. Elevation is ~170 feet.			
<b>Gradient:</b> med/high (summer flow)	<b>River Width:</b> 48 m (156 ft)	<b>Vehicular Access:</b> Most vehicles can access this location.	<b>Recreational Use:</b> Camping, fishing, rafting/kayaking, water contact.	<b>Boat Launches:</b> Motorized vessels can launch from the gravel bar.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Yurok Tribe, Klamath Office (707) 482-1350  Yurok Tribe, Weitchpec Office (530) 625-4130	
<b>ESI Shoreline Type:</b>	Vegetative steeply sloping bluffs (8F); Gravel bars and steeply-sloping bluffs (6A)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 9/24/2019



**Site Objectives:** Deflection boom with product collection and shoreline protection

**Implementation:** Start from RL shoreline below confluence and deploy up to 500 feet of swift water boom toward eddy along river bar on RR. Collect product with skimmer and pump directly to vacuum truck or tanks on shore or use sorbents. Deploy additional 200 feet of boom for shoreline protection at collection site.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Stage equipment and manage wastes away from river on gravel bar.

### Response Strategy Map (overview)



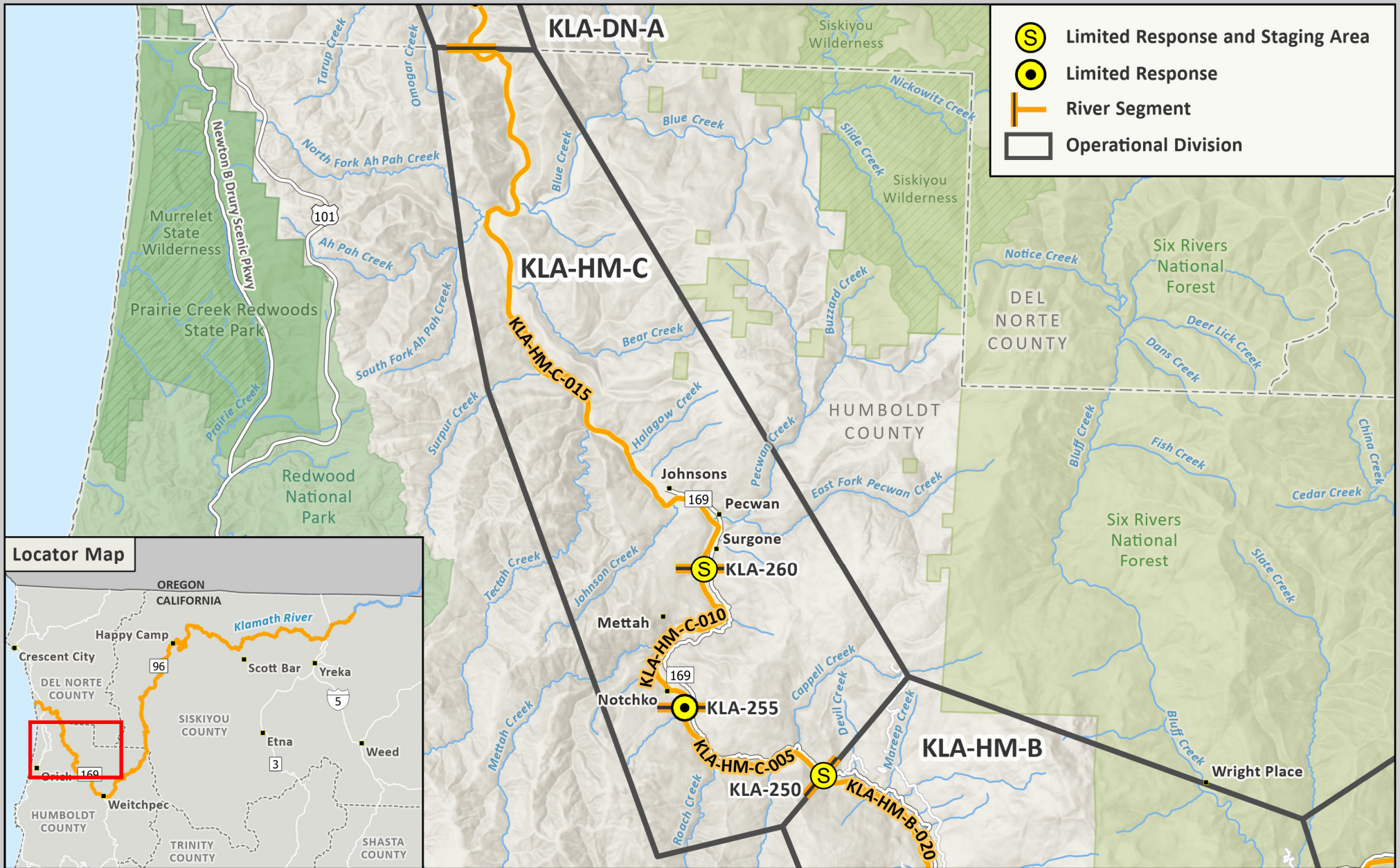
### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	700	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	1400	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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Figure 3-11: Klamath River GRP Division KLA-HM-C Map

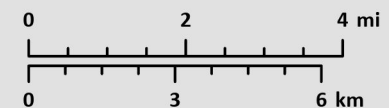


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:155,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

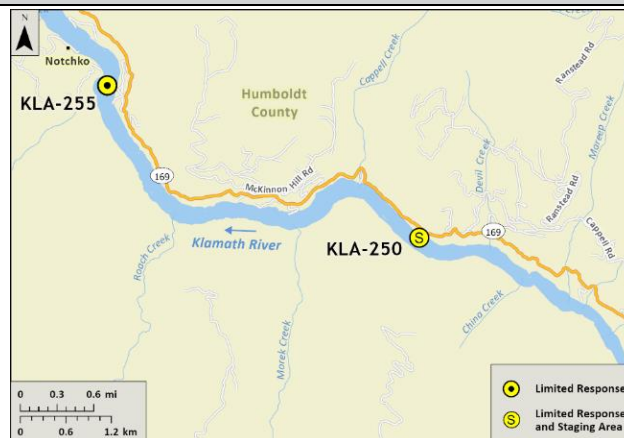
## Klamath River Geographic Response Plan Division KLA-HM-C



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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 to Willow Creek and turn east onto Hwy 96. Take Highway 96 to Weitchpec, turn left on Highway 169 and follow west for 10.4 miles to unsigned road on left.</p> <p>From East: Take Hwy 96 west from Happy Camp to Weitchpec and turn right on Highway 169 and follow west for 10.4 miles to unsigned road on left.</p> <p>Follow narrow winding dirt road down to the downriver end of the gravel bar. This is the first left turn after Lower Kep'el Rd and the retaining wall.</p> <p><b>Note:</b> Hwy 169 mile markers are posted in reverse from west to east. Distance traveled from Weitchpec will not coincide with posted MM.</p>		
<b>Latitude/Longitude:</b> 41.27523, -123.81352	<b>Highway Postmile:</b> Hwy 169 HUM 23.17	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested
<b>Nearest Address:</b> N/A			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns, swift waters in winter and spring. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnr.gov/hydrology/river-guidance-graphical-rvf-onsc1)
- Hwy 169 is narrow and has no centerline. Local traffic can be unsafe, drive with caution. Access road to site is unmarked, narrow, and steep.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Northern Spotted Owl, Osprey, Fisher, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Green Sturgeon, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Pacific Tailed Frog, Southern Torrent Salamander, Robust False Lupine

**Economic:** Rafting guide services, fishing guide services, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-C-005	<b>Site Description and Field Notes:</b> The site is a large gravel bar within the Yurok Reservation downriver from Weitchpec. There are no amenities or improvements at this site. There is a good collection site along the RR shoreline. Elevation is ~115 feet.			
<b>Gradient:</b> low	<b>River Width:</b> 100 m (330 ft)	<b>Vehicular Access:</b> Most vehicles can access road to river bar.	<b>Recreational Use:</b> Fishing, human contact, tribal.	<b>Boat Launches:</b> No improved launch facility nearby but small motorized vessels can be launched on site from gravel bar.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Yurok Tribe, Klamath Office (707) 482-1350 Yurok Tribe, Weitchpec Office (530) 625-4130	
<b>ESI Shoreline Type:</b>	Vegetated, steeply-sloping bluffs (8F), Sandy bars and gently sloping banks (4), Mixed sand and gravel bars and gently sloping banks (5)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/29/2019

**Site Objectives:** Deflect product to the RR shoreline for collection using swift water boom.

**Implementation:** Deploy up to 1,000 feet swift water boom from RL to a collection pocket on RR at gravel bar. Consider adding 200 feet swift water boom for shoreline protection at collection site. Collect floating product with sorbents for disposal, or skimmer if conditions allow.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep.

### Response Strategy Map (overview)



**Table of Response Resources**

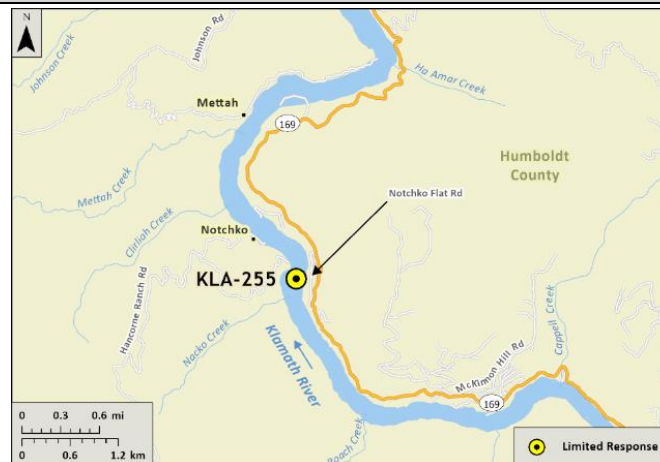
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	1,200	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	2,400	
Pads and Sweep	Sorbent		Bale	40	
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum

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Driving Directions:	From West: Take Hwy 299 east to Willow Creek and turn east onto Hwy 96 to Weitchpec. Turn left on Highway 169 and follow west for 14.7 miles to Notch-ko Village Rd on left.		
	From East: Take Hwy 96 west from Happy Camp to Weitchpec and turn right onto Hwy 169. Follow west for 14.7 miles to Notch-ko Village Rd on left.		
	Follow narrow, overgrown, winding dirt road past residences down to the downriver end of the gravel bar.		
	<b>Note:</b> Hwy 169-mile markers are posted in reverse from west to east. Distance traveled from Weitchpec will not coincide with posted MM.		
Latitude/Longitude: 41.29235, -123.86317	Highway Postmile: Hwy 169 HUM 19.8	Railroad Milepost: N/A	Cell Service: No - Verizon tested

**Nearest Address:** N/A

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns, swift waters in winter and spring. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSCI \(noaa.gov\)](https://www.cnrfc.noaa.gov/hydrology/river-guidance-graphical-rvf-onsci)
- Hwy 169 is narrow and has no centerline. Local traffic can be unsafe, drive with caution. Access road to site is very rough, narrow, and steep, 4WD recommended.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Northern Spotted Owl, Osprey, Fisher, River Otter, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Green Sturgeon, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Pacific Tailed Frog, Southern Torrent Salamander

**Economic:** Fishing guide services, tribal and recreational fishing, local tourism, rafting guide services

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-C-010	<b>Site Description and Field Notes:</b> The site is a large gravel bar downriver from Weitchpec within the Yurok Reservation with a seasonal dock for the Tribe's water taxi. There are no amenities or improvements at this site. There is a good collection site along the RR shoreline, but the gravel bar is steep. Exercise caution for foot access. Elevation is ~95 feet.			
<b>Gradient:</b> medium/high	<b>River Width:</b> 82 m (270 ft)	<b>Vehicular Access:</b> 4WD vehicles can access road to river bar.	<b>Recreational Use:</b> Fishing, human contact, tribal.	<b>Boat Launches:</b> No improved launch facility nearby but small vessels can be launched on site from gravel bar.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Yurok Tribe, Klamath Office (707) 482-1350  Yurok Tribe, Weitchpec Office (530) 625-4130	
<b>ESI Shoreline Type:</b>	Vegetated, steeply-sloping bluffs (8F), Sandy bars and gently sloping banks (4), Mixed sand and gravel bars and gently sloping banks (5)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/29/2019

**Site Objectives:** Deflect product to the RR shoreline for collection using swift water boom.

**Implementation:** Deploy up to 850 feet swift water boom from RL to a collection pocket on RR. Consider adding 200 feet additional boom for shoreline protection at collection site. Collect floating product with sorbents for disposal. Deploy cascading sections of boom if needed (400-600 feet).

**Staging Area Location and Capabilities/Amenities/Waste Management:** Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep. Collection may be difficult due to steep bank.

### Response Strategy Map (overview)



### Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	1,050	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	2,100	
Pads and Sweep	Sorbent		Bale	40	
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum

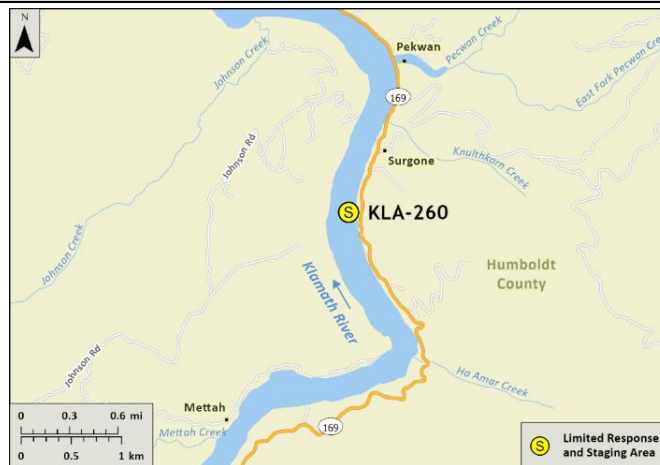
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<b>Driving Directions:</b>	<p>From West: Take Hwy 299 to Willow Creek and turn east onto Hwy 96 and follow to Weitchpec. Turn left on Highway 169 and follow west for 18.1 miles to Spey-Gon Lane on left (no signage), follow narrow winding dirt road down to the river bar.</p> <p>From East: Take Hwy 96 west from Happy Camp to Weitchpec. Turn right on Highway 169 and follow west for 18.1 miles to Spey-Gon Lane on left (no signage), follow narrow winding dirt road down to the river bar.</p> <p><b>Note:</b> Hwy 169 mile markers are posted in reverse from west to east. Distance traveled from Weitchpec will not coincide with posted MM.</p>		
<b>Latitude/Longitude:</b> 41.32929, -123.85863	<b>Highway Postmile:</b> Hwy 169 HUM 15.51	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> No - Verizon tested

**Nearest Address:** N/A

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns, swift waters in winter and spring. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - ONSC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-onsc1-noaa.gov)
- Hwy 169 is narrow and has no centerline. Local traffic can be unsafe, drive with caution. Access road to site has no signage and is narrow and steep.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Northern Spotted Owl, Osprey, Fisher, River Otter, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Green Sturgeon, Pacific Lamprey, Steelhead, Western Pond Turtle, Foothill Yellow-legged Frog, Northern Red-legged Frog, Pacific Tailed Frog, Southern Torrent Salamander, Robust False Lupine

**Economic:** Fishing guide services, tribal and recreational fishing, local tourism, rafting guide services

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.



## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-HM-C-015	<b>Site Description and Field Notes:</b> The site is a large gravel bar downriver from Weitchpec within the Yurok Reservation and has a seasonal dock for the Tribe's water taxi. There are no amenities or improvements at this site. There is a good collection site along the RR shoreline. Elevation is ~80 feet.			
<b>Gradient:</b> Medium	<b>River Width:</b> 123 m (405 ft)	<b>Vehicular Access:</b> Most vehicles can access road to river bar but the road is narrow and steep.	<b>Recreational Use:</b> Fishing, human contact, tribal.	<b>Boat Launches:</b> No improved launch facility nearby but small motorized vessels can be launched on site from gravel bar.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Yurok Tribe, Klamath Office (707) 482-1350 Yurok Tribe, Weitchpec Office (530) 625-4130	
<b>ESI Shoreline Type:</b>	Gravel bars and gently sloping banks (6A), Mixed sand and gravel bars and gently sloping banks (5), Vegetated, steeply-sloping bluffs (8F), Vegetated low banks (9B)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/29/2019

**Site Objectives:** Deflect product to the RR shoreline for collection using swift water boom.

**Implementation:** Deploy up to 1250 feet swift water boom from RL to a collection pocket on RR at the gravel bar. Consider additional 200 feet for shoreline protection at collection site. Collect floating product with sorbents for disposal. Deploy cascading sections of boom if needed (400-600 feet).

**Staging Area Location and Capabilities/Amenities/Waste Management:** Gravel bar is large enough to provide for small staging and waste management area but there are no improvements on site and the access road is narrow and steep.

### Response Strategy Map (overview)

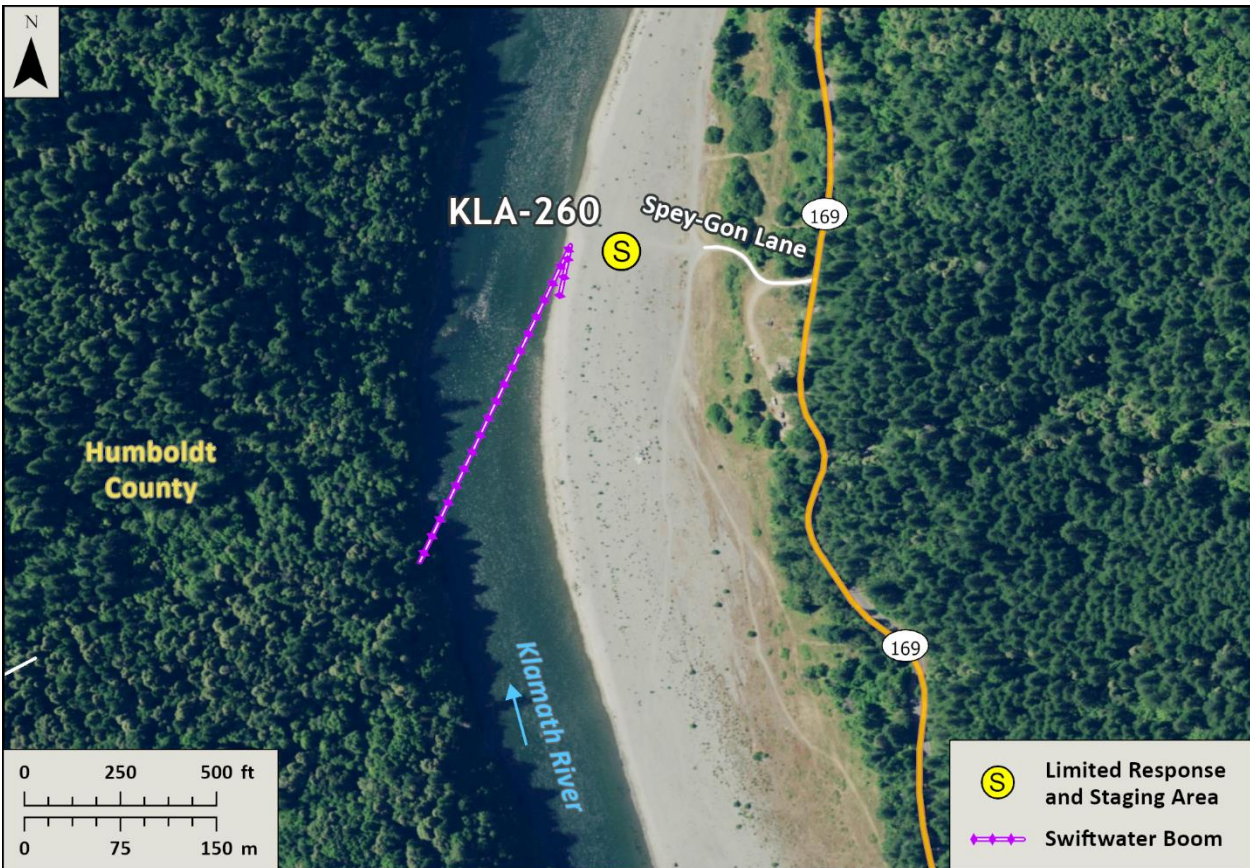


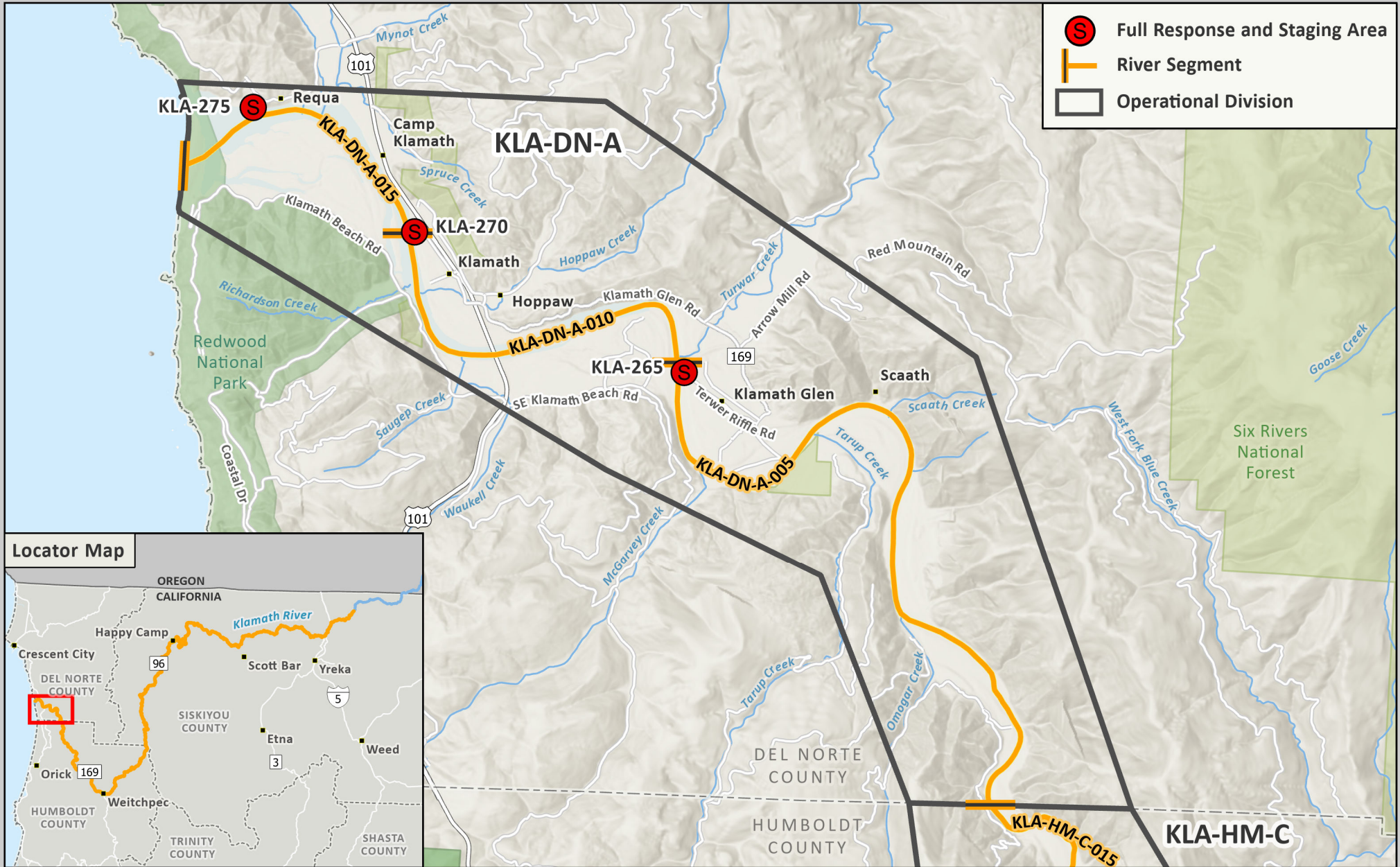
Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	1,450	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	2,900	
Pads and Sweep	Sorbent		Bale	40	
Response Vessel	Response and Boom Vessel			2	1 each, minimum. Kayaks, rafts, or shallow draft vessels recommended.
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum

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Figure 3-12: Klamath River GRP Division KLA-DN-A Map

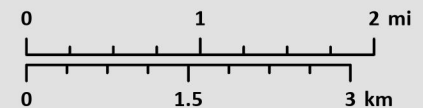


Calif. Dept. of Fish and Wildlife  
Office of Spill Prevention and Response

Data Source: CDFW-OSPR  
Requestor: OSPR  
Author: L. Studen  
Date Created: 05/13/2024

Map Scale: 1:70,000  
Map Coordinate System:  
NAD83 California Teale Albers (m)

