RUSSIAN RIVER

Mendocino and Sonoma Counties

GEOGRAPHIC RESPONSE PLAN

OIL SPILL RESPONSE

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

OFFICE OF SPILL PREVENTION AND RESPONSE

NOVEMBER 2019

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Spill Response Contact Sheet

*** Staffed 24-Hours/Day**

Immediate Emergency Notifications for Oil Spills & Hazardous Substance Releases: Call Upon Discovery of Spill	
Local Emergency Response Agencies	**911***
State Notification - California Office of Emergency Services, State Warning Center (State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES immediately)†	**(800) 852-7550***
Certified Unified Program Agency (CUPA) (CalOES Spill Report will be emailed to CUPA as part of their immediate notification)	
Mendocino Co. Environmental Health	**(707) 234-6625**
Sonoma Co. Fire and Emergency Services Hazardous Materials Unit	**(707) 565-1152**
Federal Notification - National Response Center (as appropriate): If the spill equals or exceeds CERCLA Federal Reportable Quantites ‡Federal Reportable Quantities: http://www.epa.gov/superfund/policy/release/rq/index.htm	**(800) 424-8802***

Infrastructure Emergency Notification: Promptly Notify	
Railroad, Pipeline, Fixed Facilties	
PG & E Natural Gas Pipeline (running along Hwy 101)	**(888) 743-7431** (Natural Gas System Help Line)

Highways, Utilities, Dams, Other Infrastructure	
California Highway Patrol (as appropriate) (The California Highway Patrol must be notified for spills occurring on highways in the State of California.)	**911*/(707) 588-1400 (Santa Rosa), (707) 467-4420 (Ukiah)**
Sonoma County Water Agency	**(707) 523-1070***
State Water Resources Control Board, Division of Drinking Water, Mendocino and Sonoma Counties	**OES Warning Center (24hrs) (800) 852-7550 or (916) 845-8911 Ask for SWRCB - Division of Drinking Water Duty Officer**

Oil Spill Response Agency Notifications: Promptly Notify	
CDFW Office of Spill Prevention and Response (OSPR)	
OSPR Dispatch - Report Oil Spills	**(800) 852-7550* or (800) OILS-911***

Oiled Wildlife Care Network	
OWCN Activation/Oiled Wildlife Hotline	**(877) 823-6926***

Local Fire and Law Enforcement	
Ukiah Police Department	**(707) 463-6262***
Cloverdale Police Department	**(707) 894-2525**
Healdsburg Police Department	**(707) 431-3366***
Mendocino County Sheriff	**(707) 463-4411**
Sonoma County Sheriff	**(707) 565-2121***
Ukiah Fire Department	**(707) 462-7921**
Healdsburg Fire Department	**(707) 431-3360**
Geyserville Fire District	**(707) 857-3535**
Monte Rio Fire District	**(707) 865-2067**
Russian River Fire District	**(707) 869-9089**
Sonoma County Environmental Health	**(707) 565-6565**

U.S. Environmental Protection Agency	
Emergency Response	**(800) 300-2193***

CALFIRE Office of the State Fire Marshal	
24-Hour Duty Chief	**(916) 323-7390***
On-Call Pipeline Safety Engineer	
Doug Allen	**(916) 591-0699**

*** Staffed 24-Hours/Day**

Affected or Adjacent Agencies to Notify Early-On as Appropriate; If In Doubt, Notify

Utilities, Dams, Hydroelectric, Infrastructure (non-emergency)	
Russian River Recreation and Park District	(707) 869-9184
Sonoma County Regional Parks	(707) 565-2041

Water Districts, Water Intakes and County Water Agencies	
California Water Service	(707) 869-0050
Sweetwater Springs Water District	(707) 869-4000

Traffic Control	
CalTrans District 1 (Mendocino County)	(510) 286-4444
CalTrans District 4 (Sonoma County)	(510) 286-4444
Statewide Traffic Safety & Signs	(714) 468-1919

Public Works	
Sonoma County Transportation and Public Works	(707) 565-2231
Mendocino County Department of Transportation	(707) 463-4363
Healdsburg Public Works Department	(707) 431-3346
Ukiah Public Works Department	(707) 463-6204
Cloverdale Public Works	(707) 894-1722

Additional Contact Information as Appropriate; If In Doubt, Notify

Federal Agencies	
USDA Forest Service: Forest Spill Coordinator, Ms. Belinda Walker, Asst. Regional Environmental Engineer	(909) 229-5201
U.S. Coast Guard Sector SF Incident Mgmt Division	(415) 399-3543
U.S. Army Corps of Engineers	(415) 503-6702
Bureau Of Reclamation	(916) 978-5001
Bureau of Land Management	(916) 978-4400
U.S. Fish & Wildlife Service	
Damien Higgins *(Regional Spill Response Coordinator)*	(916) 414-6548
John Henderson *(Field Response Coordinator)*	(916) 930-5676
NOAA Fisheries (*Santa Rosa office*)	(707) 387-0737

State Agencies	
Calif. Environmental Protection Agency: Greg Vlasek, Assistant Secretary for CUPA's and Emergency Response	(916) 322-7188
CAL FIRE - Office of the State Fire Marshal, Pipeline Safety	
Sacramento	(916) 263-6300
Lakewood/Southern California	(562) 497-9100
Bakersfield	(661) 665-0107
Regional Water Quality Control Board	(707) 576-2220
Calif. Department of Water Resources	(916) 574-2714
Division of Oil, Gas & Geothermal Resources	(916) 322-1110
CAL FIRE - Dept. of Forestry and Fire Protection	
Northern Region Operations	(530) 224-2490
Southern Region Operations	(951) 782-4140
Calif. Dept. Toxic Substance Control	(800) 260-3972

Tribal and Historic Contacts	
Native American Heritage Commission (NAHC)	(916) 373-3710
Steven Quinn	(916) 373-3710
Katy Sanchez	(916) 373-3710
Bryan Much, Sonoma State, Cultural Resources (CHRIS)	(707) 588-8455
Individual tribal contacts can be found on page 191-192	

State and Federally Managed Lands	
State Parks Northern Comms Center (Dispatch)	(916) 358-0333
State Parks Russian River District Office	(707) 865-2394

*** Staffed 24-Hours/Day**

Emergency Response Resources

Airports	
Ukiah Municipal Airport	**(707) 467-2855**
Cloverdale Municipal Airport	**(707) 894-2150**
Sonoma County Airport	**(707) 565-2121**

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) 876-4766***
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.	

Ambulance Service	
CALSTAR 4 (Ukiah)	**(707) 462-5972**
Medstar (Ukiah)	**(707) 462-3808**
Bell's Ambulance (Healdsburg)	**(707) 433-1408**
Cloverdale Ambulance	**(707) 894-5862**
American Medical Response (Santa Rosa)	**(707) 544-4911**
Sonoma County EMS Agency	**(707) 576-4701**
Hospitals	
Ukiah Valley Medical Center	**(707) 462-3111**
Healdsburg District Hospital	**(707) 431-6500**
Santa Rosa Memorial Hospital	**(707) 546-3210**
Kaiser Santa Rosa	**(707) 571-4000**
Sutter Medical Center	**(707) 576-4000**

†Cal OES State Warning Center
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 Cal OES/Warning Center is required.

‡National Response Center
All spills of oil or hazardous substance into navigable waters as defined by the Clean Water Act (CWA) and all spills of a reportable quantity of hazardous substances (40 CFR Part 302) must be immediately reported by the spiller to the National Response Center (NRC). The NRC will contact appropriate local US Coast Guard (USCG) or Environmental Protection Agency (EPA) offices. Notifying state offices does not relieve the spiller from federal requirements to notify the NRC nor vice versa.

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 CalOES, 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 3, Figure 3-8, pages 117-118
- Chapter 3, Figure 3-9, pages 139-140
- Chapter 3, Figure 3-10, pages 153-154
- Chapter 4, Table 4-1 on pages 167 – 180

The following pages are provided in "landscape" orientation, paper size 11 x 17:

- Chapter 3, Table 3-1, pages 27-34

The following pages are provided in "portrait" orientation, paper size 11 x 17:

- Chapter 3, Figure 3-1, pages 23-24

The following pages are provided in "portrait" orientation, 8.5 x 14:

- Appendix F, Table F-2, pages 209-210

All other chapters and appendices are oriented in "portrait," 8.5 x 11.

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Russian River
Geographic Response Plan

Purpose and Use of this Plan

This Geographic Response Plan (GRP) has been developed for inland waters of California by the California Department of Fish and Wildlife (CDFW), Office of Spill Prevention and Response (OSPR). This GRP includes response strategies, response methods, and shoreline countermeasures to be used by spill response personnel to rapidly and efficiently address releases or threatened oil spill releases to the Russian 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 initial ICS 201, 208, and 232 documents and the initial Incident Action Plan (IAP).

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. The first maintenance cycle will be at Year 3 after its original release, and thereafter, every 5 years. Contact information will be updated on an annual basis and provided as an addendum.

Purpose

1. This GRP establishes spill response guidance for oil spill incidents occurring within the Russian River area. The GRP boundary begins at the intersection of Highway 20 and Highway 101, near Lake Mendocino, and continues to the Pacific Ocean in the town of Jenner. The GRP area is within Mendocino and Sonoma Counties and Local Emergency Planning Committee (LEPC) Region II.

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 Incident Command System (ICS) among local, state, and federal agencies, as well as the responsible party (RP), 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 (SOPs) 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 in the form of the ICS 204 assignment list. 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.

Guiding Principles for GRPs

1. The safety and health of responders 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 (wind, currents, and tides), 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 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 of an Oil Spill at the Source is a Higher Priority than the 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 (IC) or UC.

Resources-At-Risk

Chapter 4 of this GRP outlines information on the environmental, economic, tribal, and cultural and historic resources-at-risk in the area that could be injured or damaged if impacted by oil or cleanup operations, and 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 (OWCN) 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 (GRP CM) contains information common to all GRPs. The GRP CM Sectionsinclude response methods, shoreline cleanup, applied response technologies, waste management,mutual aid, volunteers, non-floating oils, and procedures for the discovery of human remains andcultural and historic resources.

Information on oil spill response methods including booming, damming, and physical herding of oils can be found in Section 1 of the GRP CM. Shoreline countermeasures, Shoreline Cleanup AssessmentTechnique (SCAT), and cleanup endpoints can be found in Section 2. This includes information onoiled debris or soil removal, vacuuming, pressure washing, and dry ice blasting. Section 3 of the GRP CM includes a section on Applied Response Technologies and Oil Spill Cleanup Agents to augmentcleanup efforts. Section 4 discusses waste management including the handling of dead oiled wildlife,fish and invertebrates. Section 5 provides web links to information resources such as hazardousmaterials response, flow data, and National Oceanic and Atmospheric Administration (NOAA) andU.S. Fish and Wildlife Service (USFWS) resources. Sections 6 and 7 provide information on mutualaid and volunteers, respectively. Section 8 discusses the Natural Resource Damage AssessmentProcess, and Section 9 outlines procedures for managing the discovery of human remains andcultural and historic resources.

Standardized Response Language

In order to avoid confusion, this GRP uses standard National Incident Management System, Incident Command System (NIMS ICS) terminology.

Drills and Exercises

If an equipment deployment drills program [similar to the Sensitive Site Strategy Evaluation Program (SSSEP) for Area Contingency Plans (ACP)] 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.

Russian River Geographic Response Plan

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Appendices

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Russian River
Geographic Response Plan

Chapter 1 – Introduction

1.0 Introduction

OSPR is developing GRPs for inland waters of California. These plans are being prepared for the State of California and will be the responsibility of OSPR. GRPs are being developed through committees, workshops, and meetings with federal, state, and local oil spill emergency response experts, 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 Russian River within Mendocino and Sonoma Counties (Figure 1-1). The upper extent of the GRP boundary is at the first railroad crossing over the Russian River, where Hwy 20 meets Hwy 101, near Lake Mendocino (Figure 1-2). The lower extent is where the Russian River empties into the Pacific Ocean at Jenner. The defined boundary encompasses approximately 104 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 values stakeholder input 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 Russian River GRP, this includes emergency plans for Mendocino and Sonoma Counties, the Sector San Francisco Area Contingency Plan, and the State Oil Spill Contingency Plan.

1.1 Authority

State Government

The Administrator of OSPR has the primary authority to serve as the state incident commander, State On-Scene Coordinator (SOSC), 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 U.S. Environmental Protection Agency (USEPA) shall provide a Federal On-Scene Coordinator (FOSC) for discharges or releases into or threatening the inland zone; the environment inland of the coastal zone. The term inland zone, defined as the environment inland of the coastal zone, delineates an area of federal responsibility for response action. The U.S. Coast Guard (USCG) shall provide an FOSC for oil discharges within or threatening the coastal zone. Precise boundaries are determined by USEPA/USCG 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. National Contingency Plan (NCP) – 40 CFR §300.120.

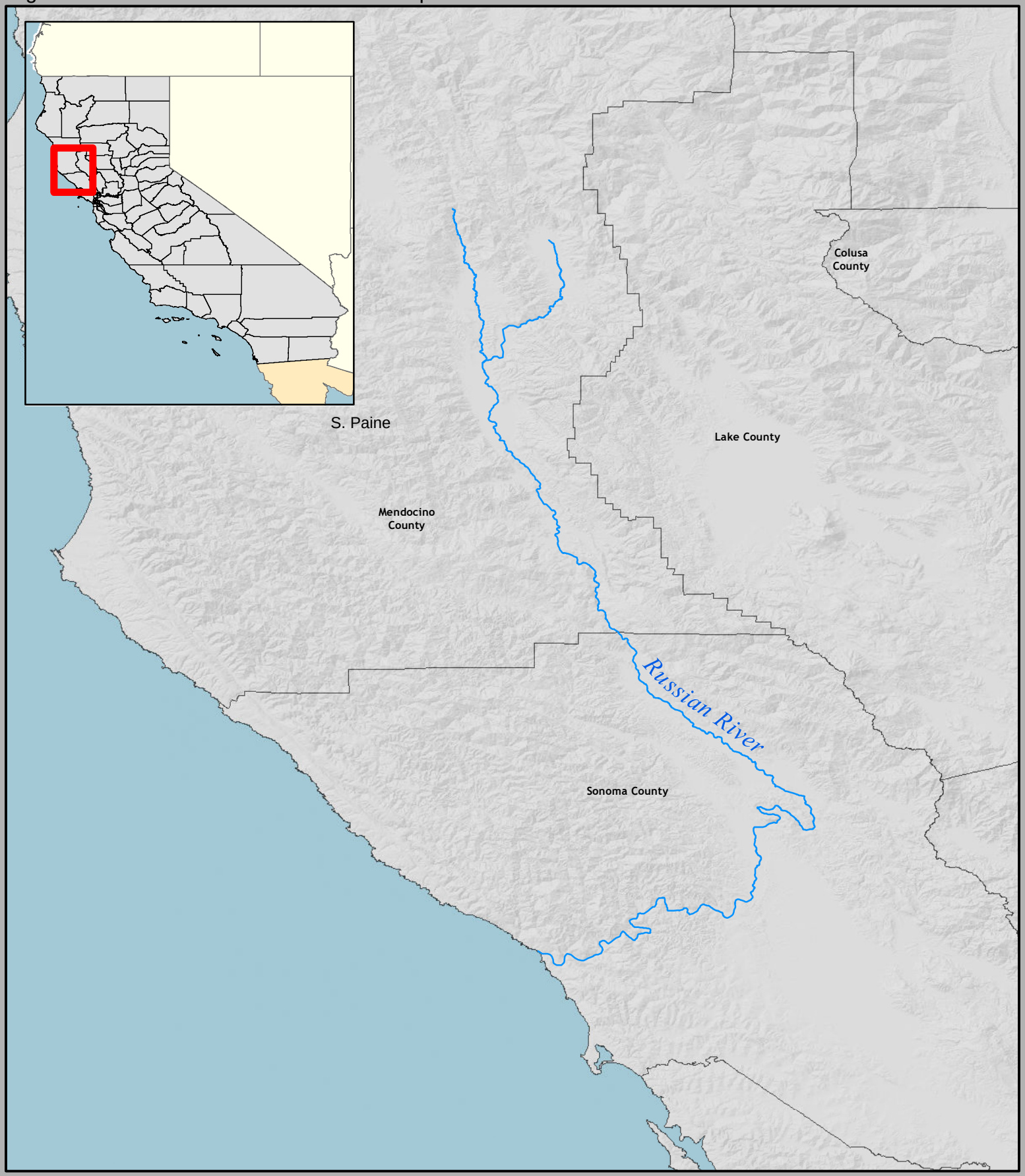
Responsible Party

The Responsible Party (RP) has the primary responsibility to conduct spill cleanup following the procedures listed in their facility (i.e. fixed facility, pipeline, railroad) response plan. The basic framework for the response management structure is a system (e.g., NIMS 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 SOSC [and Local Government On-Scene Coordinator (LGOSC) 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 (OSC's 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 an LGOSC as a participant within the UC. National Contingency Plan, §300.135(d).

Figure 1-1: Russian River GRP Location Map



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

Author: S. Paine, CDFWDate Created: 4/12/2019Data Source: CDFW-OSPR, USGS

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Russian River Geographic Response Plan Location

0 5 10 15 Miles

0 10 20 Kilometers

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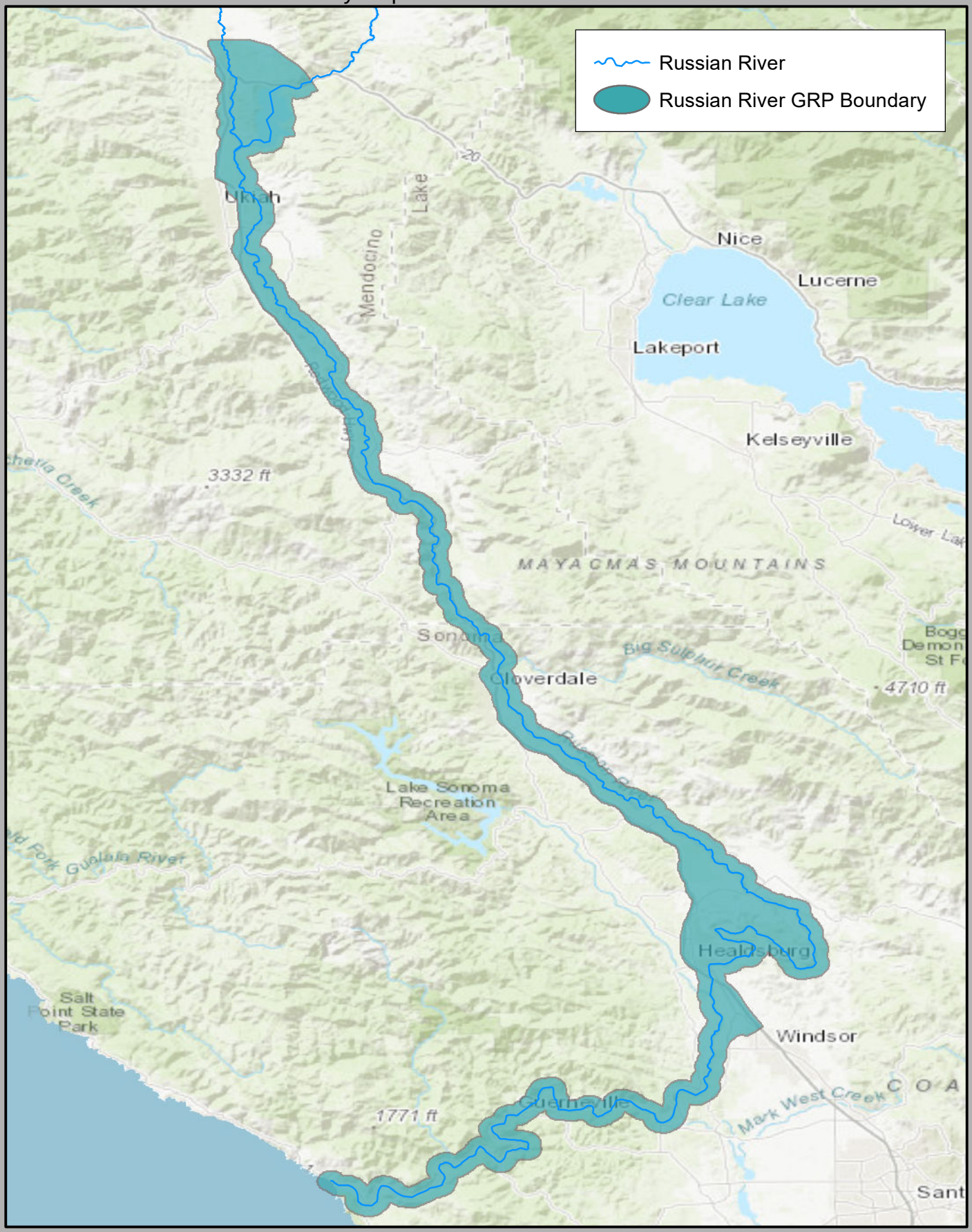
Figure 1-2: Russian River GRP Boundary Map



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

Data Source: CDFW-OSPR, NHD (USGS)
Requestor: OSPR
Author: S. Paine
Date Created: 05/22/2019

Russian River Geographic Response Plan Boundary

0 5 10 Miles
0 5 10 15 Kilometers

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Russian 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, and area and traffic control. Public Health, including information on Certified Unified Program Agencies (CUPAs) and fisheries closures, 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 2.12 as well as in the GRP CM.

The first emergency responder to arrive at the incident site will assume the role of 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 IC's from local, state, and federal agencies, or the RP, arrive on-scene, they will be incorporated into a UC, as appropriate.

Upon arrival, the IC will establish an Incident Command Post (ICP) a safe distance from the incident until hazards are removed, controlled, or neutralized. The location of the ICP should be 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, etc.). 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 (spill identification, containment, etc.) shall be coordinated through the IC or a duly appointed Operations Section Chief.

Incident Objectives

In order 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, the following actions should be taken:

1. Provide for the safety and security of responders and maximize the protection of public health and welfare.

2. Conduct an operational risk assessment, secure the source and affected area, isolate the hazard, and deny the entry of unauthorized persons into the area.

3. Identify and report the oil spill to appropriate agencies.

4. Provide rapid and effective warning, information, and instructions to threatened populations.

5. Implement response strategies, deploy spill response equipment, commence shoreline countermeasures, and return to normal conditions as quickly as possible.

2.1 Safety

The primary responsibility of the first emergency responder to arrive at the incident site 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.
- 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?
- 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 Department of Transportation (DOT) Emergency Response Guidebook (ERG), ERG App or the Wireless Information System for Emergency Responders (WISER) App recommendations for establishing safe distances and safety information. See the GRP CM, Section 5, for Web Links to Information Resources.
- Fire? – 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?
- CHEMTREC – Chemical Transportation Emergency Center 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 (PPE) 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.
- Consider current and expected weather.
- Consider worst-case scenario.
- Prepare for first responder rescue.
- Establish an accountability system for incident personnel.

Public Safety

- 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 DOT ERG.
- Establish a Public Information Officer/Joint Information Center.
- Establish a Law Enforcement Branch:
    - Evacuation
        - Establish evacuation groups/divisions as needed.
        - Identify residents, 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.
        - 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) 876-4766.

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 ERG, ERG App, or WISER App.
- 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, ICS Form 205.

2.2 Source Control

After a spill occurs, efforts to control and contain the spill at or near the source should be a top priority. 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 Ranges

Current river stage data are available for the Russian River through the NOAA National Weather Service website below and should be used to calculate travel distances for the first 6, 12, and 24 hours at the time of the release. The maximum velocity for Russian River based on average velocity from the U.S. Geological Survey (USGS) National Hydrology Dataset is 4.085 feet per second (2.42 knots).

Current river stage for the Russian River is available online from NOAA National Weather Service, Advanced Hydrologic Prediction Service: https://water.weather.gov/ahps2/hydrograph.php?wfo=lox&gage=blnc1.

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

Table 2-1 below provides information on the nearest response equipment trailers to the GRP boundary.

Table 2-1: Regional Response Trailer Locations

Contact Name	Equipment Location	Boom	Phone Number
City of Petaluma, Fire Department 3	831 South McDowell Blvd, Petaluma	6 x 12, 1000-feet	Sonoma County Dispatch – Red Comm (707) 576-1371
Sonoma County Fire & Emergency Services	8600 Windsor Road, Windsor	4 x 6, 1000-feet Sorbent boom: 5 x 10, 120-feet	Sonoma County Dispatch (707) 576-1371
Marin County, Parks & Open Space	Seadrift Rd, Stinson Beach, Bolinas Lagoon (tennis court)	6 x 6, 1000-feet	Sanford Pager (415) 451-9165 Golan Pager (415) 451-8740
Sonoma County Airport	2200 Airport Blvd, Santa Rosa	Sorbent boom: 8 x 10, 300-feet	(707) 565-1152
Santa Rosa Fire Department	Fire Station 10 1375 Corporate Center Parkway, Santa Rosa	Sorbent boom, pads	(707) 543-3500

2.5 Local/Regional Asset Resources

Appendix F 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
- Certified HazMat Teams
- Swift Water Rescue Teams

In addition to the local/regional assets and response trailer locations, Oil Spill Response Organizations (OSROs) 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 Unmanned Aircraft System

CDFW has an Unmanned Aircraft System (UAS) Program that manages the use of UAS within the Department. OSPR is currently working to adapt this technology to assist with oil spill response. Opportunities exist to utilize UAS with situation data collection and SCAT 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.

2.7 Incident Command Post Locations

During initial response, the ICP will likely be near the incident, 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 2-2 provides a list of locations near the Russian River GRP boundary that can serve as an ICP for spill response activities. Appendix F 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 2-2: Incident Command Post Locations

Location	Address	Phone Number
Sonoma County Emergency Ops Center	Santa Rosa, CA	(707) 565-2121 Sheriff Office of Emergency Service 24/7
Guerneville Veterans Memorial Building	16255 First & Church St. Guerneville, CA 95446	(707) 565-2158 M-F from 0800 to 1700
Graton Fire Department	3750 Gravenstein Hwy North, Sebastopol, 95472	(707) 823-8400
Mendocino County Emergency Ops Center	Ukiah, CA	(707) 463-4086 Sheriff Office of Emergency Service 24/7
Redwood Empire Fairgrounds	1055 N State St., Ukiah, CA 95482	(707) 462-3884
Hopland Fire Department	21 Feliz Creek Rd., Hopland, CA 95449	(707) 744-1222

2.8 Public Works

Local street and road departments are 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) are responsible for maintenance of community water systems. They may provide remedial actions in coordination with the Regional Water Quality Control Board (RWQCB) and the Department of Water Resources (DWR) when an oil spill incident may affect water sources such as treatment plants and pumping stations. Public works departments are also 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. See section 2.9, Public Health, for small public water systems. https://dpw.lacounty.gov/fcd/StormDrain/disclaimer.cfm

Water Intakes

The Sonoma County Water Agency (SCWA) is the largest water operator on the Russian River. SCWA receives notification of spills on the Russian River from Cal OES if the spill is reported. Notification may also come from the agency responsible for the spill or another

agency with knowledge of the spill. SCWA has a 24/7 Operations Desk to receive these calls. See the Contact Sheet for the 24/7 phone number.

Upon notification, SCWA would proceed to gather a detailed situational awareness and take response actions based on the level of threat. In a severe situation with water quality concerns/impacts, SCWA would notify their water customers of the situation, the actions taken by SCWA, and any request for coordination between agencies. For example, retail water contractors may be asked to activate their emergency wells. SCWA as a water wholesaler would only notify their water customers. Other impacted water companies along the Russian River should receive notification from Cal OES, SWRCB Division of Drinking Water, or other emergency service agencies.

The SWRQB, Division of Drinking Water, Santa Rosa (Sonoma and Mendocino Counties), has a 24/7 Operations Desk that will receive notification of a spill/emergency and will call the local RWCQB contact. See Contact Sheet for 24/7 phone number.

2.9 Public Health

Local health agencies are responsible for protecting public health and often coordinate emergency medical services. 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 health impacts associated with the release, key public health messages, community air monitoring and evacuations/shelter-in-place orders. The 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/HORespInEmergencies1998.pdf.

Small public water systems, 200 connections or less, and small state systems, less than 15 services, may be overseen by local public health. The environmental health agency may be a great resource for identifying rural water source/systems at risk from a particular release.

During an oil spill the local Air Pollution Control District can provide valuable support to the UC and be actively involved in situations where public and environmental health are threatened by an oil spill, particularly with respect to public air monitoring. For a directory of local air pollution control districts, please see the California Air Resources Board website at: https://www.arb.ca.gov/capcoa/roster.htm.

CUPA

All counties and a number of cities within California have been designated to implement the state and federal hazardous materials emergency planning and community right-to-know programs; these program functions are performed by CUPAs and Participating Agencies (PAs). A list of CUPAs and PAs has been developed and is maintained by the California Environmental Protection Agency (CalEPA), Unified Program Section (see http://cersapps.calepa.ca.gov/public/directory/). Table 2-3 below lists the CUPAs for

Mendocino and Sonoma Counties (current as of 10/2018). CUPAs are typically fire departments or environmental health departments that may provide resources and liaison functions during oil spills. Some CUPAs have emergency response capabilities with Health Officer authority.

CUPAs are responsible for the following local "unified programs," which may include addressing chemical components released by an oil spill:

- Hazardous Materials Area Plans.
- Hazardous Materials Business Plan Program.
- Underground Storage Tank (UST) Program.
- Inspection of Aboveground Storage Tanks (AST) storing petroleum products to ensure that Spill Prevention, Control and Countermeasure (SPCC) plans are in place, where necessary.
- Hazardous Waste Generator Program, including most of the state's "tiered permit" requirements.
- California Accidental Release Prevention Program (CalARP).

Table 2-3: Mendocino and Sonoma County CUPAs

Agency Name	Address	Phone Number
Mendocino County Environmental Health	860 N Bush St Ukiah, CA	(707) 234-6625
Healdsburg/Sebastopol JPA	601 Healdsburg Avenue Healdsburg, CA	(707) 431-3360
Petaluma City Fire Department	11 English Street Petaluma, CA	(707) 778-4389
Santa Rosa City Fire Department	2373 Circadian Way Santa Rosa, CA	(707) 543-3500
Sonoma County Fire & Emergency Services Department	2300 County Center Drive, Suite 220-B Santa Rosa, CA	(707) 565-1152

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 a 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 Closure Coordinator and provide the following information (as available):

- Location
- Product

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

The OSPR Fisheries Closure Coordinator will work with the Office of Environmental Health Hazard Assessment (OEHHA), under CalEPA, 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 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 Caltrans and Statewide Traffic Safety & Signs contact information.

During Strategy Implementation (Things to Remember)

- On-scene conditions (weather, river stage and flow, waves, and debris) may require that strategies be modified in order to be effective. There is a significant chance that weather and conditions experienced at a particular strategy location during an actual spill event will be different from that when data were gathered during field visits. Response managers and

responders must remain flexible and modify the strategies provided in this chapter as needed to meet the challenges experienced during an actual response.