## Klamath River Geographic Response Plan Division KLA-DN-A

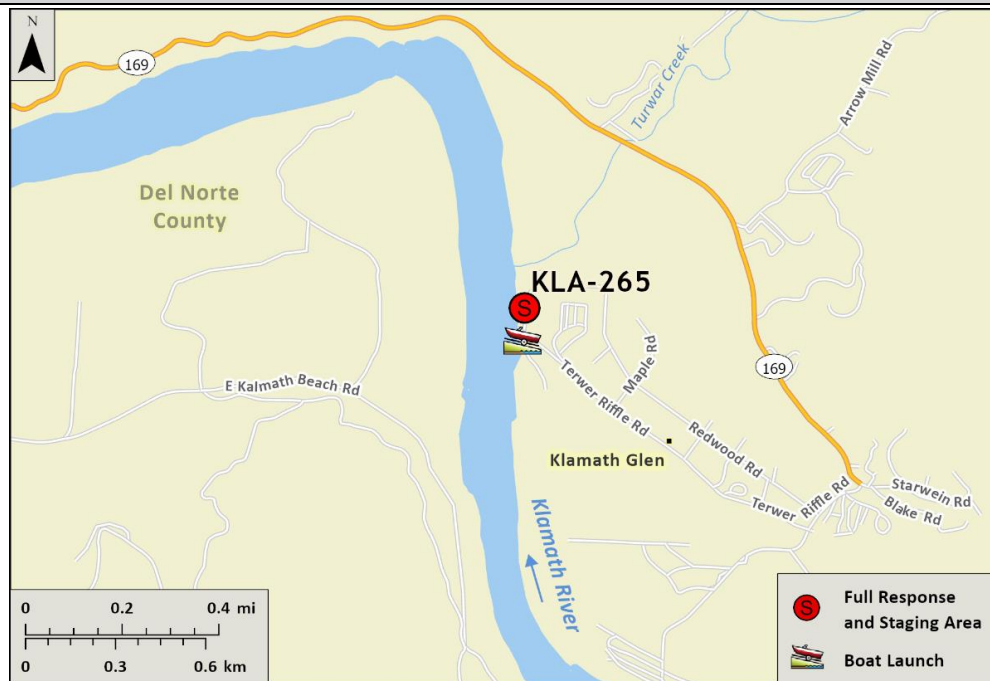




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<b>Driving Directions:</b>	From North or South on Highway 101 near Klamath: Take Hwy 169 east towards Klamath Glen/Terwer Valley, follow 3.2 miles into Klamath Glen, turn right onto Terwer Riffle Road and follow for 0.2 miles, stay right on Terwer Riffle Road, and follow another 0.8 miles up and over levee into launch facility.		
<b>Latitude/Longitude:</b> 41.51590, -124.00050	<b>Highway Postmile:</b> N/A	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> Yes - Verizon Tested
<b>Nearest Address and Thomas Guide #:</b> End Terwer Riffle Rd, Klamath Glen, CA			

## Overview Street Map



## Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. Uneven banks. This response strategy will only be safe and feasible in lower flows between late spring and fall due to swift currents. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - KLMC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-klmc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

## Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Great Blue Heron, Marbled Murrelet, Northern Spotted Owl, Osprey, River Otter, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Eulachon, Green Sturgeon, Longfin Smelt, Lower Klamath Marbled Sculpin, Pacific Lamprey, Steelhead, Northern Red-legged Frog, Wolf's Evening Primrose

**Economic:** Fishing guide services, tribal, recreational, and commercial fishing, camping, local tourism


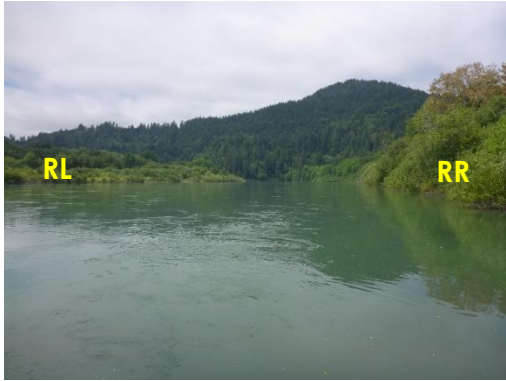

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-DN-A-010	<b>Site Description and Field Notes:</b> This response site is at the town of Klamath Glen at an improved boat launch facility. There is ample parking for staging and waste management at the site but there are no amenities. The site is within the Yurok Reservation. The site may be considered for limited or manual response or observation only in higher flows. Elevation is ~15 feet.			
<b>Gradient:</b> med (summer)	<b>River Width:</b> 151 m (495 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Recreational and commercial fishing, local tourism.	<b>Boat Launches:</b> This site features an improved boat launch and seasonal dock managed by Del Norte County.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462 Klamath Office (707) 482-1350	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Pulika Tribe of Yurok People (707) 482-2431	Del Norte County Parks & Recreation Department (707) 464-7237
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5), Vegetated low banks (9B)			

## Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right    RL = River Left</b>	<b>Photo Date:</b> 5/28/2019

**Site Objectives:** Strand floating oil near the boat launch for collection and disposal.

**Implementation:** Deploy up to 1500 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 feet). Recover oil with skimmer and sorbents. On water skimming may be possible.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Parking area at boat launch is large enough to serve as staging and waste management areas but there are no amenities. Coordinate response here with Yurok Tribe and Del Norte County Parks & Recreation.

### Response Strategy Map (overview)

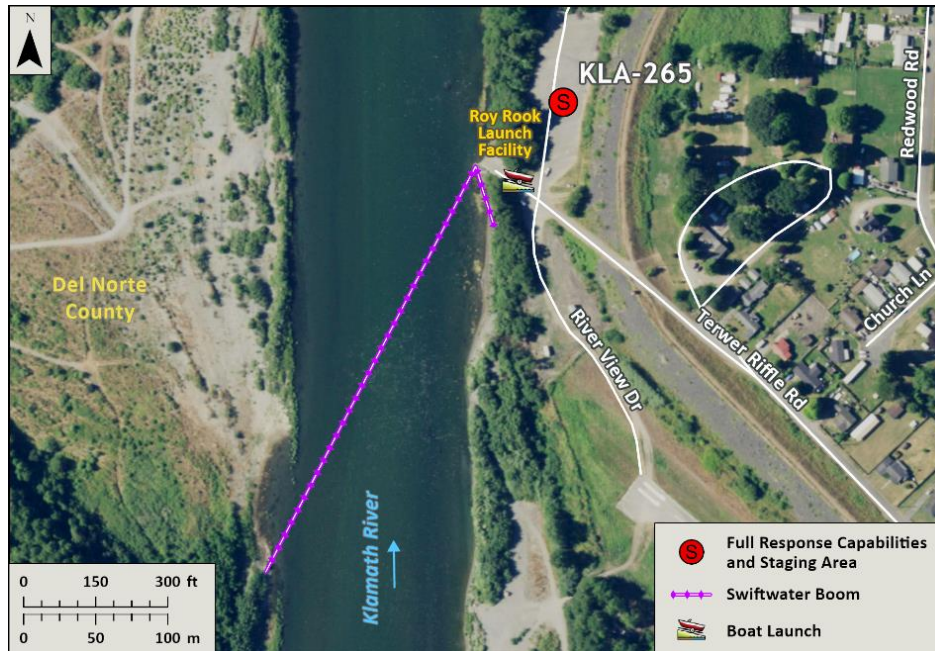


Table of Response Resources

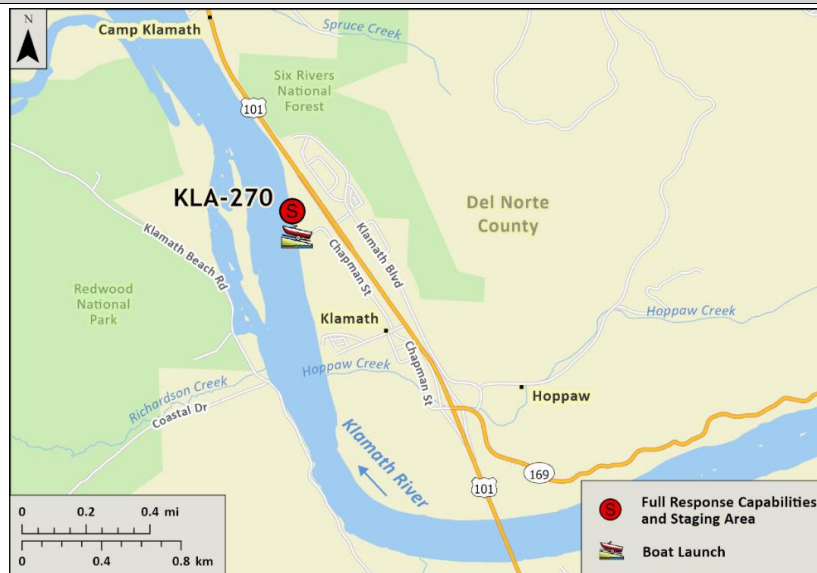
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	1700	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	3400	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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<b>Driving Directions:</b>	From North: Take Hwy 101 south to Klamath, exit at Terwer Valley Hwy 169, turn right onto Chapman Street and drive northwest 0.9 miles to the end of Chapman Street at the boat launch.		
	From South: Take Hwy 101 north to Klamath, exit at Terwer Valley Hwy 169, turn left onto Chapman Street and drive northwest 0.9 miles to the end of Chapman Street at the boat launch.		
<b>Latitude/Longitude:</b> 41.54530, -124.07100	<b>Highway Postmile:</b> N/A	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> Yes - Verizon Tested
<b>Nearest Address:</b> End of Chapman Rd, Klamath, CA			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. Uneven banks. This response strategy will only be safe and feasible in lower flows between late spring and fall due to swift currents. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - KLMC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance-graphical-rvf-klmc1)
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Marbled Murrelet, Northern Spotted Owl, Osprey, Townsend's Big-eared Bat, River Otter, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Eulachon, Green Sturgeon, Longfin Smelt, Pacific Lamprey, Steelhead, Foothill Yellow-legged Frog, Northern Red-legged Frog, Pacific Tailed Frog, Southern Torrent Salamander, Western Bumble Bee, Coastal Triquetrella

**Economic:** Fishing guide services, tribal, recreational, and commercial fishing, camping, local tourism




**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-DN-A-015	<b>Site Description and Field Notes:</b> This response site is near the town of Klamath at an improved public boat launch facility. There is ample parking for staging and waste management at the site but there are no amenities. The site is within the Yurok Reservation. The site may be considered for limited or manual response or observation only in higher flows. Elevation is less than 10 feet.			
<b>Gradient:</b> medium (summer)	<b>River Width:</b> 197 m (645 ft)	<b>Vehicular Access:</b> All vehicle types can access this location.	<b>Recreational Use:</b> Recreational and commercial fishing, local tourism.	<b>Boat Launches:</b> This site features an improved boat launch managed by Del Norte County.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462 Klamath Office (707) 482-1350	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Pulika Tribe of Yurok People (707) 482-2431	Del Norte County Parks & Recreation Department (707) 464-7237
<b>ESI Shoreline Type:</b>	Mixed sand and gravel bars and gently sloping banks (5), Vegetated low banks (9B), Riprap (6B)			

## Site Images

Upstream 	Downstream 
Straight Across 	
<b>RR = River Right RL = River Left</b>	<b>Photo Date:</b> 5/28/2019

**Site Objectives:** Strand floating oil near the boat launch for collection and disposal.

**Implementation:** Deploy up to 1950 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 feet). Recover oil with skimmer and sorbents. On water skimming may be possible. Tidal area, recovery may be most effective on ebb.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Parking area at boat launch is large enough to serve as staging and waste management areas but there are no amenities. Coordinate response here with Yurok Tribe and Del Norte County Parks & Recreation.

### Response Strategy Map (overview)



Table of Response Resources

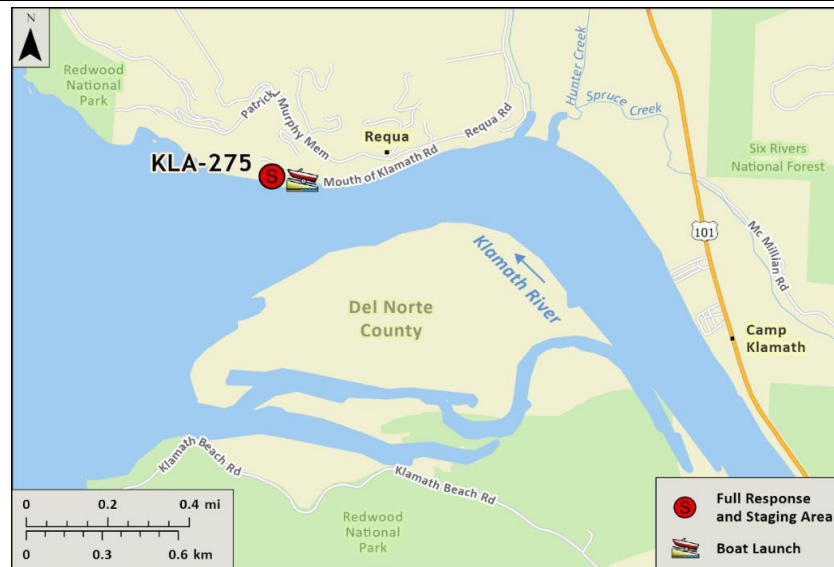
Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	2150	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	4300	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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<b>Driving Directions:</b>	<p>From North: Take Hwy 101 south toward Klamath. Turn right on Requa Rd and follow for 0.9 miles, turn left on Mouth of Klamath Rd (at Requa Inn) and follow 0.4 miles to end.</p> <p>From South: Take Hwy 101 north to Klamath. Turn left on Requa Rd and follow for 0.9 miles, turn left on Mouth of Klamath Rd (at Requa Inn) and follow 0.4 miles to end.</p>		
<b>Latitude/Longitude:</b> 41.54539, -124.07095	<b>Highway Postmile:</b> N/A	<b>Railroad Milepost:</b> N/A	<b>Cell Service:</b> Yes - Verizon Tested
<b>Nearest Address:</b> End of Mouth of Klamath Rd, Klamath, CA			

### Overview Street Map



### Hazards, Restrictions and Advice for Responders

- Responders should be aware of seasonal swift water concerns. Uneven banks. See nearest gauge for flow information at: [CNRFC - Hydrology - River Guidance - Graphical RVF - KLMC1 \(noaa.gov\)](https://www.cnrfc.com/hydrology/river-guidance/graphical-rvf-klmc1-noaa.gov/)
- This site is dynamic with the river outlet shifting in location and width periodically following high flows and can pose a hazard to boaters.
- Boat launches may become impacted/unusable during years with excess sediment load being transported downstream.
- Toxic algal blooms have been known to occur during periods of warm weather and low river flow. Avoid water contact during these conditions. The following web site tracks voluntary reporting of locations where toxic algal blooms have been reported: [https://mywaterquality.ca.gov/habs/where/freshwater\\_events.html](https://mywaterquality.ca.gov/habs/where/freshwater_events.html)

### Resources-At-Risk

**Ecological:** Bald Eagle, California Condor, Marbled Murrelet, Northern Spotted Owl, Osprey, Common Loon, California Sea Lion, Harbor Seal, River Otter, Chinook Salmon, Coho Salmon, Coast Cutthroat Trout, Eulachon, Green Sturgeon, Longfin Smelt, Pacific Lamprey, Steelhead, Northern Red-legged Frog, Western Bumble Bee, Coastal Triquetrella, Pink Sand Verbena

**Economic:** Fishing guide services, tribal, recreational, and commercial fishing, camping, local tourism

**Tribal:** Contact the Native American Heritage Commission at (916) 373-3710.

**Cultural and Historic:** Contact the Northwest Information Center at (707) 588-8455.

## Site Description and Field Notes

<b>Site Location/Segment:</b> KLA-DN-A-015	<b>Site Description and Field Notes:</b> This site is at the mouth of the Klamath River and is co-located with ACP1 site 1-180. The estuary is tidal and dynamic with the river mouth shifting locations year to year based on flow. The site is within the Yurok Reservation. Elevation is at sea level.			
<b>Gradient:</b> low (summer)	<b>River Width:</b> 366 m (1200 ft)	<b>Vehicular Access:</b> All vehicle types can access this site.	<b>Recreational Use:</b> Recreational and commercial fishing, local tourism.	<b>Boat Launches:</b> This site features an improved boat launch and seasonal dock.
<b>Site Contact/s:</b> Yurok Tribe Spill Hotline (707) 954-0462 Klamath Office (707) 482-1350	Yurok Tribe Office of Emergency Services Duty Officer (707) 951-6844		Pulika Tribe of Yurok People (707) 482-2431	Del Norte County Parks & Recreation Department (707) 464-7237
<b>ESI Shoreline Type:</b>	Sandy bars and gently sloping banks (4), Riprap (6B), Vegetated low banks (9B)			

## Site Images

Upstream



Downstream



Straight Across



RR = River Right RL = River Left

Photo Date: 5/28/2019

**Site Objectives:** Strand floating oil near the boat launch for collection and disposal.

**Implementation:** Deploy up to 3600 feet of swift water boom from RL toward RR and collect product at or near the boat launch. Deploy additional 200 feet of boom for shoreline protection in collection area. Deploy cascading sections of boom if needed (400-600 feet). Recover oil with skimmer and sorbents. On water skimming may be possible. Tidal area, recovery may be most effective on ebb.

**Staging Area Location and Capabilities/Amenities/Waste Management:** Parking area at boat launch is large enough to serve as staging and waste management areas. Seasonal dock, campground, and rest rooms on site. Coordinate response here with Yurok Tribe.

### Response Strategy Map (overview)

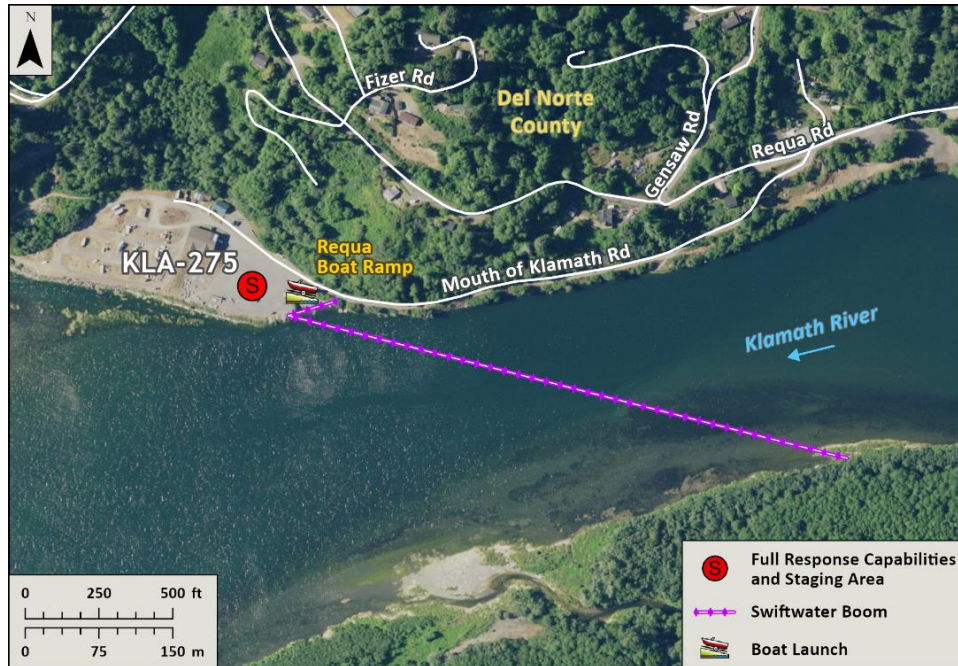


Table of Response Resources

Type	Sub-Type	Size	Unit	Quantity	Special Equipment or Comments
Boom	Swift Water Boom	8 to 12 in. skirt	Feet	3800	Need ancillary equipment including anchors and stakes
Boom	Sorbent Boom	5 to 8 in. dia.	Feet	7600	
Pads and Sweep	Sorbent		Bale	40	
Skimmer	Disc or Drum			1	If needed
Response Vessel	Response and Boom Vessel			2	1 each, minimum, shallow draft vessel necessary on RL
Personnel			Crew	6 to 10	2 vessel operators and 2 deckhands, minimum
Vacuum Truck		120	BBL	1	If needed
Storage Tank		20,000	Gallon	5	If needed



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# Klamath River

## Geographic Response Plan

### Chapter 4 - Resources at Risk

#### 4.0 Chapter Overview

This chapter provides information on the environmental, economic, California Native American Tribe, cultural and historic resources-at-risk in the Klamath River Geographic Response Plan (GRP) area. It provides a list of known sensitive fish, wildlife, plants, and habitats existing within the bounds of this GRP including seasonal concerns for species and protected lands in the area. Information about the Wildlife Response Plan (WRP) for Oil Spills in California, Oiled Wildlife Care Network (OWCN), and general information about oiled wildlife can be found in this chapter as well. It offers a list of economic resources that may be impacted by a spill including key contact information for those resources. Finally, this chapter provides information, as well as critical contacts, for California Native American Tribe and cultural resources, historic properties, and California Native American Tribal representatives.

The information provided in this chapter can be used for:

- Assisting the Environmental Unit (EU) and Operations in developing additional response strategies beyond those found in Chapter 3.
- Providing resource-at-risk "context" to responders, cleanup workers, and others during the initial phase of a spill response in the GRP area.
- Briefing responders, the Unified Command (UC), and incident command staff that may be unfamiliar with sensitive resource concerns in the GRP area.
- Providing background information for personnel involved in media presentations and public outreach during a spill incident.

#### 4.1 Sensitive Wildlife, Fisheries, Plants and Habitat Matrix

Environmentally sensitive resources listed in this section include state and federally listed species; California species of special concern; and fully protected species; California Native Plant Society (CNPS) listed 1A and 1B plants; United States Fish and Wildlife Service (USFWS) designated wetland habitats; commercial and recreational fisheries; and protected lands. Table 4-1 (a-e) below is a comprehensive list of the known species, habitats, and protected lands that exist within the boundaries of the Klamath River GRP as well as seasonal and special considerations including nesting and spawning seasons, seasonal migration, high species concentrations, rookeries and blooming periods for special plant species. The California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationship (CWHR) system is a state-of-the-art information system for California's wildlife and is the primary resource for the information provided in Table 4-1a below. Information on the species and habitats listed in Table 4-1 (a-e) were developed using the best information available at the time of preparation; over time, new species occurrences may be added to reference

databases (e.g., CWHR), the status of species may change including becoming listed by the state or federal fish and wildlife agencies, or new information may become available regarding nesting locations and seasons. During a spill incident, the EU under the Planning Section will utilize reference databases to ensure that the most up-to-date and accurate information on potential species and habitats in the area are addressed and protections put in place, whenever possible.

## **Wetlands**

Table 4-1b includes a list of USFWS Designated Wetlands that have been mapped in the area of the GRP boundary utilizing <https://www.fws.gov/wetlands/data/mapper.html>. The USFWS defines wetlands as:

"Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year." (Cowardin et al. 1979)

The USFWS definition includes swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools; periodically inundated salt flats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric in nature. (Federal Geographic Data Committee, August 2013)

Other types of defined/delineated wetlands may be present within the GRP boundary and will be determined by the EU in the Planning Section during an incident.

Table 4-1: Resources-At-Risk Matrix – Sensitive Species, Plants, Habitats, Protected Lands

Common Name	Scientific Name	Status^	CHWR (General Habitat Description) and USFWS (Critical Habitat Designated) *	Micro Habitat Description	Seasonal and Special Considerations, Notes~
Birds					
American Goshawk	<i>Accipiter atricapillus</i>	State: SSC Fed: N/A	CWHR: Uses mature and old growth stands of conifer and deciduous habitats. USFWS: N/A	Hunts in wooded areas. Uses snags and dead-topped trees for observation and prey-plucking perches. Feeds mostly on birds, from robin to grouse in size. Small mammals, of squirrel and rabbit size, often taken.	Remains yearlong in breeding areas as an uncommon resident. Prefers middle and higher elevations, and mature, dense conifer forests. Casual in winter along north coast. Breeding by mid-June in the north.
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	State: CDF Fed: N/A	CWHR: Riparian areas and coastal and inland wetlands are important habitat yearlong. USFWS: N/A	Primarily feed on other birds by diving and striking them in mid-air. Takes a variety of birds up to duck size and occasionally mammals, insects, and fish.	Uncommon breeding resident and migrant. Nesting sites occur along the coast and in the mountains from early March to late August. Migrants can occur along the coast in spring and fall. CDF: T his species is sensitive to disturbance during the nesting season and has multiple nesting locations within the Klamath River GRP boundary.



Bald Eagle	<i>Haliaeetus leucocephalus</i>	State: E Fed: FP	CWHR: Large old-growth trees or snags in remote, mixed stands near water. USFWS: N/A	Feeds from large bodies of water or free flowing rivers. Perches in large, stoutly limbed trees, on snags or broken-topped trees, or on rocks near water. Roosts communally in dense, sheltered, remote conifer stands. Nests in large, old growth, or dominant live trees with open branch work, especially ponderosa pine.	Yearlong resident. Breeds February through July, peaks March to June.
Black Swift	<i>Cypseloides niger</i>	State: SSC Fed: N/A	CWHR: Breeds in mountain regions and coastal bluffs. USFWS: N/A	Forages during flight on insects over many types of habitats. Diurnal activity with periods of torpor in cold weather. Builds nests on moist cliffs above surf or near a waterfall. Water is required at the nest to keep moist.	Breeding season lasts from early June through late August. Winters outside of California.