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

- Oil containment boom must be free of twists, gaps, and debris in order to remain effective. The 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 IC or 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 (IAP) 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 IAP. It is also suitable for briefing individuals newly assigned to the Command and General Staff, incoming tactical resources, as well as needed assessment briefings for the Incident Management Team (IMT). Per OPA 90, the UC consists of an FOSC, SOSC, and the RP.

2.12 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 (MMAA), 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.

For mutual aid coordination purposes, California has been divided into six mutual aid regions. 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. 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 LEPCs.

Formal mutual aid requests follow specified procedures and are processed through pre-identified mutual aid coordinators. 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.

Details on Mutual Aid as outlined in the State of California State Emergency Plan, 2017, can be found in Section 6 of the GRP CM.

2.13 Volunteers

In general, volunteers do not participate in the majority of oil spill responses. In cases when there has been no volunteer interest expressed, the ICS structure may not contain any positions specifically dedicated to volunteer management. Volunteers are only used if there is a role for them to fill. As the IC or UC becomes aware of individuals or organizations interested in providing volunteer services and/or the need for volunteers arises, the IC/UC should address the volunteer issue and may make assignments for volunteer management within the ICS. Only volunteers approved by the IC/UC are allowed to participate at a spill response. For additional information on volunteers, see Section 7 of the GRP CM.

2.14 Natural Resource Damage Assessment

The overall goals of the natural resource damage assessment (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 and coordinated through the UC. 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.

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Russian River
Geographic Response Plan

Chapter 3 – Response Site Strategies

3.0 Chapter Overview

This section provides information on GRP response strategies. First responders should prioritize the order in which they should be implemented based primarily on the release origin point and the nearest appropriate 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 IC or UC. 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 CM.

3.1 Response Strategy Map Index

The following map (Figure 3-1) provides an index of the response strategy locations for the Russian River GRP. Each block 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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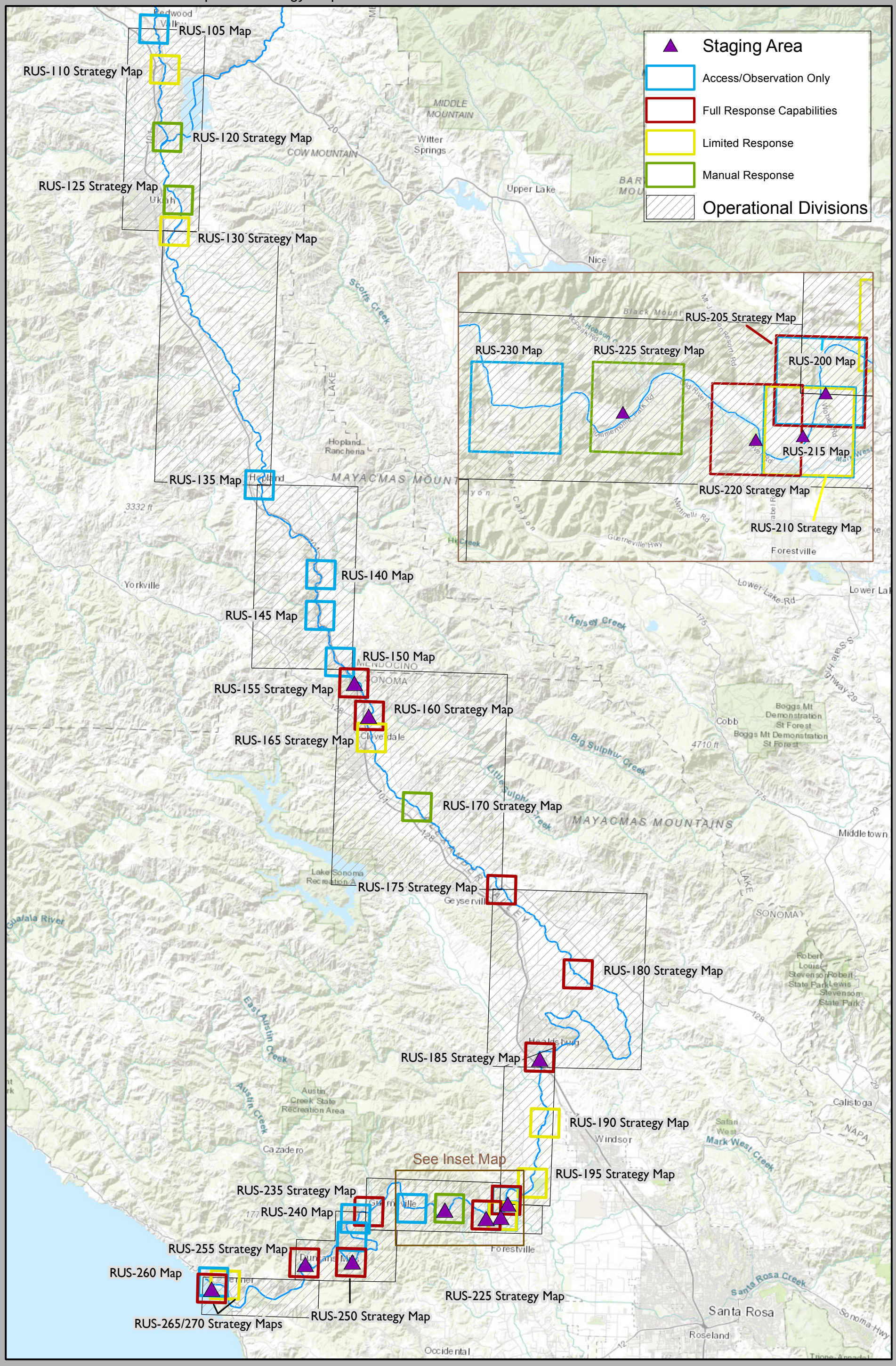
Figure 3-1: Russian River GRP Response Strategy Map Index



California Department of Fish and Wildlife
Office of Spill Prevention and Response

Data Source: CDFW-OSPR NAD_1983_California_Teale_Albers
Requestor: OSPR
Author: L. Guphy Gustafson
Date Created: 06/25/18

Russian River Geographic Response Plan Response Strategy Map Index

0 3 6 9 Miles
0 4 8 12 16 Kilometers

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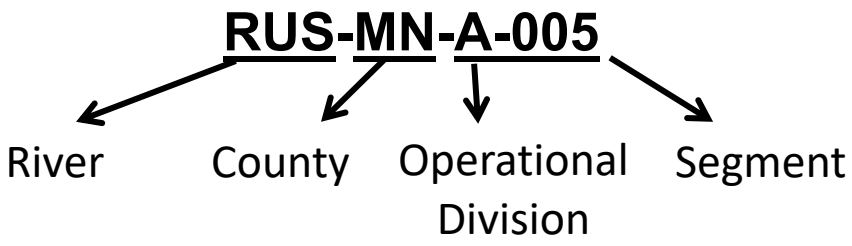
3.2 Naming Conventions – Operational Division and Segments and Site Strategies

Operational divisions and segments are presented in this GRP as front-loaded information 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 SCAT and shoreline cleanup.

Each segment listed in this document has been given 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.



RUS = Russian River

MN = Mendocino, SN = Sonoma

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

Segment = 005, 010, 015, etc.

During the course of conducting SCAT, an existing segment may need modification, or a new segment may need to be added; please consult with the SCAT Coordinator or EUL 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. RUS-005) and increasing in number by increments of 5 (e.g. 005, 010, 015, etc.). 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 the priority or order in which GRP strategies should be implemented after an oil spill into the Russian 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.

- 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 Russian 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 a purple triangle. 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 #
RUS-105	East School Way Overlook	N 39.265863 W -123.20943	Observation	n/a	Waders	Site has heavily vegetated banks with limited shoreline access. Stream flow on site is typically low.	n/a	Slips/trips/falls due to steep shoreline access. Parking off a busy road.	n/a	37	39
RUS-110	Eastside Calpella Road	N 39.23979 W -123.19902	Deflection/ collection (under ideal conditions)	100	Inflatable raft/ waders at low flow	Might be difficult to boom due to high flow (at times). Access is through private property.	Staging would be limited due to access issues.	Access is on private property; gate may be locked; 4WD may be necessary to go down access road.	n/a	37	41
RUS-120	Mendocino Ave. Bridge	N 39.19570 W -123.19503	Manual sorbent cleanup	n/a	Inflatable raft/ waders at low flow	Stretch of about 100 yds of walkable shoreline in summer. Little to no flow (in summer). It would be difficult to get equipment down to shoreline. Not ideal boom location.	Work trucks can be staged at the pull-out on the northwest side of the bridge.	Parking off side of a busy street; access to shoreline down a narrow pathway; slips, trips, and fall hazards.	n/a	37	45
RUS-125	Perkins Street Bridge	N 39.15503 W -123.18399	Manual sorbent cleanup	n/a	Inflatable raft/ waders at low flow	In summer, 150 yd stretch of shore. Not much flow. Any booming strategy would need to be deployed N of bridge. Shoreline S is heavily vegetated. Access down steep path. Would be tough to get response equipment down there.	Work trucks can be staged at the pull-out on the southwest side of the bridge.	Parking off side of a busy street; slips, trips, and fall hazards; access to shoreline down a narrow pathway.	n/a	37	49
RUS-130	Talmage Road Bridge	N 39.134562 W -123.186499	Deflection/ collection (under ideal conditions)	150	Inflatable raft/ waders at low flow	Medium/heavy flow. Likely a high flow area in winter/spring. Vehicle access to near shore. Any booming would have to be done N of bridge. East side of river is heavily vegetated.	Staging of equipment would have to be done in the narrow pull-out area on the NW side of bridge.	Access to shoreline down a narrow pathway; parking along a busy road; access through a locked gate; trip and fall hazards, slippery when icy or wet.	MEN 1.043	53	55

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 #
RUS-135	175 Bridge	N 38.97113 W -123.10813	Observation	n/a	n/a	Access is down a narrow path; foot access only; may be able to deploy boom under the "right" circumstances, but mostly just and overlook site.	n/a	Access along a busy road. Walk way is often muddy and steep in certain areas. Slips, trips, falls.	MEN 0.4	59	61
RUS-140	Frog Woman Rock	N 38.91397 W -123.05446	Observation	n/a	n/a	Steep access and swift moving water makes this area unsuitable for booming.	n/a	Slips/trips/falls due to steep shoreline access. Parking in a pull-out off of Hwy 101.	MEN 5.068	59	63
RUS-145	Commisky Station Road	N 38.88732 W -123.05402	Observation	n/a	n/a	Narrow stretch of river adjacent to a small bridge. Water can move swiftly. Must get landowner permission.	n/a	Water can often move swiftly in this area.	MEN 3.048	59	65
RUS-150	Geysers Road Access	N 38.85741 W -123.03605	Observation	n/a	n/a	Access to shoreline down foot path. Cobble shoreline that is heavily vegetated in parts; water can move swiftly; observation site under most conditions.	n/a	Slips, trips, falls; access down a narrow foot path.	MEN 0.497	59	67
RUS-155	Russian River RV Campground	N 38.84410 W -123.02393	Deflection/ collection	600	14' skiff	Can be a collection point. Product can be directed to the pocket on the northern part of the shoreline. Flow increases as you move down the shoreline. Boom must be put out at a steep angle.	Private campground with large parking area and facilities.	Vehicle access down a steep road with a sharp turn (may be difficult for larger vehicles); swift water; trip and fall hazards, slippery when icy or wet.	n/a	69	71
RUS-160	Cloverdale River Park	N 38.82319 W -123.01019	Deflection/ collection	550	17' whaler	Deploy cascades upstream of collection are. Collect product along the west bank of the river.	County Park with large parking area and small boat launch.	Park is open from 7am to sunset; access through a locked gate; trip and fall hazards, slippery when icy or wet.	n/a	69	75

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 #
RUS-165	E 1st Street Bridge	N 38.80883 W -123.00766	Deflection/ collection (under ideal conditions)	150	Inflatable raft/ waders at low flow	Flow may be too high (at times) for boom to be effective near the bridge. Cobble beach area that can be accessed through a locked gate. It may be difficult to get response equipment to shoreline due to the narrow path through the vegetation and crossing the cobble shoreline.	Limited staging in pull-out on the east side of the bridge; additional parking on the west side of the bridge at the end of the Cloverdale River Trail.	Pull-out near the road; vehicle access through a locked gate; trip and fall hazards, slippery when icy or wet; high flows at certain times of the year.	n/a	69	79
RUS-170	Washington School Rd Bridge	N 38.76460 W -122.96798	Manual sorbent cleanup	0	Inflatable raft/ waders at low flow	May be able to deploy sorbent material in the eddy that occurs north of the bridge.	Staging is limited to parking along the side of the road.	Parking right off the side of road. Flow can be high at this location.	n/a	69	83
RUS-175	128 Bridge	N 38.71238 W -122.89531	Deflection/ collection	600	Small skiff/ inflatable raft/ kayak	Angle boom toward eddy on west side of the river, just south of bridge. Set up a deflection just upstream of collection; may be able to get vac truck on to beach area.	Large parking area, but no facilities.	Access is through a locked gate; water can move swiftly at this site; there are trip and fall hazards.	SON 5.491	87	89
RUS-180	Alexander Valley Road	N 38.65880 W -122.82949	Deflection/collection	400	Small skiff/inflatable raft/kayak; may be able to wade across	Collection strategy. Angle boom to collect product on western shore.	During spill may be able to use the RV park to stage equipment/crew.	Foot access to shoreline could be down a steep path; vehicle access is through RV campground.	n/a	87	93
RUS-185	Healdsburg Veteran's Memorial Park	N 38.60392 W -122.85933	Collection	600	17' whaler	Collect product in eddy under bridge.	Sonoma County Park property with large parking area and facilities. Boat launch on site.	Access through locked gate. Park is open from 7am to sunset. Seasonal dam in place during the summer months.	n/a	87	97

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 #
RUS-190	Skinner Road	N 38.56135 W -122.85329	Collection (under ideal conditions)	200	Small skiff/inflatable raft/kayak	Angle collection strategy to western shore.	Access to site through locked gates and private property; limited space near access point.	Seasonal Access. During winter months access roads may be too sloppy for response vehicles.	n/a	101	103
RUS-195	Westside Farms	N 38.52184 W -122.86219	Collection (under ideal conditions)	200	Small skiff/inflatable raft/kayak	Collection point, but may not be accessible during bad weather conditions.	Access to site through locked gates and private property; limited space near access point.	Access is through locked gates on private property; access may not be accessible during high flow.	n/a	101	107
RUS-200	North end of Wohler Road	N 38.51014 W -122.88360	Observation	n/a	Small skiff/inflatable raft/kayak	Booming the river from the other bank (RUS-205) would be easier due to access issues.	Limited parking area.	Access to area through locked gate.	n/a	101	111
RUS-205	Wohler Bridge Fishing Access	N 38.50741 W -122.88338	Collection	300	16' skiff	Potential collection area when flows slow; would have to place boom at a steep angle to account for current; can launch small skiffs from shore.	Sonoma County property with a large parking area with a path down (behind a locked gate) to shoreline that can be used to launch a small skiff.	Access to boat launch through locked gate; high use recreational fishing area.	n/a	101	113
RUS-210	Mirabel Dam	N 38.50001 W -122.88607	Deflection	0	Small skiff/inflatable raft/kayak	Use of seasonal dam may be used to stop product; SCWA deploys boom when dam is inflated.	Must have SCWA approval to stage equipment on site.	Swift water during winter/spring flows.	n/a	117	119

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 #
RUS-215	Water Agency Property	N 38.50004 W -122.88570	Observation	0	n/a	Some shoreline access along gravel beach.	Limited parking area.	Area may act as a "summer dam" 4/1 - 5/1 to the 1st big rain in "normal" year. No direct vehicle access to shoreline.	n/a	117	123
RUS-220	Steelhead Beach	N 38.50000 W -122.89966	Collection	700	17' whaler	Collection of product on southeastern shore.	Large parking area with facilities.	Vehicle access to beach through a locked gate; high recreational use beach.	n/a	117	125
RUS-225	Sunset Beach River Park	N 38.50366 W -122.93063	Manual sorbent cleanup	0	Small skiff/inflatable raft/kayak	Trails lead to shoreline, may be difficult for equipment to access shoreline. Oil may collect in eddies along northern shore.	Large parking lot run by County Parks.	Vehicle use on path is behind a locked gate; heavily vegetated shoreline.	n/a	117	129
RUS-230	Odd Fellows Park Road Access	N 38.50301 W -122.96187	Observation	n/a	n/a	Due to the current and the heavily vegetated shoreline and amount of emergent vegetation, boom deployment at this location would be difficult.	Limited parking area (on the side of the road).	The bridge that crosses the river at this location is removed seasonally.	n/a	117	133
RUS-235	Johnson's Beach	N 38.50006 W -122.99750	Deflection/ collection	800	18' whaler	Primary collection upstream of dam, secondary collection downstream.	Large parking area that is open during the summer, otherwise the gate is locked.	Dam is on the western end of the beach. High use recreational beach.	SON R12.036	117	135
RUS-240	Highway 116-Roadside Access	N 38.49510 W -123.00837	Observation	n/a	n/a	Due to narrow acces to shoreline and it's relative slope, boom deployment would be difficult.	Staging area is limited.	Access to shoreline is down a steep path.	SON 11.141	139	141

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 #
RUS-245	Vacation Beach Dam	N 38.48337 W -123.01091	Observation	n/a	n/a	Access to shoreline is seasonal; during high flow/winter months road is closed.	Parking in pull out on the side of the road.	Seasonal bridge and dam that are in place from late spring through the summer.	SON 9.796	139	143
RUS-250	Monte Rio Beach	N 38.46655 W -123.01085	Collection	400	16' skiff	Collection strategy should be deployed east of the bridge.	Large backshore staging and parking area at fishing access. Small boat can launch on the westside of bridge.	High use recreational beach.	SON 7.778	139	145
RUS-255	Casini Ranch	N 38.46532 W -123.04987	Collection	400	16' skiff	Set-up a collection area on the beach.	Private campground with facilities are located on site. Large parking areas. High recreational use area. Beach width varies depending on water flow/time of year.	Access to shoreline is through a privately run campground.	n/a	139	149
RUS-260	Sonoma Coast Visitor Center	N 38.44933 W -123.11510	Deflection/ collection	650	Small boat	Possible collection point at the boat ramp.	Boat launch with limited parking space.	Boat ramp is run by CA State Parks Division of Boating & Waterways.	SON 21.182	153	155
RUS-265	River's End	N 38.45085 W -123.12498	Observation	n/a	Small skiff/inflatable raft/kayak	Is associated with 2-122.2 strategy in SF ACP.	Limited vehicle access to beach; small parking area.	Access is through private property.	SON 21.801	153	159

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 #
RUS-270	Sonoma Coast State Park	N 38.44662 W -123.12601	Deflection/ collection	1200	16' skiff	Collect product (coming from the marine environment) on to southern shore; *see* 2-122.2 strategy in SF ACP.	Large staging area on State Park's property.	Gate to enter the Park is open from 8am to sunset.	n/a	153	161

Table Legend

RED	**Full Response Capabilites**	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 or edge of waterbody and/or provides an observation site. Observation site may not be at the waters edge. Both may provide locations for SCAT teams or NRDA to deploy/survey for oil.
PURPLE TRIANGLE	**Staging Areas**	Response Strategy and Access/Observation Sites with a potential staging area are denoted with a purple triangle.
	Boat Launch	

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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.

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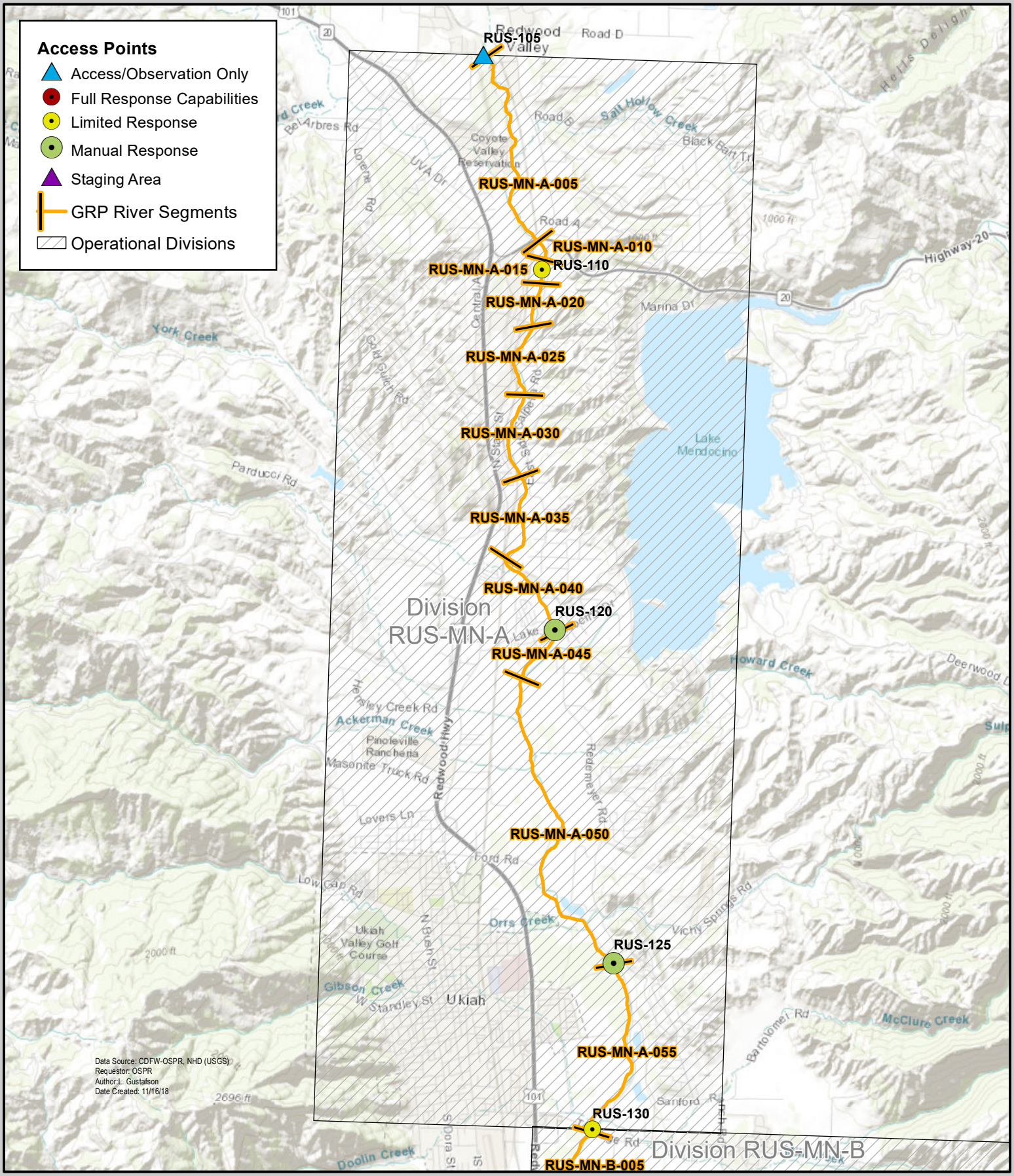
Figure 3-2: Russian River GRP Division RUS-MN-A Map



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

Author: spaine, CDFW
Date Created: 5/22/2019
Data Source: CDFW-OSPR, USGS

Russian River Geographic Response Plan Division RUS-MN-A

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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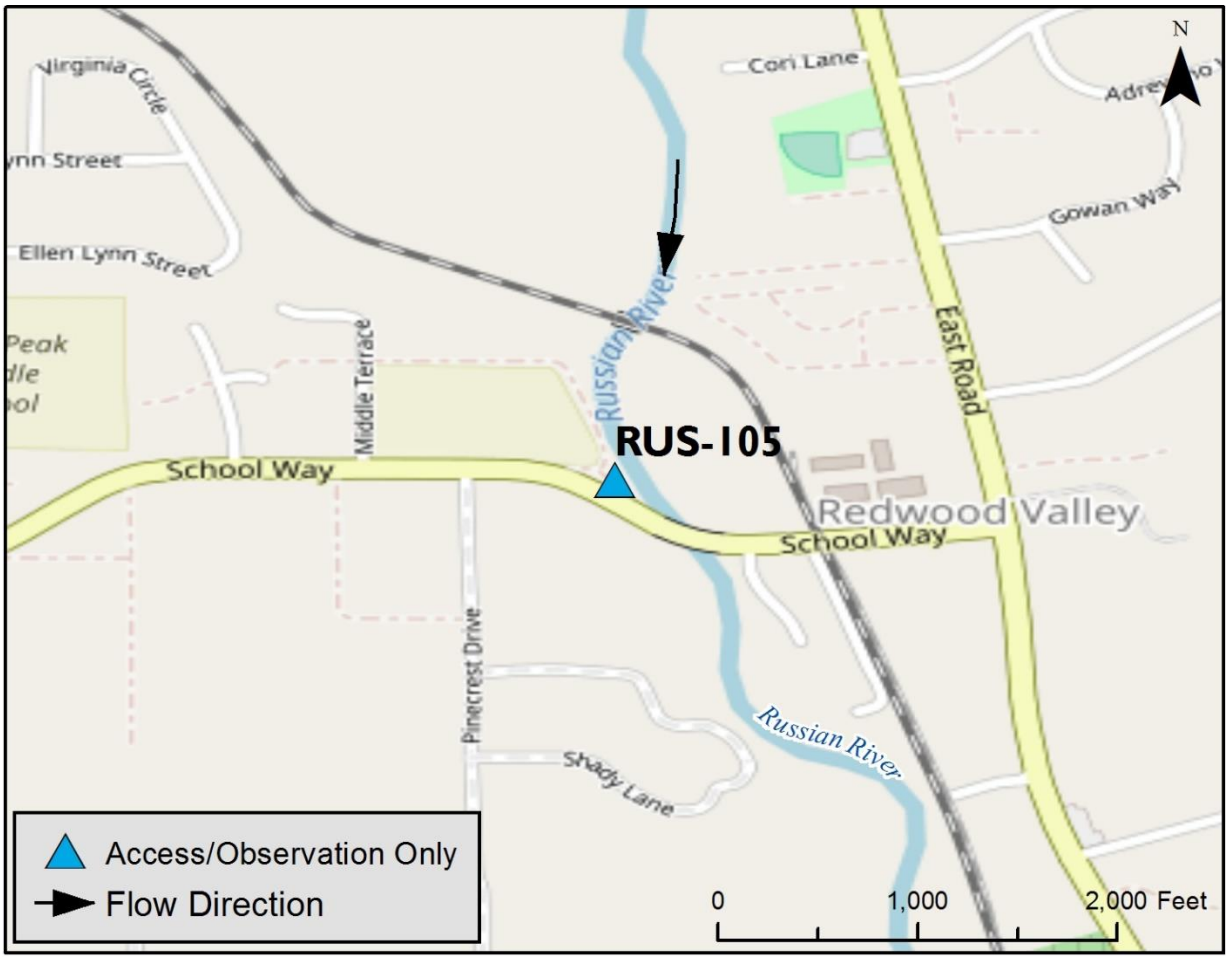
Access/Observation Site: East School Way Overlook (RUS-105)

Latitude: 39.26586 **Longitude:** -123.20943	**Driving Directions**
Highway Post Mile: N/A	From Hwy 101, take exit 557. Head north east on West Road, then head east on School Way in the town of Redwood Valley. Use pullout on NW side of river to park.
Railroad Milepost: N/A	
Nearest Address: N/A **Thomas Guide #:** 225/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access to shoreline down a very steep embankment
- Near a busy road
- Trip and fall hazards, slippery when icy or wet

Access/Observation Site: East School Way Overlook (RUS-105)

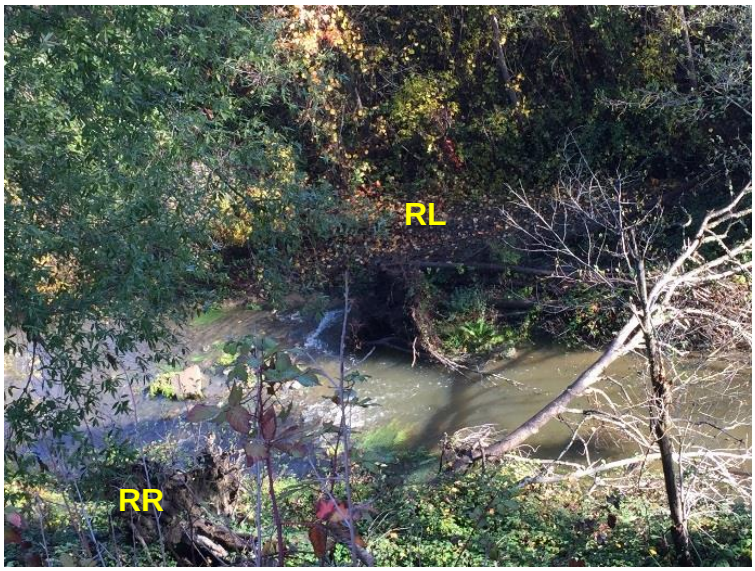
Site Description and Field Notes

Site Location/Segment: RUS-MN-A-105

Northern most observation site in the Russian River GRP. Shoreline is primarily heavily vegetated with steep sloping banks, which limits access. The river is shallow and has a low gradient (i.e., slow-moving water) at this location. River width is 12 meters (39 feet).