California Condor	<i>Gymnogyps californianus</i>	State: E Fed: E	CWHR: Can occur between sea level and 9000 ft elevation. Forage in open areas. Roost on ledges, cliffs, mature trees, or snags. Nests in caves, crevices, rock slabs, large ledges, or cliffs USFWS: N/A	Forage over wide areas of open rangelands for carrion. Eat carcasses of varying size and species but mostly large mammals. Drink and bathe in water. Bathe frequently, especially after feeding.	Breeding pairs remain near nesting areas yearlong. Subadults and nonbreeders move north March through May and south at the end of summer. Egg laying occurs January through April, hatching occurs April through June, and brooding occurs September through November.  Special consideration: Since March 2022, California condors have been reintroduced to traditional Yurok territory across Redwood National and State Parks (directly south of the Klamath River).
Common Loon	<i>Gavia immer</i>	State: SSC Fed: N/A	CWHR: common in estuarine and subtidal marine habitats along the coast, migrate along the coast November and May typically USFWS: N/A	80% of diet composed of fish and crustacean, 20% of diet is vegetation including algae. Dives up to 200 ft for food and will dive to evade predation.	Common loons occur in California in winter for migration and their nonbreeding period. Common loons can be flightless for a few weeks after molting feathers in midwinter.

Great Blue Heron	<i>Ardea herodias</i>	State: CDF Fed: N/A	CWHR: Common in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pasture, and in mountains above foothills. USFWS: N/A	75% of diet composed of fish though also eats small rodents, amphibians, snakes, lizards, insects, crustaceans and occasional small birds.	Yearlong resident. Reproductive activities February through July. Colony nester in secluded groves of tall trees near shallow-water feeding areas. CDF: This species is vulnerable to an oil spill as its primary food sources here are fish and amphibians from the river. There is a robust population with numerous rookeries within the Klamath River GRP boundary.
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	State: E Fed: T	CWHR: occurs year-round in marine subtidal and pelagic habitats. Nests in old growth trees, particularly mature Redwood and Douglas fir trees. USFWS: Critical habitat in the Six Rivers National Forest adjacent to the Klamath River and a short distance north and south of the river mouth.	Forages by diving mostly for small fish close to shore in shallow water in the summer and farther from shore in the nonbreeding season. Spends non-feeding time on surface of shallow coastal water close to shore and breeds inland in old growth trees.	Yearlong residents, with breeding beginning in late March through mid-September.
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	State: T Fed: T	CWHR: Resides in dense, old-growth, mixed conifer, redwood, and Douglass fir forests from sea level to 7600 ft elevation. USFWS: Critical habitat within GRP boundary.	Nesting habitat can be found in large trees, particularly with deformities or snags for nest placement. Usually search for food from a perch and pounce on prey in vegetation or on the ground. Heat intolerant, so require a permanent water source and may reduce heat stress by bathing.	Yearlong resident, active nocturnally. Breeding occurs from early March through June with peak in April and May.

Osprey	<i>Pandion haliaetus</i>	State: WL/CDF Sensitive Fed: N/A	CWHR: Lakes, slow water, dead trees, nesting platforms, live vegetative cover USFWS: N/A	Generally, nest in any location near water with an adequate food supply. Diet consists almost exclusively of fish.	Some migratory as well as yearlong residents. WL/CDF Sensitive: This species is vulnerable to an oil spill as its primary food source nearby is fish from the river. There is a robust population with numerous nest locations within the Klamath River GRP boundary.
Mammals					
Fisher - West Coast DPS	<i>Pekania pennanti</i>	State: SSC Fed: C	CWHR: Live vegetative cover, dead trees, Montane hardwood forest. USFWS: N/A	Prefer areas of dense mature coniferous or mixed forest with canopy closure.	Yearlong resident. Den in a variety of protected cavities, especially hollow logs, trees, and snags.
Gray Wolf	<i>Canis lupus</i>	State: E Fed: E	CWHR: N/A USFWS: Critical habitat is outside of Klamath River basin.	Currently seven confirmed packs in California with unknown individual wolves dispersed from packs or other states. The Whaleback pack resides within the upper Klamath River Basin. Can occupy diverse habitats with abundant prey. Primarily eat elk and deer, along with smaller mammals, birds, and reptiles and will opportunistically scavenge carrion.	Breeding season occurs from late January through late March with pups born in April through May. Gray wolf sightings or deceased wolves are reportable to CDFW.
Humboldt Marten	<i>Martes caurina humboldtensis</i>	State: E Fed: T	CWHR: Mixed evergreen forests with large trees and snags USFWS: Critical habitat within GRP boundary.	The population in Northern California is estimated to be less than 100 individuals. Prefer late mature and old growth forests with dense shrub understory. Mostly carnivorous, primarily taking small mammals, birds, lizards, and insects, and will less commonly eat fungi, fruit, and carrion.	Non-migratory, active yearlong with mostly nocturnal and crepuscular activity. May move to lower elevations in winter.



Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	State: SSC Fed: N/A	CWHR: Alpine, subalpine, most abundant in mesic habitats USFWS: N/A	Requires caves or man-made structures for roosting. Gleans from brush or trees or feeds along habitat edges.	Hibernates from October to April.
Fish					
Blue Chub	<i>Gila coerulea</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Abundant throughout upper Klamath drainage. Normally found in large schools in deep water or in rocky inshore areas, avoiding shallow shoreline habitat. Omnivorous diet with high percentage of filamentous algae.	Spawning similar to that of other minnows.
Bull Trout	<i>Salvelinus confluentus</i>	State: T Fed: T	Extirpated in California	Extirpated in California	Extirpated in California. Restoration actions including the Klamath River dam removal project may improve connectivity from the GRP boundary to the upper reaches of the river in Oregon which may hold bull trout.
Chinook Salmon - Upper Klamath and Trinity Rivers ESU	<i>Oncorhynchus tshawytscha</i>	State: SSC/CE Fed: CE	CWHR: N/A USFWS: Central Valley spring-run ESU. Critical habitat within GRP boundary.	Spring run and fall run exist in this ESU, however spring-run are more at-risk.	Spring run: Adult spring-run salmon enter the river from March through July, peaking late May-early June. They then hold in cold water pools 2-4 months and spawn in early September. Eggs hatch January-late May and juveniles out-migrate February-mid June. This has been identified as an evolutionarily distinct population of chinook.

Chinook Salmon - Southern Oregon/Northern California ESU	<i>Oncorhynchus tshawytscha</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: Sacramento River winter-run ESU. Critical habitat within GRP boundary.	Adults use pool habitats for holding during migration. Spawning occurs at pool tails or the head of riffles. Juveniles typically rear in shallow water areas with overhead riparian vegetation cover.	Adults migrate upstream September-December. Spawning peaks in December. Juvenile outmigration typically begins February and lasts through July.
Coastal Cutthroat Trout	<i>Oncorhynchus clarkii clarkii</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Both resident and anadromous populations occur. Most anadromous species only spend time in the sea during summer months never straying too far from the coastline before returning to the river again.	Spawning occurs December through April. Eggs hatch in about 6 weeks.
Coho Salmon - Southern Oregon/Northern California ESU	<i>Oncorhynchus kisutch</i>	State: T Fed: T	CWHR: N/A USFWS: Lower Klamath, Upper Klamath River	Spawning occurs at the head of riffles typically. Fry generally form schools on stream margins. Juveniles rear in low-gradient sections of stream with abundant pools.	Spawning occurs mainly from November through January. Eggs incubate from November through April. After a year in fresh water, smolts emigrate to the ocean between late March through early June.
Eulachon	<i>Thaleichthys pacificus</i>	State: N/A Fed: T	CWHR: N/A USFWS: Lower Klamath River from the mouth upstream to the confluence with Omogar Creek (excluding tribal lands).	Largest and only truly anadromous species of freshwater smelt in California. Feed on small zooplankton as young and krill when older.	Major spawning run on the Klamath river which occurs in early spring. Females lay ~25,000 eggs which adhere to bottom sediments and hatch within 3 weeks.

Green Sturgeon - Northern DPS	<i>Acipenser medirostris</i>	State: SSC Fed: National Marine Fisheries Service Species of Concern	CWHR: N/A USFWS: U.S. coastal marine waters out to the 60-fathom depth bathymetry line from Monterey Bay, CA to the Strait of Juan de Fuca, WA, Klamath/Trinity River estuary are excluded from critical habitat.	Most marine oriented of all sturgeon species, spending little time in river systems unless to spawn.	Adults move into estuaries and lower reaches of rivers to spawn after spending 12 to 14 years at sea. Scatter eggs across rock or cobble substrates in river areas of good water flow. The young migrate to sea in their second or third year. In the Klamath River sturgeon begin moving upstream late February to late July and spawn between March and July.
Klamath Largescale Sucker	<i>Catostomus snyderi</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Adults occupy slow water and pool areas in the lower Klamath and Trinity Rivers where they are common.	Use small tributaries of rivers to spawn. The young are often a food source for large trout. Spawning migrations upriver occur from March to May.
Klamath River Lamprey	<i>Entosphenus similis</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Parasitic species that occurs in the Klamath River drainage and does not go out to sea at any life stage, but instead feeds on local fish populations year-round.	Non-migratory residents of the rivers and lakes in the Klamath Basin.
Longfin Smelt	<i>Spirinchus thaleichthys</i>	State: ST Fed: N/A for Klamath River; federal proposed status is only for SF Bay-Delta distinct population segment.	CWHR: N/A USFWS: N/A	Prefers moderately saline water. In California it is found in all major bays and estuaries from San Francisco Bay, northward.	In fall months it moves into lower reaches of rivers and spawns throughout winter and spring. Embryos hatch in ~ 6 weeks and move with the current back to estuaries.

Lost River Sucker	<i>Deltistes luxatus</i>	State: E Fed: E/FP	CWHR: N/A USFWS: tributaries to Clear Lake Reservoir	Spend most of their time living in lakes or deep river pools. Likely feed from the bottom on invertebrates and zooplankton.	The majority of spawning occurs in March and April in tributaries to lakes where this species occurs.
Lower Klamath Marbled Sculpin	<i>Cottus klamathensis polyporus</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	One of three subspecies of Marbled sculpin that occupies clear slow-moving waters and muddy bottoms.	Spawns in areas with relatively flat rocks laying eggs in round clusters on the underside of these rocks. Spawning occurs from late February to March.
Northern California Brook Lamprey	<i>Entosphenus folletti</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Adults are non-predatory and live in freshwater streams. Larvae live in the mud in streams and filter feed for 4 years.	May have similar spawning timing to Pacific Lamprey which they are derived from.
Pacific Lamprey	<i>Entosphenus tridentatus</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Inhabits estuaries and nearby ocean areas where it parasitizes fish as adults. Inhabits inland freshwater systems to spawn and hatch and grow.	Most spawning in late spring and in upstream spawning beds of fine gravel. Movement is typically at night. Larval stage filter feeds 5-7 years in rivers and streams then move into estuaries and the ocean as adults, becoming parasitic.
Pit-Klamath Brook Lamprey	<i>Entosphenus lethophagus</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Nonpredatory lamprey that mainly occupy clear, cool streams. At the larval stage they burrow into aquatic vegetation and soft substrates.	Spawning begins in early spring through summer.



Shortnose Sucker	<i>Chasmistes brevirostris</i>	State: E Fed: E/FP	CWHR: N/A USFWS: Clear Lake Reservoir and Willow and Fletcher creeks	Medium-sized sucker of the Upper Klamath and Lost River drainages. This fish can live up to 30 years. Mouth position and fine gill rakers adapt it well to feeding on zooplankton and surface drift.	Migrate from lake to river beginning in March-May to spawn. Females can lay ~38,000 eggs per spawning.
Steelhead - Klamath Mountains Province DPS	<i>Oncorhynchus mykiss irideus</i>	State: SSC Fed: N/A	CWHR: N/A USFWS: N/A	Spawning occurs in places where the streambed is composed of gravelly substrate, usually in riffles or pool tails. Typically, the young Steelhead or parr reside in freshwater for 1-3 years before transitioning to saltwater, where they may stay for 1-2 years before returning to their native streams to spawn.	Peak spawning occurs December through April.
Tidewater Goby	<i>Eucycloglobius newberryi</i>	State: SSC Fed: E	CWHR: N/A USFWS: Critical habitat is outside of Klamath River basin	Small fish with one year lifespan that prefers semi closed estuaries or lagoons of small coastal streams low in salinity where they feed on small bottom invertebrates, especially tube dwelling species.	Males construct spawning burrows in lagoons for females which lay ~1000 eggs. Peak spawning activity occurs in spring and late summer.
White Sturgeon	<i>Acipenser transmontanus</i>	State: SSC and CT Fed: N/A	CWHR: N/A USFWS: Critical habitat is outside of Klamath River basin	Largest freshwater fish in North America. Feeds on wide variety of bottom-dwelling invertebrates, fish and eggs.	Primarily estuarine species that moves up large rivers to spawn in late winter through early spring once they reach adulthood around 12-16 years of age. Prefer to lay eggs in deep, hard bottomed sites in the main channel of middle portions of rivers and lower reaches of some tributaries.

Amphibians					
Del Norte Salamander	<i>Plethodon elongatus</i>	State: WL Fed: N/A	CWHR: found from sea level to 1100 m in open-to-dense valley-foothill riparian, montane hardwood-conifer, Douglas fir, and redwood habitats USFWS: N/A	Frequents stabilized talus, rock outcrops, in shaded closed canopy forests of mixed hardwoods and conifers. Also found under bark, logs, and other objects on forest floor, usually in rocky areas.	Mating occurs from fall to spring. Females remain with eggs in well-hidden nest sites until fall, when eggs hatch. WL: This rare species exists within a limited range within the Klamath River GRP boundary and could be affected by response activities.
Foothill Yellow-legged Frog- North Coast DPS	<i>Rana boylei</i> pop. 1	State: SSC Fed: N/A	CWHR: Rocky streams USFWS: N/A	Found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Egg clusters are attached to gravel or rocks in moving water near stream margins.	Breeding and egg laying usually await the end of spring flooding and may commence any time from mid-March to May, depending on local water conditions.
Northern Red-legged Frog	<i>Rana aurora</i>	State: SSC Fed: N/A	CWHR: Inhabits quiet pools of streams, marshes, and ponds usually below 1200 m. USFWS: N/A	Adults eat aquatic and terrestrial insects, crustaceans, snails, fish, tadpoles, smaller frogs, and small mammals. Aquatic juveniles are mostly herbivorous.	Breeding occurs March through July with eggs laid attached to vegetation 7-15 cm below the water surface.

Pacific Tailed Frog	<i>Ascaphus truei</i>	State: SSC Fed: N/A	CWHR: Occurs in permanent streams with low temperatures in conifer-dominated habitats. USFWS: N/A	Adults forage primarily terrestrially along stream banks but also underwater. Adults eat aquatic and terrestrial insects, other arthropods, and snails. Tadpoles consume diatoms, filamentous green algae, and desmids. Mating occurs underwater with eggs laid in masses to the underside of submerged rocks. Primarily nocturnal but sometimes active during the day.	Breeding occurs late August and September with eggs laid in the summer after mating. Periods of winter inactivity in some populations in refuges close to the normal area of activity.
Scott Bar Salamander	<i>Plethodon asupak</i>	State: T Fed: N/A	CWHR: Klamath mixed conifer, white fir USFWS: N/A	Found in a very small area of the Siskiyou mountains near the confluence of the Klamath and Scott Rivers. Likely feeds on small insects and other invertebrates, foraging in damp soil. May use rock rubble or under surface objects for cover. Lay eggs in moist places on land.	This species has not been well documented but if it is similar to <i>P. stormi</i> , mating may occur in the spring with egg-laying in spring or early summer and brooding until fall.
Siskiyou Mountains Salamander	<i>Plethodon stormi</i>	State: T Fed: N/A	CWHR: mixed conifer dense forest USFWS: N/A	Subspecies of Del Norte Salamander. Occurs chiefly within the Seiad Creek and Horse Creek drainages in California and various locations in Oregon. Feeds on small insects and other invertebrates in damp soil and under objects.	Breeding likely occurs in the spring.
Southern Torrent Salamander	<i>Rhyacotriton variegatus</i>	State: SSC Fed: N/A	CWHR: Permanent or nearly permanent water USFWS: N/A	Narrow range requiring cold, clear, flowing permanent seeps and headwater to low order streams with coarse, rocky substrates (gravel/cobble) in mesic to moist forests. Sensitive to slight turbidity increases. Requires dense canopy cover overhead.	Breeding may occur throughout much of the year, depending on local conditions. This results in overlapping size cohorts in the stream. It takes 4.5 years for this salamander to reach maturity.

Reptiles					
Western Pond Turtle	<i>Emys marmorata</i>	State: SSC Fed: CT	CWHR: Permanent or nearly permanent water USFWS: N/A	Individuals normally associate with permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams throughout California. Along large slow-moving streams, eggs are deposited in nests constructed in sandy banks. Along foothill streams, females may climb hillsides, sometimes moving considerable distances to find a suitable nest site.	Eggs are laid from March to August, depending on local conditions.
Invertebrates					
Suckley's Cuckoo Bumble Bee	<i>Bombus suckleyi</i>	State: CE Fed: Under review	CWHR: N/A USFWS: N/A	Key generalist pollinators, prefer medium to shallow-depth flowers. Obligate social parasite to other Bombus species.	Nest and overwinter in below-ground micro-sites.
Western Bumble Bee	<i>Bombus occidentalis</i>	State: CE Fed: N/A	CWHR: N/A USFWS: N/A	Key generalist pollinators.	In late winter to early spring, queens emerge from overwintering to search for a nesting site (often abandoned rodent holes).
Plants**					
Coastal Triquetrella	<i>Triquetrella californica</i> (Lesq.) Grout	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Found in coastal bluff scrub, coastal scrub, roadsides, hillsides, rocky slopes, fields and chaparral.	Uncommon moss
Columbia Yellow Cress	<i>Rorippa columbiae</i>	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Occurs in wetlands, meadows and wetland-riparian communities.	Perennial herb (rhizomatous). Blooms May-July.
Heckner's Lewisia	<i>Lewisia cotyledon</i> var. <i>heckneri</i>	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Found in North Coast coniferous and yellow pine forest communities. Rocky crevasses and slopes.	Perennial Herb. Blooms May-July



Pacific Gilia	<i>Gilia capitata</i> ssp. <i>pacifica</i>	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Found in many habitats, especially sandy or rocky soils.	Annual herb. Blooms April-August.
Pink Sand Verbena	<i>Abronia umbellata</i> ssp. <i>breviflora</i>	State: N/A Fed: N/A Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Perennial herb of upper beaches and dune depressions on the coast.	Perennial herb. Blooms April-August.
Robust False Lupine	<i>Thermopsis robusta</i>	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Found in North Coast coniferous forest communities.	Perennial herb (rhizomatous). Blooms May-July.
White-flowered Rein Orchid	<i>Piperia candida</i>	State: N/A Fed: N/A Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Found in coniferous forests and other habitat in coastal and inland mountain ranges within 150 kilometers of the coast.	Perennial herb. Blooms May-September.
Wolf's Evening Primrose	<i>Oenothera hookeri</i> ssp. <i>wolfii</i>	State: N/A Fed: N/A Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Found in coastal strand, Northern coastal scrub, coastal prairie communities.	Perennial herb. Blooms May-October

^State and federal threatened and endangered species and California Species of Special Concern. Migratory birds w/o any other status were not included. T= Threatened, E = Endangered, C= Candidate, SSC= State Species of Concern, R = Rare, FP= Fully Protected, WL=Watch List, CDF=California Dept. of Forestry

*Use CDFW's CWHR habitat classifications and note if there is USFWS critical habitat designated (or adjacent)
USFWS Critical Habitat Mapper - <a href="https://www.arcgis.com/home/item.html?id=2c2453ee613f47cd0ed7939409">https://www.arcgis.com/home/item.html?id=2c2453ee613f47cd0ed7939409</a>
NOAA Fisheries West Coast Critical Habitat Mapper - <a href="http://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html">http://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html</a>
For plants: Primary Source = CDFW Native Plant Program; Secondary Source = Calflora and CNPS only
~Large concentrations, rookeries, spawning, breeding, etc. For plants include the blooming season (include months) and flower description (if applicable)

USFWS Designated Wetlands			
Wetland Type (Riverine assumed present)	Federal Wetland System Description	Federal Wetland Class Description	Seasonal and Special Considerations, Notes
Palustrine: Aquatic Bed (Freshwater Pond)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes wetlands and deep-water habitats dominated by plants that grow principally on or below the surface of the water for most of the growing season in most years.	Best developed in relatively permanent water or under conditions of repeated flooding.
Palustrine: Unconsolidated Shore (Freshwater Pond)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.	Surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season.
Palustrine: Unconsolidated Bottom (Freshwater Pond)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes all wetlands and deep-water habitats with at least 25% cover of particles smaller than stones (less than 6-7cm), and vegetative cover less than 30%.	Water in this system may occur seasonally or permanently.

Palustrine: Scrub-Shrub (Freshwater Forested/Shrub Wetland)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes areas dominated by woody vegetation less than 6 m (20 feet) tall. The species include true shrubs, young trees (saplings), and trees or shrubs that are small or stunted because of environmental conditions.	Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
Palustrine: Forested (Freshwater Forested/Shrub Wetland)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Characterized by woody vegetation that is 6 m tall or taller.	Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
Palustrine: Emergent (Freshwater Emergent Wetland)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	In this wetland Class, emergent plants -i.e., erect, rooted, herbaceous hydrophytes, excluding mosses and lichens -are the tallest life form with at least 30% areal coverage.	Vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

Palustrine: Unconsolidated Bottom (Permanently Flooded-Tidal)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.	Tidal fresh water covers the substrate throughout the year in all years.
Palustrine: Emergent (Persistent, Seasonally Flooded-Tidal)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants. Subclass Persistent is dominated by species that normally remain standing at least until the beginning of the next growing season.	Tidal fresh surface water is present for extended periods (generally for more than a month) during the growing season but is absent by the end of the season in most years. When surface water is absent, the depth to substrate saturation may vary considerably among sites and among years.
Estuarine and Marine Wetland: Intertidal (Forested)	Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves ( <i>Rhizophora mangle</i> ) and eastern oysters ( <i>Crassostrea virginica</i> ), are also included in the Estuarine System.	The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone. Habitat characterized by woody vegetation that is 6 m tall or taller. Subclass Broad-Leaved Deciduous includes woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season, e.g., black ash ( <i>Fraxinus nigra</i> ).	Tides flood the substrate less often than daily.



Estuarine and Marine Wetland: Intertidal (Unconsolidated Shore)	Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves ( <i>Rhizophora mangle</i> ) and eastern oysters ( <i>Crassostrea virginica</i> ), are also included in the Estuarine System.	The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone. Unconsolidated Shore includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.	Areas of regularly and irregularly flooded. Irregularly Flooded consists of tides that flood the substrate less often than daily.
Estuarine and Marine Wetland: Intertidal (Emergent)	Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves ( <i>Rhizophora mangle</i> ) and eastern oysters ( <i>Crassostrea virginica</i> ), are also included in the Estuarine System.	The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone. Emergent Wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.	Dominated by species that normally remain standing at least until the beginning of the next growing season. Water regime is Irregularly Flooded where tides flood the substrate less often than daily.

Estuarine and Marine Deepwater: Intertidal (Scrub Shrub)	Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves ( <i>Rhizophora mangle</i> ) and eastern oysters ( <i>Crassostrea virginica</i> ), are also included in the Estuarine System.	The substrate in these habitats is flooded and exposed by tides; includes the associated splash zone. Scrub-Shrub habitat includes areas dominated by woody vegetation less than 6 m (20 feet) tall. The species include true shrubs, young trees (saplings), and trees or shrubs that are small or stunted because of environmental conditions.	Tides flood the substrate less often than daily.
Estuarine and Marine Deepwater: Subtidal (Unconsolidated Bottom)	Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines, there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves ( <i>Rhizophora mangle</i> ) and eastern oysters ( <i>Crassostrea virginica</i> ), are also included in the Estuarine System.	The substrate in these habitats is continuously covered with tidal water (i.e., located below extreme low water). Unconsolidated Bottom includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.	Tidal salt water continuously covers the substrate.