Site Contact/s:
Redwood Valley-Calpella Fire Department – (707) 485-8121

Site Images



Upstream

Downstream

Straight Across

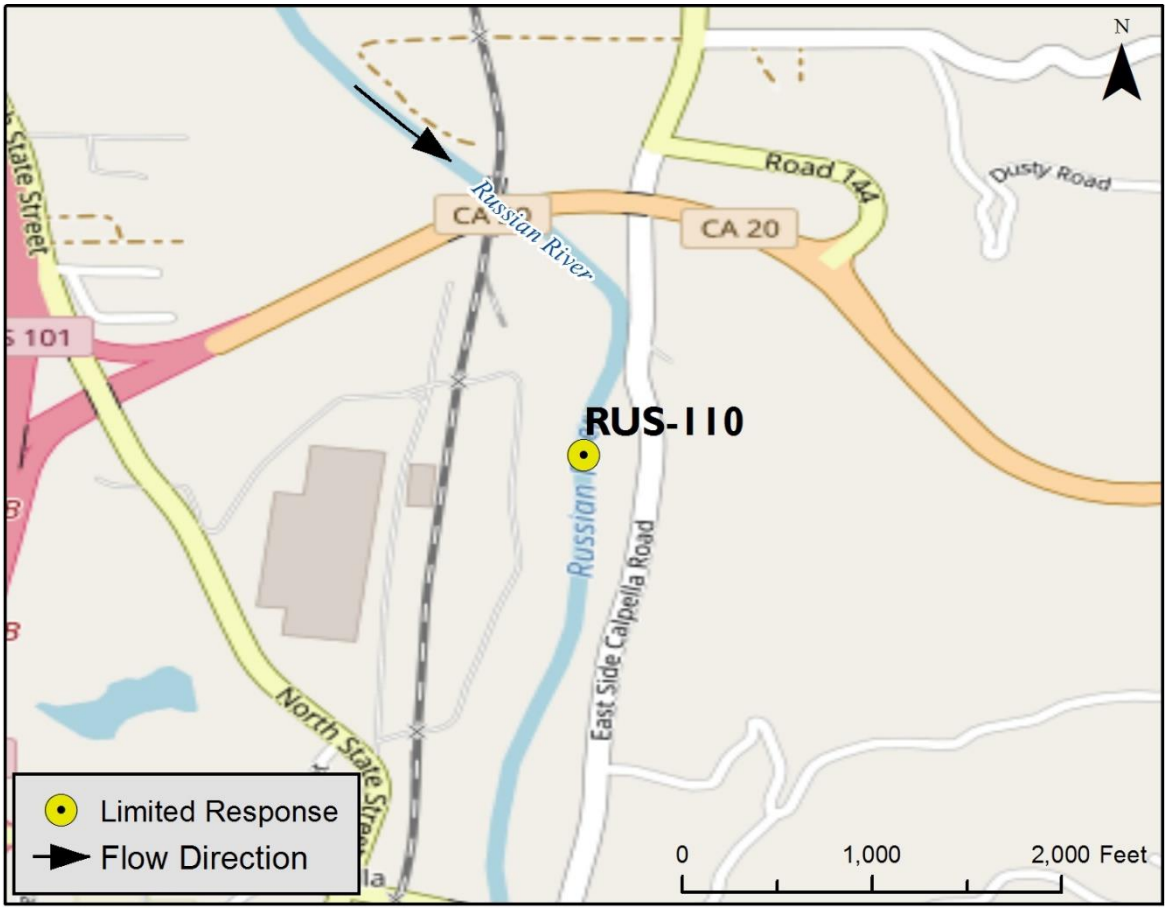
RR = River Right RL = River Left

Photo Date: 11/21/2017

Response Strategy Site: East Side Calpella Road (RUS-110)

Latitude: 39.23979 **Longitude:** -123.19902	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, take exit 555B onto Highway 20. Take a left on Road 144, then take a left on Eastside Calpella Rd. Take first turnout on the right, south of the Hwy 20 overpass.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 225/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access through locked private gate
- Access to shoreline down a very steep embankment
- Flow at this site could be high during certain times of the year
- Near a busy road
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Private Property, Mendocino Redwood Co.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Response Strategy Site: East Side Calpella Road (RUS-110) Page 2 of 3

Site Description and Field Notes

River Width: 15 meters (49 feet)

Gradient: Medium

Site Contact/s:

Redwood Valley-Calpella Fire Department – (707) 485-8121

Site Location/Segment: RUS-MN-A-115

Privately owned access area; Vegetated banks on the west side of the River, while the east side of the river is lightly vegetated with gravel banks.

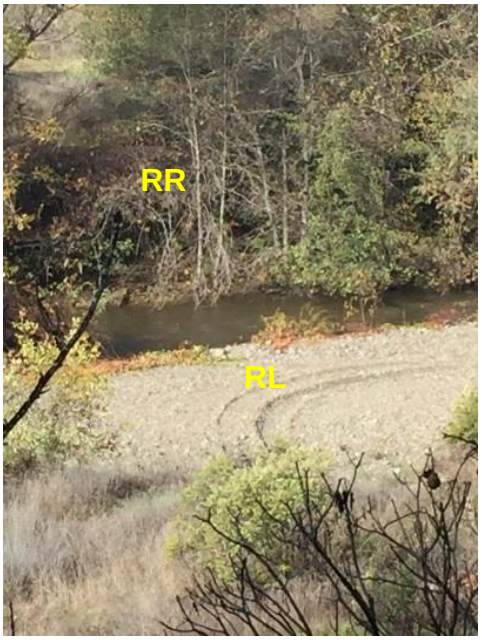
Vehicular Access: A pick-up truck could drive down to the shoreline in most situations, but 4WD would be needed in inclement weather or when the access road is muddy.

Recreational Use: Private Property

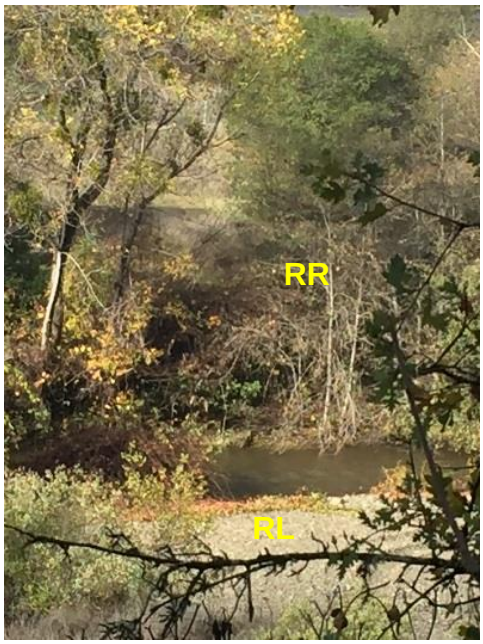
Boat Launches: N/A

ESI Shoreline Type: 8F-Vegetated steeply sloping bluffs; 6A – Gravel beach and gently sloping banks

Site Images



Upstream



Downstream

Entrance/Access

RR = River Right RL = River Left

Photo Date: 11/21/2017

Response Strategy Site: East Side Calpella Road (RUS-110) Page 3 of 3

Site Objectives: Collection

Implementation: Boom would have to be deployed only at times of low flow. Crews may have to use waders to cross the river. Contact landowner for entrance to property.

Staging Area Location and Capabilities/Amenities/Waste Management: Due to the steep narrow entrance, a vac truck would have some difficultly accessing the area**.**

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	100 feet	
Anchor	Danforth	40	lb	1	
Stakes				3	Use shore-side stakes
Personnel				4	

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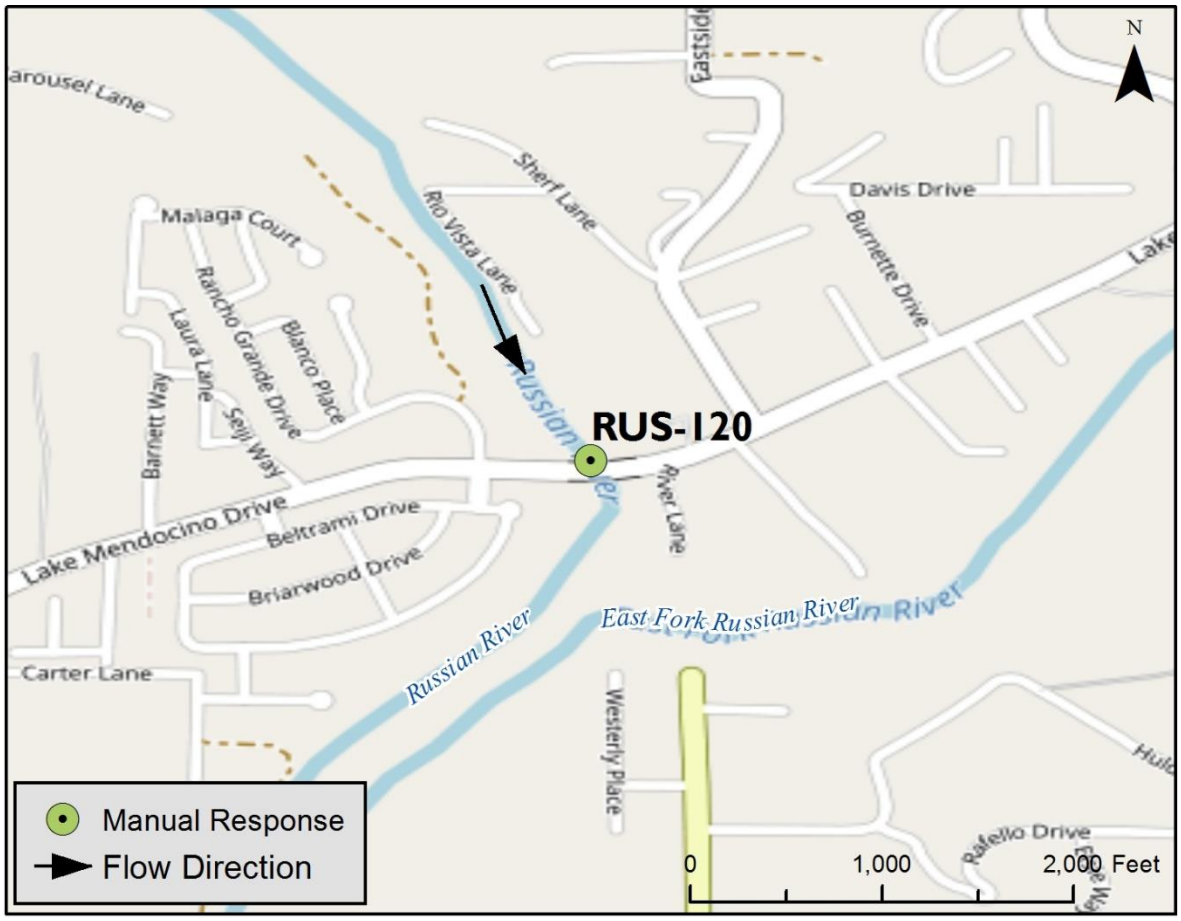
Latitude: 39.1955 **Longitude:** -123.195	**Driving Directions**
Highway Postmile: N/A	From Hwy 101 (north of Ukiah), take exit 552 onto West Lake Mendocino Drive. Head north on North State Street then head east on Lake Mendocino Drive for ~0.6mi. Park in a turnout on the northwest side of bridge.
Railroad Milepost: N/A	
Nearest Address: N/A **Thomas Guide #:** 225/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access to shoreline down a narrow pathway
- Near a busy road
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, Osprey

Economic:

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 7.5 meters (25 feet)

Gradient: Low

Site Contact/s:

Mendocino Co. Env. Health (707) 234-6625

Site Location/Segment: **RUS-MN-A-145**

Stretch of about 100 yds of walkable shoreline in the summer when there is little to no flow. It would be difficult to get equipment down to shoreline.

Vehicular Access: N/A**, f**oot access only.

Recreational Use: Swimming

Boat Launches: N/A

ESI Shoreline Type: 4 – Sandy beach and gently sloping banks; 9B – vegetated low banks

Site Images

Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 08/08/2017

Response Strategy Site: Mendocino Ave. Bridge (RUS-120)

Site Objectives: Deploy sorbent to pick-up any accumulated product.

Implementation: Use crew to deploy/pick-up sorbent materials.

Staging Area Location and Capabilities/Amenities/Waste Management: Work trucks can be staged at the pull-out on the northwest side of the bridge.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Sorbent				Use as needed
Pads	Sorbent				Use as needed

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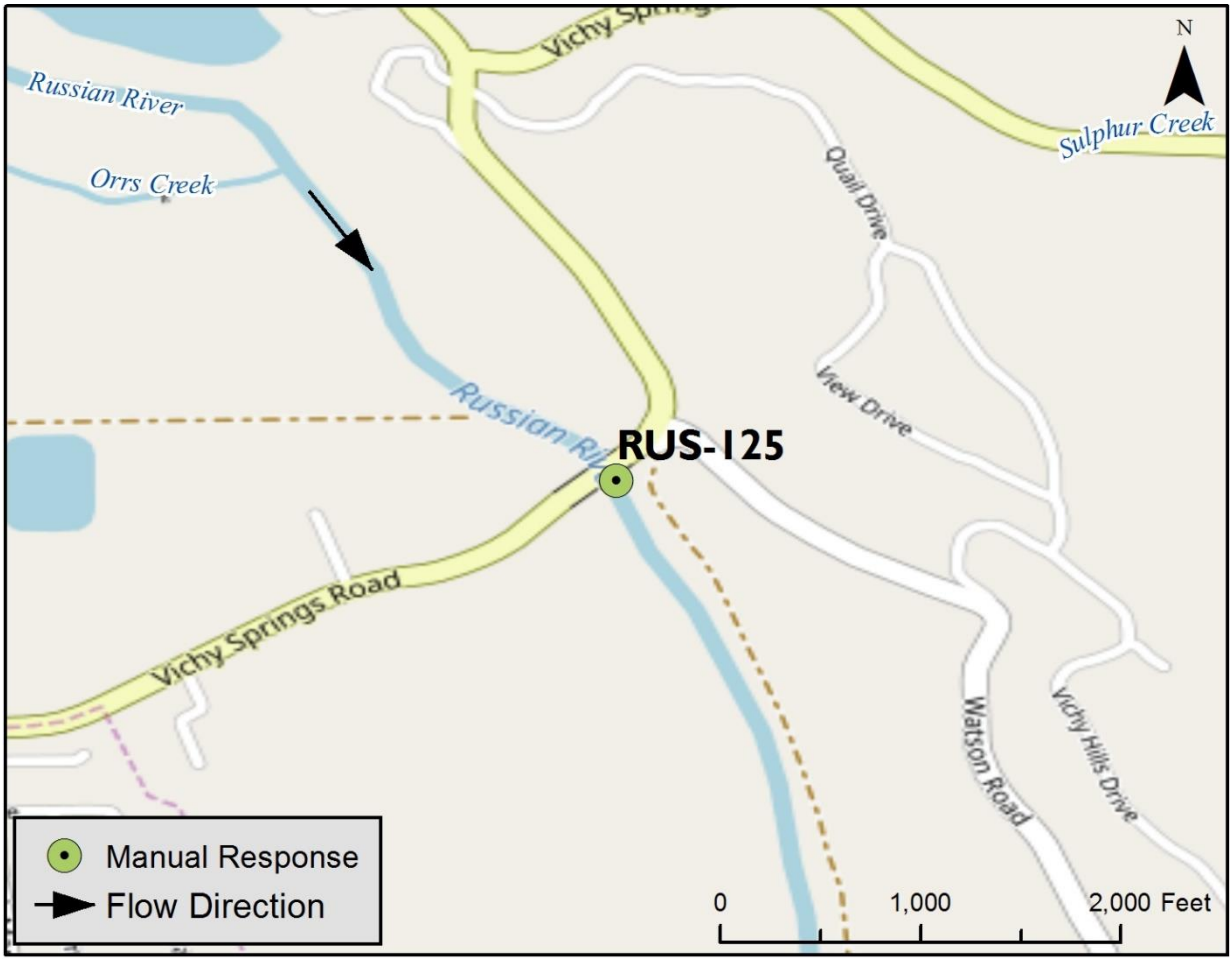
Response Strategy Site: Perkins Street Bridge (RUS-125)

Latitude: 39.15503 **Longitude:** -123.18399	**Driving Directions**
Highway Postmile: N/A	From Hwy 101 (in Ukiah), take exit 549 and head east on E Perkins St/Vichy Springs Road for ~0.7mi. Park along SW side of Bridge in the pullout.
Railroad Milepost: N/A	
Nearest Address: N/A **Thomas Guide #:** 308/4F	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access to shoreline down a narrow pathway
- Parking along a busy road
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Red-bellied Newt, Foothill Yellow-legged Frog, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic:

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 15 meters (49 feet)

Gradient: Low

Site Contact/s:

Mendocino Co. Env. Health
(707) 234-6625

Site Location/Segment: RUS-MN-A-155

In summer, there is a 150 yd stretch of shoreline on the west side of the river low stream flow. Riparian vegetation line both banks. Shoreline south of the bridge is heavily vegetated and access is down a steep path. Difficult to get response equipment down there.

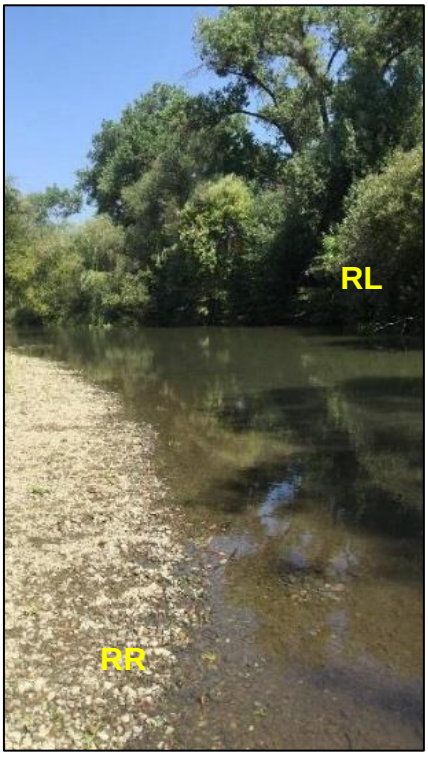
Vehicular Access: N/A, foot access only

Recreational Use: Rafting, Fishing, Beaches

Boat Launches: N/A

ESI Shoreline Type: 5 – mixed sand and gravel beaches and gently sloping banks; 8F – vegetated, steeply sloping bluffs.

Site Images



Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 08/08/2017

Response Strategy Site: Perkins Street Bridge (RUS-125) Page 3 of 3

Site Objectives: Deploy sorbent to pick-up any accumulated product.

Implementation: Use crew to deploy/pick-up sorbent materials.

Staging Area Location and Capabilities/Amenities/Waste Management: Work trucks can be staged at the pull-out on the southwest side of the bridge.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Sorbent				Use as needed

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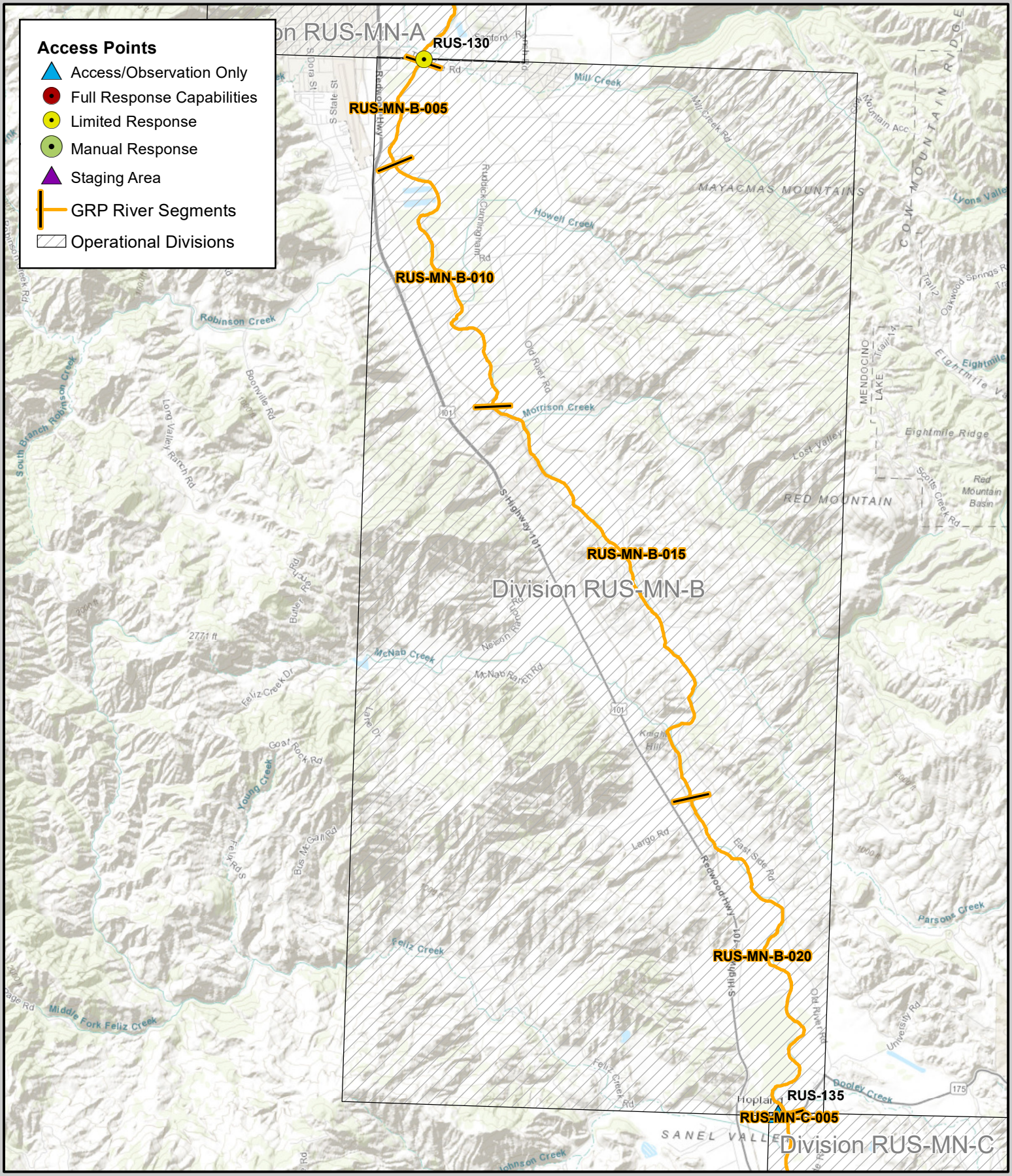
Figure 3-3: Russian River GRP Division RUS-MN-B Map



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

Author: S. Paine, CDFW
Date Created: 9/30/2019
Data Source: CDFW-OSPR, USGS

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Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-MN-B

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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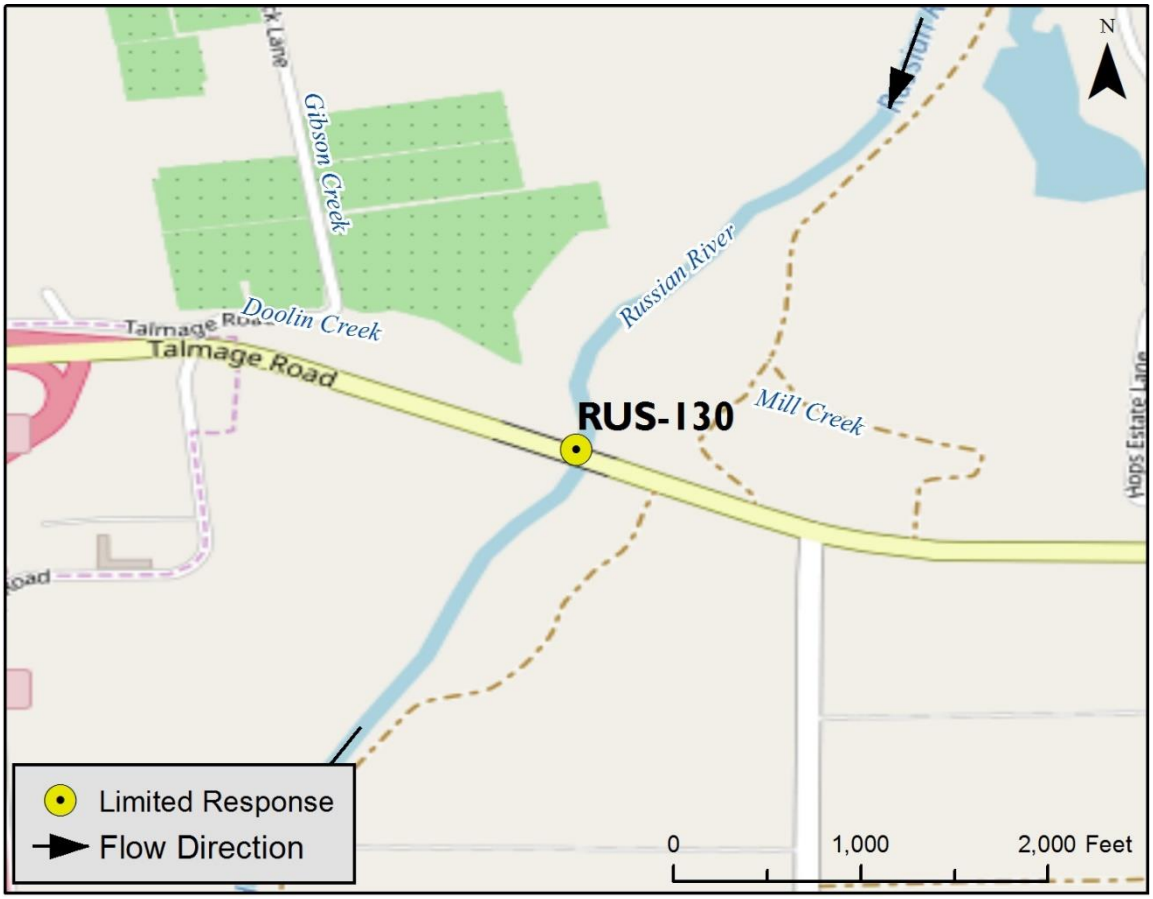
Response Strategy Site: Talmage Road Bridge (RUS-130)

Latitude: 39.134562 **Longitude:** -123.186499	**Driving Directions**
Highway Postmile: MEN 1.043	From Hwy 101 (in Ukiah), take exit 548A. Head east on CA-222 E/Talmage Rd for ~0.4mi. Park in a pullout on the NW side of the bridge.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 308/7F	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access to shoreline down a narrow pathway
- Parking along a busy road
- Access through a locked gate
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Red-bellied Newt, Foothill Yellow-legged Frog**,** Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, Osprey

Economic: Nor-Cal Recycled Rock and Aggregates

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 25 meters (82 feet)

Gradient: Medium

Site Contact/s:

Mendocino Co. Env. Health
(707) 234-6625

Nor-Cal Recycled Rock and Aggregates
(707) 459-9636

Site Location/Segment: RUS-MN-B-005

Medium/heavy flow zone. Likely a high flow area in winter/spring. This site has vehicle access to near shore. Any boom strategies would have to be deployed north of the bridge. The east side of river is heavily vegetated.

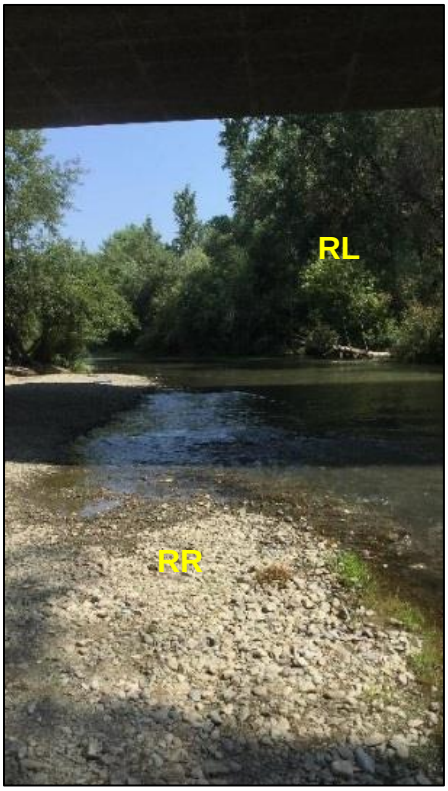
Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing

Boat Launches: N/A

ESI Shoreline Type: 6A – gravel beaches and gently sloping banks; 9B – vegetated low banks

Site Images



Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 08/08/2017

Response Strategy Site: Talmage Road Bridge (RUS-130)

Site Objectives: Collection of product from a release upstream.

Implementation: Under conditions that would allow for deployment of boom (low flow), set up a collection area on the west shore, north of the bridge. Wet conditions may make shoreline access difficult for response vehicles.

Staging Area Location and Capabilities/Amenities/Waste Management: Work trucks and vac trucks may be accessible to shoreline through locked gate on NW side of the bridge. Contact Mendocino County Environmental Health for information regarding access to the locked gate.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	150 feet	
Anchors	Danforth	40	lb	2	Use 2 mid-stream anchors
Stakes				3	Shore-side stakes
Boat	skiff	14	ft	2	
Personnel				8	4 boat crew, 4 shoreside staff

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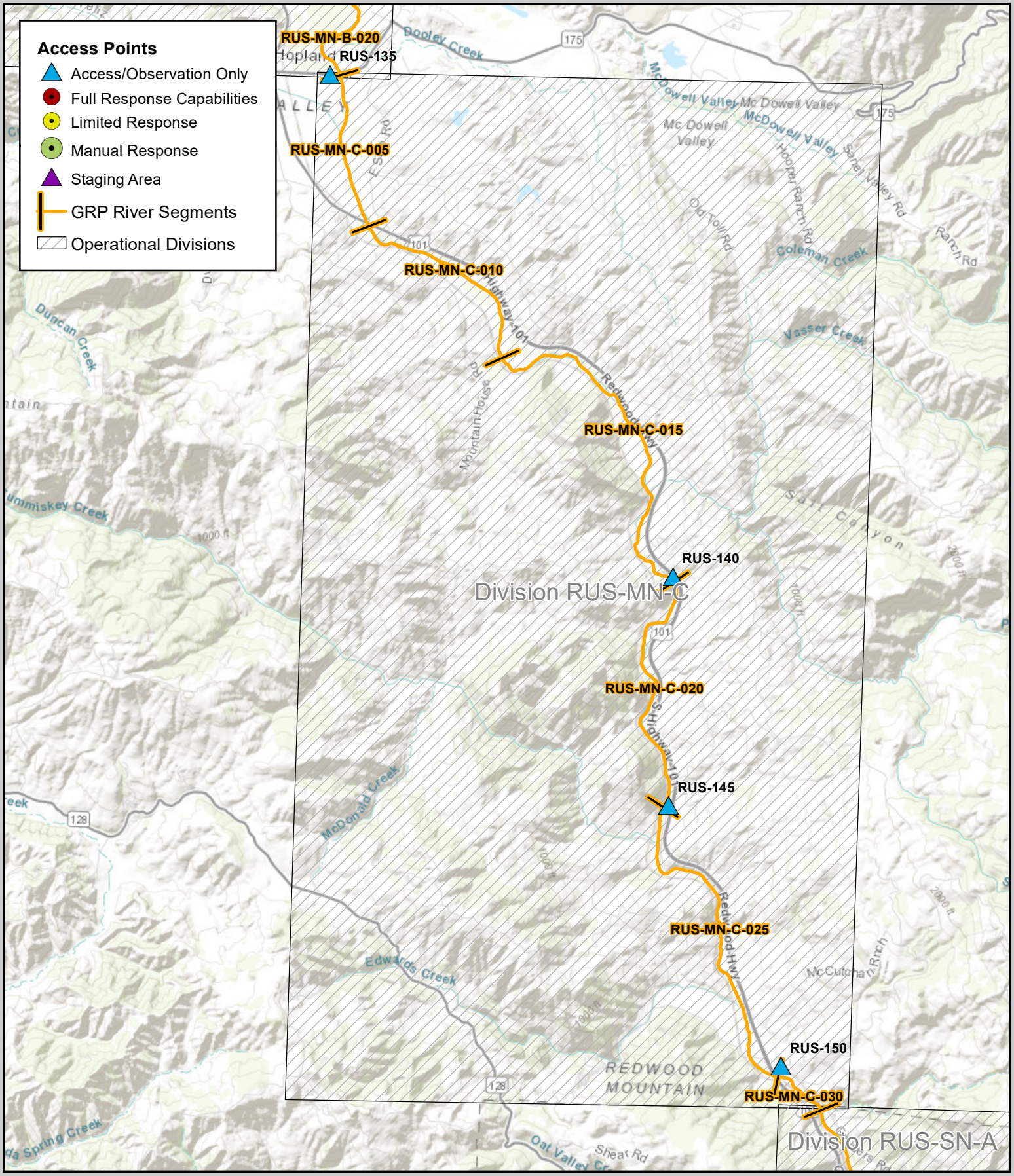
Figure 3-4: Russian River GRP Division RUS-MN-C Map



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

Author: S. Paine, CDFW
Date Created: 9/30/2019
Data Source: CDFW-OSPR, USGS

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Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-MN-C

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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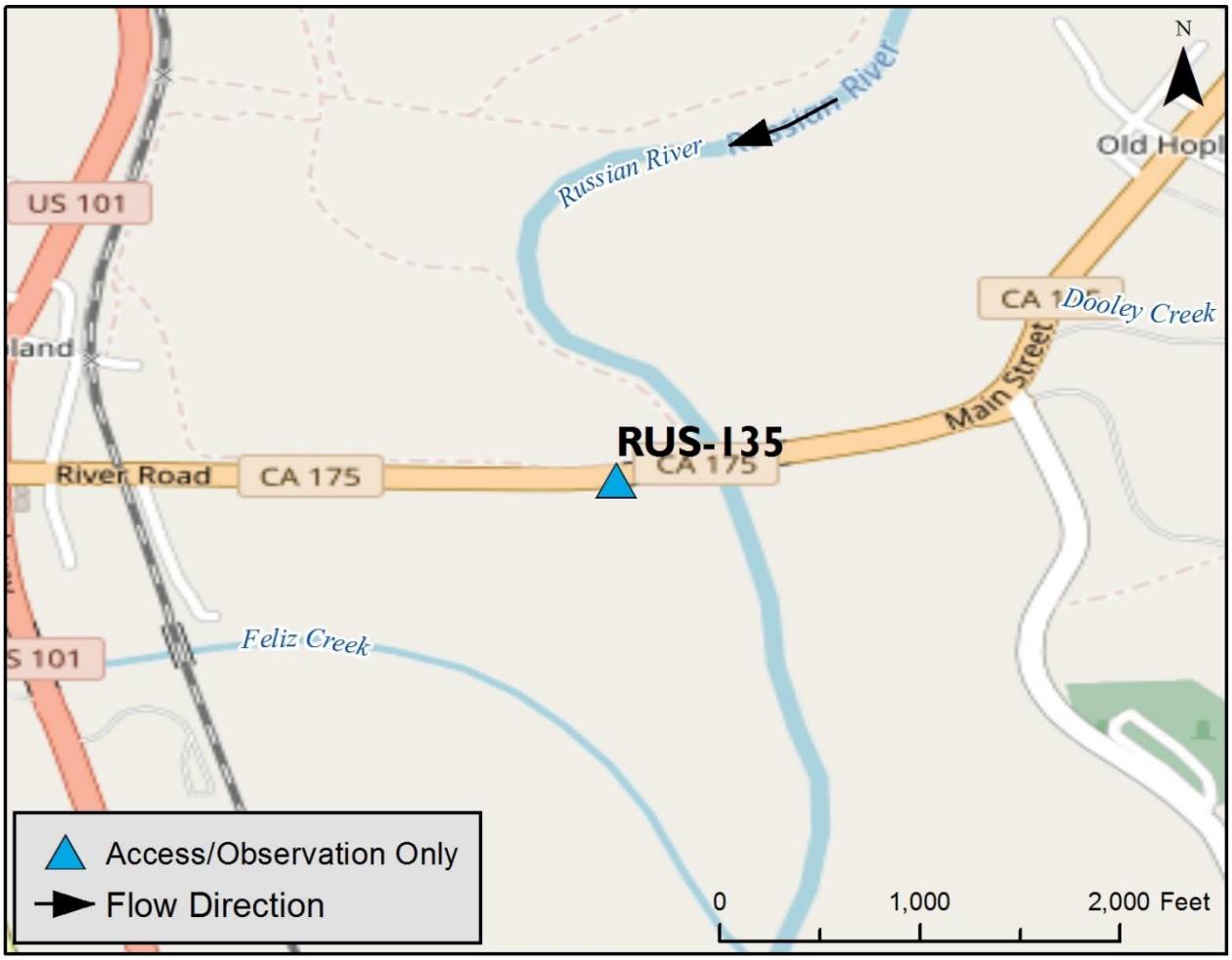
Access/Observation Site: 175 Bridge (RUS-135)

Latitude: 38.97113 **Longitude:** -123.10813	**Driving Directions**
Highway Post Mile: MEN 0.4	From Hwy 101, proceed east on Hwy 175 for ~ 0.5mi until you come to a small bridge. Use pullout on the SW side of the bridge.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 162/2B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Parking on the side of a busy road
- Trip and fall hazards, slippery when icy or wet
- Pathway to shoreline is steep and can be muddy in certain areas
- Biological hazards (e.g., poison oak)

Site Description and Field Notes

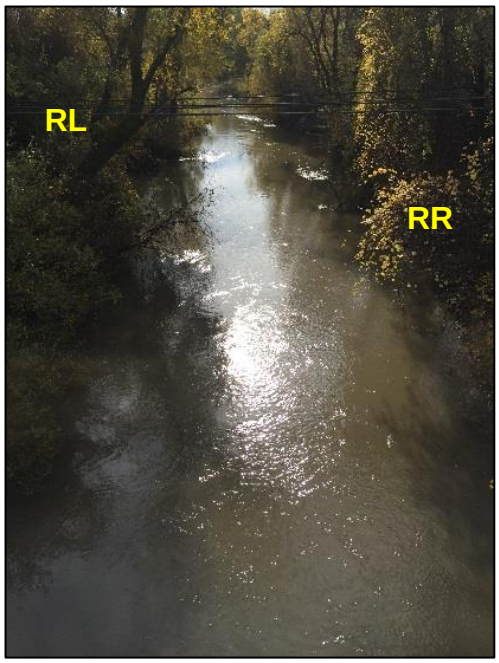
Site Location/Segment: RUS-MN-B-020

Observation point is just east of Hopland. Shoreline is heavily vegetated on both sides with only ~10 yds of vegetation free shoreline on the west bank. The water moves slow on this stretch of the river, though the river widens to ~25 meters.

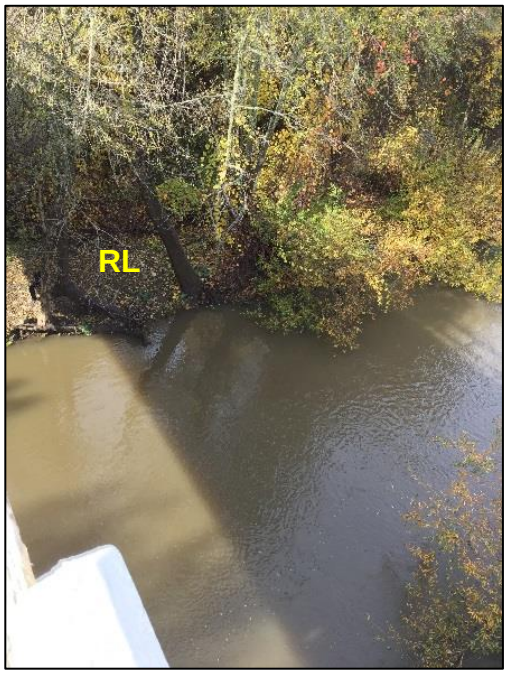
Site Contact/s:
Hopland Fire District – (707) 744-1222

Site Images

Upstream



Downstream



Straight Across

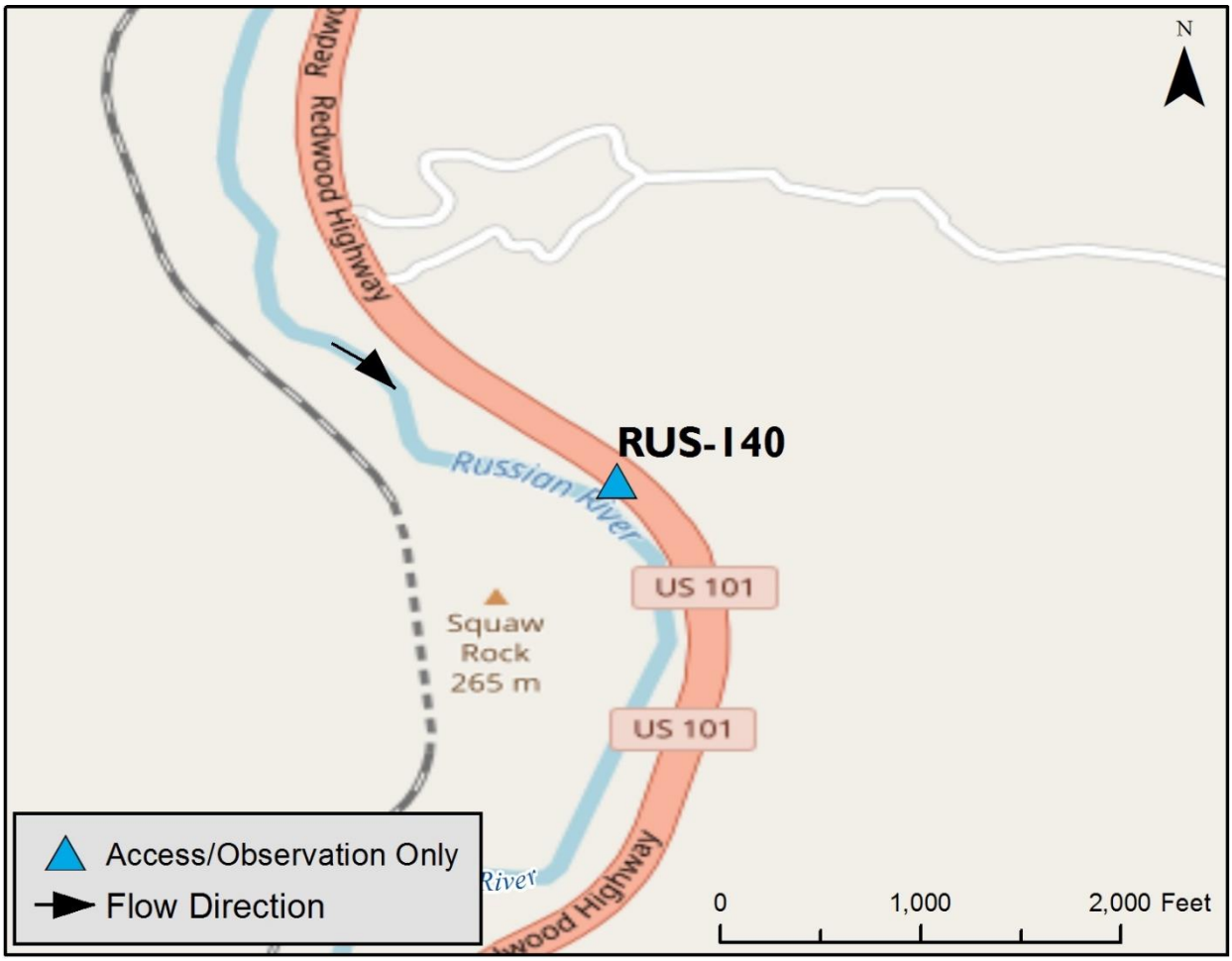
RR = River Right RL = River Left

Photo date: 11/21/2017

Access/Observation Site: Frog Woman Rock (RUS-140)

Latitude: 38.91397 **Longitude:** -123.05446	**Driving Directions**
Highway Post Mile: MEN 5.068	From Hwy 101, approximately 5.5 mi S of Hopland, park in a large pullout N of Frog Woman Rock along southbound 101.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 225/6B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Parking adjacent to highway
- Swift water year-round, especially during winter and spring flows
- Trip and fall hazards, slippery when icy or wet
- Steep trail down to river

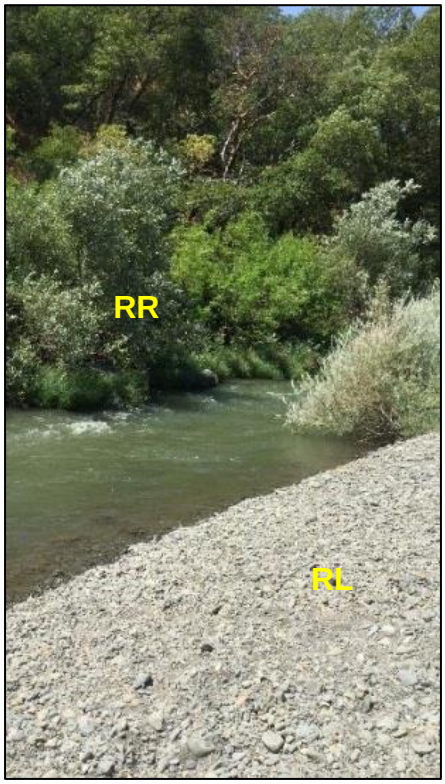
Site Description and Field Notes

Site Location/Segment: RUS-MN-C-015

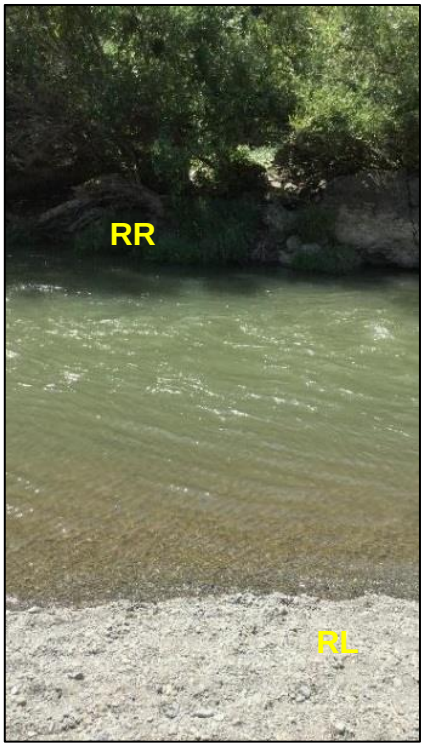
This is a narrow stretch of river where the water moves swiftly year-round. Access to the river is down a steep, narrow trail. Shoreline is primarily made-up of gravel on the east side, while the west side is primarily vegetated. River width is 15 meters (49 feet).

Site Contact/s:
Mendocino County Environmental Health – (707) 234-6625

Site Images



Upstream



Straight Across

Downstream

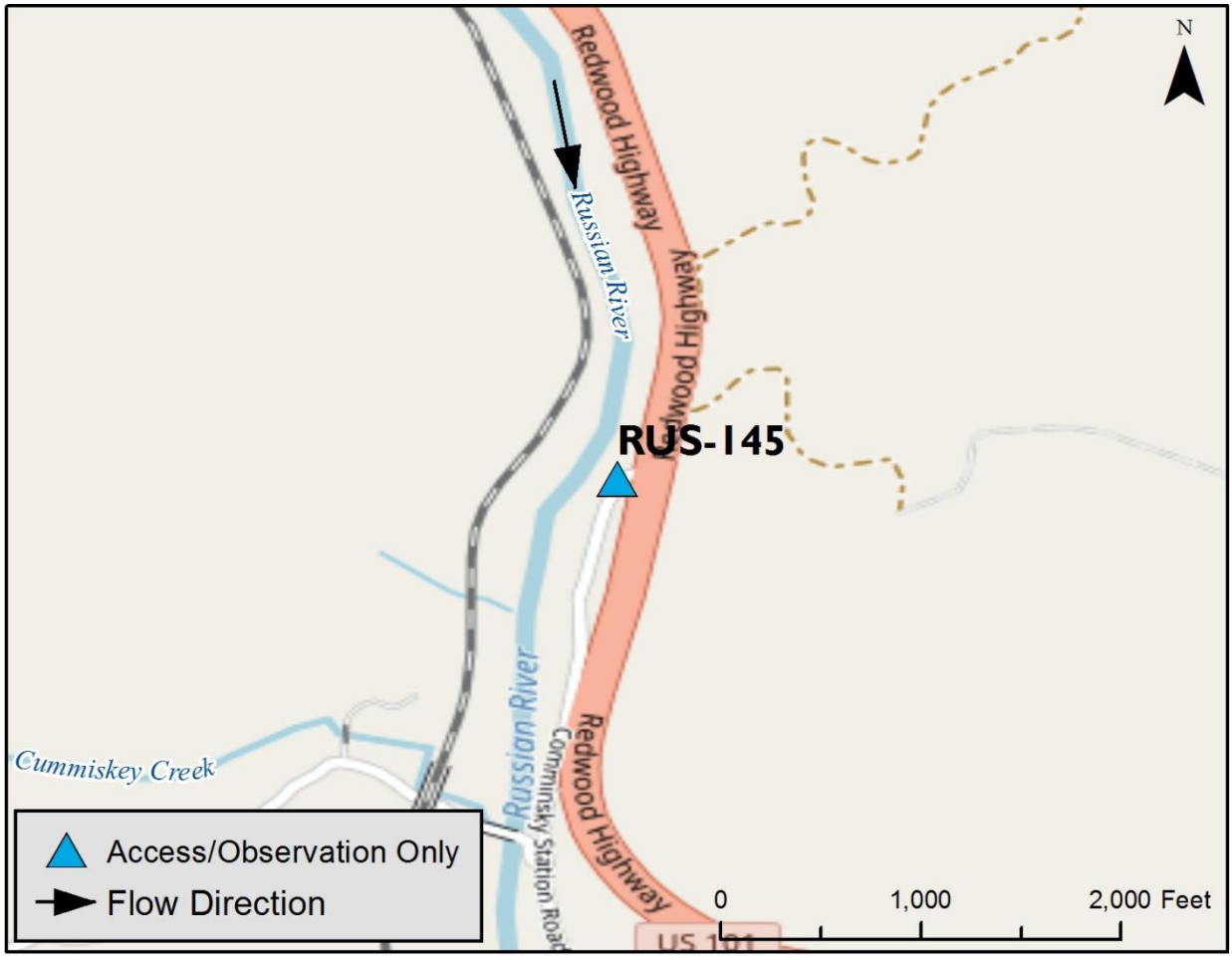
RR = River Right RL = River Left

Photo Date: 08/08/2017

Access/Observation Site: Commisky Station Road (RUS-145)

Latitude: 38.88732 **Longitude:** -123.05402	**Driving Directions**
Highway Post Mile: MEN 3.048	From Highway 101 (~7mi south of Hopland), take Commisky Station Road exit. Proceed ~ 0.4mi to a gated area where a small private bridge crosses the river.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 225/7B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Access to shoreline through private property
- Trip and fall hazards, slippery when icy or wet

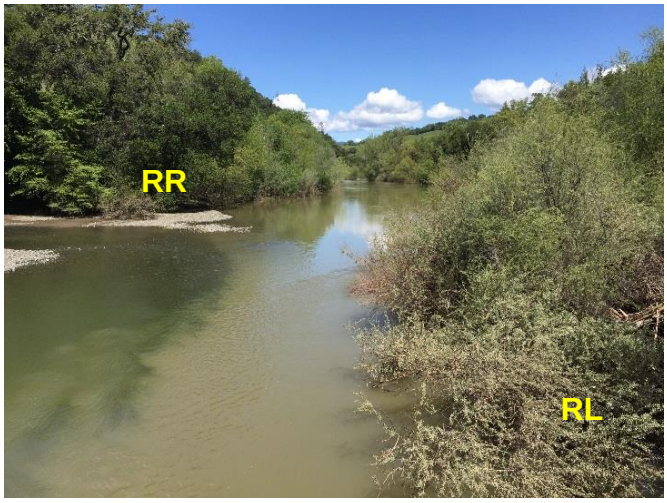
Site Description and Field Notes

Site Location/Segment: RUS-MN-C-015

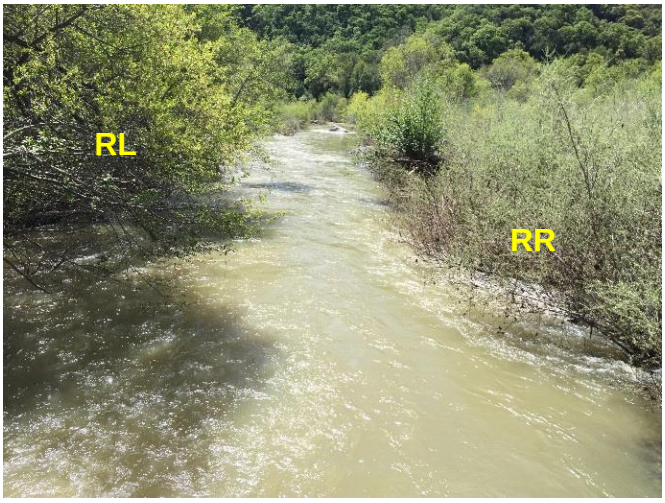
This is a narrow stretch of the Russian River adjacent to a small bridge (on private property). Water moves swiftly at this location. Shoreline is heavily vegetated with a small patch of gravel/sand on the western shore. Boom deployment may be possible at times of low flow. There are several other observation spots along Commisky Station Rd.

Site Contact/s:
Mendocino County Environmental Health – (707) 234-6625

Site Images



Upstream
Photo Date: 04/17/2018



Downstream
Photo Date: 04/17/2018

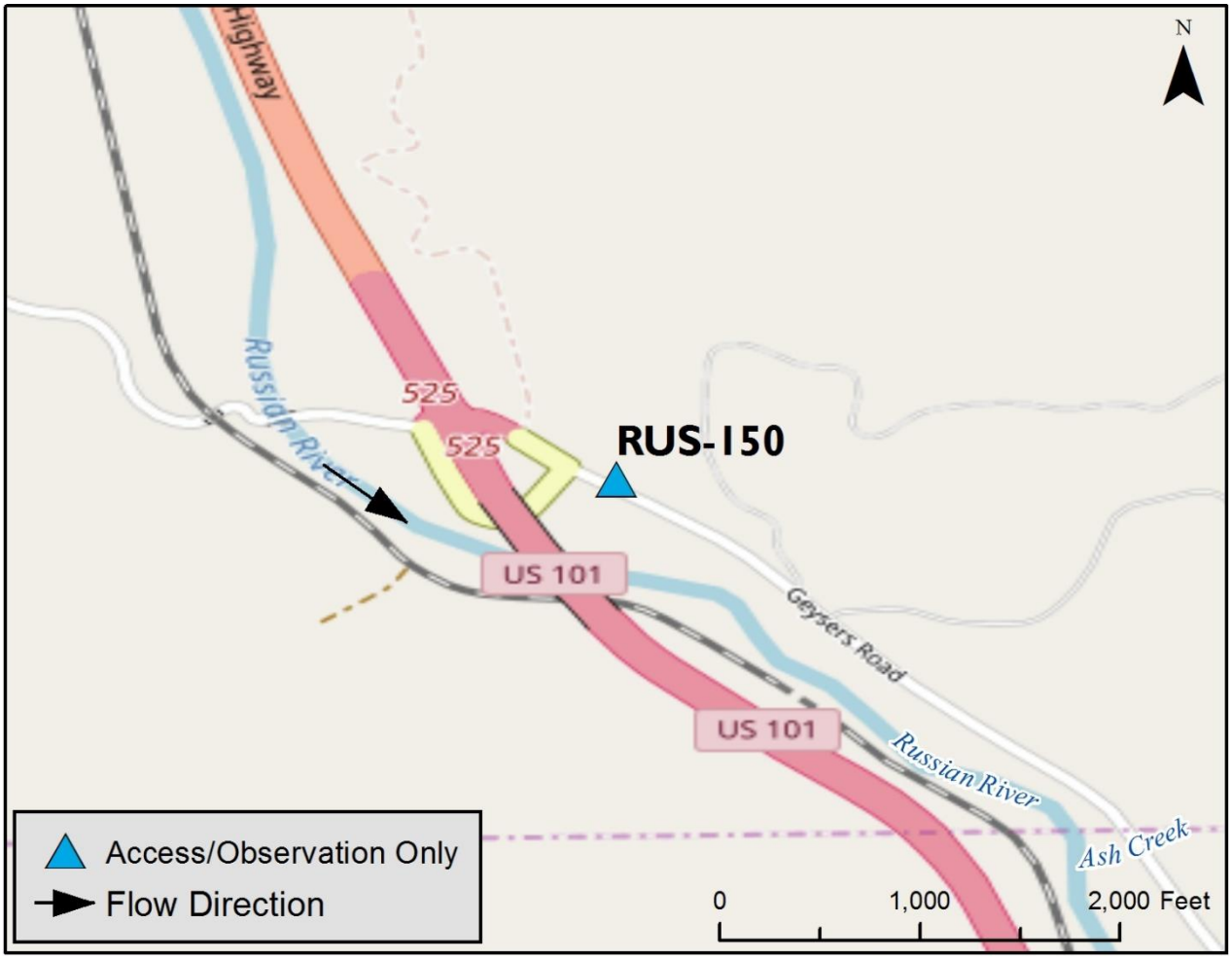
Straight Across
Photo Date: 08/08/2017

RR = River Right RL = River Left

Access/Observation Site: Geysers Road Access (RUS-150)

Latitude: 38.85741 **Longitude:** -123.03605	**Driving Directions**
Highway Post Mile: MEN 0.497	From Hwy 101 (north of Cloverdale), take exit 525 onto Geysers Rd. Proceed ~0.10mi and park in a pull out along side of the road. There is a dirt trail at this location that leads down to the river.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 239/1D	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Parking is off the side of a road
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when icy or wet
- Access to shoreline is down a steep narrow path

Site Description and Field Notes

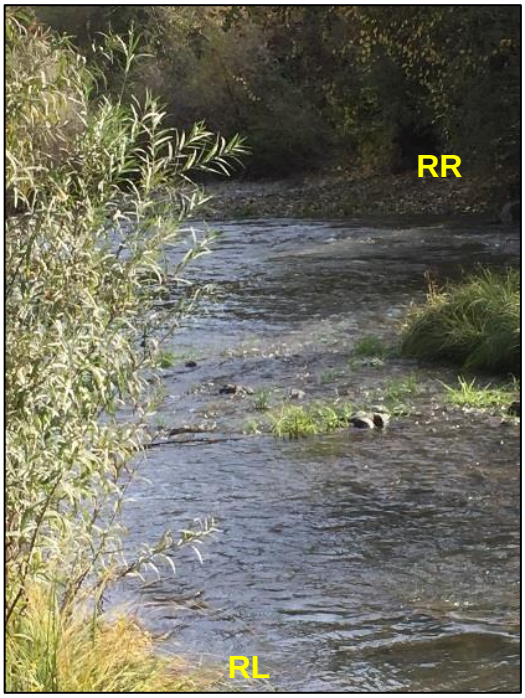
Site Location/Segmentation: RUS-MN-C-030

There is an observation point near the Mendocino/Sonoma County border. Access to the shoreline is down a narrow dirt pathway. The shoreline is made-up of mixed sand/gravel with sloping, vegetated banks. Much of the shoreline is heavily vegetated, making access difficult. Water moves swiftly at most time of the year. River width is 25 meters (82 feet). Private property is just upstream (near southbound 101 onramp) which may offer additional shoreline access.