**Commercial and Recreational Fisheries (Public Health, Fisheries Closure)**

Common Name	Scientific Name	Contact Information	Seasonal and Special Considerations, Notes	
American Shad	<i>Alosa sapidissima</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Runs April through July.	Recreational fishery
Black Bullhead	<i>Ameiurus melas</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Black Crappie	<i>Pomoxis nigromaculatus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Bluegill	<i>Lepomis macrochirus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Brook Trout	<i>Salvelinus fontinalis</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Brown Bullhead	<i>Ameiurus nebulosus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Brown Trout	<i>Salmo trutta</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Some anadromous, some non-migratory	Recreational fishery
Channel Catfish	<i>Ictalurus punctatus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Fall and spring runs. Angling seasons vary annually (check regulations).	Recreational and tribal subsistence/commercial fishery (based upon harvestable surplus).
Chum Salmon	<i>Oncorhynchus keta</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional anadromous marine visitor.	Recreational fishery and tribal fisheries.
Coastal Cutthroat Trout	<i>Oncorhynchus clarki clarki</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	In the lower main stem of the Klamath River seasonally, but potentially all year.	Recreational fishery

Crayfish	<i>Various spp.</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Green Sturgeon	<i>Acipenser medirostris</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	In the main stem of the Klamath River seasonally, but potentially all year.	Protected species historically fished but no current legal angling opportunity. Limited tribal harvest. Confused for white sturgeon by some anglers.
Green Sunfish	<i>Lepomis cyanellus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Lamprey spp.	<i>Various spp.</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Migratory seasonally and some likely in the Klamath River all year.	Recreational and tribal fisheries.
Kokanee	<i>Oncorhynchus nerka</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Largemouth Bass	<i>Micropterus salmoides</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Pink Salmon	<i>Oncorhynchus gorbuscha</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional anadromous marine visitor.	Recreational and tribal fisheries.
Pumpkinseed	<i>Lepomis gibbosus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Rainbow Trout	<i>Oncorhynchus mykiss</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Sacramento Perch	<i>Archoplites interruptus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Shiner Perch	<i>Cymatogaster aggregata</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional marine visitor.	Recreational fishery

Smallmouth Bass	<i>Micropterus dolomieu</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Sockeye Salmon	<i>Oncorhynchus nerka</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional anadromous marine visitor.	Recreational and tribal fisheries
Spotted Bass	<i>Micropterus punctulatus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Starry Flounder	<i>Platichthys stellatus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River estuary all year	Recreational fishery
Steelhead	<i>Oncorhynchus mykiss irideus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Migratory steelhead in Klamath River seasonally and summer steelhead all year.	Recreational and tribal fisheries
Striped Bass	<i>Morone saxatilis</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional anadromous marine visitor.	Likely not encountered in river
Surf Smelt	<i>Hypomesus pretiosus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Occasional marine visitor.	Recreational fishery
White Crappie	<i>Pomoxis annularis</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
White Sturgeon	<i>Acipenser transmontanus</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	In the main stem of the Klamath River seasonally, but potentially all year.	No recreational opportunity in North Coast District.
Yellow Bullhead	<i>Ameiurus natalis</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery
Yellow Perch	<i>Perca flavescens</i>	<b>CDFW Region 1</b> (Northern Region) Redding Office (530) 225-2300	Likely in the Klamath River all year.	Recreational fishery



Designated or Protected Lands			
Area Name	Designation**	Contact Information	Seasonal and Special Considerations, Notes
US Bureau of Land Management	BLM Lands	BLM Redding Office: 530-224-2100	Open access
California State Lands Commission	State Lands	SLC Headquarters: (916) 574-1900	Near Gottsville, open access
China Point Ecological Reserve	CDFW Ecological Reserve	CDFW Region 1, Redding Office (530) 225-2300	Restricted access
Gale Zinc Memorial Park	Happy Camp Community Services District	(530) 493-5106	Open access
Klamath National Forest	USDA Forest Service Lands	Klamath National Forest Headquarters (530) 842-6131	Open access
Klamathon Station	CDFW Lands	CDFW Region 1, Redding Office (530) 225-2300	No public access
Klamath River Fishing Access	CDFW Lands	CDFW Region 1, Redding Office (530) 225-2300	Open access
Redwood National Park	National Park Service	Redwood National Park Visitor Center (707) 464-6101	Open access
Six Rivers National Forest	USDA Forest Service Lands	Six Rivers National Forest Headquarters (707) 442-1721	Open access
Thompson Creek	The Nature Conservancy	Siskiyou Land Trust (530) 926-2259	No public access
Waukell Creek Wildlife Area	CDFW Lands	CDFW Region 1, Redding Office (530) 225-2300	Open access

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## 4.2 Wildlife Response Plan

Wildlife and habitats are put at risk or injured when oil is spilled into marine or inland waters of the state, or the terrestrial environment. Both federal and state statutes mandate protection, rescue, and rehabilitation of oiled wildlife.

The WRP for Oil Spills in California (OSPR 2016) details the purposes, goals, objectives, responsibilities, and structure of the Wildlife Branch within the Incident Command System. The WRP describes procedures to be used, along with personnel and equipment needed, to meet wildlife protection responsibilities of federal and state governments during a spill. The current WRP can be found at: <http://www.wildlife.ca.gov/OSPR/Preparedness/Wildlife-Response>.

The primary goal of the Wildlife Branch (WB) within the Operations Section is to provide coordinated, immediate, and effective protection, rescue, rehabilitation, and minimization of risk of injury to wildlife and habitat during oil spills. The principal objectives during a spill response are to:

- Protect wildlife and habitats from contamination.
- Minimize injuries to wildlife and habitats from the spilled oil and/or response actions.
- Provide best achievable rescue and care for oiled and injured wildlife.
- Document adverse effects to wildlife that result from the spill and cleanup.

These objectives are achieved through a suite of methods that include hazing of wildlife; aerial, ground, and on-water wildlife reconnaissance; recovery, stabilization, and transportation of injured wildlife; care and processing of oiled wildlife; and eventual release of rehabilitated wildlife.

The Wildlife Branch Director (WBD) coordinates and manages the activities of all personnel in the WB who fall under the authority of the UC during spill response to ensure these objectives are achieved with maximum efficiency per Incident Command System. These include federal, state, and local agencies along with commercial and non-profit organizations performing wildlife objectives.

CDFW Office of Spill Prevention and Response (OSPR) staff will assume the role of WBD during a spill response. This is a natural consequence of the pivotal position of OSPR because they are the lead state trustee agency for California's fish and wildlife, they have formal agreements and permits in place with other agencies, and they have the needed expertise, training and experience. Within the WB structure for California, there are five Groups who report to the WBD:

- Wildlife Reconnaissance Group (aerial, ground, and on-water)
- Wildlife Hazing Group (deters wildlife from oiled areas)
- Wildlife Recovery Group (search and collection, live and dead)
- Wildlife Field Stabilization (initial first aid prior to transport)
- Wildlife Care and Processing Group (rehabilitation and logging in)

### **Oiled Wildlife**

Attempting to capture oiled wildlife can be hazardous to both the animal and the person attempting to capture the animal. Response personnel should NOT approach or attempt to recover oiled

wildlife. Responders should report their observations to the WB of the Operations Section via the OWCN Hotline (877) 823-OWCN (6926) so appropriate action can be taken. Information provided should include the location, date, and time of the sighting, and the estimated number and kind of animals observed. This Hotline is active 24/7, year-round.

### **Wildlife Avoidance Measures**

The WBD (Operations Section) or EU (Planning Section) may be recommend avoidance measures for the purpose of avoiding or minimizing impacts to wildlife during an oil spill response. Common measures include exclusion zones or placing limits on ingress/egress routes, unnecessary disturbance of sensitive habitat areas, limitations on low altitude flights (drones or aircraft), limitations on night operations, and others. Such measures can minimize the risk of direct wildlife and habitat injury, prevent the accidental hazing of wildlife into oiled areas, avoid causing abandonment of nests or dens, and other unintentional injuries.

### **4.3 Oiled Wildlife Care Network**

OWCN is a cooperative system of specialized wildlife rehabilitation centers and organizations. OWCN is administered by the Wildlife Health Center at University of California Davis. OWCN personnel fill critical supervisory and staffing roles throughout the WB. During an oil spill, OSPR activates and directs activities of OWCN within the WB. OWCN maintains a corps of veterinarians, paid staff, and professionally trained volunteers. OWCN comprises more than 45 rehabilitation, academic, and private non-profit organizations that actively participate during oil spill responses. This includes more than 10 permanent wildlife care facilities for use during a spill, the majority occurring along the California coast. If a particular wildlife care facility becomes overwhelmed, additional facilities and/or temporary tents can be utilized. For more information on OWCN, see <https://owcn.vetmed.ucdavis.edu/>.

### **4.4 Human Health and Safety Sites and Economic Resources Susceptible to Oiling**

This section identifies inland waterway infrastructure essential to human health and safety, which will be the first priority for response during any oil spill. The primary purpose of this section is to identify and incorporate into emergency oil spill response planning the specific resources subject to impacts of the highest consequence if not protected (e.g., contacts notified, sites boomed, access closed). Also identified in this section are economic resources that are susceptible to impacts from an inland oil spill. Due to limitations of time, personnel, and the availability of information, not all resources of significant economic value and susceptibility to oil spills are identified in the GRP. The list of human health and safety resources, critical infrastructure, and economic sites and their maintenance are dependent upon input from state and local agencies, and their content will vary by GRP. Response planners recognize that inland waterway resources that are deemed economically sensitive can have environmental, cultural, or historical importance as well, such as parks or important fishing areas. In these cases, a higher environmental ranking would be used to delineate response planning. Therefore, many of those resources are not captured within the List of Economic Resources Susceptible to Oiling. Instead, the GRP provides contact information for the California Historical Resources Information System (CHRIS) centers, the Native American Heritage Commission (NAHC) and local California Native American Tribal representatives in section 4.5 below. The listing of

economic resources susceptible to oiling in this plan is provided to assist Liaison Officers and other responders with contact information that may be useful during the early stages of a response before Subject Matter Experts and local Area Representatives are available to assist.

Lists of economic resources are not intended to be exhaustive and may include various types of sites and resources depending on the specific features of each GRP. Regardless of inclusion in the List of Economic Resources Susceptible to Oiling, any entity may submit a third-party claim for damages and costs incurred due to specific oil spill impacts to these resources. Additionally, some businesses, as well as local government offices or departments, may have access to privately owned or contracted response equipment and resources that can be deployed at these locations. It is encouraged that parties with jurisdictional authority over their economic resources arrange for their protection and/or file a third-party claim for impacts.

### **Human Health and Safety Resources plus Critical Infrastructure**

Inland resources and structures that are essential to public health and safety, such as drinking water intakes and emergency response facilities, will receive first priority protection during oil spill response operations. This GRP provides contact information for a defined list of human health and safety resources and critical infrastructure, which will facilitate initial notifications and protection considerations. These are not exhaustive lists, more resources may be considered on a spill-specific basis, and some are not included on maps or in plans due to security issues (e.g., power plant intakes). Ultimately, public entities, like water supply and health agencies, are tasked with ensuring the protection of human health and safety.

Examples of resources or critical infrastructure that would receive a first priority response (because of human health and safety concerns) include:

- Drinking water intakes
- Dams
- Power plant intakes
- Wastewater treatment facility intakes
- Groundwater replenishment
- Other health/safety intakes
- First responders on water facilities

### **Economic Resources Susceptible to Oiling**

Economic resources are categorically designated as the third priority for dedication of oil spill response resources, following human health and safety (including critical infrastructure) and environmental resources per the federal Oil Pollution Act of 1990. Economic resources that have a greater potential for long-term high consequence impacts receive a higher priority for emergency response and are captured in these lists. Protection of economic resources under the direction of the UC may occur when response equipment, personnel resources or significant extenuating factors dictate adaptations in a response's priorities. Economic resources susceptible to oiling are listed in Table 4-2 and may include facilities, businesses, or other resources that directly use inland waters to support their economic activity and are at risk of long-term, high consequence impacts due to oiling.



Examples of economic resources that could be captured in the List of Economic Resources Susceptible to Oiling include:

- Aquaculture/fish hatchery facilities
- Tide gates
- Public marinas
- State, county, and city parks and beaches, as appropriate

Economic resources susceptible to oiling with locations and details (excluding sites that have security concerns, e.g., power plant intake locations) can also be found in the National Oceanic and Atmospheric Administration Environmental Response Management Application (<https://erma.noaa.gov/southwest/erma.html>).

**Table 4-2: Resources-At-Risk - Economic Resources Susceptible to Oiling (Listed upstream to downstream by category)**

Name	Agency/ Company	Contact Info.	Phone	Notes
<b>Drinking Water, Power Plant, Wastewater Treatment Facility Intakes</b>				<b>Klamath River drinking water? (Y/N)</b>
Hornbrook Community Services District		P.O. Box 29 Hornbrook, CA 96044	(530) 598-9609	N
Happy Camp Community Services District		700 5th Street Crescent City, CA 95531	(707) 482-0723	N
Orleans Community Services District		37737 CA-96 Orleans, CA 95556	(530) 627-3454	N
Yurok Tribe	Public Utilities Department	Grant Peterson, gpeterson@yuroktribe.nsn.us	(707) 951-8654	
Yurok Tribe	Public Utilities Department	Troy Fletcher trfletcher@yuroktribe.nsn.us	(707) 951-1937	
Yurok Tribe	Public Utilities Department	Will Wilson wwilson@yuroktribe.nsn.us	(707) 458-5769	
Klamath Community Services District		700 5th Street Crescent City, CA 95531	(707) 482-0723	N
Pulikla Tribe of Yurok People	Natural Resources Department	Frank Spa-ghe Dowd, Water Resources Manager	(707) 482-2431	N
<b>Dams and Hydroelectric Facilities</b>				
N/A				As of September 2024, all four Klamath River hydroelectric project dams have been removed.
<b>Tide Gates, Aquaculture/Fish Hatcheries</b>				
Fall Creek Fish Hatchery	California Department of Fish and Wildlife	19619 Copco Road Hornbrook, CA 96044	CDFW Region 1, Main Office, Redding, (530) 225-2300  CDFW Region 1, Field Office, Eureka, (707) 445-6493	Iron Gate Fish Hatchery is permanently closed.

Name	Agency/ Company	Contact Info.	Phone	Notes
<b>Public Marinas, City/County/State Parks and Beaches</b>				
Randolph E. Collier Northbound and Southbound Rest Area	California Department of Transportation, District 2	1657 Riverside Drive Redding, CA 96001	(530) 225-3426	
Gottville River Access	USDA Forest Service	Highway 96, 13.5 miles west of Interstate 5 Klamath River, CA 96050	Supervisors Office (Headquarters) (530) 842-6131  Happy Camp/Oak Knoll Ranger District (530) 493-2243	
Blue Creek Ah Pah Traditional Yurok Village - Historical Landmark	Yurok Tribe	Hoopa, CA 95546	Willard Carlson Jr. (707) 954-8833  David Frye (707) 923-7287 cell: (707) 223-3939	
Yurok Tribe Economic Development Corporation (YDEC)	Yurok Tribe	Ramond Bacon YDEC Executive Director rbacon@yuroktribe.nsn.us	(707) 482-1350, Ext. 1701	Jet Boat Tours, Canoe Tribal/ Cultural Tours
Yurok Tribe Economic Development Corporation	Yurok Tribe	Sara Barbour Alliance Executive Director sbarbour@yuroktribe.nsn.us	(707) 482-0657	Jet Boat Tours, Canoe Tribal/ Cultural Tours
Klamath Beach National Reserve	Yurok Tribe	Klamath Beach Road, Klamath CA 95548	Yurok Tribe Klamath Office (707) 482-2431	
Redwood National and State Park	National Park Service and California State Parks	Klamath Beach Road at Alder Camp Road, Klamath CA 95548	(707) 464-6101	

Name	Agency/ Company	Contact Info.	Phone	Notes
<b>U.S.D.A. Forest Service/State Parks Campgrounds</b>				
Tree of Heaven Campground	USDA Forest Service	Yreka, CA 96097	Happy Camp/Oak Knoll Ranger District (530) 493-2243	
Fort Goff Campground	USDA Forest Service	Seiad Valley, CA 96086	Happy Camp/Oak Knoll Ranger District (530) 493-2243	
Sarah Totten Campground	USDA Forest Service	63822 CA-96 Happy Camp, CA 96039	Happy Camp/Oak Knoll Ranger District (530) 493-2243	
Curly Jack Campground	USDA Forest Service	63822 CA-96 Happy Camp, CA 96039	Happy Camp/Oak Knoll Ranger District (530) 493-2243	
Dillon Creek Campground	USDA Forest Service	Klamath River Hwy Happy Camp, CA 96039	Orleans/Ukonom District (530) 627-3291	
<b>First Responder On-Water Facilities, Other Health and Safety Intakes</b>				
N/A				

#### 4.5 California Native American Tribe and Cultural Resources and Historic Properties at Risk

Cultural and historic resources are reported to be present within this GRP area. Due to the confidential nature of this information, details regarding the location and type of cultural resources present are not included in this document. However, in order to ensure that tactical response strategies do not inadvertently impact cultural and historic sensitive sites, the Northeast Information Center (Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity Counties) under CHRIS, and the NAHC - Sacred Lands File should be contacted to determine presence/absence of these resources as soon as possible if disturbing any soil or sediment during a response action or addressing contamination on potentially historic structures. As part of their National Historic Preservation Act, Section 106 responsibilities, the United States Coast Guard or United States Environmental Protection Agency Federal On-Scene Coordinator may hire an Historic Properties Specialist to help identify the location of these sensitive resources, sign-off that cleanup operations are unlikely to impact these resources, and/or assign resources to monitor cleanup operations if there may be potential impacts. Table 4-3 lists contact information for the appropriate CHRIS Information Center for the GRP area. Updated contact information can be obtained through the Tribal Coordinator from NAHC, <https://nahc.ca.gov/>, and the respective CHRIS information center, [https://ohp.parks.ca.gov/?page\\_id=1068](https://ohp.parks.ca.gov/?page_id=1068).

## California Native American Tribe Notification

Oil spills which occur on or near California Native American Tribal land may have the potential to impact cultural resources on traditional ancestral lands. These ancestral lands may be of importance to several federally recognized and non-federally recognized tribes. The California Public Resource Code Section 21073 states "California Native American tribe means a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." A notification call will be placed by the Tribal Coordinator to the NAHC. When it is determined that an oil spill has the potential to impact cultural resources, the California Native American Tribal representatives listed in Table 4-3, provided by NAHC, will be contacted by the Tribal Coordinator and invited to participate in the response for the purpose of cultural resource consideration.

The 1997 Programmatic Agreement ('97 PA) under the National Oil and Hazardous Substances Pollution Contingency Plan provides an alternative process to ensure appropriate consideration of historic properties with the meaning and compliance of Section 106 of the National Historic Preservation Act during emergency response to a release or spill. California Native American Tribal consultation occurs when a federal agency project or effort may affect historic properties that are either located on California Native American Tribal lands or when any federally recognized Native American tribe attaches religious or cultural significance to the historic property, regardless of the property's location. When an oil spill occurs, the federal agency or a designee (e.g., Tribal Liaison) must notify appropriate Native American tribes of the undertaking and provide those tribes the opportunity to consult, should they wish to do so.

The State On-Scene Coordinator or a designee will ensure appropriate notification of and coordination with California Native American Tribes to the extent practicable, in the absence of a Federal On-Scene Coordinator.

The Historic Properties Specialist will coordinate with the Tribal Coordinator and EU on cultural and historic resources-at-risk concerns and necessary signoffs after the UC is established. Procedures for managing the discovery of human remains and cultural and historic resources can be found in Section 9 of the [Geographic Response Plan Companion Manual](#).



**Table 4-3: Resources-At-Risk Matrix – California Native American Tribe, Cultural and Historic Properties**

Historical and Cultural Resources		
<b>Northeast Information Center:</b> Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity Counties		
Ryan Bradshaw	neinfocntr@csuchico.edu	(530) 898-6256
Website	http://www.csuchico.edu/neic	
<b>Northwest Information Center:</b> Alameda, Colusa, Contra Costa, Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Yolo Counties		
Bryan Much, Coordinator	nwic@sonoma.edu	(707) 588-8455 Cell: (707) 332-1117
Website	ttp://web.sonoma.edu/nwic/	
California Native American Tribal Resources (State Agency)		
<b>Native American Heritage Commission</b>	1550 Harbor Blvd., Suite 100, West Sacramento, CA  <a href="mailto:nahc@nahc.ca.gov">nahc@nahc.ca.gov</a> with cc to NAHC Staff Below:	(916) 373-3710
Andrew Green	Andrew.Green@nahc.ca.gov	(916) 373-3710
Cody Champagne	Cody.Champagne@nahc.ca.gov	(916) 373-3710
<b>CDFW OSPR Tribal Coordinator</b>		
Cindy Murphy	Cindy.Murphy@wildllife.ca.gov	(916) 616-4515
<b>CDFW Headquarters Tribal Liaison</b>		
Sarah Fonseca	<a href="mailto:Sarah.Fonseca@wildlife.ca.gov">Sarah.Fonseca@wildlife.ca.gov</a> <a href="mailto:Tribal.Liaison@wildlife.ca.gov">Tribal.Liaison@wildlife.ca.gov</a>	(916) 902-9000

Local California Native American Tribe Contact Information			
California Native American Tribe, Contact Name, Email Address	County	Address	Phone
Karuk Tribe Russell Attebury, Chairperson	Siskiyou Humboldt	P.O. Box 1016 64236 Second Ave Happy Camp, CA 96039	(530) 493-1600
Karuk Tribe Alex R. Watts-Tobin Archeologist and Tribal Historic Preservation Officer, Karuk Tribe's Department of Natural Resources atobin@karuk.us	Siskiyou Humboldt	P.O. Box 282 39051 Hwy 96 Orleans, CA 95556	(530) 627-3446 Ext. 3015
Pit River Tribe of California Agnes Gonzalez, Chairperson AgnesGonzalez1010@gmail.com; <a href="mailto:ViceChairman@pitrivertribe.org">ViceChairman@pitrivertribe.org</a> (Mr. Eleck); <a href="mailto:ODanzuka@pitrivertribe.org">ODanzuka@pitrivertribe.org</a> (Orvie Danzuka); <a href="mailto:ZBaker@pitrivertribe.org">ZBaker@pitrivertribe.org</a> (Ms. Baker;) <a href="mailto:THPO@pitrivertribe.org">THPO@pitrivertribe.org</a> (Ms. Forrest-Perez)	Siskiyou	36970 Park Ave Burney, CA 96013	(916) 372-9720
Quartz Valley Indian Community Harold Bennett, Chairperson <a href="mailto:harold.bennett@qvir-nsn.gov">harold.bennett@qvir-nsn.gov</a> tribalchairman@qvir-nsn.gov	Siskiyou	13601 Quartz Valley Road Fort Jones, CA 96032	(530) 468-5907
Quartz Valley Indian Community Crystal Robinson, Environmental Director	Siskiyou	13601 Quartz Valley Road Fort Jones, CA 96032	(530) 468-5907
Shasta Nation Roy V. Hall, Jr, Chairperson	Siskiyou	10808 Quartz Valley Road Fort Jones, CA 96032	(530) 468-2387
Winnemem Wintu Tribe Caleen Sisk, Tribal Chief and Spiritual Leader caleenwintu@gmail.com	Siskiyou	14840 Bear Mountain Road Redding, CA 96003	(530) 229-4096
Winnemem Wintu Tribe Mark Miyoshi, THPO markmwinnemem@gmail.com	Siskiyou	P. O. Box 774 Mount Shasta, CA 96067	(530) 926-4408

### Local California Native American Tribe Contact Information (continued)

Wintu Tribe of Northern California Wade McMaster, Chairperson <a href="mailto:wintu.tribe1@gmail.com">wintu.tribe1@gmail.com</a> Kelli Hayward, Cultural Resources Director Brenda Hogan, Cultural Resources Manager	Siskiyou	P.O. Box 995 Shasta Lake, CA 96019	(530) 605-1726
Elk Valley Rancheria Dale A. Miller, Chairperson Kerri Vue, Chief Financial officer Crista Stewart, THPO <a href="mailto:dmiller@elk-valley.com">dmiller@elk-valley.com</a> <a href="mailto:kvue@elk-valley.com">kvue@elk-valley.com</a> <a href="mailto:cstewart@elk-valley.com">cstewart@elk-valley.com</a>	Del Norte	2332 Howland Hill Road Crescent City, CA 95531	(707) 464-4680
Pulikla Tribe of Yurok People Fawn C. Murphy, Chairperson <a href="mailto:Fawn.murphy@puliklatribes.gov">Fawn.murphy@puliklatribes.gov</a>	Del Norte	P.O. Box 529 Klamath, CA 95548	(707) 482-2431
Tolowa Dee-ni' Nation Jeyi Lynn Thompson, Chairperson Troy Ralstin, Executive Director Cynthia Ford, THPO <a href="mailto:Jeri.thompson@tolowa.com">Jeri.thompson@tolowa.com</a> <a href="mailto:Cynthia.ford@tolowa.com">Cynthia.ford@tolowa.com</a>	Del Norte	12801 Mouth of Smith River Road Smith River, CA 95567	(707) 487-9255 Ext. 1174
Yurok Tribe of California Rosie M. Clayburn THPO, Cultural Resources Manager <a href="mailto:rcayburn@yuroktribe.nsn.us">rcayburn@yuroktribe.nsn.us</a>	Del Norte Humboldt	P.O. Box 1027 190 Klamath Blvd Klamath, CA 95548	(707) 482-1350 Ext. 1309 Cell: (707) 954-4825
Yurok Tribe of California Joe James Chairperson	Del Norte Humboldt	P.O. Boc 1027 Klamath, CA 95548	(707) 482-1350 (707) 482-1377
Bear River Band of Rohnerville Rancheria Josephina Frank, Chairperson Terresa Ballew, Tribal Administrator Melanie McCavour, THPO and Cultural Program Director Ana Canter, THPO/Cultural Program Assistant and GIS Specialist <a href="mailto:THPO@brb-nsn.gov">THPO@brb-nsn.gov</a> <a href="mailto:anacanter@brb-nsn.gov">anacanter@brb-nsn.gov</a> <a href="mailto:josefinafrank@brb-nsn.gov">josefinafrank@brb-nsn.gov</a>	Humboldt	266 Kiesner Road Loleta, CA 95551	(707) 733-1900
Big Lagoon Rancheria Virgil Moorehead, Chairman <a href="mailto:vmoorehead@earthlink.net">vmoorehead@earthlink.net</a>	Humboldt	P.O. Box 3060 Trinidad, CA 95570	(707) 826-2079