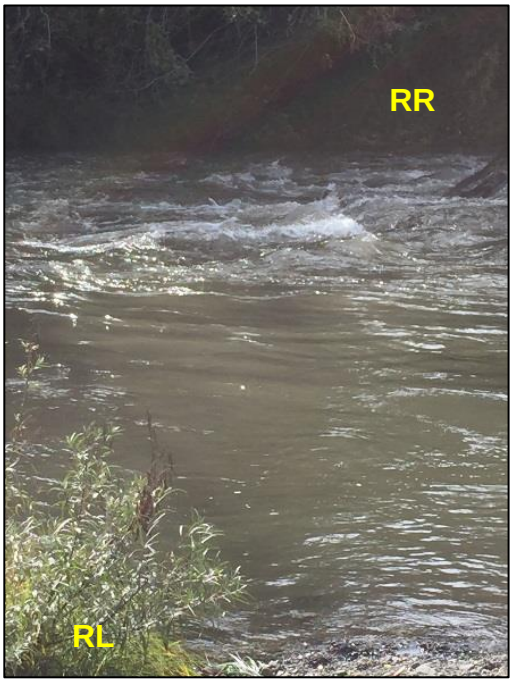
Site Contact/s:
Mendocino County Environmental Health – (707) 234-6625

Site Images

Upstream



Downstream

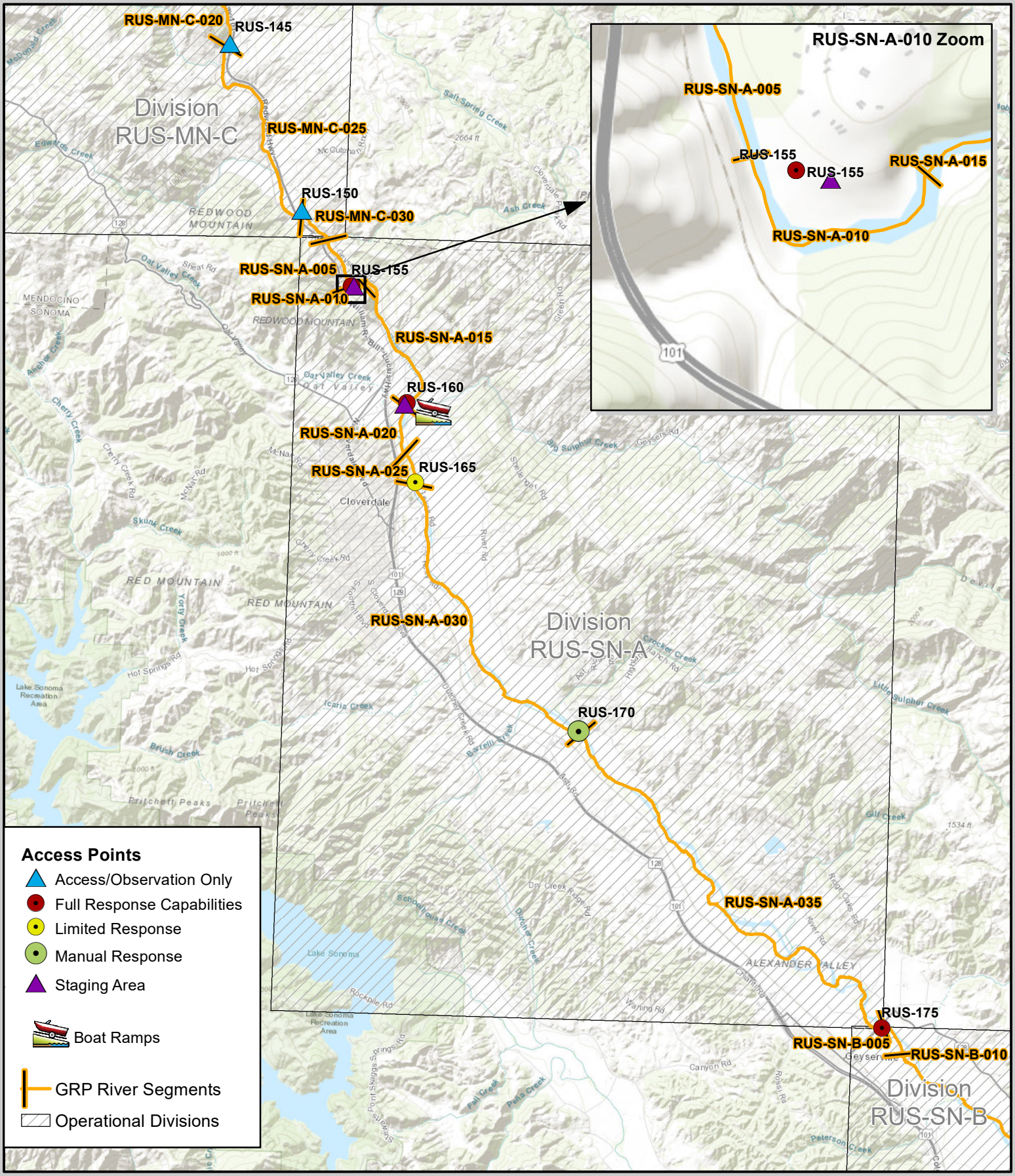


Straight Across

RR = River Right RL = River Left

Photo Date: 11/21/2017

Figure 3-5: Russian River GRP Division RUS-SN-A Map



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

Author: S. Paine, CDFW
Date Created: 10/10/2019
Data Source: CDFW-OSPR, USGS

T:\Projects\Work_in_Progress\GRP_maps\RussianRiver\Maps\mxds\RussianRiver_SN_A_20190522.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-A

0 1 2 Miles

0 1 2 3 Kilometers

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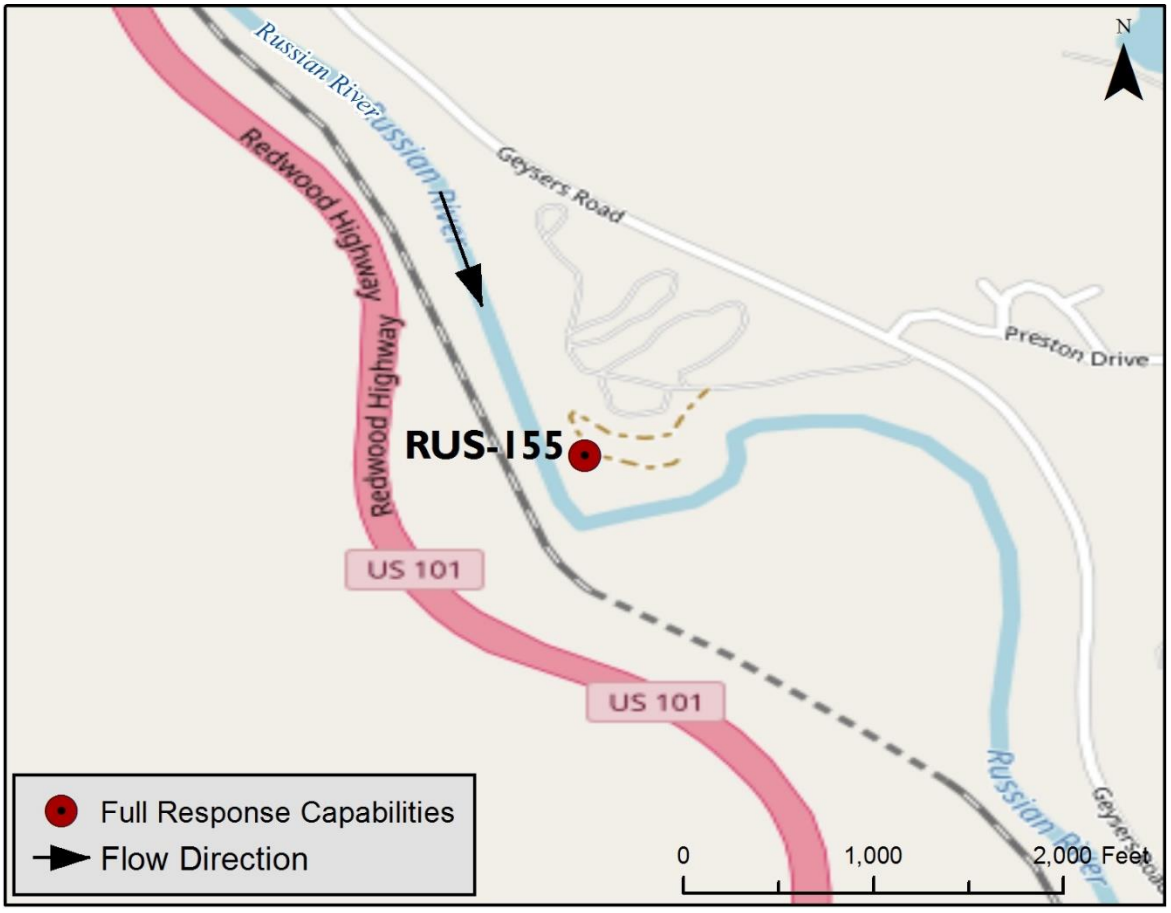
Response Strategy Site: Russian River RV Campground (RUS-155)

Latitude: 38.84410 **Longitude:** -123.02393	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, take exit 525 and proceed east on Geyser's Rd. Continue on Geyser's Rd for ~1.4mi then turn right into the Thousand Trails' Russian River RV Campground. Proceed through the ranger station and continue to the sandy beach entrance.
Railroad Milepost: N/A	
Nearest Address: 33655 Geyers Rd., Cloverdale **Thomas Guide #:** 95425 239/1D	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Must check-in with park staff at ranger station (and proceed through park)
- Vehicle access is down a steep road with a sharp turn (may be difficult for larger vehicles)
- Swift water
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Colusa layia, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Russian River RV Campground

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 20 meters (65 feet)

Gradient: Medium

Site Contact/s:

Russian River RV Campground
(707) 894-3184

Site Location/Segment: RUS-SN-A-010

Access to the shoreline is through a privately-owned RV campground. The gravel beach is on the east side of the river, west side of river is lined with steeply sloping heavily vegetated bluffs.

Vehicular Access: 4WD Pick-Up

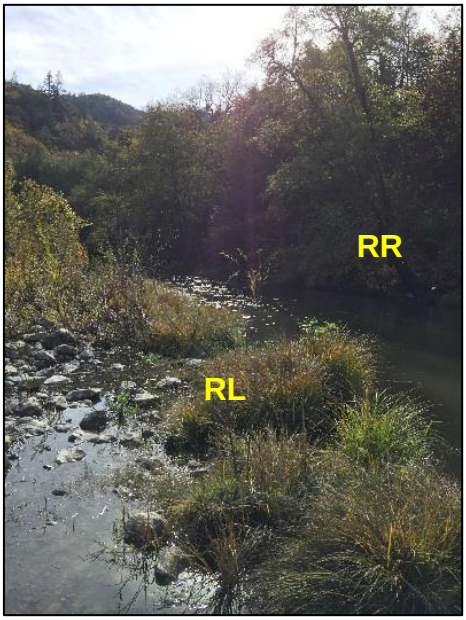
Recreational Use: Rafting, Fishing, Campground

Boat Launches: OSROs can launch skiff from shore

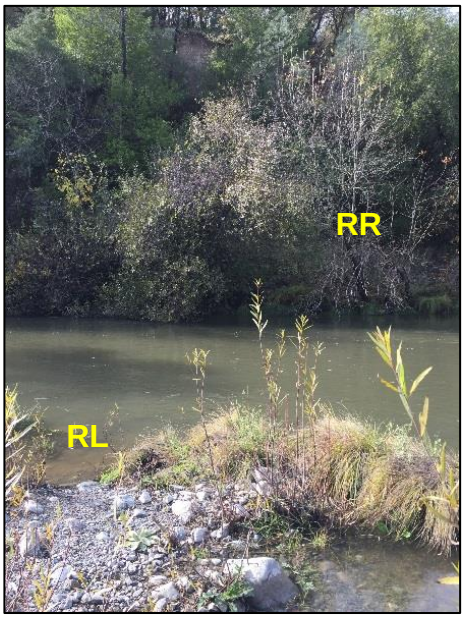
ESI Shoreline Type: 6A – Gravel beach and gently sloping banks; 8F – Vegetated steeply-sloping bluffs

Site Images

Upstream



Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 11/21/2017

Site Objectives: Deflection/Collection

Implementation: Set a deflection leg, just N of an inlet on the W side of the river. Deploy a collection strategy to drive product to the E side of the river.

Staging Area Location and Capabilities/Amenities/Waste Management: 70 bbl vac truck and adler tanks could be staged near shoreline above MHW; steep turn to go up the hill (from the shoreline) may be an issue

Response Strategy Map (overview)

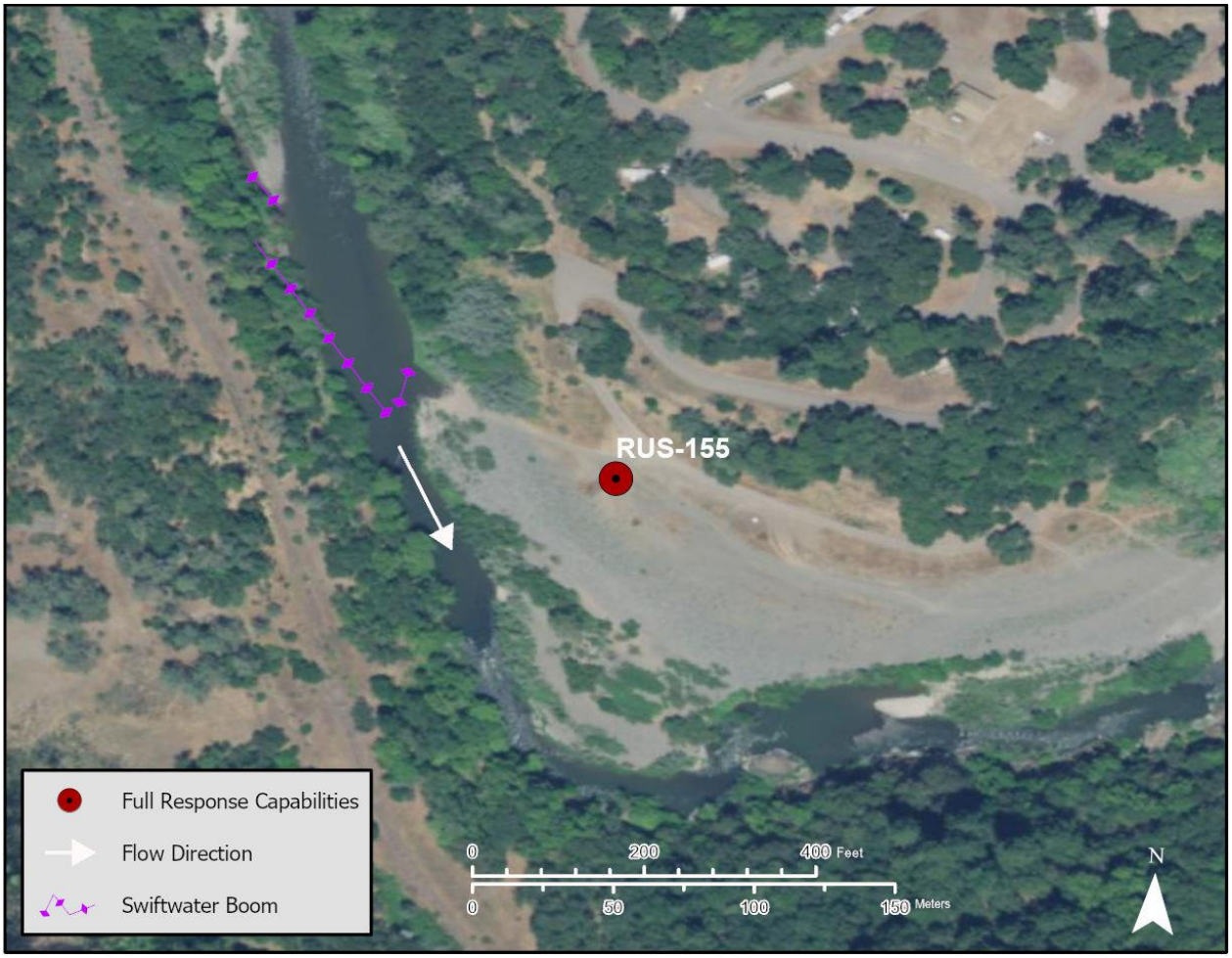


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift water	8	inch	600 feet	50ft for the deflection leg, and the rest for the collection "J"
Anchor	Danforth	40	lb	3	1 anchor for the deflection leg, 2 mid-stream anchors for the collection
Stakes				3	Shore-side stakes for the collection strategy
Boat	skiffs	14	ft	2	No motorized boats unless there is high flow
Personnel				8	4 boat crew, 4 shoreside staff

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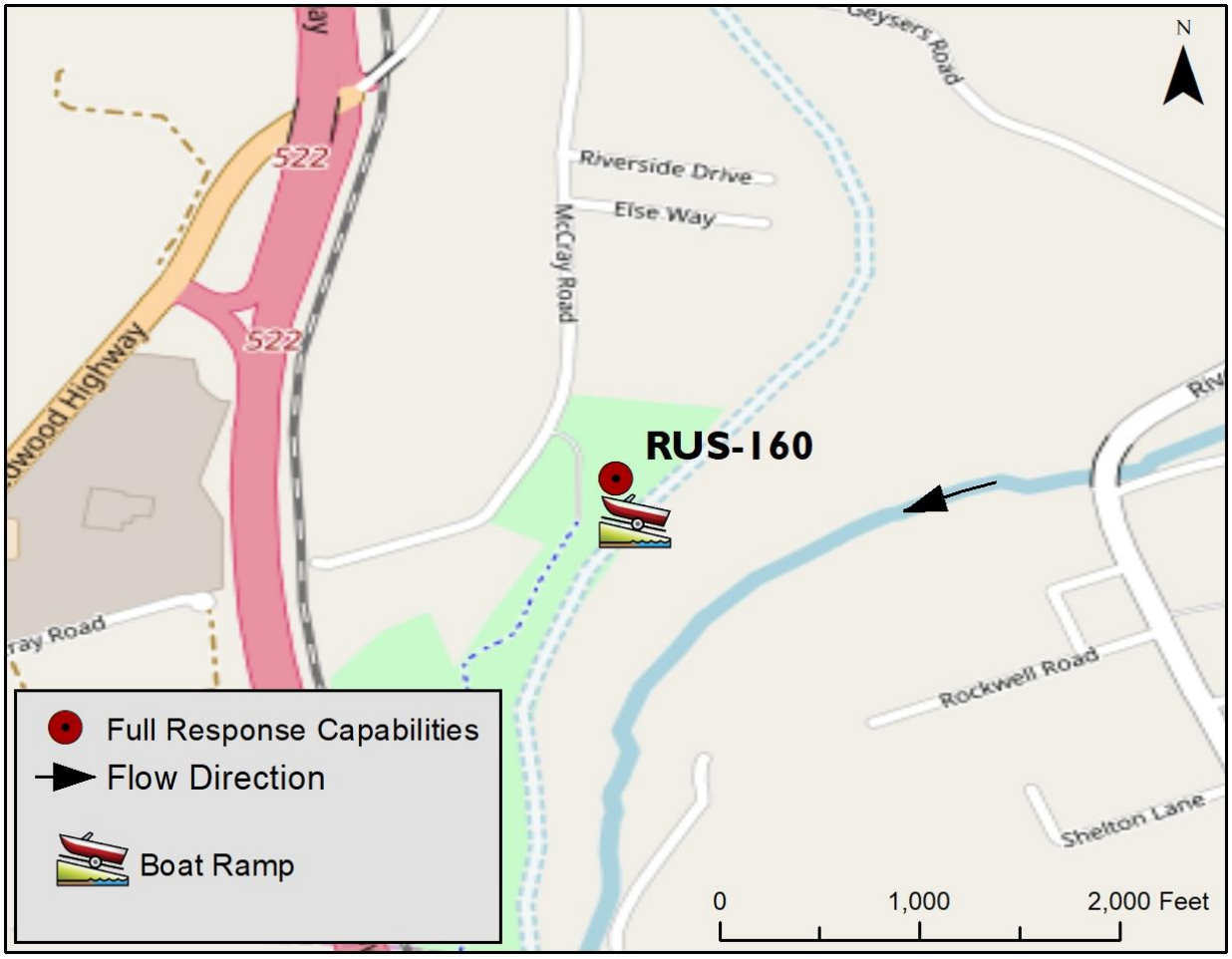
Latitude: 38.82319 **Longitude:** -123.01019	**Driving Directions**
Highway Postmile: N/A	From Highway 101, take exit 522 east onto Hwy 128/N Redwood Hwy. Take a right on McCrary Rd and continue to the Cloverdale River Park entrance.
Railroad Milepost: N/A	
Nearest Address: 31820 McCray Rd., Cloverdale 95425 **Thomas Guide #:** 239/2D	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Park is open from 7am to sunset
- Access through a locked gate
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Sonoma County Regional Park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 25 meters (82 feet)

Gradient: Low

Site Contact/s:

Ranger Station
(707) 433-1625

Site Location/Segment: RUS-SN-A-020

This is a county park with only ~ 20-30 yds of accessible [by foot] shoreline. This site is heavily vegetated on both sides of the river.

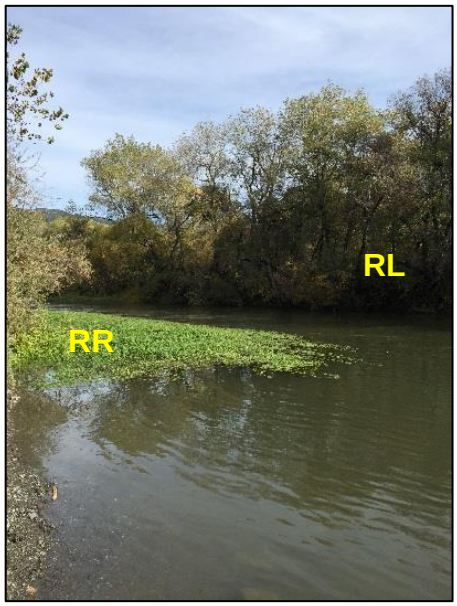
Vehicular Access: You can drive a vehicle to the water's edge on the boat ramp.

Recreational Use: Rafting, Fishing, etc.

Boat Launches: Boat launch on site

ESI Shoreline Type: 6A – gravel beaches and gently sloping banks; 9B – vegetated low banks

Site Images



Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 11/21/2017

Site Objectives: Deflection/collection

Implementation: Deploy cascades upstream of collection strategy.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging can be done in the associated parking lot. Room for 70 bbl vac truck.

Response Strategy Map (overview)

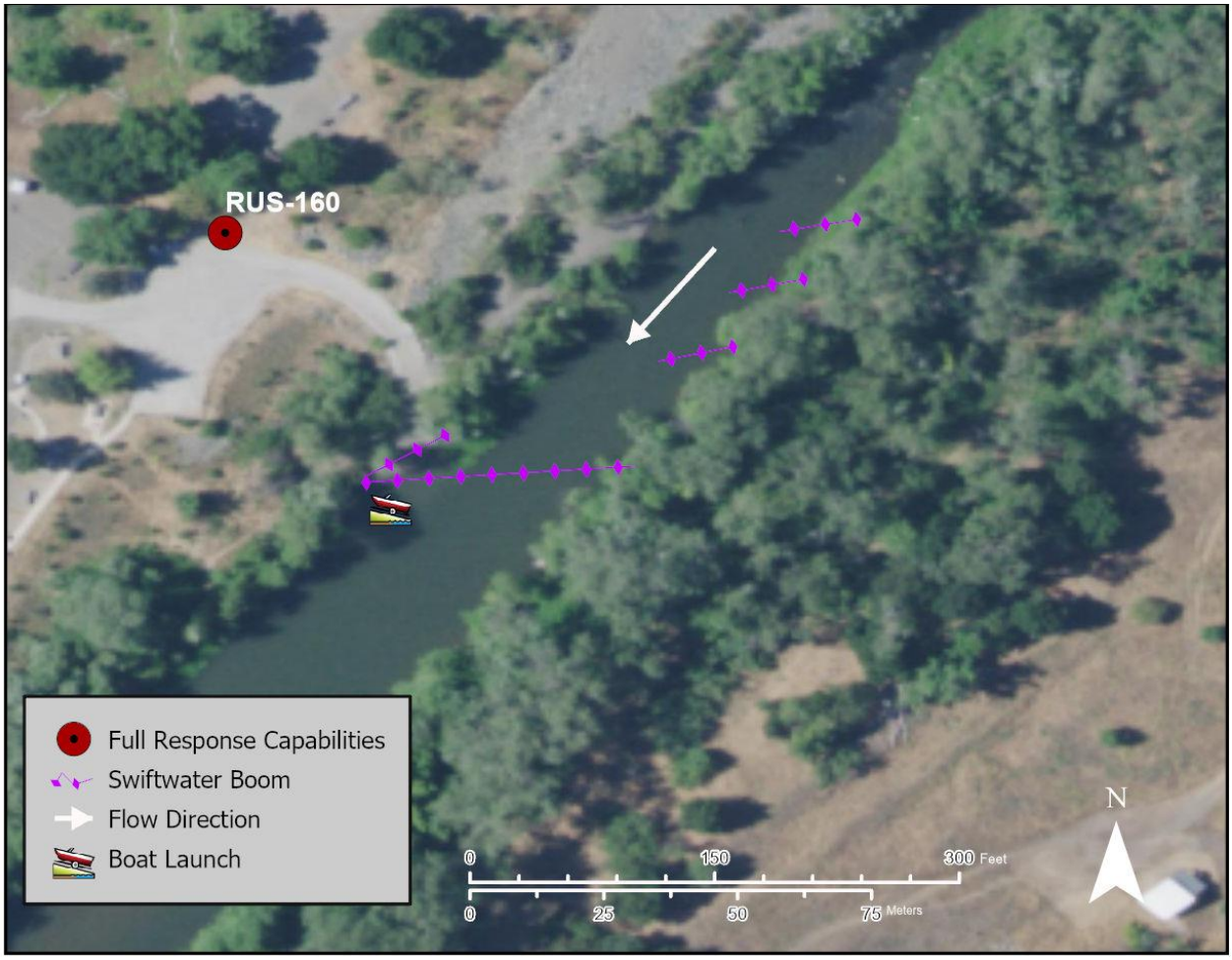


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	550 feet	400ft for the collection "J"; 50ft for each deflection leg
Anchor	Danforth	40	lb	5	1 anchor for each deflection leg; 2 mid-stream anchors for deflection "J"
Stakes				3	Stakes for shore-side anchoring
Boats	whaler	17	ft	2	
Personnel				8	4 boat crew, 4 shore-side

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Response Strategy Site: E 1st Street Bridge (RUS-165)

Latitude: 38.80883 **Longitude:** -123.00766	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, take Central Cloverdale exit 520. Proceed east on Citrus Fair Rd then head north on Asti Rd. Head east on E 1st Street/Crocker Rd. Proceed ~ 0.3mi to a park on the eastside of the bridge.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 239/2D	
Cell Service: Yes	

Overview Street Map

Hazards, Restrictions and Advice for Responders

- Parking on the eastside of the river is in a pull-out near the road
- [Vehicle] access through a locked gate
- Trip and fall hazards, slippery when icy or wet
- High flows at certain times of the year

Resources-At-Risk

Ecological: Western Pond Turtle, Townsend's big-eared bat, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Cloverdale Cemetery, Cloverdale River Park Trail

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Response Strategy Site: E 1st Street Bridge (RUS-165)

Site Description and Field Notes

River Width: 25 meters (82 feet)

Gradient: Medium

Site Contact/s:

Ranger Station
(707) 433-1625

Site Location/Segment: RUS-SN-A-030

Cobble beach area that can be accessed through a locked gate, down a path off E 1st Street/Crocker Rd. Moderate flow. It would be difficult to get response equipment to the site due to the narrow [access] path through vegetation and wide the cobble shoreline. Response equipment deployment at this site could only be done under the most ideal of circumstances.

Vehicular Access: ATV

Recreational Use: Rafting, fishing, nature trails

Boat Launches: Upstream at Cloverdale River Park

ESI Shoreline Type: 6A – gravel beaches and gently sloping banks; 9B – vegetated low banks; 2A – rocky shoals

Site Images

Upstream
Photo Date: 11/21/2017

Downstream
Photo Date: 12/20/2017

Straight Across
Photo Date: 11/21/2017

RR = River Right RL = River Left

Response Strategy Site: E 1st Street Bridge (RUS-165)

Site Objectives: Collection

Implementation: Deploy strategy to set-up a collection pocket; boats would have to be launched upstream at Cloverdale River Park.

Staging Area Location and Capabilities/Amenities/Waste Management: Several work trucks may park in the pullout along E 1st Street.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	in	150 feet	
Anchor	Danforth	40	lb	2	2 mid-stream anchors
Stakes				3	Stakes for shore side anchoring
Boats	whaler	17	ft	2	
Personnel				8	4 boat crew, 4 shore-side

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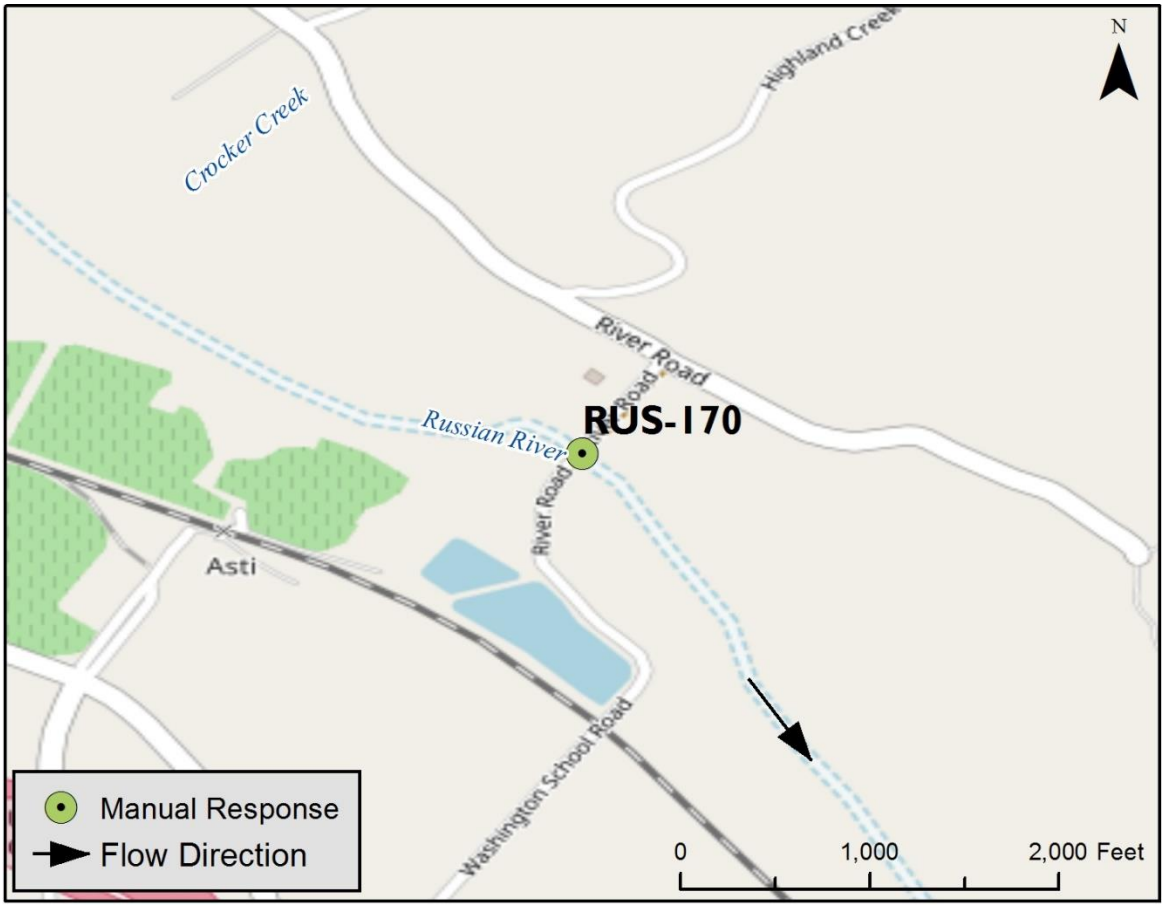
Latitude: 38.76460 **Longitude:** -122.96798	**Driving Directions**
Highway Postmile: N/A	From Highway 101 (in Asti), take exit 517 north onto Asti Store Rd. Take a right on Asti Rd then take a left on Washington School Rd. Proceed to bridge. There is a small pullout on the eastside of bridge to park.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 239/3D	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Seasonal bridge (In place during the summer; closed September - June)
- Parking is just off the side of road
- High flows near bridge
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Pallid bat, Western Pond Turtle, Foothill Yellow-legged Frog, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Sciaini Vineyards

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 20 meters (65 feet)

Gradient: High

Site Contact/s:

Cloverdale PD (24/7)
(707) 894-1700

Cloverdale Public Works
(M-F, 0800 – 1600)
(707) 894-1728

Site Location/Segment: RUS-SN-A-030

The river constricts at the bridge, resulting in fast moving water. The bridge is in place from June to Sept. There is access to shoreline area only in the summer/fall. There are areas north of the bridge where product may strand and crews may be able to use sorbents to pick up collected material.

Vehicular Access: N/A

Recreational Use: Rafting, Fishing

Boat Launches: N/A

ESI Shoreline Type: 6A – gravel beaches and gently sloping banks; 9B – vegetated low banks

Site Images

Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 08/08/2017

Site Objectives: Manually pick-up stranded product

Implementation: Deploy/pick-up sorbents, as needed

Staging Area Location and Capabilities/Amenities/Waste Management: Limited parking along the side of the road

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Sorbent				Deploy/pick-up as needed

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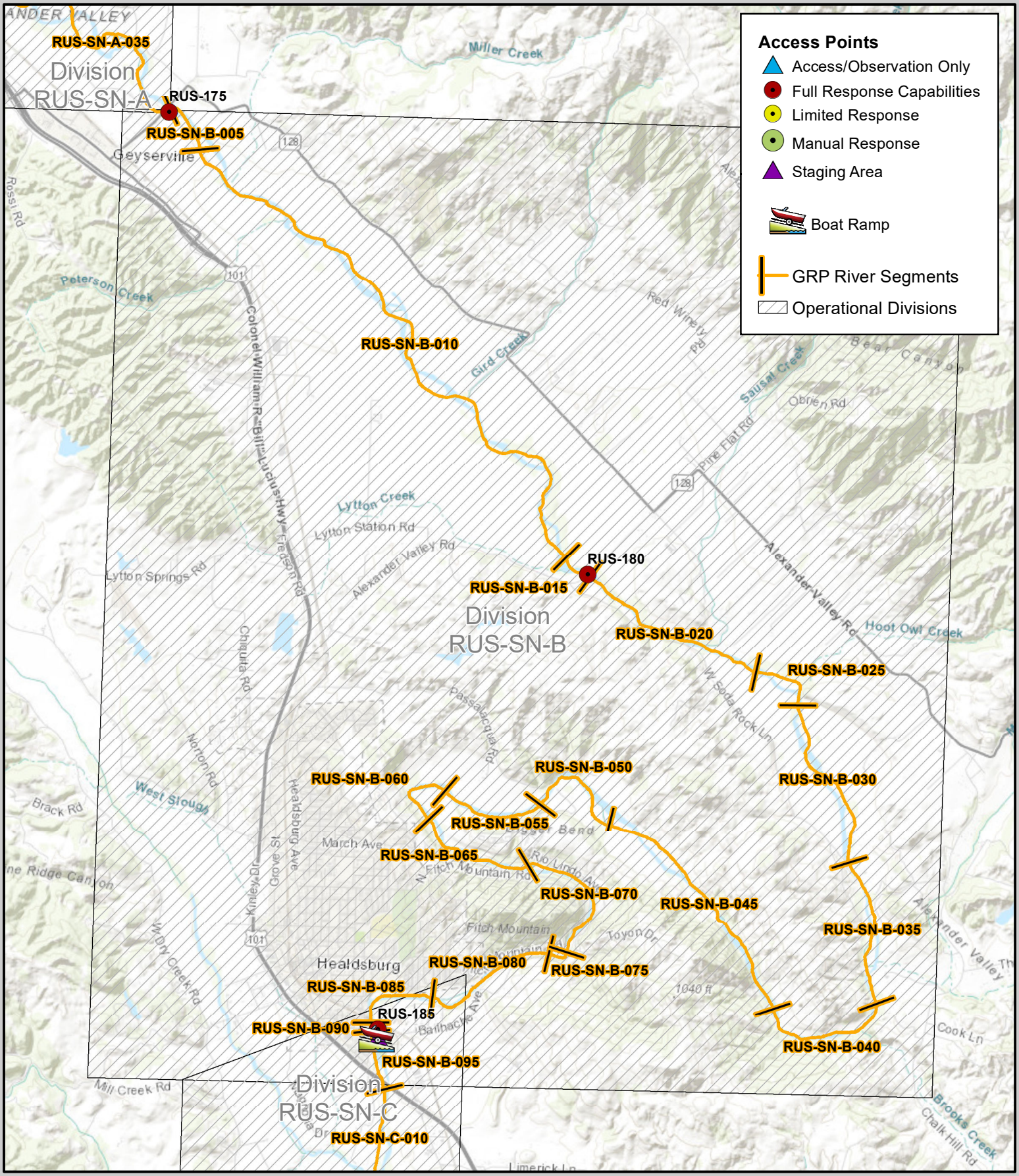
Figure 3-6: Russian River GRP Division RUS-SN-B Map



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

Author: S. Paine, CDFW
Date Created: 10/10/2019
Data Source: CDFW-OSPR, USGS

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Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-B

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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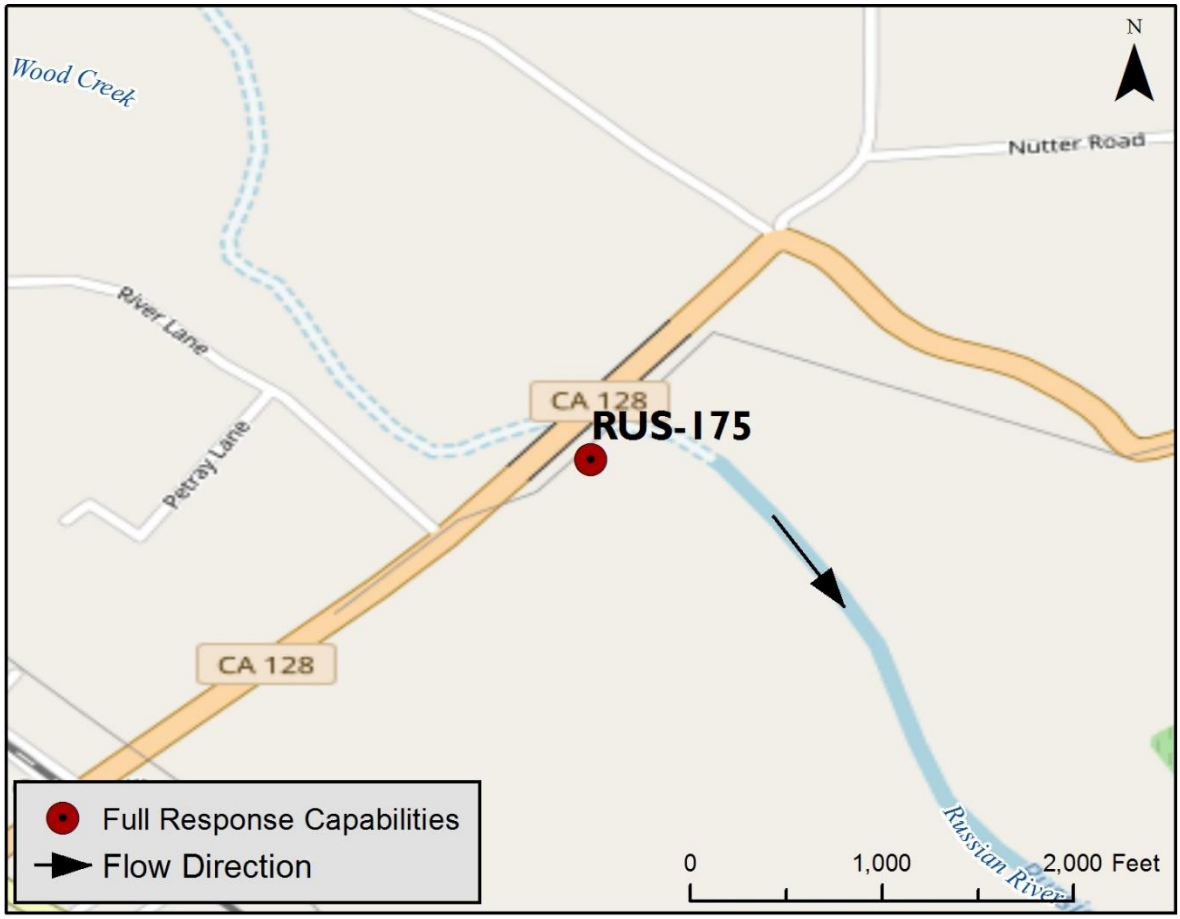
Latitude: 38.71238 **Longitude:** -122.89531	**Driving Directions**
Highway Postmile: SON 5.491	From Hwy 101, take exit 512 onto Hwy 128 E toward Geyserville. Proceed S ~ 0.9mi through Geyserville then Proceed E toward the Russian River. Parking is on the west side of the river/southeast side of the bridge.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 240/4A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access through a locked gate
- Trip and fall hazards, slippery when icy or wet
- Vehicle access to shoreline down a cobble/gravel path
- Water can move swiftly at this site

Resources-At-Risk

Ecological: California Giant Salamander, Western Pond Turtle, Foothill Yellow-legged Frog, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic:

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 75 meters (246 feet)

Gradient: Medium

Site Contact/s:

Geyersville FD
(707) 857-3535

Site Location/Segment: RUS-SN-B-005

This area has a gravel parking lot with vehicle access close to water. Gate to access site must be unlocked by PG&E or Sonoma County Fire Department. Water is shallow enough in spots for responders to wade across the river.

Vehicular Access: 4WD Pick-Up

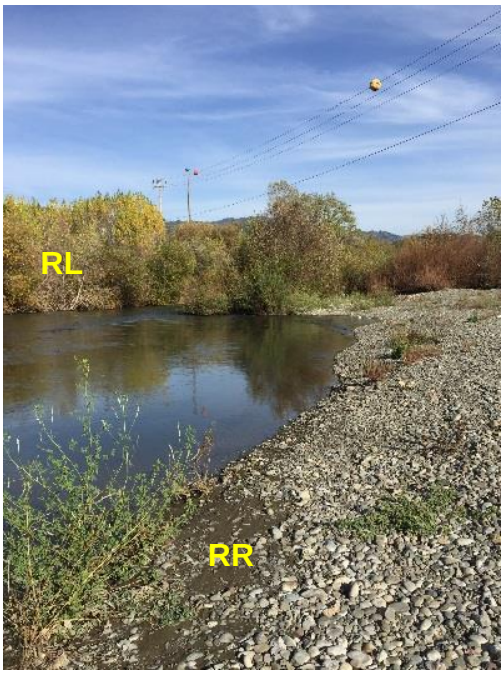
Recreational Use: Rafting, Fishing

Boat Launches: Skiffs can be launched from the shore

ESI Shoreline Type: 6A – Gravel beaches and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream
Photo Date: 12/20/2016



Downstream
Photo Date: 11/21/2017

Straight Across
Photo Date: 11/21/2017

RR = River Right RL = River Left

Response Strategy Site: 128 Bridge (RUS-175)

Site Objectives: Deflection/Collection

Implementation: Deploy deflection leg upstream to try and slow product down into collection area (just under and to the east of the bridge); 2 collection areas may be utilized due to possible entrainment from swift currents; use heaving lines (or wade) to get boom across river.

Staging Area Location and Capabilities/Amenities/Waste Management: No larger than a 70 bbl vac truck must be used due to the soft sediment along the shoreline

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	600 feet	50ft for the deflection, 300ft for the first collection strategy, and 250ft for the second collections strategy
Anchors	Danforth	40	lb	5	1 anchor for the deflection, 2 mid-stream anchors for each of the collection strategies
Stakes				4	Use to secure boom to shoreline
Personnel				6	

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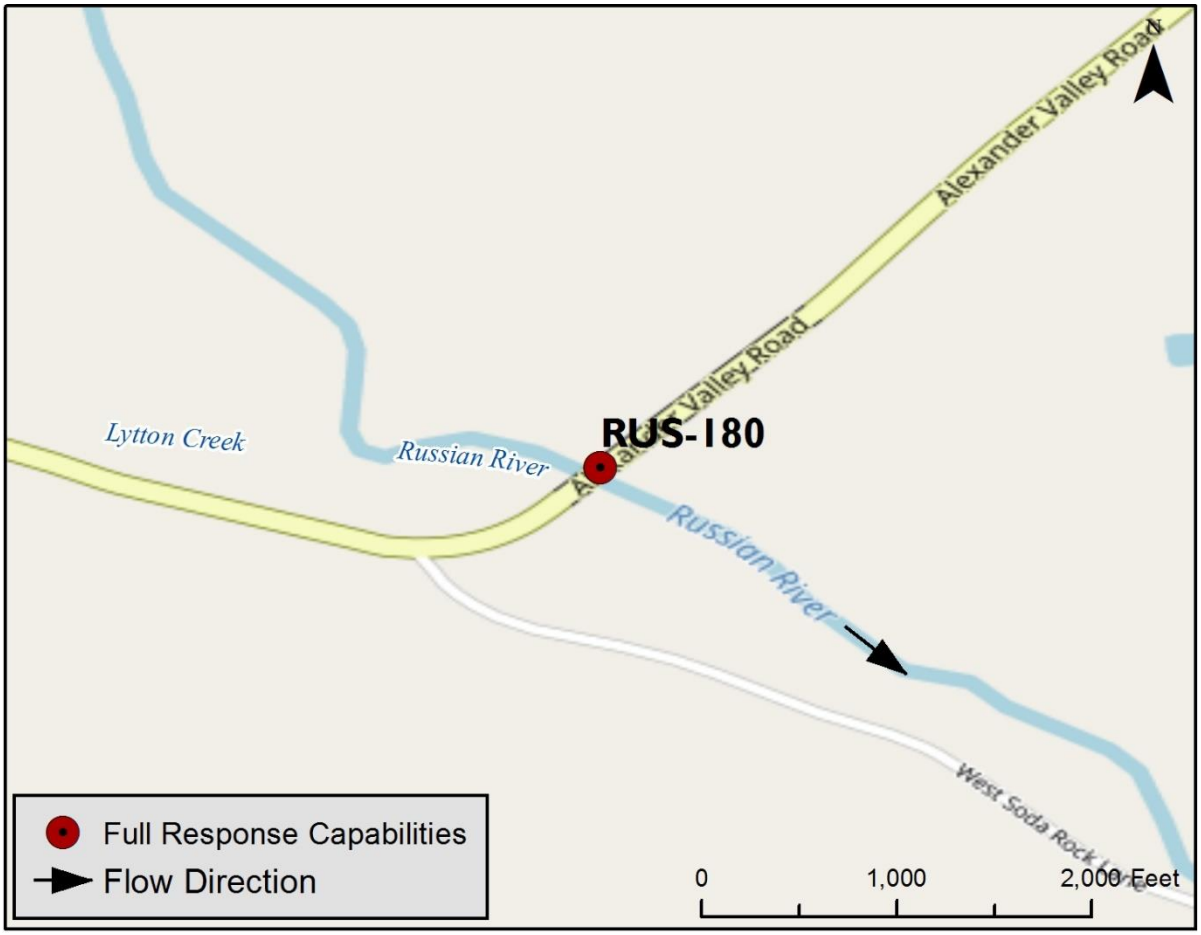
Response Strategy Site: Alexander Valley Road (RUS-180)

Latitude: 38.65880 **Longitude:** -122.82949	**Driving Directions**
Highway Postmile: N/A	From Highway 101, take exit 507 east onto Lytton Springs Rd toward Alexander Valley Rd. Turn left onto Lytton Station Rd and continue for ~ 1.4mi. Turn left onto Alexander Valley Rd. and continue for ~ 1.4mi. Park in a small pullout on the southwest side of bridge.
Railroad Milepost: N/A	
Nearest Address: 2411 Alexander Valley Rd., Healdsburg 95448 **Thomas Guide #:** 240/5B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Shoreline access is through RV campground or from foot trail
- Access through a locked gate
- Trip and fall hazards, slippery when icy or wet
- Under normal flow condition may be able to wade across river (south of bridge)

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Alexander Valley RV Park & Campground

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 50 meters (164 feet)

Gradient: Medium

Site Contact/s:

Alexander Valley RV Park & Campground
(707) 431-1453

Site Location/Segment: RUS-SN-B-020

The river is narrow (~8m) in the summer but can widen in winter spring. There is ~150yds of gravel shoreline on the west side. Contact Alexander Valley RV Park & Campground for vehicle access to shoreline.

Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing, Camping

Boat Launches: N/A

ESI Shoreline Type: 6A – Gravel beaches and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 08/22/2017

Site Objectives: Collection

Implementation: Depending on flow, may use up to 3 collection formations; Under normal flow conditions waders may be used to get across the river.

Staging Area Location and Capabilities/Amenities/Waste Management: Vehicle access to shoreline is through Anderson Valley RV Park

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	400 feet	During high flow, 3 collection strategies may be necessary
Anchors	danforth	40	lb	6	2 midstream anchors per collection strategy
Stakes				9	Use to anchor boom to shoreline
Personnel				8	

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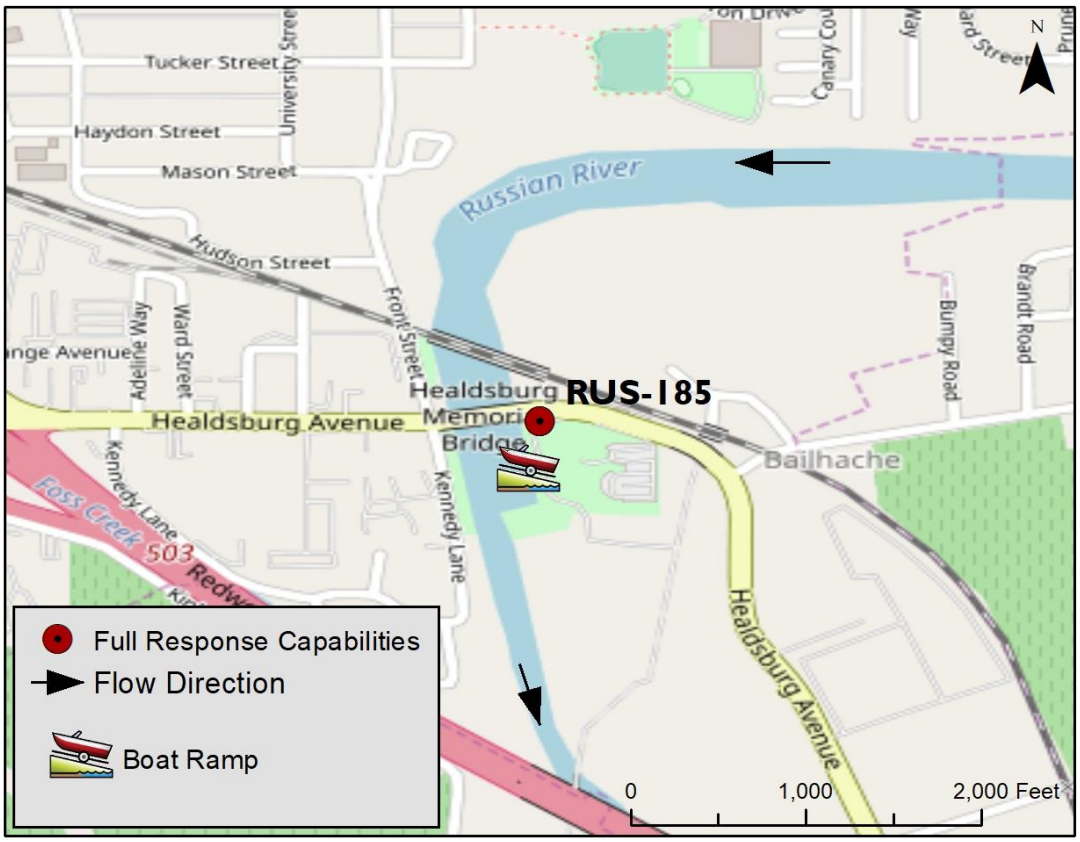
Response Strategy Site: Healdsburg Veterans Memorial Park (RUS-185)

Latitude: 38.60392 **Longitude:** -122.85933	**Driving Directions**
Highway Postmile: N/A	From Highway 101, take exit 503 and head east on Old Redwood Hwy/Healdsburg Ave. Entrance to park is just past the Healdsburg Ave Bridge on the right through a gate (that is open from 7am to sunset).
Railroad Milepost: N/A	
Nearest Address: 13839 Old Redwood Hwy, Healdsburg 95448 **Thomas Guide #:** 226/6A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Shoreline access is through Park run by Sonoma County Regional Parks Department
- Access through locked gate
- Park is open from 7am to sunset
- Seasonal dam in place during summer months
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, Navarro roach, narrow-anthered brodiaea

Economic: Healdsburg Veterans Memorial Beach, River's Edge Kayak & Canoe Trips

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 75 meters (246 feet)

Gradient: Low

Site Contact/s:

Ranger Station
(707) 433-1625

Sonoma Co. Regional Parks
(707) 565-2041

Site Location/Segment: RUS-SN-B-90

This is a county park with a large (~300 meters) sandy beach on the east side of the river, backed by dunes. Water moves slower in summer when the seasonal dam (south of boat launch) is in place. The beach is staffed by lifeguards during the summer. Heavy recreational use during the summer, as well.

Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Beaches, Swimming

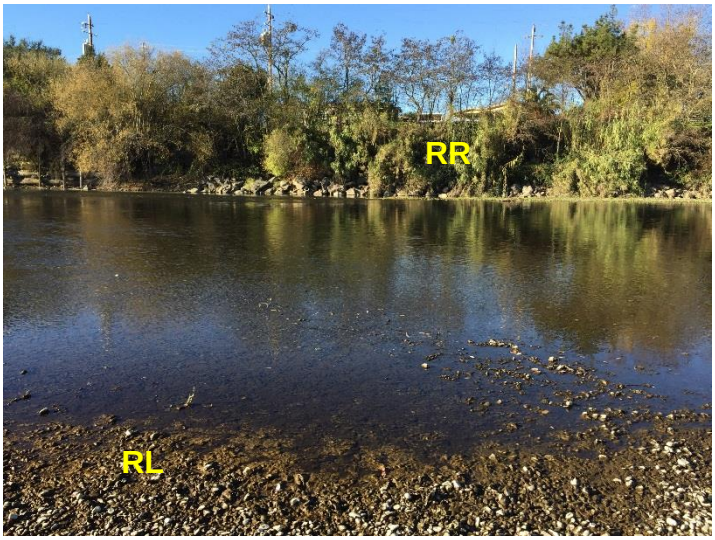
Boat Launches: Boat launch on-scene

ESI Shoreline Type: 4 – Sandy beach, gently sloping banks; 1B – Exposed, solid man-made structures

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 12/05/2017

Site Objectives: Collection

Implementation: Set-up collection under Healdsburg Ave. bridge

Staging Area Location and Capabilities/Amenities/Waste Management: Large parking lot on-site with bathroom facilities

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	600 feet	
Anchor	Danforth	40	lb	8	
Stakes				3	Stakes for shore-side anchoring
Boat	whaler	17	ft	2	
Personnel				8	4 boat crew, 4 shore-side crew

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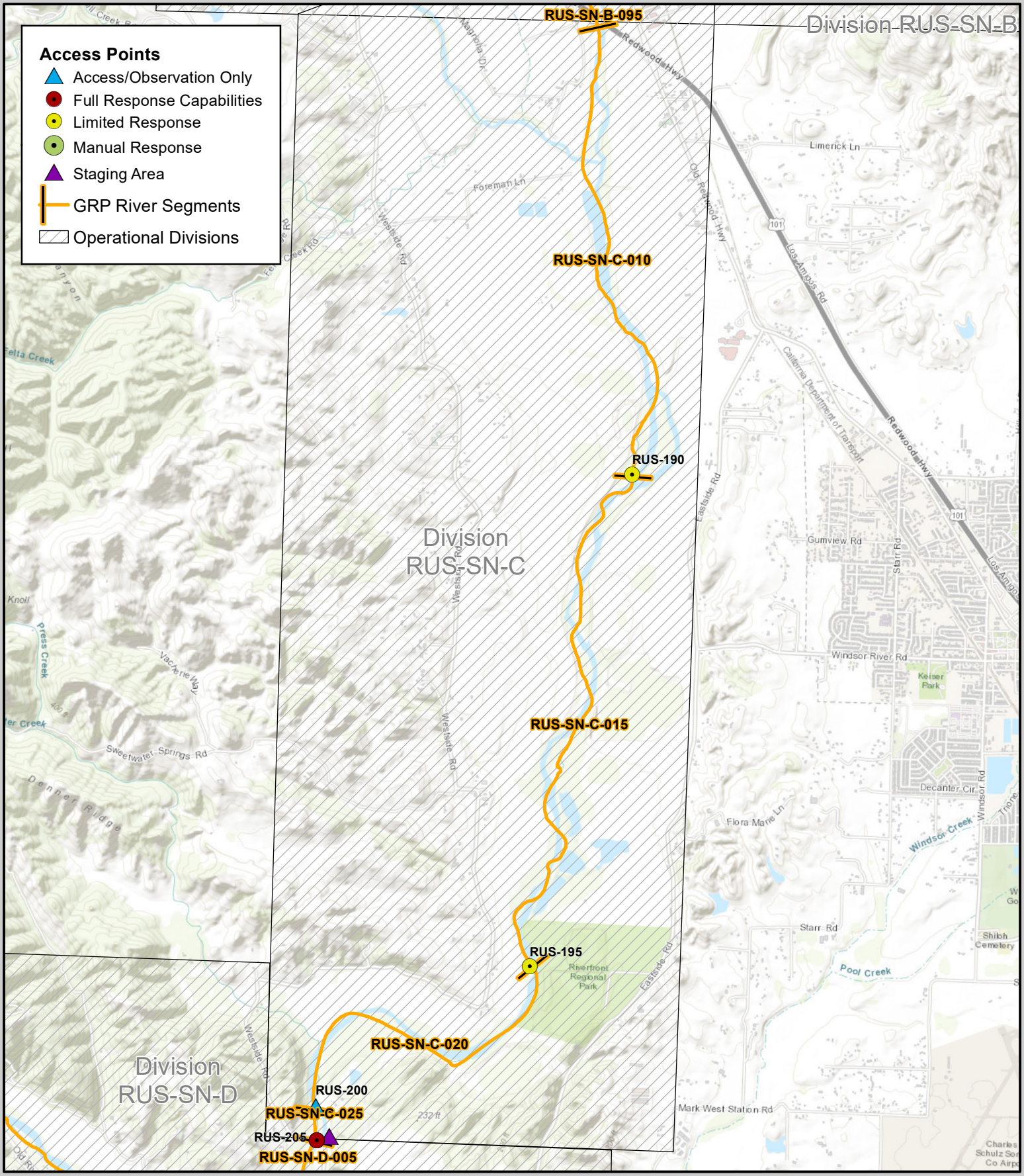
Figure 3-7: Russian River GRP Division RUS-SN-C Map



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

Author: S. Paine, CDFW
Date Created: 9/30/2019
Data Source: CDFW-OSPR, USGS

T:\Projects\Work_in_Progress\GRP_maps\RussianRiver\Maps\mxds\RussianRiver_SN_C_20190522.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-C

0 0.5 1 Miles
0 0.5 1 1.5 Km

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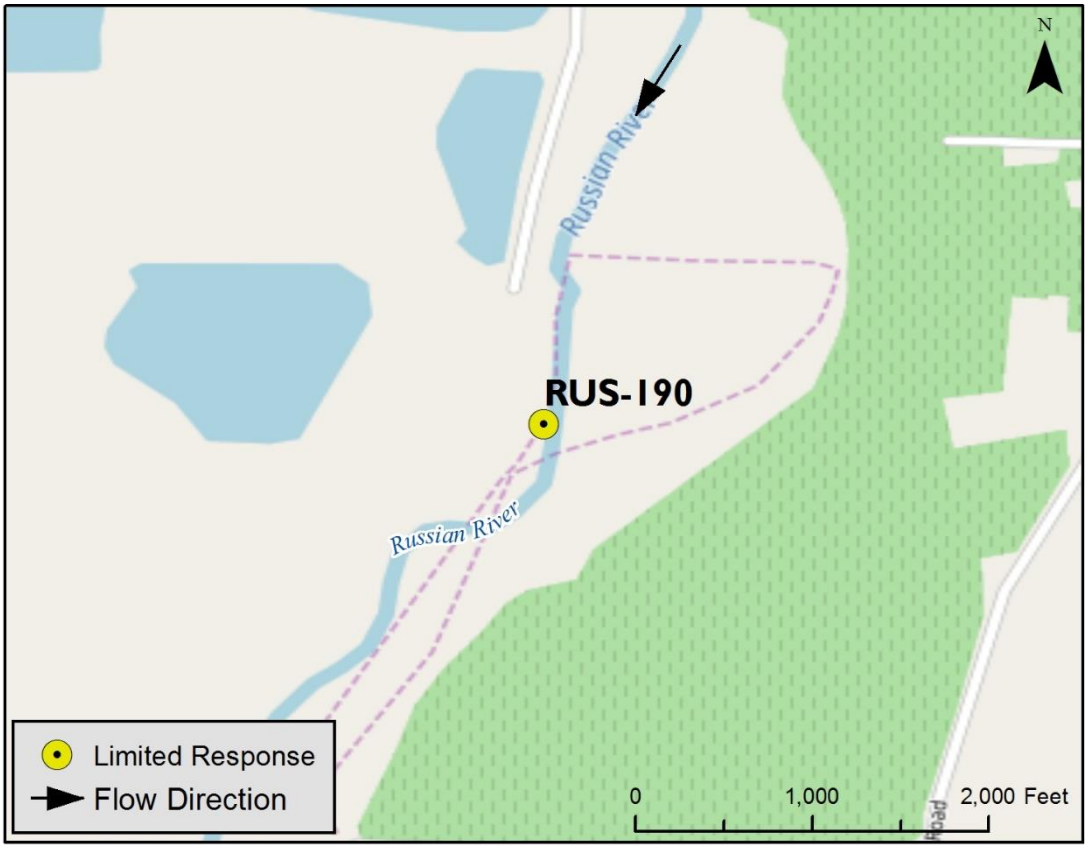
Response Strategy Site: Skinner Road (RUS-190)

Latitude: 38.56135 **Longitude:** -122.85329	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, take exit 503 and head north on Healdsburg Ave. At the roundabout, take the 4th exit onto Westside Rd., continue on Westside Rd for ~2.9mi. Take a right on Felta Rd then a left on Foreman Ln. Proceed to locked gate near the City of Healdsburg Water Reclamation Facility. The dirt road beyond the gate is known as Skinner Rd (frontage road). Follow that frontage road along the river to a turnout.
Railroad Milepost: N/A	
Nearest Address: 300 Foreman Lane, Healdsburg 95448 **Thomas Guide #:** 240/7A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access through several locked gates
- Levee access may be restricted during bad weather
- Trip and fall hazards, slippery when icy or wet
- Near Healdsburg wastewater treatment plant
- Levee road runs adjacent to wineries
- Access site may not be accessible during times of high flow

Resources-At-Risk

Ecological: Western Pond Turtle, Townsend's big-eared bat, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Toad Hollow Vineyards, Twomey Cellars

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 25 meters (82 feet)

Gradient: Medium

Site Contact/s:

Sonoma County Fire and Emergency Services
Hazardous Materials Unit
(707) 565-1152

Site Location/Segment: RUS-SN-C-010

Site is an off road/levee that runs along the west side of the Russian River behind private property (i.e., wineries). The access site may be under water during high flow events. Short stretches of sand/dirt adjacent to the water may limit response activities.