### Local California Native American Tribe Contact Information (continued)

Blue Lake Rancheria Claudia Brundin, Chairperson Arla Ramsey, Tribal Administrator Janet Eidsness, THPO Jacob Pounds, Assistant THPO Daniel Holsapple, THPO Office <a href="mailto:jeidsness@bluelakerancheria-nsn.gov">jeidsness@bluelakerancheria-nsn.gov</a> <a href="mailto:jpounds@bluelakerancheria-nsn.gov">jpounds@bluelakerancheria-nsn.gov</a> <a href="mailto:dholsapple@bluelakerancheria-nsn.gov">dholsapple@bluelakerancheria-nsn.gov</a>	Humboldt	P.O. Box 428 Blue Lake, CA 95525	(707) 668-5101
Cher-Ae_Heights Indian Community of the Trinidad Rancheria Garth Sundberg Sr., Chairman Rachel Sundberg, THPO Jonas Savage, Environmental Coordinator <a href="mailto:gsundberg@TrinidadRancheria.com">gsundberg@TrinidadRancheria.com</a> <a href="mailto:rsundberg@TrinidadRancheria.com">rsundberg@TrinidadRancheria.com</a>	Humboldt	P.O. Box 630 Trinidad, CA 95570-0630	(707) 677-0211
Hoopla Valley Tribe Joe Davis, Chairperson	Humboldt	P.O. Box 1348 Hoopla, CA 95546	(530) 625-4594
Round Valley Reservation/Covelo Indian Community James Russ, President Patricia Rabano, THPO <a href="mailto:prabano@rvip.org">prabano@rvip.org</a>	Humboldt	77826 Covelo Road, Hwy 162 Covelo, CA 95428	(707) 983-6128 Cell: (707) 354-8440
Tsnungwe Council Paul Ammon, Chairperson <a href="mailto:tsnungweofcalifornia@gmail.com">tsnungweofcalifornia@gmail.com</a>	Humboldt	P.O. Box 373 Salier, CA 95563	(530) 739-3828
Wiyot Tribe Ted Hernandez, Chairman Cultural Director, THPO	Humboldt	1000 Wiyot Drive Loleta, CA 95551	(707) 733-5055

## **Appendix A**

### **GRP Development and Contributors**

The Klamath River Geographic Response Plan was developed by the California Department of Fish and Wildlife, Office of Spill Prevention and Response through a collaborative effort among the state, federal, and local government agencies listed below, as well as industry and oil spill response organization partners, California Native American Tribes and environmental Non-Governmental Organizations representatives:

#### **Federal Representatives**

US Environmental Protection Agency, Region 9 and 10  
US Department of Agriculture, Forest Service  
US Department of the Interior  
US Fish and Wildlife Service

#### **State Representatives**

California Environmental Protection Agency  
California Governor's Office of Emergency Services  
California Department of Fish & Wildlife, Region I  
California Department of Forestry and Fire Protection, State Fire Marshal's Office, Pipeline Safety Division  
Native American Heritage Commission

#### **Local Representatives**

Santa Barbara County Public Health

#### **California Native American Tribal Representatives**

Yurok Tribe  
Karuk Tribe  
Pulikla Tribe of Yurok People

#### **Industry and Response Contractors**

Patriot Environmental Services  
Marine Spill Response Corporation  
Union Pacific Railroad  
Burlington Northern Santa Fe Railroad  
Kinder Morgan Pipeline  
Crimson Pipeline  
Shell Pipeline Company  
Shell Oil Company  
National Response Corporation, US Ecology

#### **Environmental Non-Governmental Organizations**

Trout Unlimited



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# Appendix B

## Site Description

### Klamath River GRP

#### 1.0 Overview

This section provides a description of the physical features, hydrology, and climate, found along the Klamath River and includes an overview of the oil spill risks in the region. The Klamath River Basin has an area of approximately 15,700 square miles and flows 253 miles from Southern Oregon through the mountains of far Northern California before ultimately reaching the California coast ([United States Bureau of Reclamation \(USBR\), 2021](#); [Cal Trout](#), retrieved March 2024). It is the second largest watershed in the State of California after the Sacramento River. Approximately 60 percent of the watershed is public land. It supports a wide range of habitats for numerous fish and wildlife species in addition to supplying water for agricultural, hydropower, California Native American Tribes, recreational, municipal, industrial, and domestic uses ([USBR, 2021](#)).

The river provides critical habitat for numerous species, including large runs of Chinook salmon, Coho salmon, steelhead trout, coastal cutthroat trout, green and white sturgeon, and Pacific lamprey. The anadromous fishery supports the river's sport fishing guide and resort industry, Native American subsistence and ceremonial culture and the ocean commercial and sport fishing industry ([Klamath-Siskiyou Wildlands Center](#), retrieved March 11, 2024).

The Klamath River Watershed is home to six federally recognized California Native American Tribes (the Yurok, Karuk, Hoopa, Shasta, and Klamath tribes, plus Quartz Valley Indian Reservation and the Pulikla Tribe of Yurok People who lived off and tended to the fertile lands for thousands of years before European colonization. Today, California Native American Tribes control approximately 10 percent of the watershed while 60 percent is managed by public agencies (such as the National Park Service) and 30 percent is privately owned ([Cal Trout](#), retrieved March 2024).

#### 1.1 Physical Features

The Klamath River has been referred to as the “upside down river” because of its geography. Typical rivers originate high in the mountains, with steep gradients and are relatively undeveloped until they reach valleys where gradients are lower, temperatures are warmer, and there is an increased level of urbanization. The Klamath River, however, originates in the arid deserts of eastern Oregon, which contain a considerable amount of urbanization and agriculture. Low gradients and large reservoirs are present in the upstream reaches of the Klamath watershed. Conversely, the lower reaches of the river run through the temperate rainforests of California and remain relatively undisturbed with mostly California Native American Tribes and federal land ownership ([National Oceanic and Atmospheric Administration Fisheries](#), retrieved March 2024).

The geomorphology of the lower Klamath River basin reflects the geology, hydrology, climate, and vegetation characteristic of the geomorphic provinces it flows through. The Klamath River downstream of the former Iron Gate Dam location flows through steep, mountainous terrain and is generally a coarse-grained, bedrock-controlled channel with relatively short alluvial reaches and little floodplain development. Channel morphology, degree of confinement, and bed surface grain size distribution are locally controlled by bedrock and by tributary flow and sediment inputs ([Waterboards, 2018](#)).

## Hydrology and Flows

The watershed is strongly influenced by the Cascade and Siskiyou mountains, which create two distinct climates—an arid climate in the upper basin, generally east of the mountains, and a maritime climate in the lower basin. The dividing line between the upper and lower basins is approximately located at the former Iron Gate Dam location on the Klamath River. Each basin has very different climates, hydrologic regimes, and water needs. The primary tributary inflows to the Klamath River are located in the Lower Klamath River and include the Shasta, Scott, Salmon, and Trinity Rivers ([USBR, 2021](#)).

**Mid Klamath River Basin:** The Middle Klamath River Basin includes the area downstream from the former Iron Gate Dam location to the confluence of the Trinity River, which includes 150 miles of river. The major tributaries entering the Klamath River along these reaches include the Shasta, Scott, and Salmon rivers. The Klamath Basin is heavily influenced by these three rivers because they provide 44 percent of the average annual runoff (Federal Energy Regulatory Commission, 2007; [Waterboards, 2018](#)).

The Shasta River enters the Klamath River at river mile (RM) 179.5, 13.5 miles downstream from the former Iron Gate Dam location. The Shasta River watershed includes the glaciated slopes of Mount Shasta but is largely rangeland with substantial amounts of irrigated pastureland and agricultural area. The average precipitation in the watershed varies greatly with exposure and elevation but is about 15 inches per year due to the rain shadow effects of the mountains to the west of the watershed. The hydrograph for the Shasta River near the confluence with the Klamath River shows a peak in the winter and minimum median flows under 40 cubic feet per second (cfs) during July and August ([Waterboards, 2018](#)).

The Scott River enters the Klamath River at RM 145.1, 47.1 miles downstream from the former Iron Gate Dam location. The Scott River watershed includes the heavily forested and relatively wet Salmon Mountains on its western divide, but these mountains create a rain shadow for the rest of the watershed. Similar to the Shasta River Valley, many areas in the Scott River Valley have been extensively altered for grazing and agriculture. Although the Scott River watershed is almost the same size as the Shasta River watershed, the hydrograph for the Scott River near the confluence with the Klamath River has four to five times higher median monthly flows in the winter and spring months. Somewhat similar to the Shasta River, the minimum monthly median flows near 50 cfs occur during August and September ([Waterboards, 2018](#)).

Approximately 77 miles downstream from the Scott and Klamath Rivers confluence, the Salmon River enters the Klamath River at RM 66.3. The Salmon River flows through the Klamath National Forest and

many designated wilderness areas. The region surrounding the Salmon River is mainly forested with some agricultural activity. High monthly average flows (3,375 cfs) occur in January, which is the winter peak for flooding as rain and rain-on-snow events occur. In April and May, the Salmon River has a high monthly average flow (2,660 and 2,630 cfs, respectively) from snowmelt at higher elevations. The Salmon River has its lowest monthly average flow at about 200 cfs in September, which is later than for other tributaries upstream including the Shasta River where lowest monthly average flow occurs in July (Federal Energy Regulatory Commission, 2007; [Waterboards, 2018](#)).

**Lower Klamath River Basin:** The Trinity River enters the Klamath River at RM 43.3, 150 miles downstream of the former Iron Gate Dam location. The Trinity River is the largest tributary to the Klamath River. The Trinity River watershed is generally wet, steep, forested, and largely federally owned within several national forests and wilderness areas. The Trinity River hydrograph at the confluence with the Klamath River has peak median monthly flows in February and March near 7,000 cfs, gradually declining to about 600 cfs in September ([Waterboards, 2018](#)).

**Lower Klamath Project Dam Removal:** As discussed in the Draft Environmental Impact Report for the Lower Klamath Project License Surrender, hydrologic and hydraulic modeling of floodplain inundation shows that removal of the Lower Klamath Project dams could alter the 100-year floodplain inundation area downstream of the former Iron Gate Dam location between RM 193 and 174 (i.e., from the former Iron Gate Dam location to Humbug Creek) (USBR, 2012). USBR (2012) estimated that the discharge of the 100-year peak flood immediately downstream of the former Iron Gate Dam location would increase by up to seven percent following dam removal and flood peaks would occur about 10 hours earlier. This increased discharge would result in flood elevations that are 1.65 feet higher on average from the former Iron Gate Dam location (RM 193) to Bogus Creek (RM 192.6) and 1.51 feet higher on average from Bogus Creek to Willow Creek (RM 188). The impact of dam removal on flood peak elevations would decrease with distance downstream of the former Iron Gate Dam location, and USBR (2012) and the Klamath River Renewal Corporation estimated that there would be no significant effect on flood elevations downstream of Humbug Creek (RM 174) ([Waterboards, 2018](#)).

## Tidal Influence

The Klamath River Estuary spans approximately four to five miles upstream of the mouth. The tidal influence normally extends approximately four miles upstream of the mouth during high tides greater than six feet upstream of the Highway 101 bridge. Past studies have observed the formation of a sill at the river mouth in late summer or early fall causing a standing water backup up to six miles upstream. During high tides saltwater was observed in the summer and early fall from the mouth upstream ranging approximately 2.5 to four miles depending on the time period samples were taken. The saltwater recedes during low tides ([Waterboards, 2018](#)).

## Climate and Winds

As noted above, the Klamath River Basin consists of two distinct climates between the upper and lower basins. The Geographic Response Plan boundary begins at the former Iron Gate Dam location and thus consists of the lower Klamath River basin. The lower basin has historically received about 70 percent more precipitation annually than the upper basin. ([USBR, 2021](#)). Within the lower basin, the

climates can also vary between the eastern section along Interstate 5 near Yreka, the middle section near Happy Camp, and in the City of Klamath at the Pacific Ocean near Highway 101. A description of climate regimes for those three areas is discussed below.

**Yreka, CA:** In Yreka, the summers are short, hot, dry, and mostly clear and the winters are very cold, wet, and mostly cloudy. Over the course of the year, the temperature typically varies from 28°F to 90°F and is rarely below 18°F or above 98°F. The hot season lasts for 2.9 months, from June 19 to September 16, with an average daily high temperature above 81°F. The hottest month of the year in Yreka is July, with an average high of 88°F and low of 54°F ([Weather Spark, Yreka, Ca](#), retrieved March 2024).

The rainy period of the year lasts for 9.3 months, from September 12 to June 20. The month with the most rain in Yreka is December, with an average rainfall of 4.9 inches. The rainless period of the year lasts for 2.7 months, from June 20 to September 12. The month with the least rain in Yreka is August, with an average rainfall of 0.2 inches ([Weather Spark, Yreka, Ca](#), retrieved March 2024).

Yreka experiences some seasonal variation in monthly snowfall. The snowy period of the year lasts for 3.8 months, from November 13 to March 5. The month with the most snow in Yreka is December, with an average snowfall of 3.2 inches. The snowless period of the year lasts for 8.2 months, from March 5 to November 13 ([Weather Spark, Yreka, Ca](#), retrieved March 2024).

The windier part of the year lasts for 7.0 months, from October 18 to May 18, with average wind speeds of more than 4.3 miles per hour. The windiest month of the year in Yreka is February, with an average hourly wind speed of 4.8 miles per hour. The calmer time of year lasts for 5.0 months, from May 18 to October 18. The calmest month of the year in Yreka is August, with an average hourly wind speed of 3.9 miles per hour ([Weather Spark, Yreka, Ca](#), retrieved March 2024).

**Happy Camp, CA:** In Happy Camp, the summers are short, warm, dry, and mostly clear and the winters are long, very cold, wet, and mostly cloudy. Over the course of the year, the temperature typically varies from 34°F to 86°F and is rarely below 26°F or above 93°F. The hot season lasts for 2.9 months, from June 22 to September 18, with an average daily high temperature above 78°F. The cool season lasts for 3.8 months, from November 11 to March 5, with an average daily high temperature below 55°F ([Weather Spark, Happy Camp, Ca](#), retrieved March 2024).

The rainy period of the year lasts for 9.7 months, from September 3 to June 26. The month with the most rain in Happy Camp is December, with an average rainfall of 8.5 inches. The rainless period of the year lasts for 2.3 months, from June 26 to September 3. The month with the least rain in Happy Camp is August, with an average rainfall of 0.2 inches ([Weather Spark, Happy Camp, Ca](#), retrieved March 2024).

The average hourly wind speed in Happy Camp does not vary significantly over the course of the year, remaining within 0.5 miles per hour of 4.2 miles per hour throughout. The wind is most often from the north for 5.2 months, from April 25 to October 1. The wind is most often from the east for 2.6 weeks, from October 1 to October 19, with a peak percentage of 31% on October 4. The wind is most often from the south for 5.6 months, from October 19 to April 8, with a peak percentage of 47% on January 1 ([Weather Spark, Happy Camp, Ca](#), retrieved March 2024).

**Klamath, CA:** The City of Klamath on the coast has a moderate climate, with cool winters and warm summers. Average yearly temperatures are mild, with an average high of 72°F (22°C) in the summer and an average low of 40°F (4°C) in the winter. The area gets an abundant amount of rain throughout the year. Snowfall is rare in Klamath; however there have been some major snowstorms in



recent years that caused significant damage to local infrastructure. During these storms, temperatures can drop to below freezing levels. Klamath gets some kind of precipitation, on average, 128 days per year including 79 inches of rain. Precipitation is rain, snow, sleet, or hail that falls to the ground ([Best Places, Klamath, Ca Climate](#), retrieved March 2024).

Information on wind regimes was more robust for Crescent City, 20 miles to the north of Klamath, on the coast, and is provided here. The windier part of the year for Crescent City lasts for 5.0 months, from November 12 to April 10, with average wind speeds of more than 8.5 miles per hour.

The windiest month of the year in Crescent City is December, with an average hourly wind speed of 9.8 miles per hour ([Weather Spark, Crescent City, Ca](#), retrieved March 2024).

The calmer time of year lasts for 7 months, from April 10 to November 12. The calmest month of the year in Crescent City is September, with an average hourly wind speed of 7.2 miles per hour. The wind is most often from the north for 7.1 months, from March 25 to October 28, with a peak percentage of 75% on July 17. The wind is most often from the south for 4.9 months, from October 28 to March 25, with a peak percentage of 47% on January 1 ([Weather Spark, Crescent City, Ca](#), retrieved March 2024).

## **1.2 Risk Assessment**

The Klamath River is a critical hydrological resource in northern California with natural, cultural, and historical resources, all at risk of injury from oil spills. The Klamath Basin has long been celebrated for its lakes, streams, forests, hunting, fishing, and agriculture. The Klamath River was once the third largest salmon-producing river on the West Coast. It was the life force of California Native American Tribes who relied on it for its generous abundance of salmon and trout.

The Klamath River Basin supports Chinook salmon, coho salmon, and steelhead trout populations among other anadromous species. Historically, anadromous fish populations supported important commercial, recreational, and tribal fisheries. However, many of these anadromous fish populations in the Klamath River have declined substantially in abundance ([NOAA Fisheries, Klamath River Basin](#), retrieved March 2024).

The potential risks to these resources include rail and vehicle accidents along major transportation routes, recreational boating, and other factors. Prevention of and preparation for oil spills impacting this river is essential.

### **Oil Production, Refinement, Pipelines and Storage**

There are no production or refinement industries in this area and no hazardous liquid pipelines crossing or running parallel to the river within the GRP boundary (Environmental Response Management Application Southwest, retrieved March 2024).

### **Rail Transportation**

The Central Oregon & Pacific Railroad is the only rail line within the boundary of this GRP that crosses and runs parallel to the Klamath River near Hornbrook for approximately three miles and along tributaries that drain directly into the river for an additional seven miles.

## Road Systems

The Klamath River is vulnerable to hazardous materials spills from vehicle accidents along Interstate 5, which crosses the river south of the town of Hornbrook and parallels the river for approximately 4 miles. Interstate 5 is a primary north-south route for both intra- and interstate travel. Between Interstate 5 on the eastern end of the GRP boundary and Highway 101 on the western end, Highways 96 and 169 follow the river until it reaches Wauteck Village, west of Pecwan, where all major roads end. The Klamath River then continues northwest through the Yurok Reservation. The next, and final, major river crossing is Highway 101 in the community of Klamath (Google Maps, retrieved March 2024).

Highway 101 serves as the primary transportation route in the county; it borders Humboldt Bay and the coastline with a north-to-south orientation and intersects the most populous communities. It is a major, interstate transportation corridor that traverses California from Los Angeles in the southern end of the state, up to the Oregon border in the north, where it continues to parallel the coastline through Oregon and Washington, all the way to Port Angeles. Hundreds of trucks transport an array of cargo across the winding corridors of Highway 101 each day, creating the potential for hazardous materials spills that can threaten the safety of people, wildlife, and waterways ([Humboldt County Hazard Mitigation Plan, Volume 1, Final, 2020](#))

## Recreational Boating

Accidents involving recreational watercraft have the potential to result in spills on the Klamath River. Examples of such accidents include collisions, vessel groundings, and mechanical failures. Recreational boating along the Klamath River between Hornbrook (near Interstate 5) and Requa (mouth of river) is very accessible with numerous boat launch locations. There are few fueling docks along the Klamath River within California; there is a jet boat tour service based out of the community of Klamath near the mouth of the river which includes a private fuel dock.

## Other Spill Risks

Other potential spill risks in the area include road run-off during rain events, construction activities where heavy equipment is being operated, and hydro-electric facilities.

## Appendix C

### Comments, Corrections, or Suggestions

Geographic Response Plans (GRPs) are living documents and can be revised at any time based on new information from comments and lessons learned from drills and spills. These changes are typically reflected as interim updates on the website for each GRP until they are fully incorporated into the plan during a future update. The California Department of Fish and Wildlife, Office of Spill Prevention and Response values input from interested parties and welcomes suggestions about how the plan might be improved. If you have any questions or comments, suggestions for improvement, or find errors in this document please submit comments to the following address:

California Department of Fish and Wildlife  
Office of Spill Prevention and Response  
1010 Riverside Parkway  
West Sacramento, CA 95605  
*Attn: Geographic Response Plans*

The form below 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.

Additional information on GRPs is available at <http://www.wildlife.ca.gov/OSPR/Contingency>.

#### GRP Comment Form

Today's Date: \_\_\_\_\_

Your Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company/Agency: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

GRP Page Number: \_\_\_\_\_ Section or Paragraph: \_\_\_\_\_

Comment(s) \_\_\_\_\_

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## Appendix D

### Record of Changes

Date	Change Number	Summary of Changes	Name of Person Making Changes



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## **Appendix E**

### **Other Relevant Emergency Response Plans**

#### **Klamath River GRP**

##### **Siskiyou County Hazardous Materials Area Plan**

The Siskiyou County Hazardous Materials Area Plan (Haz Mat Area Plan) establishes the policies, responsibilities, and procedures required to protect the health and safety of Siskiyou County's citizens, the environment, and public and private property from the effects of hazardous materials emergency incidents.

The Haz Mat Area Plan establishes the emergency response organization for hazardous materials incidents occurring within Siskiyou County. This Plan documents the operational and general response procedures for the Shasta Cascade Hazardous Materials Response Team, which is the primary hazardous materials response group for Siskiyou County.

The Haz Mat Area Plan is the principal guide for agencies of Siskiyou County, its incorporated cities, and other local entities in mitigating hazardous materials emergencies. This Haz Mat Area Plan is consistent with the National Incident Management System; a unified framework for incident management within which government and private entities at all levels can work together effectively. The National Incident Management System provides a set of standardized organizational structures such as the Incident Command System and standardized processes, procedures and systems. These processes and procedures are designed to improve interoperability among jurisdictions and disciplines in various areas -- command and management, resource management, training, and communications. The California version, known as the Standardized Emergency Management System was updated in 2004 by the federal system.

This Haz Mat Area Plan is an operational plan as well as a reference document; it may be used for pre-emergency planning as well as emergency response. Agencies having roles and responsibilities established by this Area Plan are encouraged to develop standard operating procedures and emergency response checklists based on the provisions of this Haz Mat Area Plan. This Haz Mat Area Plan should be used in conjunction with the Siskiyou County Emergency Operations Plan and the California Hazardous Materials Incident Contingency Plan.

Copies of the Haz Mat Area Plan are on file in the Siskiyou County Emergency Operations Center.

##### **Siskiyou County Office of Emergency Services Hazard Mitigation Plan**

Siskiyou County and nine local government planning partners worked together to create the Siskiyou County Hazard Mitigation Plan. Several factors initiated the planning effort for Siskiyou County and its planning partners: the Siskiyou County area has significant exposure to numerous natural hazards that have caused millions of dollars in past damage; local resources for risk reduction are limited; and the partners wanted to be proactive in preparing for the impacts of natural hazards.

The hazard mitigation plan identifies resources, information, and strategies for reducing risk from natural hazards. Elements and strategies in the plan were selected because they meet a program requirement and because they best meet the needs of the planning partners and their citizens. One of the benefits of multijurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that has uniform risk exposure and vulnerabilities.

In addition to natural hazards, hazardous materials are everywhere in Siskiyou County and are likely accidentally released or spilled numerous times each day. Eliminating these widespread substances throughout the county would be nearly impossible, but the threats of an accidental release or spill may be reduced by mitigation at both fixed facilities and transportation.

All citizens and businesses of Siskiyou County are the ultimate beneficiaries of this hazard mitigation plan. The plan reduces risk for those who live in, work in, and visit the County. It provides a viable planning framework for all foreseeable natural hazards that may impact the County. Participation in development of the plan by key partners in the County helped ensure that outcomes will be mutually beneficial. The resources and background information in the plan are applicable countywide, and the plan's goals and recommendations can lay groundwork for the development and implementation of local mitigation activities and partnerships. ([Siskiyou County Hazard Mitigation Plan, Volume 1: Planning-Area-Wide Elements](#))

## **Humboldt County Emergency Operations Plan**

The Humboldt County Emergency Operations Plan (EOP) addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and human-caused disasters in or affecting Humboldt County. This plan accomplishes the following: establishes the emergency management organization required to mitigate any significant emergency or disaster affecting Humboldt County; identifies the policies, responsibilities, and procedures required to protect the health and safety of Humboldt County communities, public and private property, and the environmental effects of natural and technological emergencies and disasters; establishes the operational concepts and procedures associated with field response to emergencies, County Emergency Operations Center activities, and the recovery process.

The EOP is designed to establish the framework for implementation of the California Standardized Emergency Management System and the National Incident Management System for Humboldt County, which is located within the California Office of Emergency Services Mutual Aid Region II. It is intended to facilitate multiagency and multijurisdictional coordination, particularly between Humboldt County and local governments, including special districts and state agencies, in emergency operations.