Vehicular Access: 4WD Pick-Up, ATV

Recreational Use: N/A; Rafters/boaters may come from up/down stream

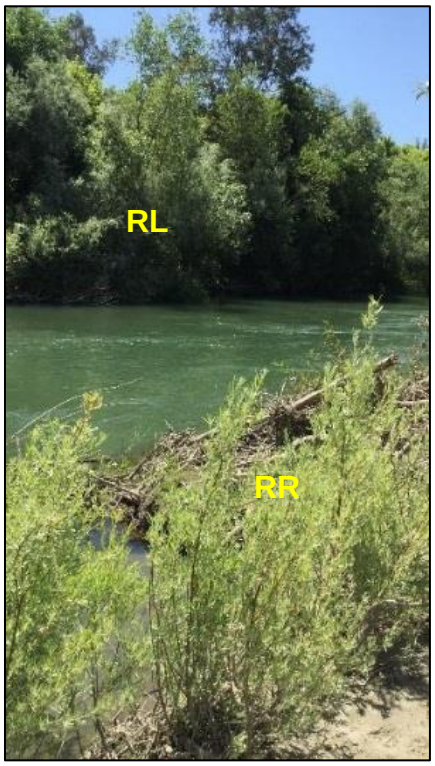
Boat Launches: Boat would have to come from downstream at the Wohler Bridge Fishing Access boat launch

ESI Shoreline Type: 5 – Mixed sand/gravel beach and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream

Entrance



Downstream

RR = River Right RL = River Left

Photo Date: 06/06/2017

Response Strategy Site: Skinner Road (RUS-190)

Site Objectives: Collection

Implementation: When environmental conditions are favorable, get access to levee road from appropriate entity (e.g., law enforcement, etc.). Deploy boom to collect product along the west side of the river. Boat would have to launch from Wohler Bridge Fishing Access.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging equipment on site may be difficult due to narrow road and soft substrate.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	in	200 feet	
Anchors	Danforth	40	lb	2	2 midstream anchors
Stakes				3	Use to anchor boom on the shoreline
Personnel				4	

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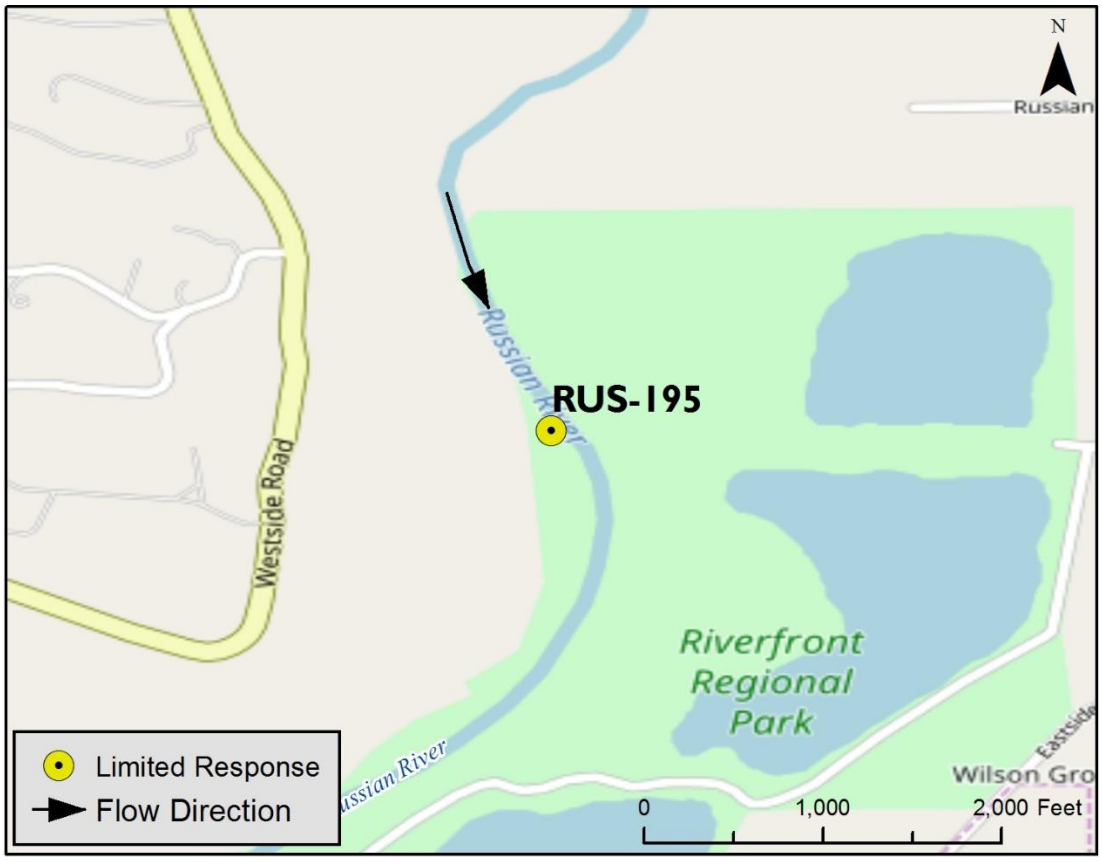
Response Strategy Site: Westside Farms (RUS-195) Page 1 of 3

Latitude: 38.52184 **Longitude:** -122.86219	**Driving Directions**
Highway Postmile: N/A	From Hwy 101 (SW of Healdsburg), take exit 503 and head north toward Healdsburg Ave. At the roundabout, take the 4th exit onto Westside Rd., continue on Mill street/Westside Road and continue for ~ 7mi then take a left onto Westside Farms property. Take the farm road toward the river.
Railroad Milepost: N/A	
Nearest Address:7097 Westside Rd., Healdsburg 95448 **Thomas Guide #:** 240/7A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access through locked gate
- Access on private property
- Levee access may be restricted during bad weather
- Trip and fall hazards, slippery when icy or wet
- Levee road runs adjacent to wineries
- Access site may not be accessible during times of high flow

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Riverfront Regional Park, Gracianna Winery

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 35 meters

Gradient: Medium

Site Contact/s:

Westside Farms
(707) 433-0870

Site Location/Segment: RUS-SN-C-015

Site must be accessed through private property behind a locked gate. Site may not be accessible during high flow and/or bad weather. Narrow path to shoreline may make it difficult for heavy equipment to access. Gravel substrate near the river. Banks heavily vegetated north and south of the access point.

Vehicular Access: 4WD Pick-Up, ATV

Recreational Use: N/A; Rafting coming from upstream

Boat Launches: Boat would have to launched from Wohler Bridge fishing access.

ESI Shoreline Type: 6A – gravel beaches and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream

Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 06/06/2017

Response Strategy Site: Westside Farms (RUS-195) Page 3 of 3

Site Objectives: Collection

Implementation: When environmental conditions are favorable, get access to levee road from appropriate entity (e.g., law enforcement, etc.). Deploy boom to collect product along west side of river. Boat would have to launch from Wohler Bridge Fishing Access.

Staging Area Location and Capabilities/Amenities/Waste Management: Due to the narrow entrance/egress from the shoreline, large storage containers/vehicles/etc., may have a difficult time accessing this area even under the best of circumstances.

Response Strategy Map (overview)

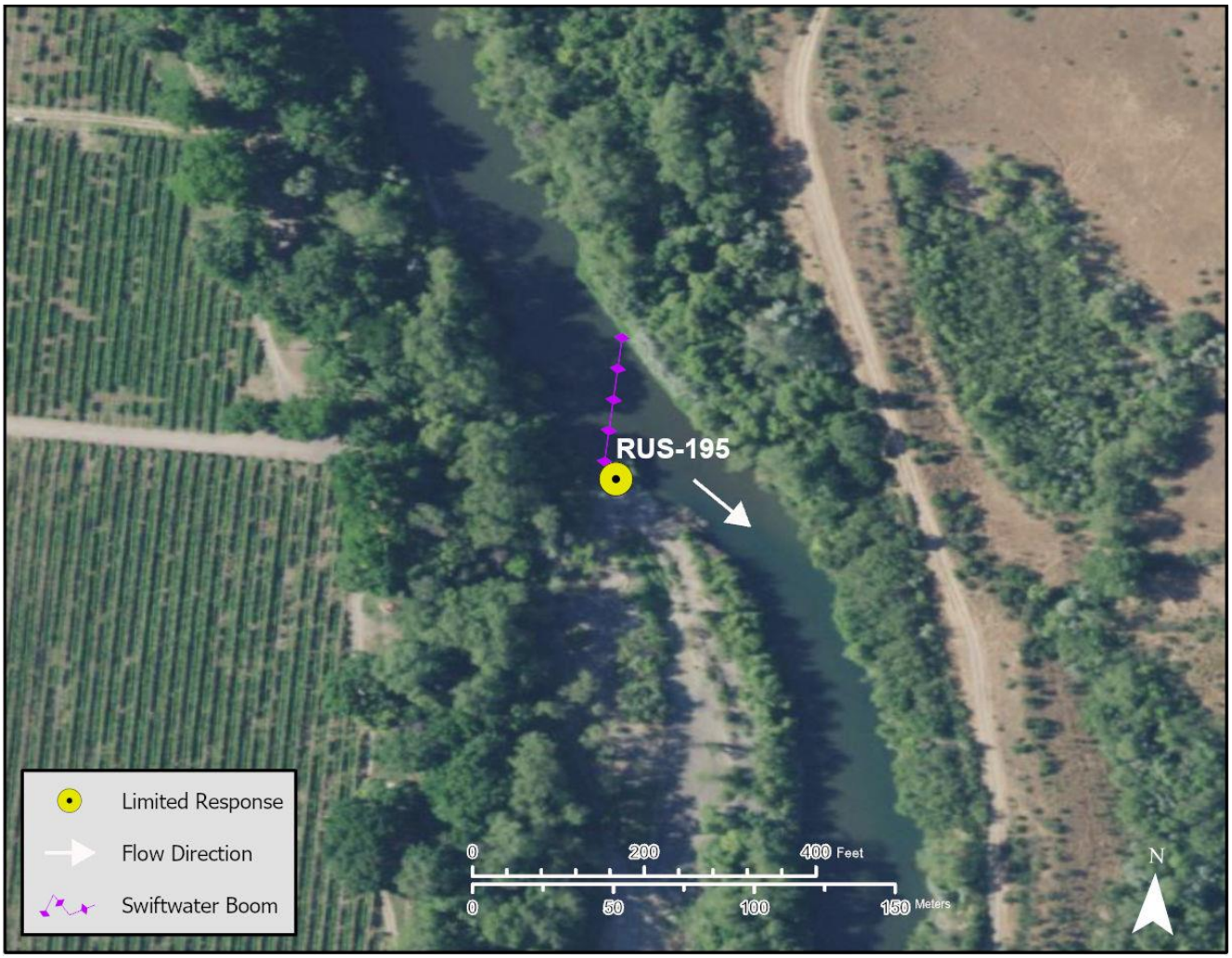


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	in	200 feet	
Anchor	Danforth	40	lb	2	2 midstream anchors
Stakes				3	Use to anchor boom to shoreline
Personnel				4	

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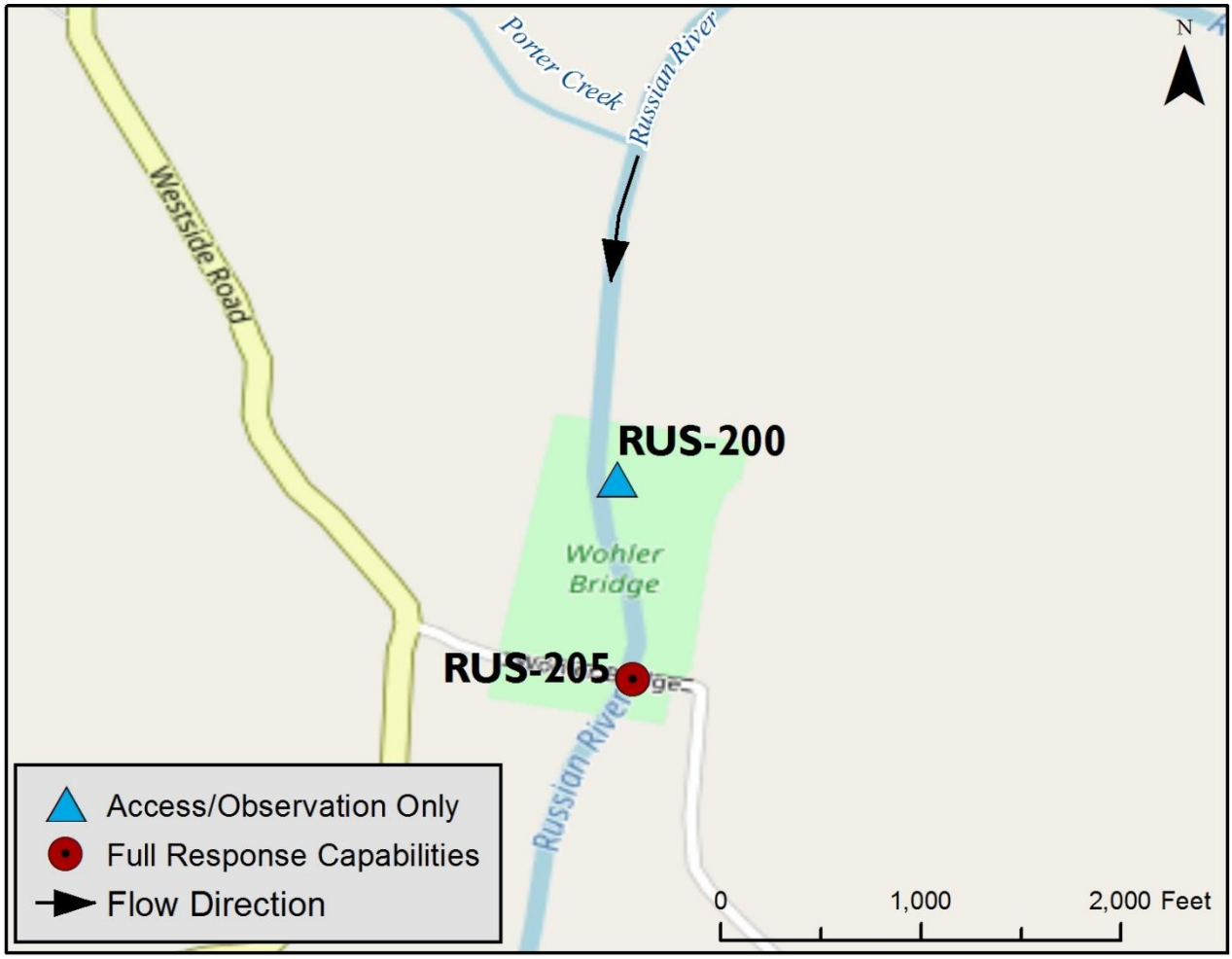
Access/Observation Site: North end of Wohler Road (RUS-200)

Latitude: 38.51014 **Longitude:** -122.88360	**Driving Directions**
Highway Post Mile: N/A	From the north: Take Hwy 101 south to the Westside Rd./Mill St. exit in Healdsburg, head west and then south on Westside Rd. Turn left on Wohler Rd., then cross Wohler Bridge. Take a left and proceed east past a locked gate until the dirt road terminates. Follow this road towards the water. From the south: Take Hwy 101 north to the River Rd./Mark West Springs Rd. exit near Fulton. Turn left onto River Rd. and travel west. Turn right on Trenton-Healdsburg Rd., followed by a right onto Eastside Rd. Make a right onto Wohler Rd. and proceed to the Wohler Bridge.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Intermittent	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Must cross single lane Wohler Bridge (if coming from Westside Rd.)
- Swift water during winter and spring flows
- Must gain access through a locked gate
- Trip and fall hazards, slippery when icy or wet

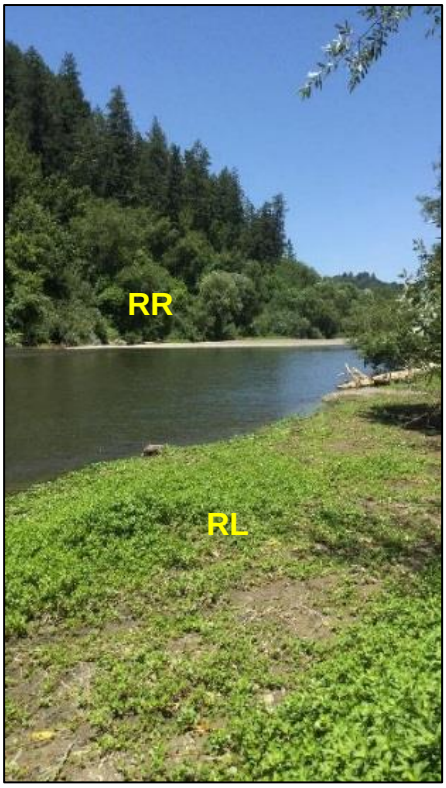
Site Description and Field Notes

Site Location/Segment: RUS-SN-D-005

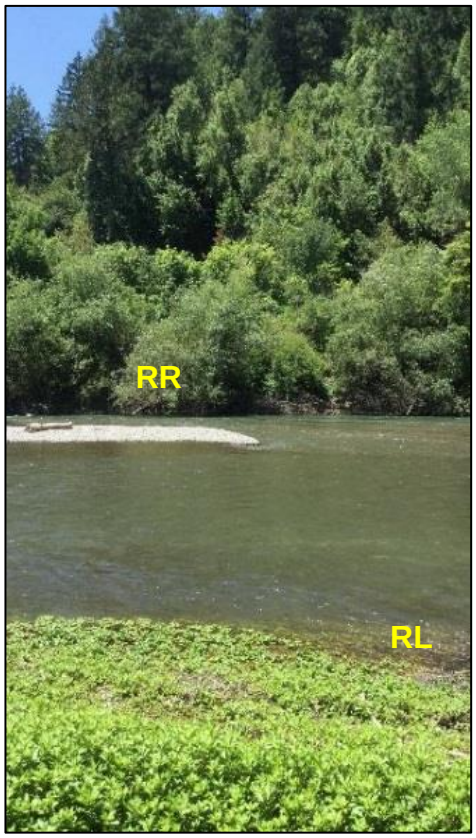
An observation point on the eastside of the Russian River, north of the Wohler Bridge. Access to through a private gate to the shore. A mostly vegetated shoreline, transitions to pebble/gravel substrate. Shoreline is walkable all the way to the bridge (at times of low river flow). Boom deployment is best from the opposite shore (Wohler Bridge Fishing Access). See RUS-205 Response Strategy Sheet.

Site Contact/s:
Sonoma County Water Agency – (707) 523-1070 (Operations Desk 24hrs)

Site Images



Upstream



Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 06/06/2017

Latitude: 38.50741
Longitude: -122.88338

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address: 9765 Wohler Road, Forestville 95446
Thomas Guide #: 242/1A

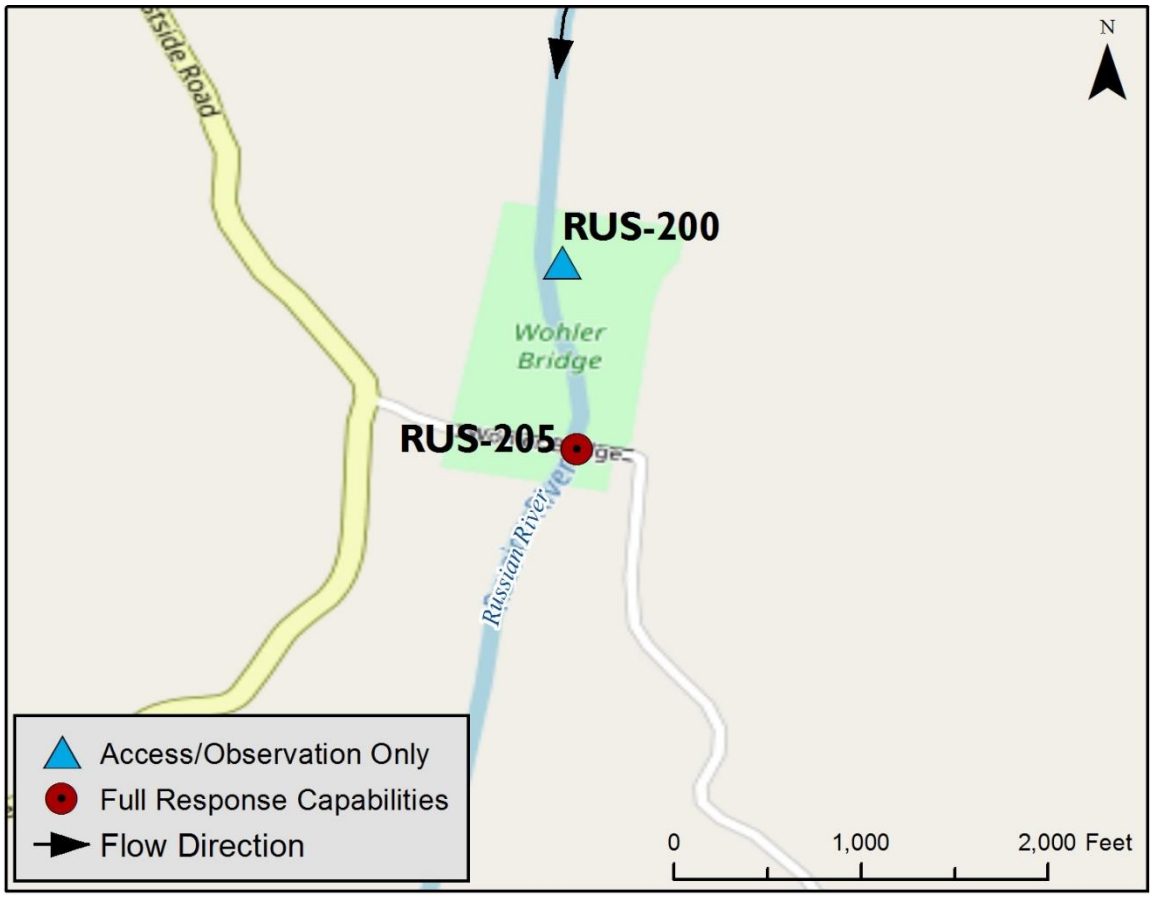
Cell Service: Intermittent

Driving Directions

From the north: Take Hwy 101 south to the Westside Rd./Mill St. exit in Healdsburg, head west and then south on Westside Rd. Turn left on Wohler Rd., then cross Wohler Bridge. Take a left and proceed east past a locked gate until the dirt road terminates. Follow this road towards the water.

From the south: Take Hwy 101 north to the River Rd./Mark West Springs Rd. exit near Fulton. Turn left onto River Rd. and travel west. Turn right on Trenton-Healdsburg Rd., followed by a right onto Eastside Rd. Make a right onto Wohler Rd. and proceed to the Wohler Bridge.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Area maintained by Sonoma County Regional Parks
- Swift water during winter and spring flows
- Access to boat launch through a locked gate
- Trip and fall hazards, slippery when icy or wet
- High use recreational fishing area

Resources-At-Risk

Ecological: Western Pond Turtle, Foothill Yellow-legged Frog, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Wohler Bridge Fishing Access

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 60 meters (197 feet)

Gradient: Medium

Site Contact/s:

Sonoma Co Regional Park Ranger Station
(707) 433-1625

Site Location/Segment: RUS-SN-D-005

Recreational fishing area. Operated and maintained by Sonoma County Regional Parks. Approximately 300 meters of exposed sandy shoreline, depending on water level.

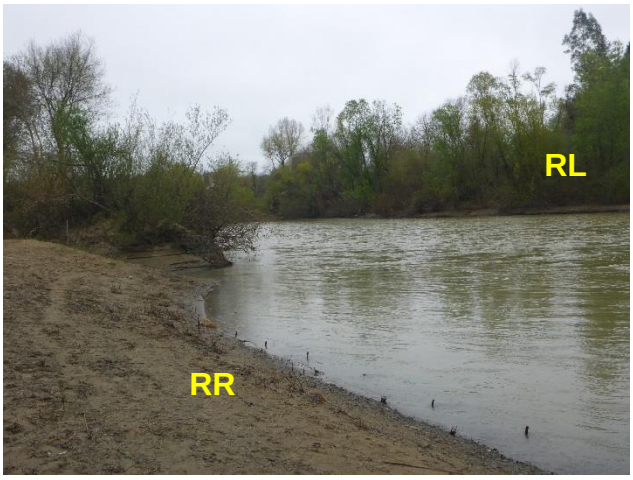
Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing

Boat Launches: Seasonal boat launch (October 1 – May 15)

ESI Shoreline Type: 4 – Sandy beach and gently sloping banks; 9B – vegetated low banks

Site Images



Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 03/15/2017

Site Objectives: Collection

Implementation: Collect product on west side of river.

Staging Area Location and Capabilities/Amenities/Waste Management: 70 bbl vac truck could be staged here

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	300 feet	
Anchor	Danforth	40	lb	4	4 midstream anchors
Stakes				3	To use to secure boom to shoreline
Boat	Skiffs	16	ft	2	Use skiffs to get across river to deploy boom
Personnel				6	4 boat crew, 2 shore side crew

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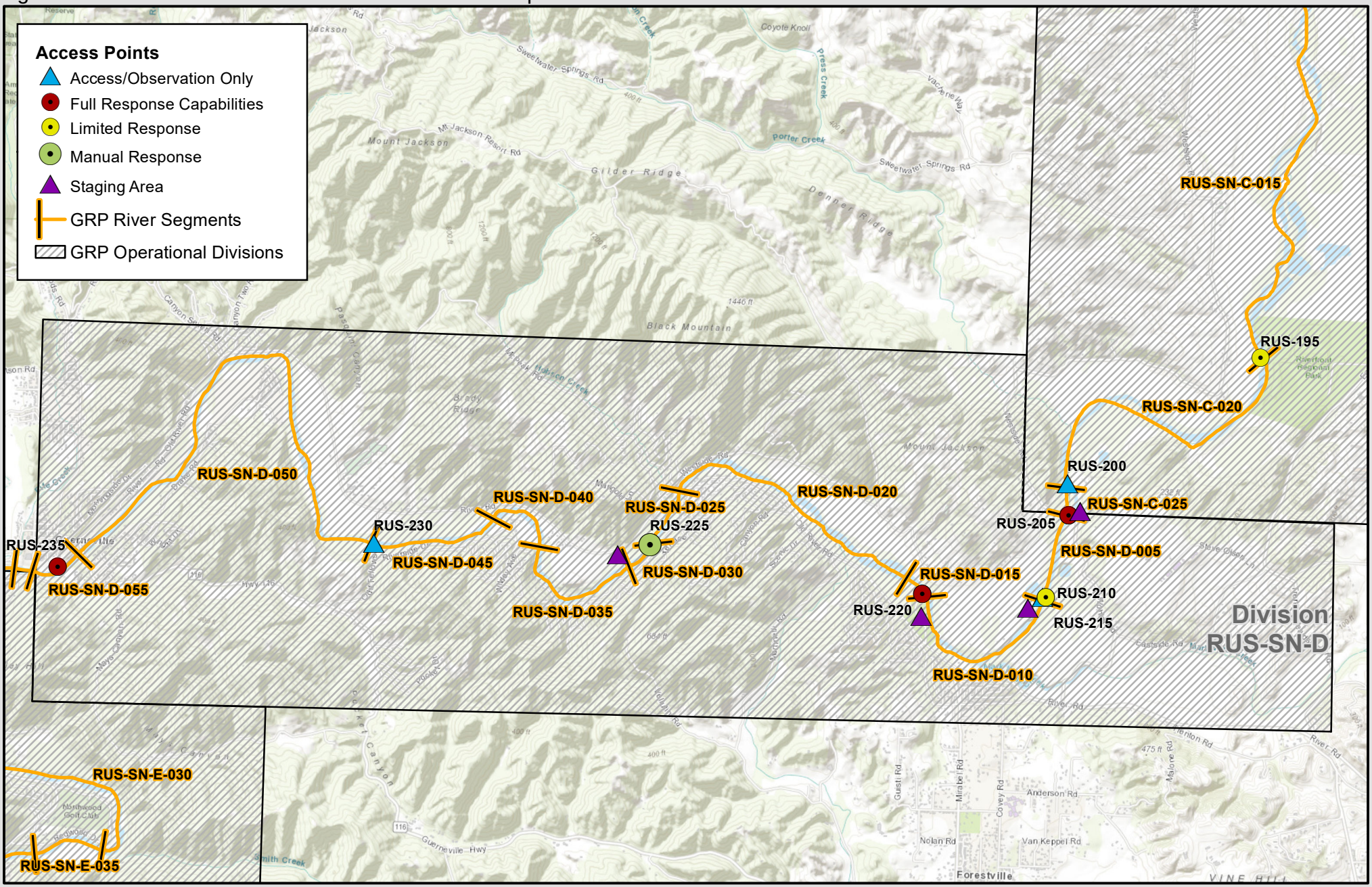
Figure 3-8: Russian River GRP Division RUS-SN-D Map



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

Author: S. Paine, CDFW
Date Created: 9/30/2019
Data Source: CDFW-OSPR, USGS

T:\Projects\Work_in_Progress\GRP_maps\RussianRiver\Maps\mxds\RussianRiver_SN_D_20190424.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-D

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0 1 2 3 Kilometers

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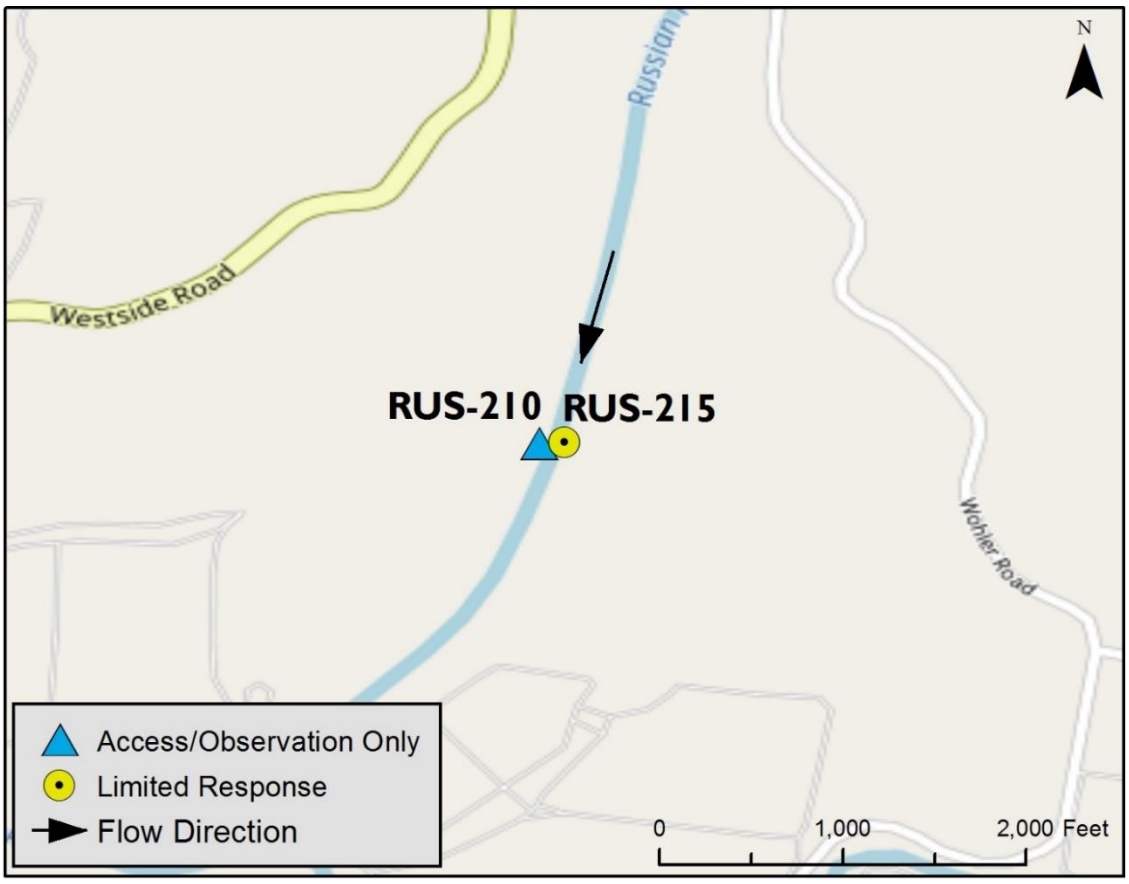
Response Strategy Site: Mirabel Dam (RUS-210)

Latitude: 38.50001 **Longitude:** -122.88607	**Driving Directions**
Highway Postmile: N/A	From the north: Take Hwy 101 south to the Westside Rd./Mill St. exit in Healdsburg, head west and then south on Westside Rd. From Westside Road, take a left ~0.9mi southwest of Wolher Road onto Water Agency Property (directly across from Moshin Vineyards winery). Access through a locked gate. Need a passcode to enter the property. From the south: Take Hwy 101 north to the River Rd./Mark West Springs Rd. exit near Fulton. Turn left onto River Rd. and travel west. Turn right on Trenton-Healdsburg Rd., followed by a right onto Eastside Rd. Make a right onto Wohler Rd. and travel north. Turn left on Wohler Rd. to cross Wohler Bridge, then turn left onto Westside Rd. From Westside Road, take a left ~0.9mi southwest of Wolher Road onto Water Agency Property (directly across from Moshin Vineyards winery). Access through a locked gate. Need a passcode to enter the property.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 242/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Must gain access through a locked gate
- Trip and fall hazards, slippery when icy or wet
- Seasonal inflatable dam
- SCWA installs boom in front of dam when dam is inflated and takes the boom down when it is deflated.