This EOP addresses the entire spectrum of contingencies ranging from relatively minor incidents like water pipe ruptures to large-scale disasters such as major earthquakes. A build-up or warning period providing sufficient time to warn the public will precede some emergencies and will trigger the implementation of mitigation measures designed to reduce loss of life, property damage, and effects on the environment. Other emergencies occur with little or no advance warning, requiring immediate activation of the County Emergency Operations Center and rapid mobilization of resources. All County departments and agencies must be prepared to (1) promptly and effectively respond to any foreseeable emergency, and (2) take all appropriate actions, including requesting and providing mutual aid. ([Humboldt County Emergency Operations Plan, 2015](#))

## **Humboldt County Local Hazard Mitigation Plan**

Humboldt County and a partnership of local governments within the operational area have developed a hazard mitigation plan to reduce risks from natural disasters in the Humboldt County Operational Area—defined as the unincorporated county, incorporated cities, and special purpose districts planning partners authorized to govern, develop, or regulate. One of the benefits of such multi-jurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that has uniform risk exposure and vulnerabilities. Elements and strategies in the plan were selected because they meet a program requirement and because they best meet the needs of all the planning partners and their citizens.

All citizens and businesses of Humboldt County are the ultimate beneficiaries of this hazard mitigation plan. The plan reduces risk for those who live in, work in, and visit the planning area. It provides a viable planning framework for all foreseeable natural hazards. Participation in development of the plan by key partners helped ensure that outcomes will be mutually beneficial. The resources and background information in the plan are applicable across the planning area, and the plan's goals and recommendations can lay groundwork for the development and implementation of local mitigation activities and partnerships. ([Humboldt County HMP, Volume 1, Final, 2020](#))

## **Del Norte County Operational Area Hazard Mitigation Plan**

The County of Del Norte and the City of Crescent City jointly prepared a hazard mitigation plan in compliance with the Disaster Mitigation Act in 2010. The 2010 plan identified resources, information, and strategies for reducing risk from natural hazards. It called for ongoing updates, and the 2018 Del Norte County Operational Area Hazard Mitigation Plan fulfills the update requirement. The 2018 Del Norte County Operational Area Hazard Mitigation Plan will help guide and coordinate mitigation activities throughout the planning area.

All citizens and businesses of Del Norte County are the ultimate beneficiaries of the hazard mitigation plan. The plan reduces risk for those who live in, work in, and visit the planning area. It provides a viable planning framework for all foreseeable natural hazards. Participation in development of the plan by key partners helped ensure that outcomes will be mutually beneficial.

The Certified Unified Program Agency in Del Norte County is the County's Environmental Health Division. This agency helps businesses meet state requirements for reporting hazardous materials and waste above certain designated quantities that they use, store, or handle at their facility.

The number and types of hazardous chemicals stored in and transported through Del Norte County will likely continue to increase. As the population grows, the number of people vulnerable to the impacts of hazardous materials spills and transportation incidents will increase. Population and business growth along major transportation corridors increases the vulnerability to transportation-related hazardous material spills. ([Del Norte County Hazard Mitigation Plan, Volume 1 Final.pdf](#))

## **Local Emergency Planning Committee Hazardous Materials Emergency Plans**

There are six California Governor's Office of Emergency Services mutual aid regions in California that have the same boundaries as the Local Emergency Planning Committees (LEPCs). The LEPCs are designated as emergency planning districts to prepare Hazardous Materials Emergency Plans

pursuant to the Superfund Amendments and Reauthorization Act, Title III (Emergency Planning and Community Right to Know) found in Title 42, United States Code §110003(a).

## **Region II, Hazardous Materials Emergency Plan**

LEPC Region II is comprised of the sixteen coastal California counties of Alameda, Contra Costa, Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.

This plan will assist in identifying the risks and effective uses of resources for the maximum benefit and protection of the public during a hazardous material emergency and community right-to-know information. This plan is not intended to be an Operational Plan but to provide guidance and information to local government, businesses and the public facing the growing responsibilities and concerns relating to hazardous materials.

This regional Hazardous Materials Emergency Plan builds on the county Hazardous Materials Area Plans and facility Hazardous Materials Business Plans located in the region's counties. It includes the identity, location and emergency contacts for facilities that handle threshold quantities of extremely hazardous substances. It also contains chemical release response procedures, public protective action notification information, county government emergency coordinators and plans for exercising the Hazardous Materials Emergency Plan. ([Coastal Region, Local Emergency Planning Committee, Hazardous Materials Emergency Response Plan, 1994](#))

## **Region III, Comprehensive Regional Hazardous Materials Emergency Plan**

LEPC Region III is comprised of the thirteen inland California counties of Butte, Colusa, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, and Yuba.

The Local Emergency Planning Committee for Region III has developed this Regional Hazardous Materials Emergency Plan. The information provided in the plan identifies the populated and environmentally sensitive areas at risk, the potential for a hazardous materials exposure from fixed facilities and along transportation routes (highways and rails), and other sources including aircraft, pipelines, industry, agriculture, and illegitimate businesses within the LEPC III Region.

## **Sector San Francisco Area Contingency Plan, Area Committee ACP-1**

The statutes (Oil Pollution Act of 1990 and Senate Bill 2040) enacted in consequence of the catastrophic oil spills of 1989, required contingency planning by both state and federal Governments. The U. S. Coast Guard (USCG) and California Department of Fish and Wildlife, Office of Spill Prevention and Response agreed to joint preparation of contingency plans through co-chairing the three Port Area Committees for Contingency Planning: USCG Port Areas for San Francisco, Los Angeles/Long Beach, and San Diego.



Each Area Committee, under the direction of the Federal On-Scene Coordinator for the area, is responsible for developing an Area Contingency Plan (ACP) which, when implemented in conjunction with the National Contingency Plan, shall be adequate to remove a worst case discharge of oil or a hazardous substance, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the geographic area. Each Area Committee is also responsible for working with state and local officials to pre-plan for joint response efforts, including appropriate procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive environmental areas, and protection, rescue, and rehabilitation of fisheries and wildlife. The Area Committee is also required to work with state and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

The Sector San Francisco ACP extends from the Oregon border to the northern Santa Cruz County border. ACP-1 extends from the Oregon Border to the southern Mendocino County border covering the shoreline of coastal Del Norte, Humboldt, and Mendocino Counties. The inland boundary is determined by the USCG/USEPA boundary. This line generally follows Highway 1 and 101 along the coast. The Klamath Geographic Response Plan intersects the coastal ACP-1 at the mouth of the river at Requa near the community of Klamath ([California Department of Fish and Wildlife, USCG, 2022](#)).

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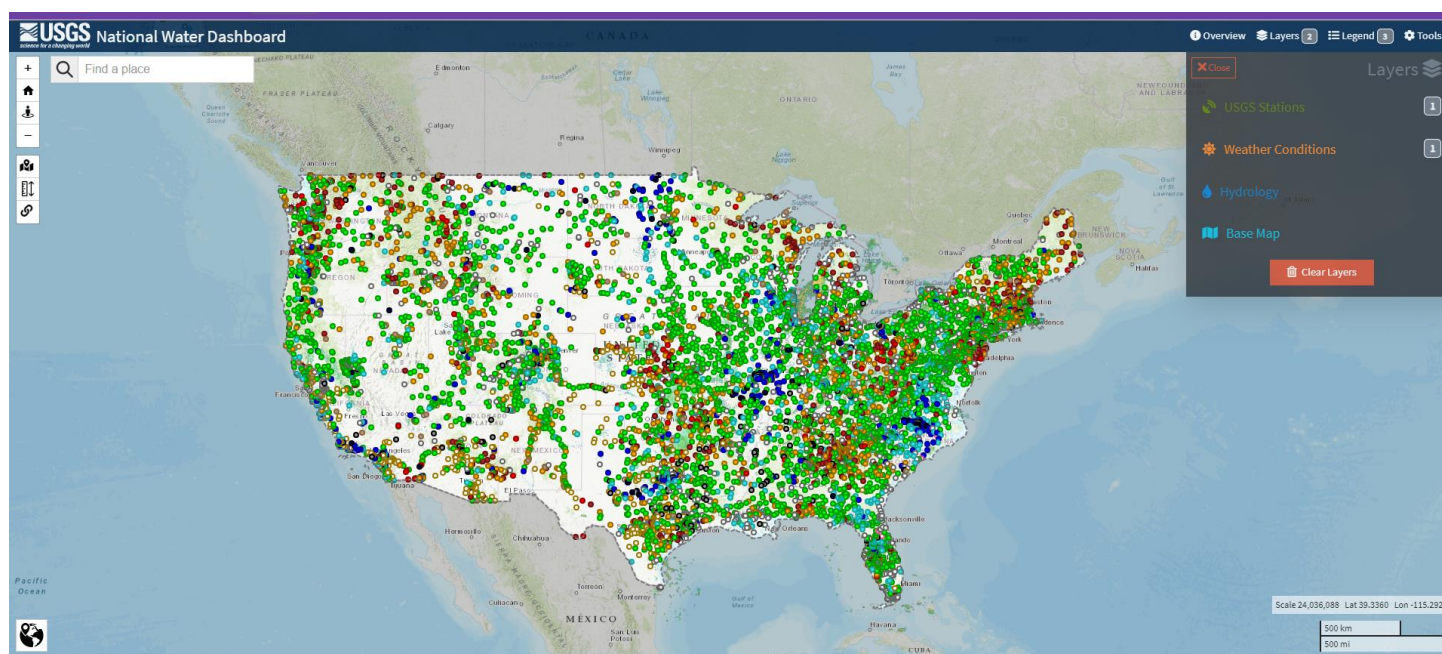
## **Appendix F**

### **U.S. Geological Survey (USGS) Water Dashboard and Time to Travel Tool**

- **Figure F-1: USGS Water Dashboard Instructions to Retrieve Stream Gauge Surface Velocity**
- **Figure F-2: USGS Klamath River Stream Gauge Location Map**
- **Figure F-3: USGS Time to Travel Tool Job Aid**

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**Figure F-1: USGS Water Dashboard Instructions to Retrieve Stream Gauge Surface Velocity**



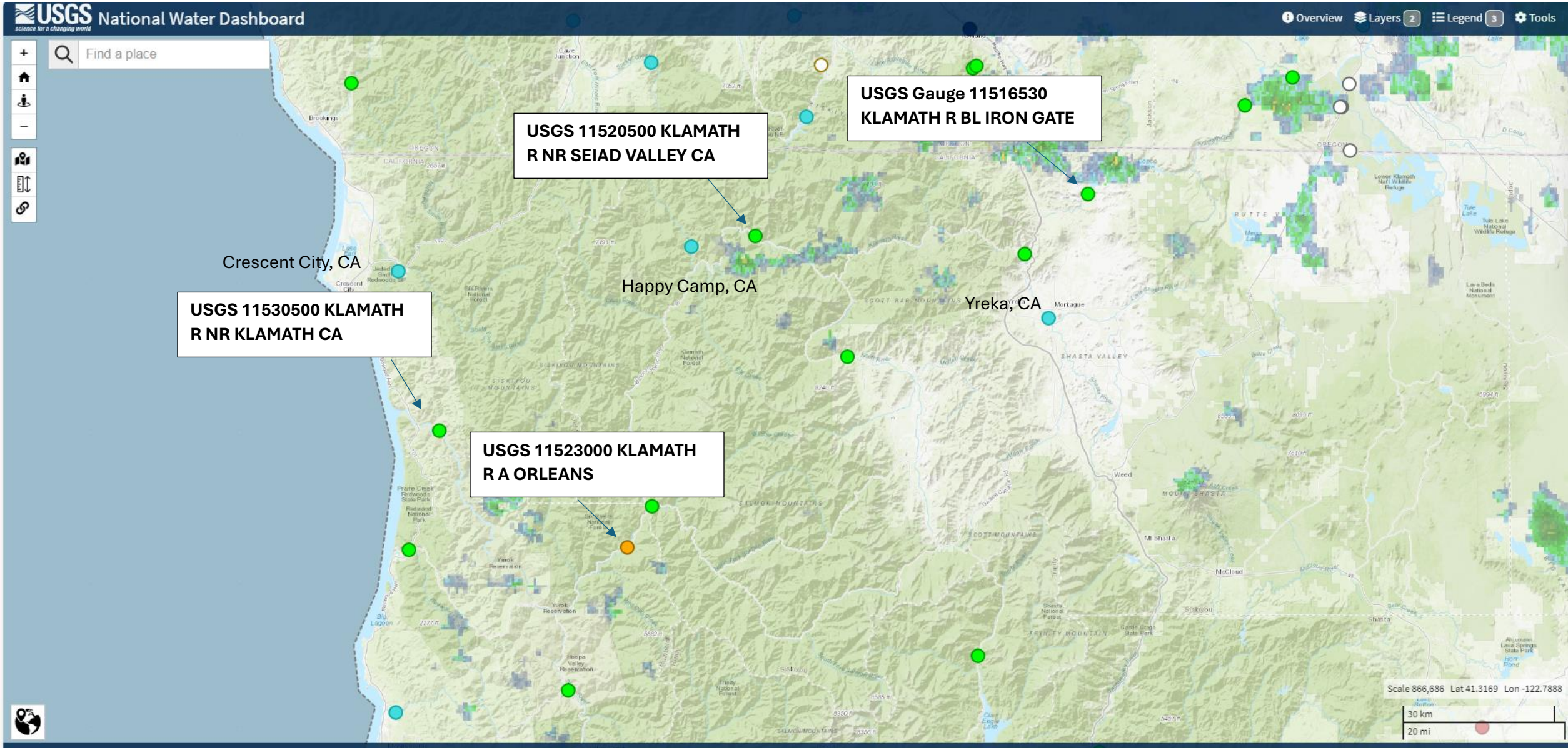
Access stream gauge surface velocity data by following the instructions below:

- Load website and zoom to the Klamath River, <https://dashboard.waterdata.usgs.gov>.
- Select an available gauge on the Klamath River for the area of interest.
- On the top tool bar, select "Site page."
- On the top tool bar, select the "Data Inventory," dropdown list and select "Field Measurements."
- Under Output formats, select "HTML table with channel data."
- Use the bottom scroll bar to scroll to the right to find the "Channel vel. (ft/s)" column.



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Figure F-2: USGS Klamath River Stream Gauge Location Map



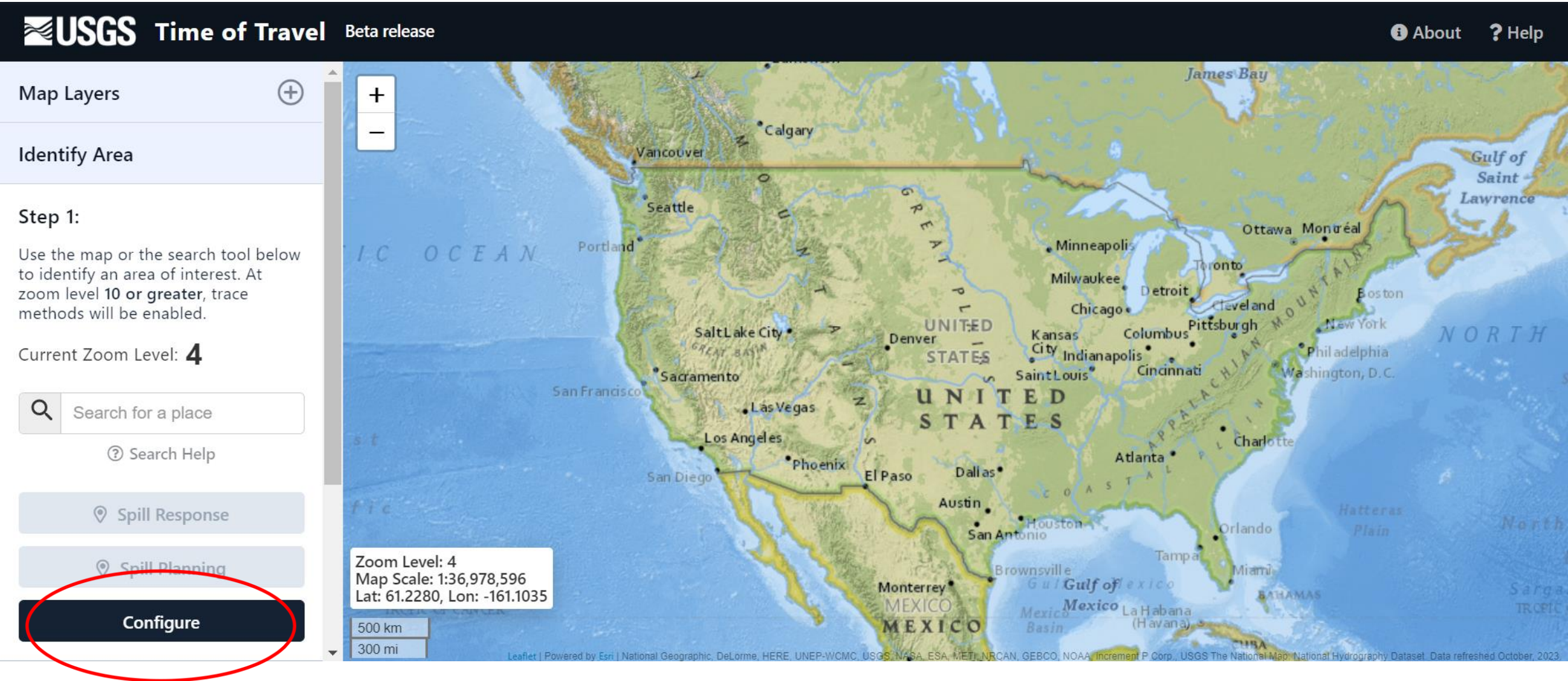
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Figure F-3: USGS StreamStats Time to Travel Tool Job Aid

The time to travel tool was developed based on surface particles, not petroleum products, but will provide a good estimate of downstream travel.

- 1. Load website and select “Configure” on the left column, <https://streamstats.usgs.gov/tot-beta/>.



2. Select “Imperial (Miles)” and enter distance downstream from release site that you would like to view time of travel and click “Done.”

USGS

Time of Travel

Beta release

About

Help

Map Layers

+

Identify Area

+

−

Step 1:

Use the map or the search tool below to identify an area of interest. At zoom level 10 or greater, trace methods will be enabled.

Current Zoom Level: 4

Q

Search for a place

?

Search Help

📍

Spill Response

📍

Spill Planning

Configure

Zoom Level: 4

Map Scale: 1:36,978,596

Lat: 22.9432, Lon: -143.7891

500 km

300 mi

Configure units

×

Select Distance

50

Select Units

☐ Metric (Kilometers)

☒ Imperial (Miles)


Done

272


KLAMATH RIVER GRP August 2025



3. Zoom in to location of release, when you zoom in sufficiently close, it will activate the “Spill Response” button. Select this button and then click on the location of the release on the map.

 **Time of Travel** Beta release


[About](#) [Help](#)


Map Layers 


Identify Area


Step 2:

You have zoomed in sufficiently to select a trace method. Select an option below then click or tap a point on the map.

 Search for a place



 Search Help

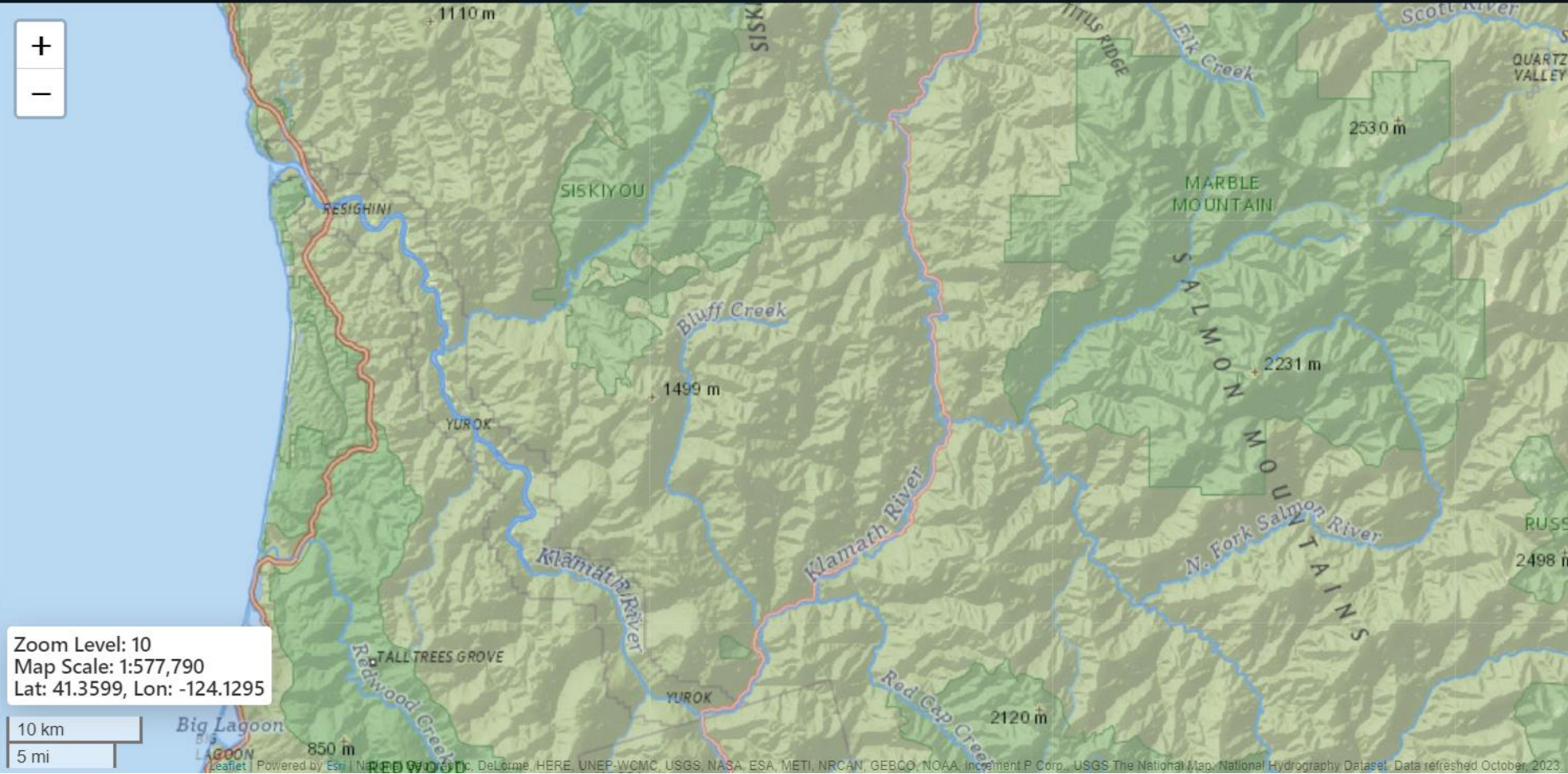
 **Spill Response**

 Spill Planning

**Configure**

Scenarios



Zoom Level: 10  
Map Scale: 1:577,790  
Lat: 41.3599, Lon: -124.1295

10 km

5 mi

273

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4. The map will load and the left Column will update with a blue “Continue” button; leave “Jobson’s” selected and click “Continue.”

**USGS Time of Travel** Beta release

Map Layers Identify Area Scenarios

☒ Jobson's

Continue

Build Report

Powered by WIM

USGS Home Contact USGS Search USGS Accessibility  
FOIA Privacy Policies & Notices


Zoom Level: 10  
Map Scale: 1:577,790  
Lat: 41.1469, Lon: -124.0961

10 km  
5 mi

Travel time not computed for overland/raindrop trace portion



5. Enter Spill Response information:
- Update date and time of spill as needed.
  - Under “Spill Mass,” enter a dummy number, such as 100 (this provides concentration data only).
  - Leave Recovery Ratio at “1” (this also contributes to concentration data only).
  - Under Discharge, click “View Gauges,” to get current cubic feet per second (cfs) for the location of the spill of downstream.

 **Time of Travel** Beta release

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Spill Response

Time of Spill:

9/24/2024 15:57:32

Spill Mass (pounds):

100

Recovery Ratio (dimensionless):

1

Discharge (cubic feet per second):

Enter discharge

View Gauges

(Mean annual flow of nearest reach: 17351.06 cfs)

Reaches

Clear

Get Results

Zoom Level: 10

Map Scale: 1:577,790


Lat: 41.3451, Lon: -124.5493

10 km

5 mi

Travel time not computed for overland/raindrop trace portion

6. Under “View Gauges,” select an active gauge.

 **Time of Travel** Beta release

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Spill Response

Streamgages were found

KLAMATH R NR KLAMATH CA (Active)

KLAMATH R A JOHNSONS POINT NR ORICK CA (Inactive)

KLAMATH R A YOUNGS BAR NR WEITCHPEC CA (Inactive)

Done

Clear

Get Results

Zoom Level: 10

Map Scale: 1:577,790

Lat: 41.3451, Lon: -124.5493

10 km

5 mi

Travel time not computed for overland/raindrop trace portion

7. Take note of the cfs at the selected gauge and close this page by clicking “Done.”
- Note: if you are unable to access gauge info on this site, try opening the [USGS Water Dashboard](#) site to obtain current cfs for the stretch of river of interest.

USGS

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Streamgages were found

KLAMATH R NR KLAMATH CA (Active)

>

Source:

nwissite

Identifier:

USGS-11530500

Name:

KLAMATH R NR KLAMATH CA

Comid:

4440630

Navigation url:

<https://labs.waterdata.usgs.gov/api/nldi/linked-data/nwissite/USGS-11530500/navigation>

Nwis url:

<https://waterdata.usgs.gov/monitoring-location/11530500>

Flow value:

2550 cfs

Tue Sep 24 2024 15:30:00 GMT-0700 (Pacific Daylight Time)

Done

Zoom Level: 10

Map Scale: 1:577,790

Lat: 41.3451, Lon: -124.5493

10 km

5 mi

Travel time not computed for overland/raindrop trace portion

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8. Enter the current cfs (from the previous slide) to the left of “View Gauges,” and select “Get Results.”

USGS

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+

+

-

Zoom Level: 10

Map Scale: 1:577,790

Lat: 41.3451, Lon: -124.5493

10 km

5 mi

Spill Response

Time of Spill:

9/24/2024 15:57:32

Spill Mass (pounds):

100

Recovery Ratio (dimensionless):

1

Discharge (cubic feet per second):

2550

View Gages

(Mean annual flow of nearest reach: 17351.06 cfs)

Reaches

Clear

Get Results

Bluff Creek

Marble Mountain

Klamath River

Big Lagoon

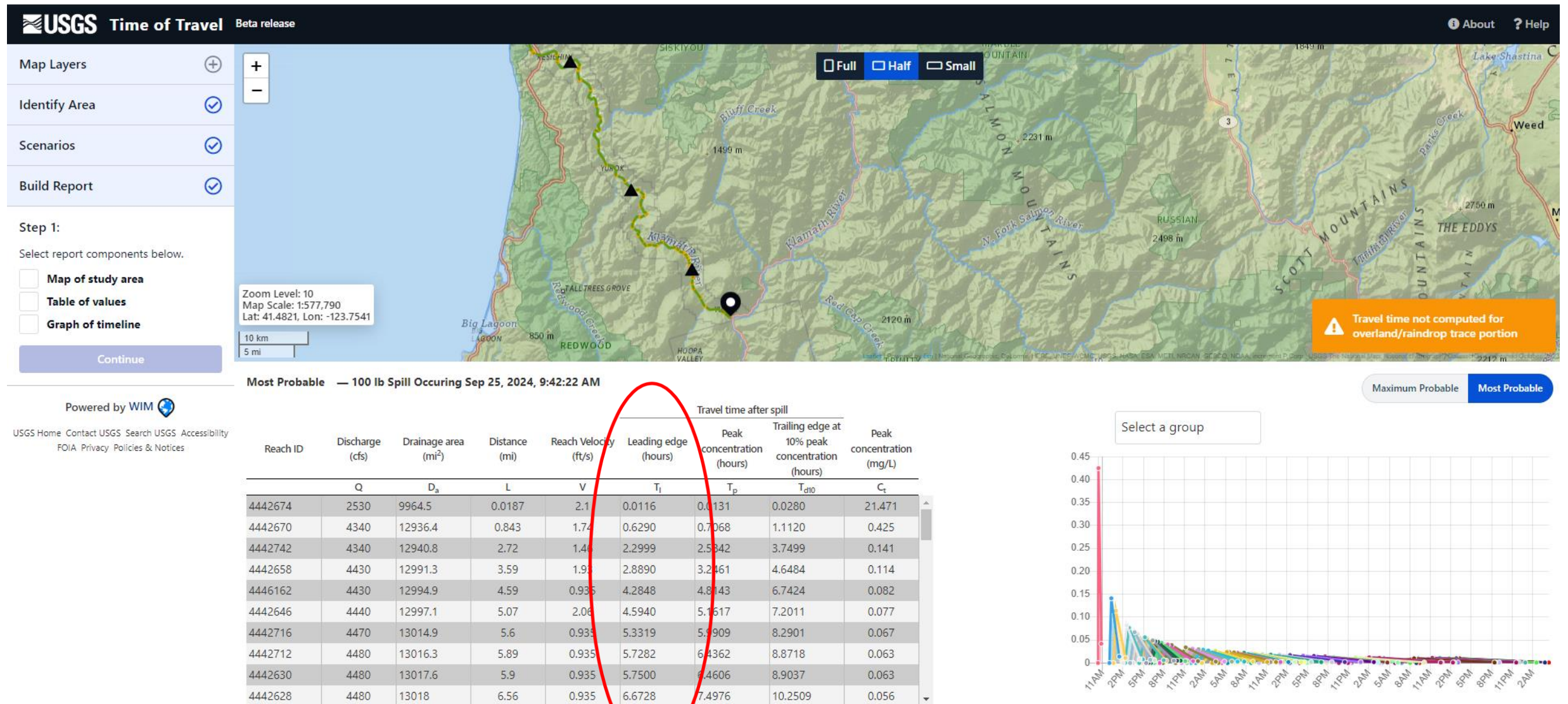
Redwood

Travel time not computed for overland/raindrop trace portion

278

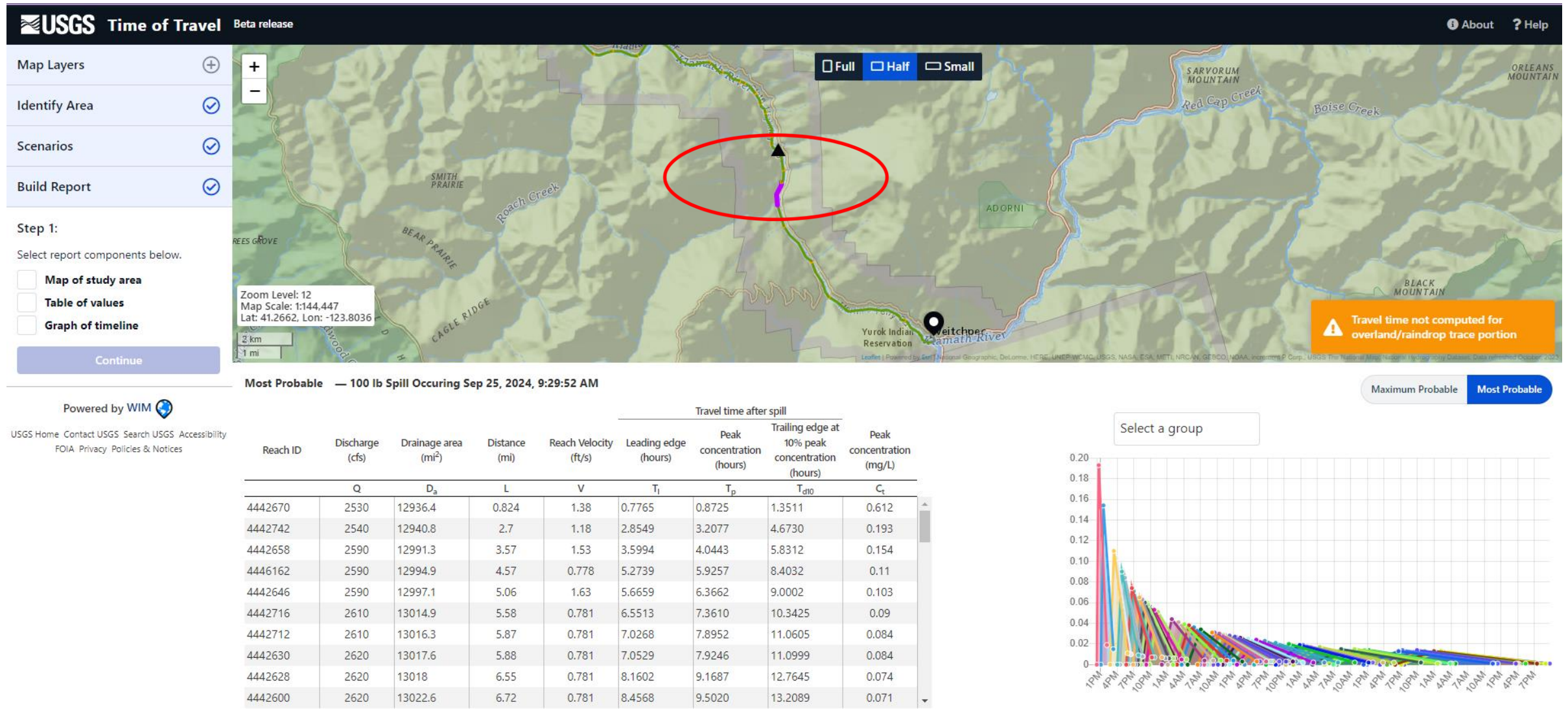
KLAMATH RIVER GRP August 2025

9. In the table below the map, find the leading edge (hours) column and find the time frame of interest (e.g., 6 hours) and click on the row for that reach.





10. The map for that reach will highlight in dark pink, between the two orange nodes that comprise the Reach ID. The downstream node of the purple highlight is the location of the leading edge.



**Note:** The map and table are set to “Most Probable” (right hand side in blue) which should be sufficient in terms of getting in front of the spill down river to set up containment. However, if there are drinking water intakes or other infrastructure of significant importance, by choosing “Maximum Probable” this will provide a worst-case, highest possible, velocity in order to close or protect intakes and infrastructure.

11. To produce a report, on the left tool bar, under “Step 1” (will change to “Step 2” when you click on report components), click on the components you would like to show and click “Continue.”

USGS

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Beta release

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Build Report

Step 2:

Click "Continue" to proceed.

Map of study area

Table of values

Graph of timeline

Continue

Zoom Level: 10

Map Scale: 1:577,790

Lat: 41.5179, Lon: -124.2252

10 km

5 mi

Full

Half

Small

Map of study area

Table of values

Graph of timeline

Continue

Most Probable

100 lb Spill Occuring Sep 25, 2024, 9:42:22 AM

Maximum Probable

Most Probable

Reach ID

Discharge (cfs)

Drainage area (mi<sup>2</sup>)

Distance (mi)

Reach Velocity (ft/s)

Leading edge (hours)

Peak concentration (hours)

Trailing edge at 10% peak concentration (hours)

Peak concentration (mg/L)

Q

D<sub>a</sub>

L

V

T<sub>l</sub>

T<sub>p</sub>

T<sub>d10</sub>

C<sub>t</sub>

4442674

2530

9964.5

0.0187

2.1

0.0116

0.0131

0.0280

21.471

4442670

4340

12936.4

0.843

1.74

0.6290

0.7068

1.1120

0.425

4442742

4340

12940.8

2.72

1.46

2.2999

2.5842

3.7499

0.141

4442658

4430

12991.3

3.59

1.93

2.8890

3.2461

4.6484

0.114

4446162

4430

12994.9

4.59

0.935

4.2848

4.8143

6.7424

0.082

4442646

4440

12997.1

5.07

2.06

4.5940

5.1617

7.2011

0.077

4442716

4470

13014.9

5.6

0.935

5.3319

5.9909

8.2901

0.067

4442712

4480

13016.3

5.89

0.935

5.7282

6.4362

8.8718

0.063

4442630

4480

13017.6

5.9

0.935

5.7500

6.4606

8.9037

0.063

4442628

4480

13018

6.56

0.935

6.6728

7.4976

10.2509

0.056

Select a group

11AM

2PM

5PM

8PM

11PM

2AM

5AM

8AM

11AM

2PM

5PM

8PM

11PM

2AM

5AM

8AM

11AM

2PM

5PM

8PM

11PM

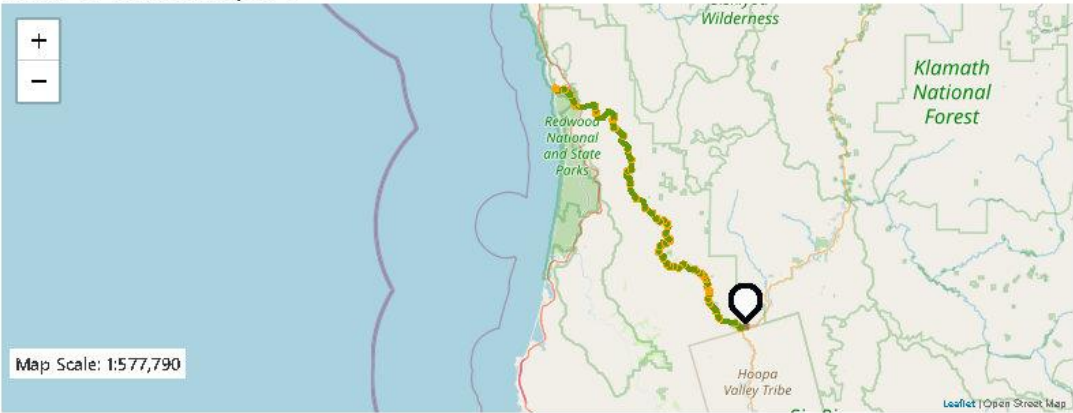
2AM

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Time of Travel Report



Most Probable

Reach ID	Discharge (cfs)	Drainage area (mi <sup>2</sup> )	Distance (mi)	Reach Velocity (ft/s)	Travel time after spill			
					Leading edge (hours)	Peak concentratio n (hours)	Trailing edge at 10% peak concentratio n (hours)	Peak concentratio n (mg/L)
					T <sub>l</sub>	T <sub>p</sub>	T <sub>d10</sub>	C <sub>t</sub>
4442672	2660	0.282	0.0424	65.1	0.0008	0.0009	0.0488	6.976
4442674	NaN	9960	0.641	446	0.0026	0.0029	0.0759	0
4442670	NaN	12900	1.47	358	0.0056	0.0063	0.1034	0
4442742	NaN	12900	3.34	287	0.0141	0.0159	0.1522	0
4442658	NaN	13000	4.21	404	0.0170	0.0191	0.1647	0
4446162	NaN	13000	5.21	156	0.0253	0.0285	0.1970	0
4442646	NaN	13000	5.7	436	0.0268	0.0301	0.2021	0
4442716	NaN	13000	6.23	156	0.0312	0.0351	0.2169	0
4442712	NaN	13000	6.51	156	0.0336	0.0378	0.2244	0
4442630	NaN	13000	6.53	156	0.0337	0.0379	0.2248	0
4442628	NaN	13000	7.19	156	0.0393	0.0441	0.2415	0
4442600	NaN	13000	7.36	156	0.0408	0.0458	0.2458	0
4442708	NaN	13000	7.92	156	0.0454	0.0510	0.2588	0
4442588	NaN	13000	8.16	156	0.0475	0.0533	0.2645	0
4442584	NaN	13000	8.42	156	0.0496	0.0557	0.2701	0
4442582	NaN	13000	8.75	156	0.0524	0.0589	0.2775	0
4442578	NaN	13000	8.87	156	0.0534	0.0600	0.2800	0
4442574	NaN	13000	9.32	156	0.0572	0.0643	0.2898	0
4442568	NaN	13000	9.68	156	0.0602	0.0676	0.2973	0
4442562	NaN	13000	11	156	0.0712	0.0800	0.3237	0
4442554	NaN	13000	11.6	156	0.0765	0.0860	0.3359	0
4442556	NaN	13100	12.2	156	0.0813	0.0913	0.3465	0
4442550	NaN	13100	12.6	156	0.0849	0.0954	0.3544	0
4442544	NaN	13100	13.1	156	0.0890	0.1000	0.3634	0
4442536	NaN	13100	13.8	156	0.0944	0.1061	0.3750	0
4442528	NaN	13100	14.9	156	0.1034	0.1162	0.3937	0
4442520	NaN	13100	15.4	515	0.1049	0.1178	0.3966	0



## **Appendix G**

### **Local/Regional Asset Resources**

- **Table G-1: Local/Regional Asset Resources Table**
- **Figure G-1: California Governor's Office of Emergency Services California Certified HazMat Material Teams Map**
- **Table G-2: California Governor's Office of Emergency Services Statewide List of Certified California HazMat Teams by Type**
- **Figure G-2: State Water Resources Control Board, Division of Drinking Water District Offices Map**
- **Incident Command Post Facility Assessment Check Sheet**

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Table G-1: Local/Regional Asset Resources Table

Resource	Home Base/Owner	Contact Information/Comments
<b>Response Trailers (in addition to those listed in Chapter 2 or supplied by an Oil Spill Response Organization)</b>		
Booms, sorbent pads	Yreka Fire Department	401 W Miner Street Yreka, CA 96097 (530) 841-2383
HazMat trailer (with booms, sorbent pads, and overpack drums)	California Department of Forest and Fire Protection (CAL FIRE), Siskiyou Unit	1809 Fairlane Rd Yreka, CA 96097 (530) 842-3516
Sorbent pads	Humboldt County Environmental Health	100 H St. Suite 100 Eureka, CA 95501 (707) 445-6215
Sorbent pads, overpack drum	Del Norte County Environmental Health	981 H Street, Suite 110 Crescent City, CA 95531 (707) 465-0426
Booms, sorbent pads, overpack drums	Montague Fire Department	121 10th St Montague, CA 96064 (530) 459-5343

Water Supplies for Firefighting		
Shasta Lake	Shasta-Trinity National Forest, Whiskeytown-Shasta-Trinity National Recreation Area	Shasta-Trinity National Forest Headquarters 3644 Avtech Parkway Redding, CA 96002 (530) 226-2500  Shasta Lake Ranger Station (530) 275-1587
Trinity Lake	Shasta-Trinity National Forest, Whiskeytown-Shasta-Trinity National Recreation Area	Shasta-Trinity National Forest Headquarters 3644 Avtech Parkway Redding, CA 96002 (530) 226-2500  Weaverville Ranger Station (530) 623-2121
Meiss Lake	California Department of Fish and Wildlife, Region 1, Butte Valley Wildlife Area	Butte Valley Wildlife Area (530) 398-4627  California Department of Fish and Wildlife Northern Region Redding Office (530) 225-2300
Lake Shastina	Lake Shastina Community Services District	16320 Everhart Drive Weed, CA 96094 (530) 938-3281
Howard Prairie Lake (Oregon)	Jackson County Parks	Jackson County Parks Office 7520 Table Rock Road Central Point, OR 97502 (541) 774-8183
Hyatt Reservoir (Oregon)	Bureau of Land Management	7975 Hyatt Prairie Rd Ashland, OR 97520 (541) 618-2200
Applegate Lake (Oregon)	Rogue River-Siskiyou National Forest	Siskiyou Mountains Ranger District 6941 Upper Applegate Road Jacksonville, OR 97530 (541) 899-3800
Emigrant Lake (Oregon)	Jackson County Parks	Jackson County Parks Office 7520 Table Rock Road Central Point, OR 97502 (541) 774-8183

Foaming Operations		
Class A and one CAPS foam unit	Yreka Fire Department	401 W Miner Street Yreka, CA 96097 (530) 841-2383
Wildland fire foam unit (not for hazardous materials)	CAL FIRE Siskiyou Unit	1809 Fairlane Rd Yreka, CA 96097 (530) 842-3516
Class B foaming units	Montague Fire Department	121 10th St Montague, CA 96064 (530) 459-5343
Wildland fire foam unit (not for hazardous materials)	Yurok Fire Department, Unit 9400, Tulley Creek	123 Owl Creek Road Weitchpec, CA 95546 Duty Officer (707) 457-0297 yurokfire@yuroktribe.nsn.us
Class A, B foam, Type-1 apparatus	Hoopa Fire Rescue, HOO-9600	11233 Hoopa, CA 95546 Fire Chief (707) 407-7571 hoopavfd@gmail.com
Class A, B foam Type-1, 2 apparatus	Klamath Fire Protection District	P.O. Box 369 Klamath, CA 95548 Fire Chief, "Lonnie Levi" (707) 482-3311 ljlevi@hotmail.com
Air Monitoring Equipment		
2-3 handheld carbon monoxide monitors	Yreka Fire Department	401 W Miner Street Yreka, CA 96097 (530) 841-2383
4-gas meter and carbon monoxide meter	Montague Fire Department	121 10th St Montague, CA 96064 (530) 459-5343
5-gas meter	Siskiyou County Environmental Health	806 South Main Street Yreka, CA 96097 (530) 841-2100
4-gas meter and combustible gas sensor	Humboldt County Environmental Health	100 H St. Suite 100 Eureka, CA 95501 (707) 445-6215



Communication Equipment: Portable Radio/Mobile Repeaters		
Handheld and mobile radios in vehicles	Yreka Fire Department	401 W Miner Street Yreka, CA 96097 (530) 841-2383
Handheld and mobile radios in vehicles	Klamath National Forest Headquarters	1711 S Main St Yreka, CA 96097 (530) 842-6131
Handheld radios	Siskiyou County Environmental Health	806 South Main Street Yreka, CA 96097 (530) 841-2100
Handheld radios, mobile radios in vehicles, and county radio systems	Siskiyou County Office of Emergency Services	1312 Fairlane Rd Yreka, CA 96097 (530) 841-2155
Portable radios	Humboldt County Environmental Health	100 H St. Suite 100 Eureka, CA 95501 (707) 445-6215
Mobile radios	Montague Fire Department	121 10th St Montague, CA 96064 (530) 459-5343
Mobile repeaters	Yurok Tribal Police Department	230 Klamath Blvd Klamath, CA 95548 (707) 482-8185
Handheld radios, mobile radios in vehicles, and Tribal radio systems, repeaters	Yurok Fire Department	123 Owl Creek Road Tulley Creek CA, 95546 (707) 457-0297
Handheld radios, mobile radios in vehicles, and Tribal radio systems, repeaters	Yurok Office of Emergency Services	225 Klamath Blvd Klamath Ca, 95568 (707) 482-1350 Ext 1425

Unoccupied Aerial System Equipment and Pilots		
(1) DJI Mavic Pro (1) DJI Mini Pro 3 (1) DJI 3T Thermal	Graymar Environmental	Steve Sitton - Reno (775) 225-4559 ssitton@graymarenv.com  Kent Creighton-Central Calif. (562) 310-6969 kcreighton@graymarenv.com  Dan Chuntz-Southern Calif. (562) 244-1680 dchuntz@graymarenv.com
(3) DJI Mavic Pro 2 drones (2) Mavic 3 drones (3) licensed pilots	Patriot Environmental Services  <b>Note:</b> Assets would be coming from southern California, travel time would be needed.	Kevin Pawson, Senior PM (562) 244-2392 kpawson@patriotenvironmental.com  Marc Ruffner, Director (562) 244-2265 mruffner@patriotenvironmental.com
(1) DJI Enterprise drone (1) licensed pilot	Marine Spill Response Corporation	Jeremy Hurd T&IS Remote Surveillance Manager Pacific Region, Everett, WA Office (562) 572-5787
HazMat Teams		
HazMat Team - Type 2	Humboldt Bay Fire Department	Captain Chris Mitchell (707) 441-4000 email: c.mitchell@hbfire.org
Multi-Agency Emergency Response Team	Shasta Cascade Hazardous Materials Response Team	HazMat equipment is stored at Shasta County Fire Department 875 Cypress Avenue Redding, CA 96001 (530) 225-2418

Swift Water Rescue Teams		
CAL FIRE and Siskiyou County Swift Water Rescue Group	CAL FIRE Siskiyou Unit and Siskiyou County	Call 911 for an emergency response dispatcher
Swift Water Rescue Team, Mud Rescue Team	Hornbrook Fire Protection District	16100 Front St Hornbrook, CA 96044 (707) 260-4858
Dive Team	Siskiyou County Sheriff	305 Butte St, Yreka, CA 96097 Call 911 or local dispatch at (530) 842-2900 for Dive Team
City/County Corporate Yards		
Yreka City Corporation Yard	City of Yreka, Public Works Department	856 N Main St Yreka, CA 96097 (530) 340-2003
City of Arcata Corporation Yard	City of Arcata	600 S G St Arcata, CA 95521 (707) 822-5957 24-hour line (Police Department who can contact on-call staff): (707) 822-2424
Red Bluff Corporation Yard	City of Red Bluff	1028 Kimball Rd Red Bluff, CA 96080 (530) 527-2605

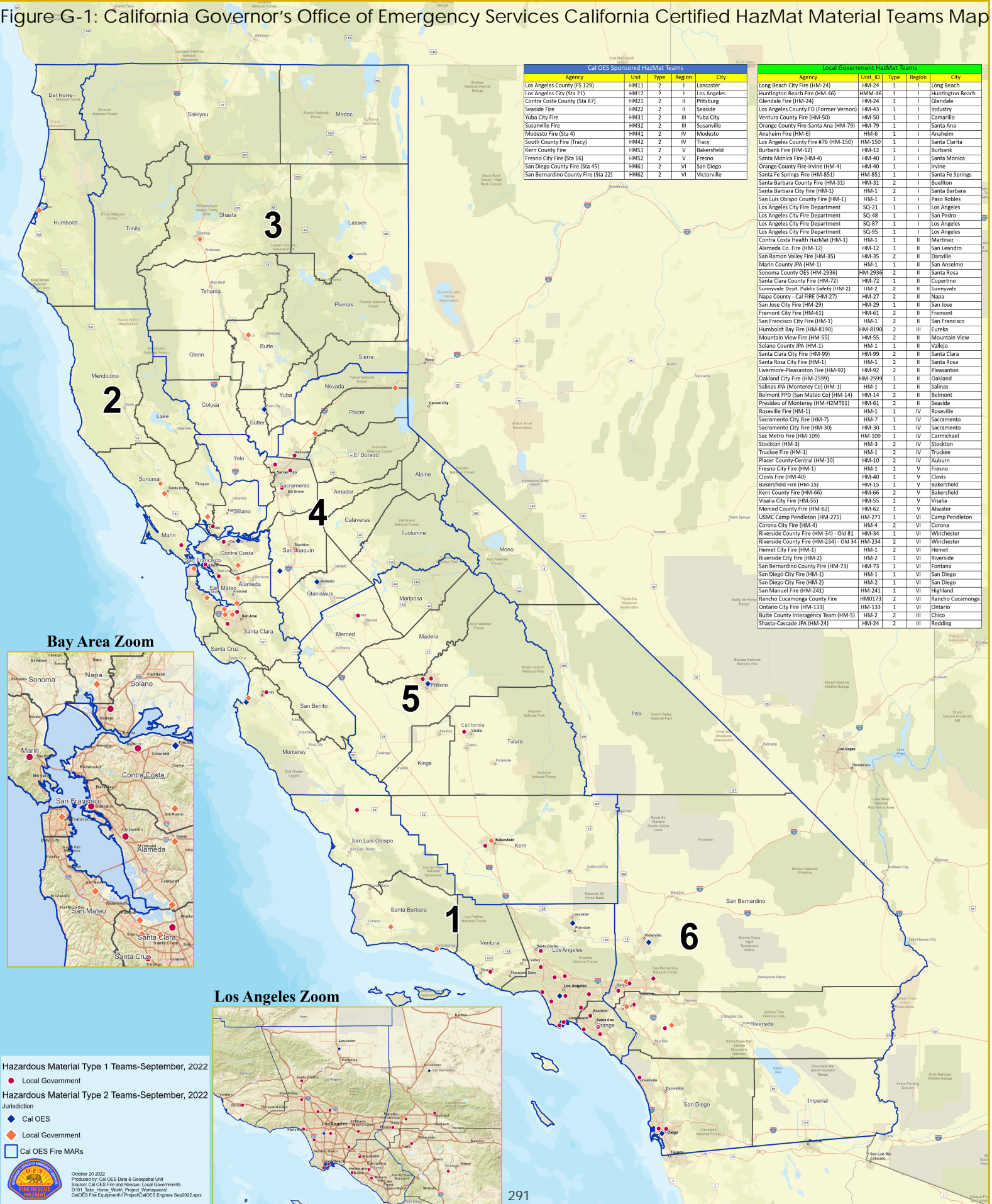


# Hazardous Materials Response Teams

Cal OES Sponsored and Local Government



Figure G-1: California Governor's Office of Emergency Services California Certified HazMat Material Teams Map



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Table G-2: California Governor’s Office of Emergency Services Statewide List of Certified California HazMat Teams by Type

CERTIFIED CALIFORNIA HAZ-MAT TEAMS, BY TYPE (Items highlighted is new data since last update) – 3/8/24									
	Orig. Req. #	Orig. Insp. #	Recent Pass #	AGENCY	Operational and Local Identifier	Region	Unit Designation	Most Recent Attained	Zip Code
TYPE 1	46	41	28	Anaheim Fire	XOR-ANA	1	HM-6	12/15/2021	92802
	14	13	32	Burbank City Fire	XLC-BRK	1	HM-12	10/14/2022	91505
	10	10	9	Glendale City Fire	XLC-GLN	1	HM-24	9/16/2022	91203
	7	7	6	Long Beach Fire Dept.	XLF-LOB	1	HM-24	12/15/2021	90802
	81	80	64	Huntington Beach Fire	XOR-HTB	1	HHM-46	5/12/2022	92648
	18	17	30	Los Angeles County Fire	XLB-LAC	1	HM-150	1/23/2018	91351
	51	46	37	Orange Co Fire Authority	XOR-ORC	1	HM-4	8/23/2023	92612
	49	44	26	Orange Co Fire Auth. (formerly Santa Ana hm-9)	XOR-ORC	1	HM-79	8/23/2023	92705
	45	40	23	Ventura County Fire	XVE-VNC	1	HM-50	11/21/2022	93010
	26	25	15	Los Angeles County Fire	XLB-LAC	1	HM-43	7/15/2017	91745
	55	58	47	Santa Fe Springs Fire	XLE-SFS	1	HM # 851	9/20/2023	90670
	54	48	17	Santa Monica Fire	XLA-SMA	1	HM-4	12/28/2021	90404
	11	11	11	Los Angeles City Fire	XLA-LFD	1	OES-12	9/12/2023	90011
	77	76	76	Los Angeles City Fire	XLA-LFD	1	SQ-21	1/29/2021	90012
	78	77	77	Los Angeles City Fire	XLA-LFD	1	SQ-48	2/8/2022	90731
	79	78	78	Los Angeles City Fire	XLA-LFD	1	SQ-87	2/8/2022	91344
	80	79	79	Los Angeles City Fire	XLA-LFD	1	SQ-95	2/8/2022	90045
	72	74	63up	San Luis Obispo County / CAL Fire	XSL-SLU	1	HM-1	1/21/2021	93446
	6	6	11	Alameda County Fire	XAL-ACF	2	HM-12	10/1/2023	94578
	5	8	8	Contra Costa Health Haz Mat	XCC-CCH	2	HM-1	12/1/2021	94553
	1	1	1	Contra Costa County Fire	XCC-CON	2	OES-21	11/3/2023	94565
	33	31	5up	Marin County Fire Haz-Mat JPA	XMR-MRN	2	HM-1	6/1/2021	94960
	43	62	52	Oakland City Fire	XAL-OKL	2	HM # 2599	5/20/2021	94607
	22	45	31	San Jose City Fire	XSC-SJS	2	HIT-29	3/24/2022	95134
	24	23	19	Santa Clara County Fire	XSC-CNT	2	HM – 72	3/4/2022	95014
	50	45	38up	Solano County (OES) Vallejo FD	XSO-VLJ	2	HM-1	6/20/2023	94591
	61	60	50	Salinas City Fire – Monterey County JPA	XMY-SLS	2	HM-2	5/10/2019	93901
	6	6	6	***Currently Being Reassigned***	TBD	3	OES-32	TBD	TBD
	1	1	1	Roseville City Fire	XPL-RSV	4	HM-1	5/26/2021	95678
	2	2	2	Sacramento City Fire	XSA-SCR	4	HMRT-7	7/27/2021	95823
	3	3	3	Sacramento City Fire	XSA-SCR	4	HMRT-30	7/27/2021	95835
	4	4	4	Sacramento Metro F.P.D.	XSA-SAC	4	HM-109	4/17/2023	95608
	5	5	5	South County Fire District	XSJ-TRY	4	OES-42	10/31/2023	95376
	42	36	25up	Bakersfield Fire. Dept	XKE-BKF	5	HM-15	3/29/2022	93314
	27	26	13	Clovis City Fire	XFR-CLV	5	HM-40	12/21/2016	93611
	17	16	12	Fresno City Fire	XFR-FRN	5	HM-1	10/4/2023	93703
	8	8	8	Fresno City Fire	XFR-FRN	5	OES-52	10/4/2023	93703
	11	61	14up	Merced County F.D.	XMD-MRD	5	HM-62	5/10/2023	95341
	32	30	41	Visalia Fire	XTU-VSA	5	HM-55	6/30/2022	93291
	67	73	62	Ontario City Fire	XBO-OTO	6	HM-133	5/12/2021	91761
	57	55	44u	Riverside City Fire	XRI-RIV	6	HM-2	4/8/2021	92503
	64	63	51	Riverside County Fire	XRI-RIV	6	HM-34	5/14/2018	92596
	9	9	9	San Bernadino County Fire	XBO-BDC	6	OES-62	8/31/2023	92395
	68	66	55	San Bernardino County Fire	XBO-BDC	6	HM-73	6/18/2019	92335
	9	69	56	San Diego City Fire	XSD-SND	6	HM-1	6/3/2019	92126
	48	70	57	San Diego City Fire	XSD-SND	6	HM-2	6/3/2019	92126
	7	7	7	San Diego City Fire	XSD-SND	6	OES-61	11/6/2023	92108
	15	14	7	U.S. Marine Corp Camp Pendleton	XSD-MCP	6	HM-271	6/20/2022	92055
	72	72	74	San Manuel Band of Mission Indians Fire Dept.	XBO-SMI	6	HM-241	4/30/2021	92346
	TYPE 1 TOTAL:					49			
TYPE 2	59	67	59	Santa Barbara City	XSB-STB	1	HM-72	5/16/2023	93101
	66	65	53	Santa Barbara County	XSB-SBC	1	HM-31	4/29/2022	93427
	11	11	11	Los Angeles County Fire	XLB-LAC	1	OES-11	1/28/2021	93534
	63	71	58	San Mateo Consolidated Fire	XSM-BFS	2	HM-14	12/21/2020	94002
	41	35	33	Fremont City Fire	XAL-FRE	2	HM-61	5/1/2023	94538
	31	29	22	Humboldt Bay Fire Dept	XHU-EUR	2	HM-8190	2/26/2018	95501
	53	51	48	Livermore-Pleasanton	XAL-LAP	2	HM-92	5/5/2023	94566
	35	32	29	Napa County Fire	XNA-NPA	2	HM-27	10/18/2023	94558
	44	39	35	San Francisco Fire	XSF-SFR	2	HM-1	9/26/2023	94102
	28	27	16	San Ramon Valley Fire Prot. Dist	XCC-SRM	2	HM-31	3/11/2022	94506
	73	75	65	Presidio of Monterey	XMY-POM	2	H2MT61	9-20-2017	93955
	23	52	45	Santa Clara City Fire	XSC-SNC	2	HM-99	7/19/2023	95051
	8	8	18	Sonoma County Emergency Services	XSN-SSR	2	HM-2936	4/7/2022	95403
	58	58	46	Santa Rosa City Fire	XSN-SRS	2	HM-1	2/16/2018	95404
	20	49	36	Mountain View Fire	XSC-MTV	2	HM-55	3/25/2022	94043
	25	24	24	Sunnyvale Dept. Public Safety	XSC-SNY	2	HM-2	11/9/2021	94085
	4	4	4	Seaside Fire	XMY-SEA	2	OES-22	12/4/2020	93955
	36	33	20	Butte County Fire	XBU-BUT	3	HM-2	2/23/2022	95926
	12	54	42	Shasta-Cascade HM JPA (Redding Fire)	XSH-SHS	3	HM-24	7/20/2018	96002
	3	3	3	Yuba City Fire	XSU-YUB	3	OES-31	10/16/2023	95993
	69	68	60	Placer Co. Fire (CDF)	XPL-PCF	4	HM-10	4/9/2021	95603
	72	72	72	Stockton Fire	XSJ-STO	4	HM-3	1/30/2020	95206
	13	12	10	Truckee Fire Prot. District	XTB-TRK	4	HM-1	4/11/2018	96161
	2	2	2	Modesto Fire	XST-MST	4	OES-41	4/13/2021	95351
	47	42	40	Kern County Fire	XKE-KRN	5	HM-66	3/16/2017	93308
	10	10	10	Kern County Fire	XKE-KRN	5	OES-51	2/9/2022	93308
	60	59	49up	Corona City Fire	XRI-COR	6	HM-4	1/18/2019	92879
	56	57	43	Hemet City Fire	XRI-HMT	6	HM-1	8/16/2022	92545
	65	64	54	Riverside County Fire	XRI-RIV	6	HM-234	10/15/2018	92596
	73	73	73	Rancho Cucamonga County Fire (HM-173)	XRI-RCF	6	HM-173	1/3/2020	91739

	80	80	80	Chino Valley Fire District	XBO-CHO	6	HM-61	10/4/2022	91710
	TYPE 2 TOTAL:					31			
TOTAL TEAMS PASSED INSPECTION						80			

NOTES:
CHART has been modified as follows:

- "Request #" column has been re-named "Orig. Request #".
- "Insp. #" column has been re-named "Orig. Inspection #".
- "Pass #" column has been re-named "Recent Pass #". This is to capture the most recent Re-Cert inspection **chronological number**. Further, if a HM unit during a Re-Cert inspection was able to upgrade their typing status, a "up" is indicated next to their Re-Cert number.
- "Attained" column has been re-named "Most Recent Attained". This is to capture the most recent Re-Cert **inspection date**.

Changes to HM Unit status:

- Palo Alto FD Team Disbanded 09/23/2021
- LA City FD Added 4 Type 1 Teams 11/1/2021
- Huntington Beach FD Added Type 1 Team 05/12/2022
- Chino Valley Fire District added Type 2 Team 10/4/2022
- 2023 - OES RHMR Units Upgraded To Type 1: OES-12, OES-21, OES-32,OES-42 OES-52, OES-61, OES-62,

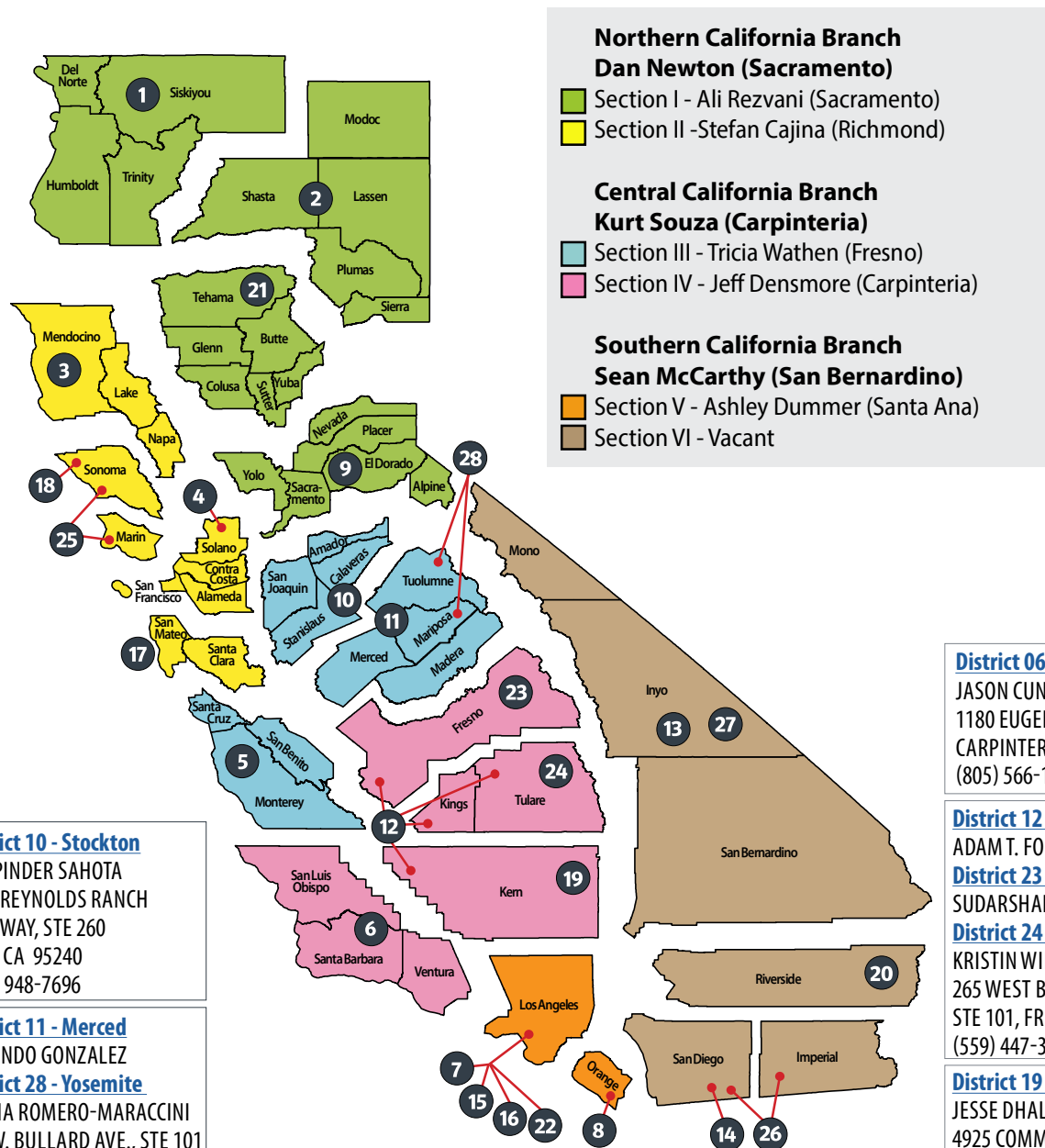
Changes to Chart Statistics:

- The total number of TYPE 1 HM teams increased to 49.
- The total number of TYPE 2 HM teams decreased to 31.
- The total number of TYPE 3 HM teams decreased from 2 to 0.

Figure G-2: State Water Resources Control Board, Division of Drinking Water District Offices Map



STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
**DIVISION OF DRINKING WATER DISTRICT OFFICES**  
HEADQUARTERS OFFICE • (916) 449-5577 • 1001 I ST, 24TH FLOOR • SACRAMENTO CA 95814



**District 01 - Klamath**  
BARRY SUTTER  
**District 02 - Lassen**  
STEVE WATSON  
**District 21 - Valley**  
REBECCA TABOR  
364 KNOLLCREST DR., STE 101  
REDDING, CA 96002  
(530) 224-4800

**District 09 - Sacramento**  
AUSTIN PETERSON  
1001 I ST, 19TH FLOOR  
SACRAMENTO, CA 95814  
(916) 449-5681

**District 03 - Mendocino**  
ZACH ROUNDS  
**District 18 - Sonoma**  
MISHA ANDERSON  
50 D ST., STE 200  
SANTA ROSA, CA 95404  
(707) 576-2145

**District 04 - San Francisco**  
MARCO PACHECO  
**District 17 - Santa Clara**  
VAN TSANG  
**District 25 - Marin**  
ELENA JOY M. PELEN  
850 MARINA BAY PARKWAY  
BLDG. P, SECOND FLOOR  
RICHMOND, CA 94804  
(510) 620-3474

**District 05 - Monterey**  
JONATHAN WEININGER  
1 LOWER RAGSDALE DR.  
BLDG. 1, STE 120  
MONTEREY, CA 93940  
(831) 655-6939

**District 10 - Stockton**  
BHUPINDER SAHOTA  
3021 REYNOLDS RANCH  
PARKWAY, STE 260  
LODI, CA 95240  
(209) 948-7696

**District 11 - Merced**  
ORLANDO GONZALEZ  
**District 28 - Yosemite**  
OFELIA ROMERO-MARACCINI  
265 W. BULLARD AVE., STE 101  
FRESNO, CA 93704  
(559) 447-3300

**District 06 - Santa Barbara**  
JASON CUNNINGHAM  
1180 EUGENIA PL., STE 200  
CARPINTERIA, CA 93013  
(805) 566-1326

**District 12 - Visalia**  
ADAM T. FORBES  
**District 23 - Fresno**  
SUDARSHAN POUDYAL  
**District 24 - Tulare**  
KRISTIN WILLET  
265 WEST BULLARD AVE.,  
STE 101, FRESNO, CA 93704  
(559) 447-3300

**District 19 - Tehachapi**  
JESSE DHALIWAL  
4925 COMMERCE DR., STE 120  
BAKERSFIELD, CA 93309  
(661) 335-7315

**District 07 - Hollywood**  
DMITRIY GINZBURG  
**District 15 - Metropolitan**  
CHI P. DIEP  
**District 16 - Central**  
TERRY KIM  
**District 22 - Angeles**  
BILL LIANG  
500 NORTH CENTRAL AVE.  
STE. 500, GLENDALE, CA 91203  
(818) 551-2004

**District 08 - Santa Ana**  
OLIVER PACIFICO  
2 MACARTHUR PL., STE 150  
SANTA ANA, CA 92707  
(714) 558-4410

**District 13 - San Bernardino**  
WEI CHANG  
**District 27 - Mojave**  
HELENE BARIBEAU  
464 W. 4TH ST., RM 437  
SAN BERNARDINO, CA 92401  
(909) 383-4328

**District 14 - San Diego**  
SEAN STERCHI  
**District 20 - Riverside**  
CHUN HUANG  
**District 26 - Imperial**  
ASHLEY DUMMER  
2375 NORTHSIDE DR., STE  
100, SAN DIEGO, CA 92108  
(619) 525-4159

Effective April 1, 2024

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ICP Facility Assessment Checksheet	
Facility Name:	Facility Address/phone number:
Rental/lease cost:	Maximum Occupancy:
General Impressions:	
Limitations/Constraints:	
Proximity to services	
Type/Name	Approximate Distances
Interstates-	
State Routes-	
Restaurants-	
Hotels-	
Airport-	
Emergency Services-	
Copy Centers (i.e. Kinko's)-	
Other-	
Cell phone coverage	
Nearest cell tower:	
Signal strength within the ICP (on your cell phone/list provider):	
Parking	Site Security
Adequate?	Public access controls:
Secure?	
Number of spaces:	On-site security:
Comments:	Security needs/comments:



**ICP physical characteristics**

Facility floor plan available? (Attach to checksheet/scan to ICP e-folder)

Photo documentation? (Photograph each room and attach to checksheet/save to ICP e-folder)

Number of rooms available:

Square foot per room

Main space:

Meeting  
room:Multi-purpose  
room:

Other:

Wall space per room

Main space:

Meeting  
room:Multi-purpose  
room:

Other:

Tables

Chairs

Telephone  
outlets

Telephones

Power outlets

Internet outlets

Can the facility accommodate a JIC?

**Overall Impressions (comment on placement of Command/General Staff work locations/spaces, placement of Situation and Resource unit displays, capability/capacity of location, and other impressions):**

## Appendix H

### ACRONYMS

#### A

**ACP** Area Contingency Plan

**ART** Applied Response Technologies

#### C

**Cal EPA** California Environmental Protection Agency

**Cal OES** California Office of Emergency Services

**CalTrans** California Department of Transportation

**CCR** California Code of Regulations

**CAL FIRE** California Department of Forestry and Fire Protection

**CDFW** California Department of Fish and Wildlife

**CFR** Code of Federal Regulations

**CFS** Cubic Feet per Second

**CHEMTREC** Chemical Transportation Emergency Center

**CHP** California Highway Patrol

**CHRIS** California Historical Resources Information Center

**CNPS** California Native Plant Society

**CUPA** Certified Unified Program Agency

**CWA** Clean Water Act

**CWHR** California Wildlife Habitats Relationship (System)

#### D

**DOI** Department of the Interior

**DOT** Department of Transportation

**DPH** Department of Public Health

**DPR** California Department of Pesticide Regulation

**DSW** Disaster Service Worker

**DSWVP** Disaster Service Worker Volunteer Program

**DTSC** California Department of Toxic Substances Control

**DWR** California Department of Water Resources

## **E**

**EOC** Emergency Operations Center

**ERG** Emergency Response Guidebook

**ESI** Environmental Sensitivity Index

**EU** Environmental Unit

**EUL** Environmental Unit Leader

## **F**

**FGC** Fish & Game Code

**FOSC** Federal On-Scene Coordinator

## **G**

**GC** Government Code

**GRP** Geographic Response Plan

## **H**

**HAZWOPER** Hazardous Waste Operations and Emergency Response

## **I**

**IAP** Incident Action Plan

**IC** Incident Commander

**ICP** Incident Command Post

**ICS** Incident Command System

**J**

**JIC** Joint Information Center

**L**

**LEPC** Local Emergency Planning Committee

**LGOSC** Local Government On-Scene Coordinator

**M**

**MOU** Memorandum of Understanding

**N**

**NAHC** Native American Heritage Commission

**NCP** National Contingency Plan

**NGO** Non-Governmental Organization

**NIMS** National Incident Management System

**NOAA** National Oceanic and Atmospheric Administration

**NRC** National Response Center

**NRDA** Natural Resource Damage Assessment

**NWVP** Non-Wildlife Volunteer Program

**O**

**OEHHA** Office of Environmental Health Hazard Assessment

**OPA 90** Oil Pollution Act of 1990

**OSC** On-Scene Coordinator

**OSCA** Oil Spill Clean Up Agent

**OSLTF** Oil Spill Liability Trust Fund

**OSPR** Office of Spill Prevention and Response

**OWCN** Oiled Wildlife Care Network

**P**

**PPE** Personal Protective Equipment

**PRC** Public Resources Code

**R**

**RCP** Regional Contingency Plan

**RGS** Reconnaissance Group Supervisor

**RP** Responsible Party

**RRT** Regional Response Team

**RWQCB** Regional Water Quality Control Board

**S**

**SCAT** Shoreline Clean-Up and Assessment Technique

**SEMS** Standardized Emergency Management System

**SHPO** State Historic Preservation Officer

**SOFR** Safety Officer

**SOP** Standard Operating Procedures

**SOSC** State On-Scene Coordinator

**SWA** Surface Washing Agent

**SWRCB** State Water Resources Control Board

**T**

**THPO** Tribal Historic Preservation Officer

**U**

**UC** Unified Command

**USBR** United States Bureau of Reclamation



**USCG** United States Coast Guard

**USEPA** United States Environmental Protection Agency

**USFWS** United States Fish & Wildlife Service

**USGS** United States Geologic Survey

## **V**

**VC** Volunteer Coordinator

**VU** Volunteer Unit

**VUL** Volunteer Unit Leader

## **W**

**WISER** Wireless Information System for Emergency Responders

**WRGS** Wildlife Recovery Group Supervisor

**WRP** Wildlife Response Plan

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