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Mirabel Dam

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 45 meters (148 feet)

Gradient: High

Site Contact/s:

Sonoma County Water Agency (24 hrs)
(707) 523-1070

Site Location/Segment: RUS-SN-D-010

Sonoma County Water Agency (SCWA) property. Water moves swiftly right in front of the building. This is a "summer dam". In a typical year, the dam is inflated from the beginning of April/May through the first rain. SCWA has boom in place in front of the dam during this time.

Vehicular Access: ATV

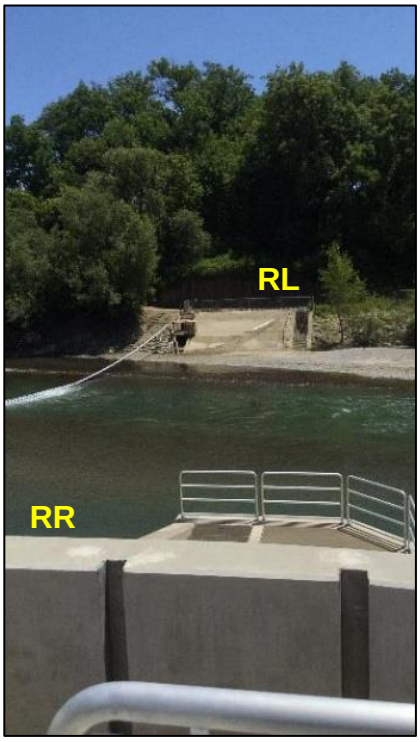
Recreational Use: N/A

Boat Launches: N/A

ESI Shoreline Type: 1B – Exposed, solid man-made structure; 4 – Sandy beach and gently sloping banks; 9B – vegetated low banks

Site Images

Upstream



Straight Across

Downstream

RR = River Right RL = River Left

Photo Date: 06/06/2017

Response Strategy Site: Mirabel Dam (RUS-210)

Site Objectives: Deflection/Collection

Implementation: Contact SCWA and have them deploy boom and, if necessary, inflate the dam.

Staging Area Location and Capabilities/Amenities/Waste Management: A vac truck may be able to collect any accumulated product on-site RUS-215, depending on condition of road.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
					See “Implementation” notes above.

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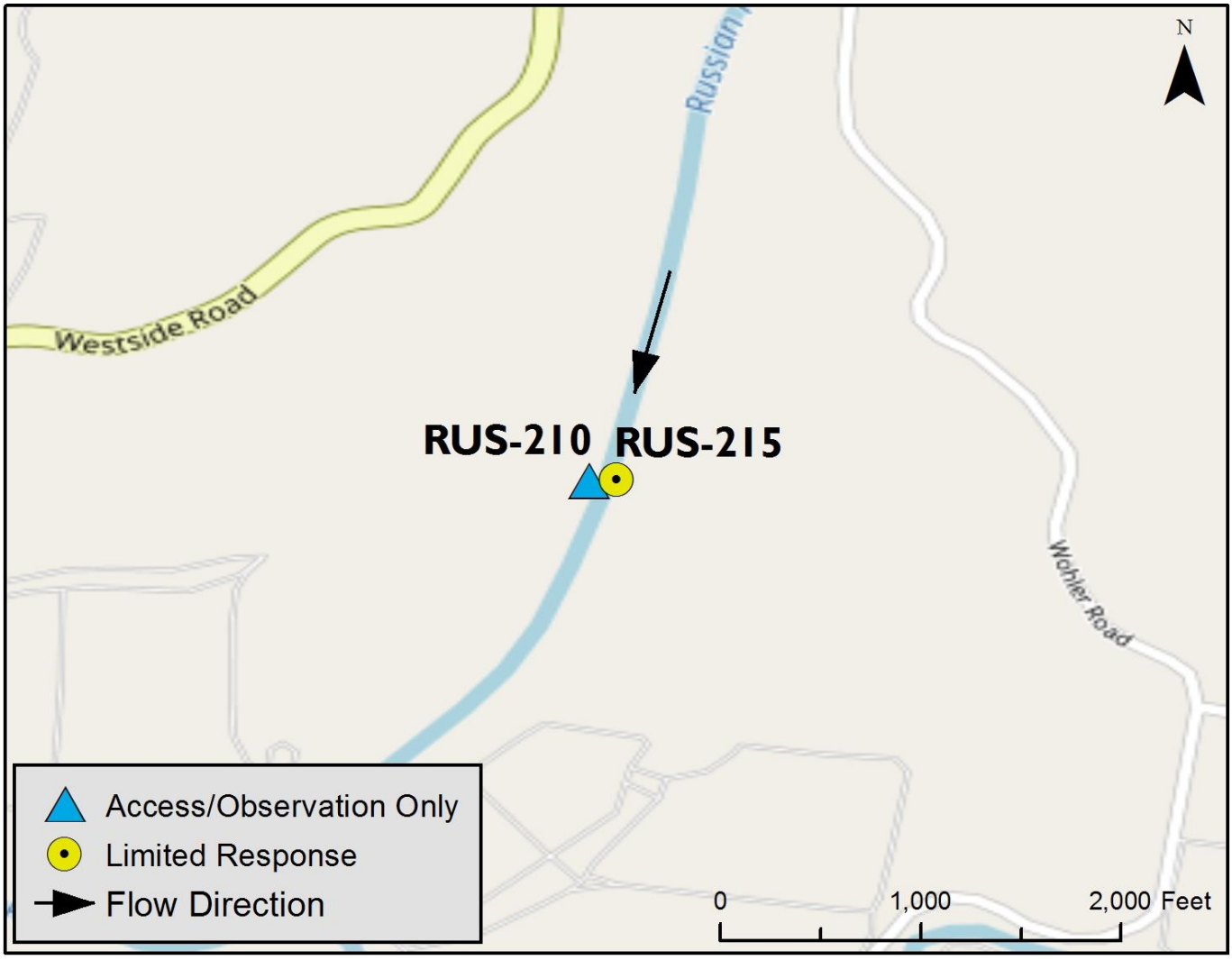
Access/Observation Site: Water Agency Property (RUS-215)

Latitude: 38.50004 **Longitude:** -122.88570	**Driving Directions**
Highway Post Mile: N/A	From Westside Rd. (west of Healdsburg), head east onto Wohler Rd then cross Wohler Bridge. Take a left and pass through a locked gate. Take an immediate, hard, left down a dirt road that passes under Wohler Bridge and continue to the end of the road.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 242/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Access is through 2 locked gates
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when icy or wet

Site Description and Field Notes

Site Location/Segment: RUS-SN-D-010

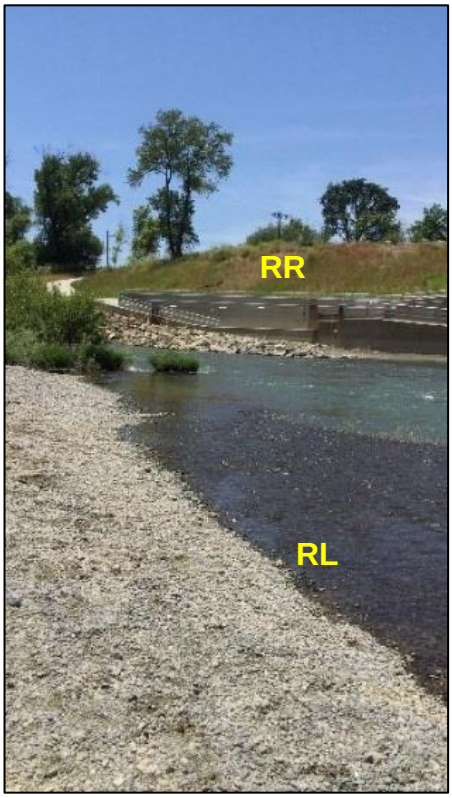
Access is on the eastern portion of the Russian River, south of the Wohler Bridge. There is minimal access to the gravel shoreline. Most of the shoreline is heavily vegetated. Area is adjacent to the inflatable summer dam. The dam is in place from the beginning of April/May through the first large rain event in a "normal" year. Boom is in place in front of the dam while the dam is inflated. Water can move swiftly in this area during winter/spring.

Site Contact/s:
Sonoma County Water Agency (Operations Desk 24hrs) – (707) 523-1070

Site Images

Upstream

Straight Across



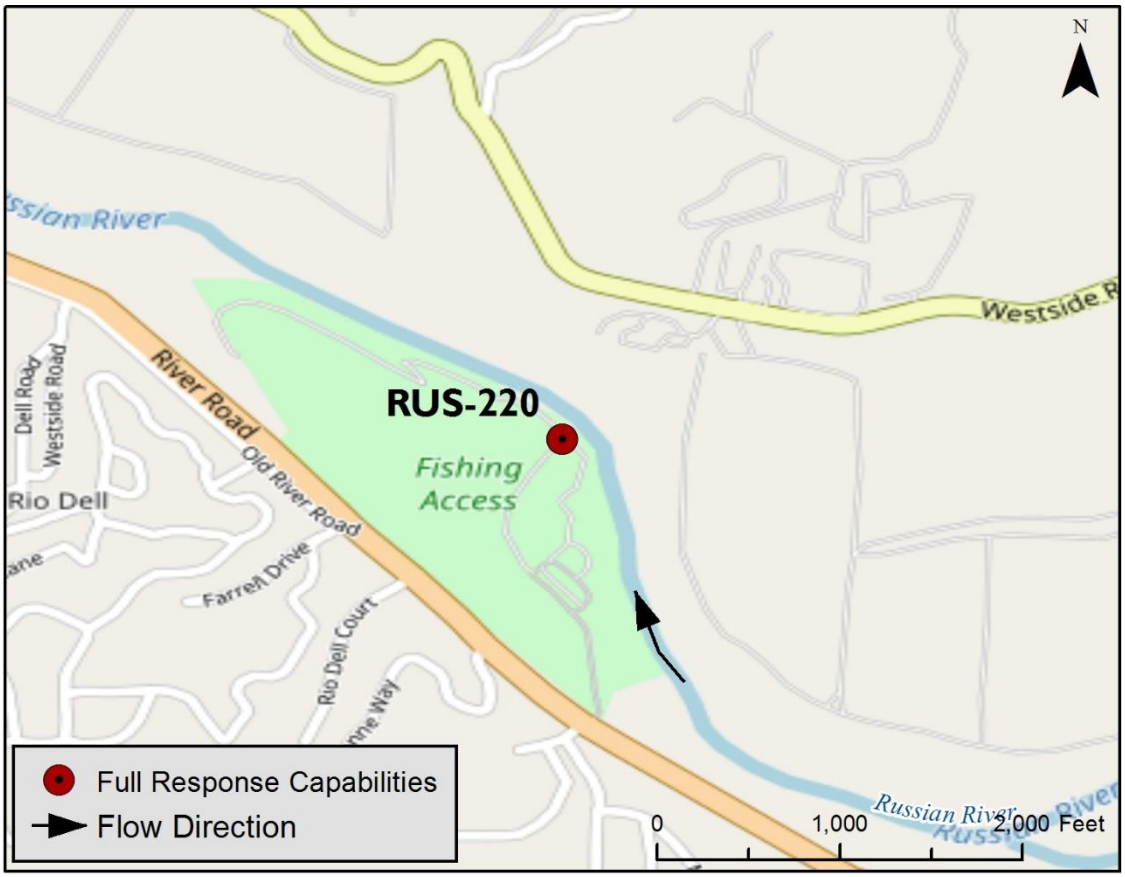
Downstream

RR = River Right RL = River Left

Photo Date: 06/06/2017

Latitude: 38.50000 **Longitude:** -122.89966	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, Take exit 494 west onto Mark West Springs Rd (going toward Guerneville). Continue straight on River Road for ~ 8.2mi. Turn right at Trenton Rd through the entrance to Steelhead Beach.
Railroad Milepost: N/A	
Nearest Address: 9000 River Rd., Forestville 95436 **Thomas Guide #:** 242/1A	
Cell Service: No	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Area maintained by Sonoma County Regional Parks
- Access to boat launch through a locked gate
- Trip and fall hazards, slippery when icy or wet
- High use recreational beach, rafting, and fishing area

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Steelhead Beach Regional Park, Burke's Canoe Trips

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 40 meters (131 feet)

Gradient: Low

Site Contact/s:

Sonoma County Regional Park Ranger Station
(707) 433-1625

Site Location/Segment: RUS-SN-D-020

Gently sloping beach with direct vehicle access. High use recreational site. Large parking area

Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing, Beaches

Boat Launches: Can launch canoes and kayaks year-round from the beach. Launching of larger watercrafts is available from October through mid-May

ESI Shoreline Type: 5 – Mixed sand and gravel beach and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 05/01/2018

Site Objectives: Collection

Implementation: Deploy boom for collection on the southern portion of the beach

Staging Area Location and Capabilities/Amenities/Waste Management: 70 bbl vac truck and adler tanks could be staged here

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	700 feet	Under “normal” flow conditions 400 ft would be sufficient; under high flow, decrease the angle/increase the length of boom necessary (by 300ft)
Anchor	Danforth	40	lb	2	Use 2 midstream anchors
Stakes				3	Use stakes to secure boom to shoreline
Boat	whaler	17	ft	2	
Personnel				8	4 boat crew, 4 shore side staff

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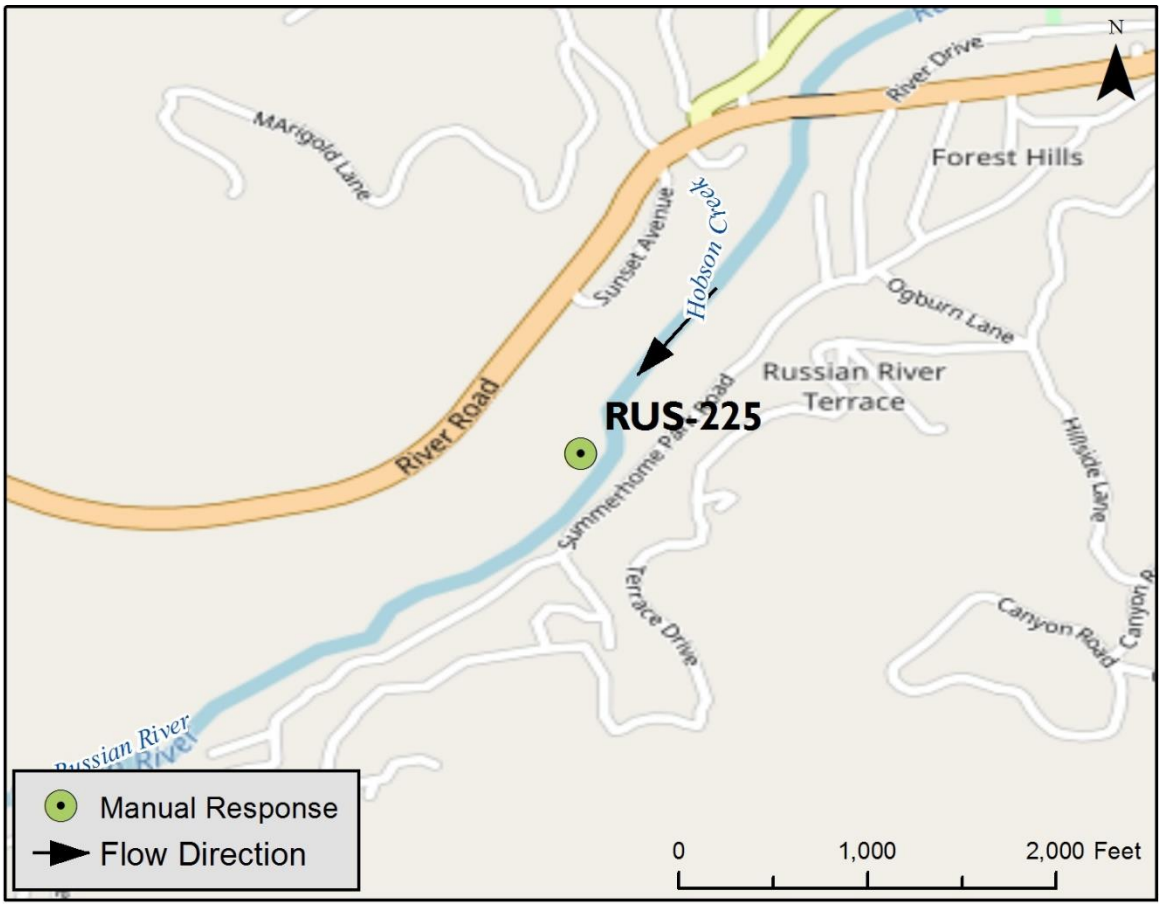
Response Strategy Site: Sunset Beach River Park (RUS-225)  Page 1 of 3

Latitude: 38.50366 **Longitude:** -122.93063	**Driving Directions**
Highway Postmile: N/A	From Hwy 101, Take exit 494 west onto Mark West Springs Rd. Continue straight on River Road for ~10.5mi then take a left into Sunset Beach River Park parking area.
Railroad Milepost: N/A	
Nearest Address: 11060 River Rd., Forestville 95436 **Thomas Guide #:** 242/1A	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Area maintained by Sonoma County Regional Parks
- Trip and fall hazards, slippery when icy or wet
- Recreational area used for fishing, hiking, birding
- There is additional access to this section of shoreline further upstream; Take left on Sunset Rd, single lane road. Proceed to access gate and park along side of the road.

Resources-At-Risk

Ecological: Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Sunset Beach River Park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 75 meters (246 feet)

Gradient: Low

Site Contact/s:

Sonoma County Regional Park Ranger Station
(707) 433-1625

Site Location/Segment: **RUS-SN-D-035**

This site has a trail that runs along the shoreline but offers no direct vehicle access to it. Vehicles can access parts of the trail but cannot access the waters' edge. Depending on how high the river is, there may be eddies along the shore where product may collect. Depending on the product type and amount accumulated, sorbent material may be used to collect it.

Vehicular Access: N/A

Recreational Use: Fishing, Beaches

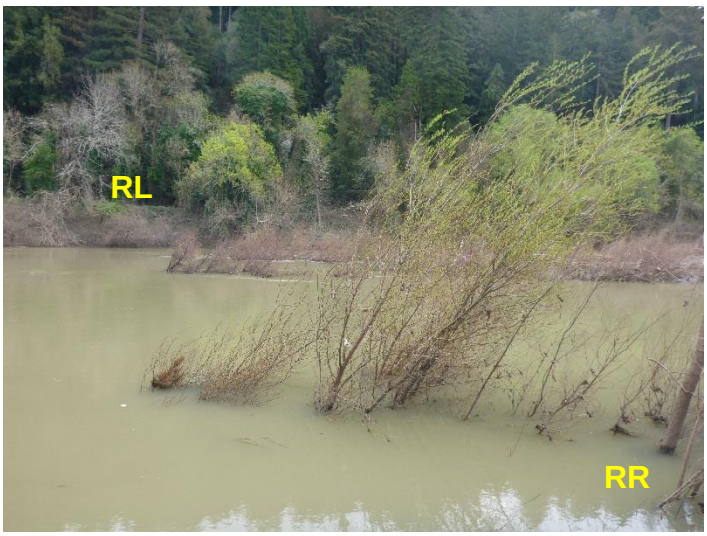
Boat Launches: Steelhead Beach would be the closest boat launch

ESI Shoreline Type: 3B – exposed, eroding banks in unconsolidated sediments**;** 6A – Gravel beaches/bars and gently sloping banks; 9B – Vegetated low banks;

Site Images

Upstream
Photo Date: 05/01/2018

Downstream
Photo Date: 05/01/2018



Straight Across
Photo Date: 03/15/2017

RR = River Right RL = River Left

Response Strategy Site: Sunset Beach River Park (RUS-225)

Site Objectives: Manually pick-up stranded product

Implementation: Deploy/pick-up sorbents, as needed

Staging Area Location and Capabilities/Amenities/Waste Management: Large parking area with a port-o-potty

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Sorbent				Deploy/pick-up as needed

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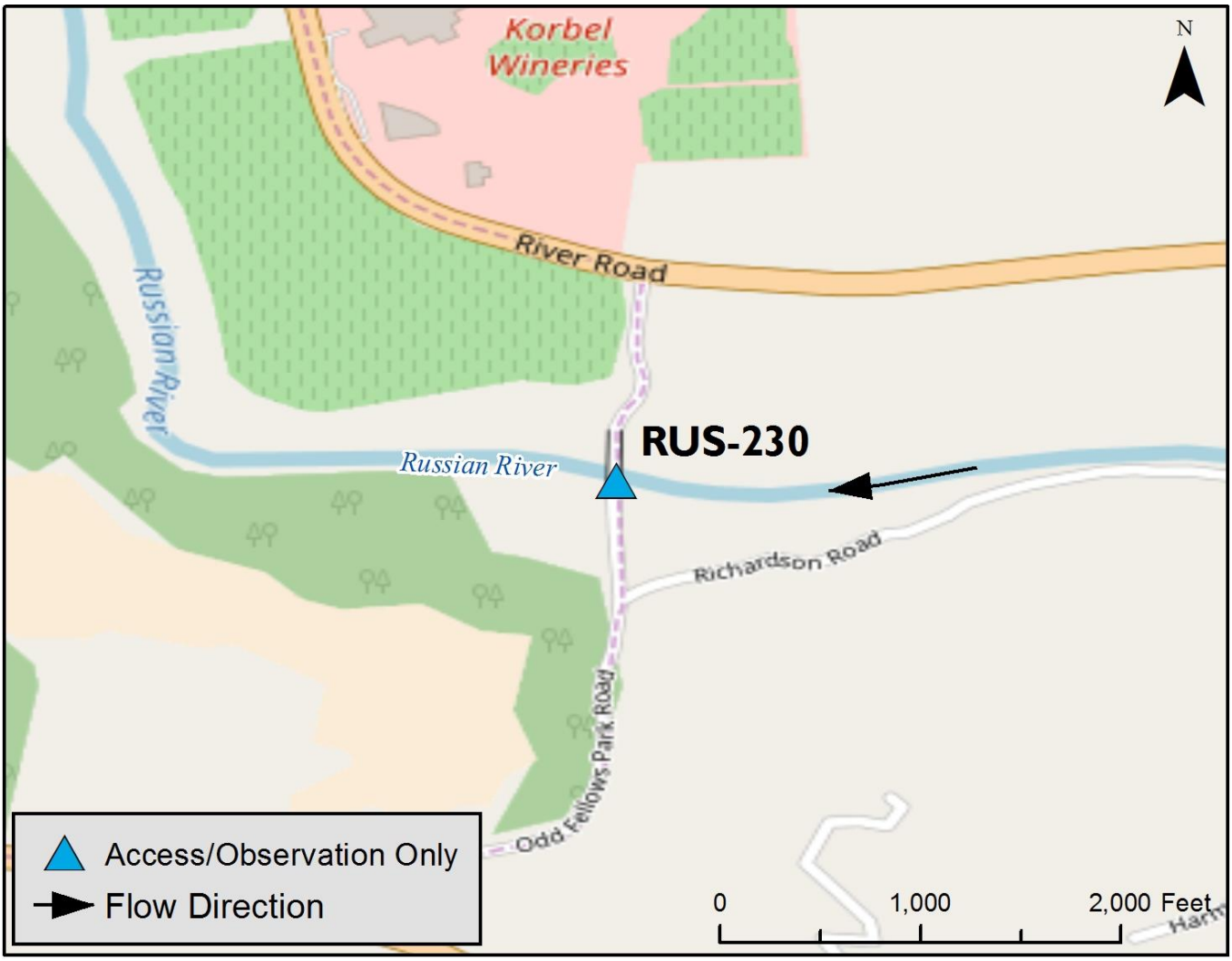
Access/Observation Site: Odd Fellows Park Road (RUS-230)

Latitude: 38.50301 **Longitude:** -122.96187	**Driving Directions**
Highway Post Mile: N/A	Heading west on River Road (east of Guerneville), take a left onto Odd Fellows Park Road. Proceed to a seasonal bridge. The road is closed during the winter months when the bridge is removed. Parking is along the side of the road.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 173/3B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Parking is along the side of the road
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when icy or wet

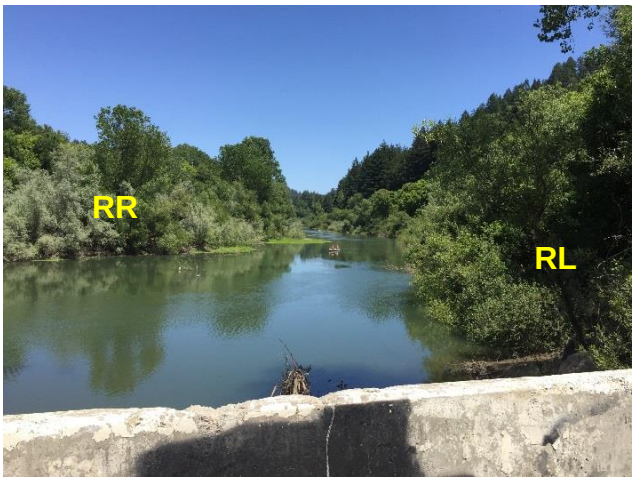
Site Description and Field Notes

Site Location/Segment: RUS-SN-D-050

A high flow area with a heavily vegetated shoreline. There is no direct access to the shoreline. This is just an observation site. The bridge that crosses the river is removed seasonally and a portion of the road is closed [when the bridge is removed]. River width is 75 meters during high flows.

Site Contact/s:
Sonoma County Department of Transportation & Public Works – (707) 565-2231

Site Images



Upstream
Photo Date: 06/06/2017

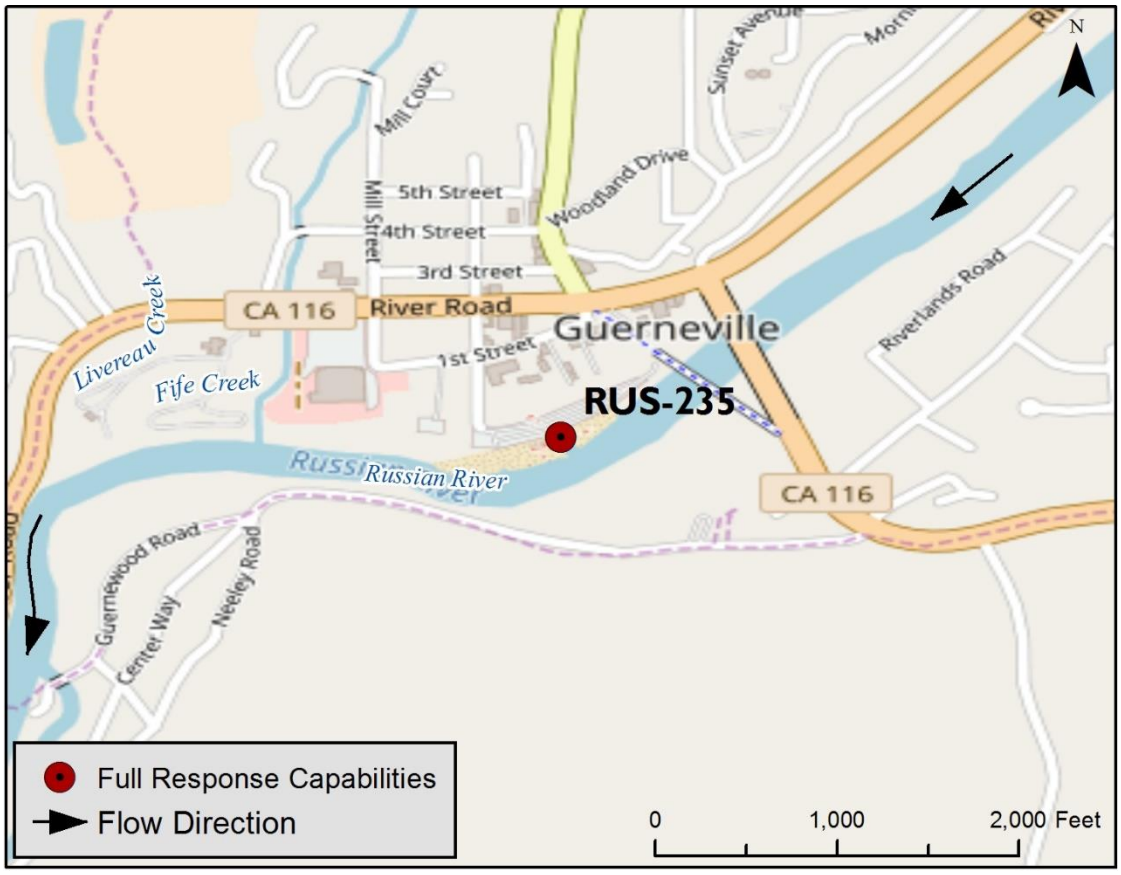
Downstream
Photo Date: 06/06/2017

Entrance
Photo Date: 03/15/2017

RR = River Right RL = River Left

Latitude: 38.50006 **Longitude:** -122.99750	**Driving Directions**
Highway Postmile: SON R12.036	From River Rd, heading southwest through Guerneville, continue straight onto Highway 116. Turn left onto Church Street and follow it to the end.
Railroad Milepost: N/A	
Nearest Address: 16215 First St., Guerneville 95446 **Thomas Guide #:** 168/3B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Area maintained by Russian River Recreation and Park District
- Access to launch boats (off the beach) is through a locked gate during certain times of the year: 5/20 – 6/16 (weekends only), 6/16 – 9/7 (daily), 9/15 – 9/23 (weekends only)
- Trip and fall hazards, slippery when icy or wet
- High use recreational beach, rafting, and fishing area
- Dam is located toward western end of the beach

Resources-At-Risk

Ecological: Western Pond Turtle, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, holly-leaved ceanothus, Napa false indigo

Economic: Johnson's Beach, Guerneville River Park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 50 meters (164 feet)

Gradient: Medium

Site Contact/s:

Russian River Recreation and Park District
(707) 869-9184

Site Location/Segment: RUS-SN-D-055

High recreational use beach area with a large mixed sand shoreline. The area is operated by the Russian River Recreation and Park District. Parking area is closed October 1 through May 15.

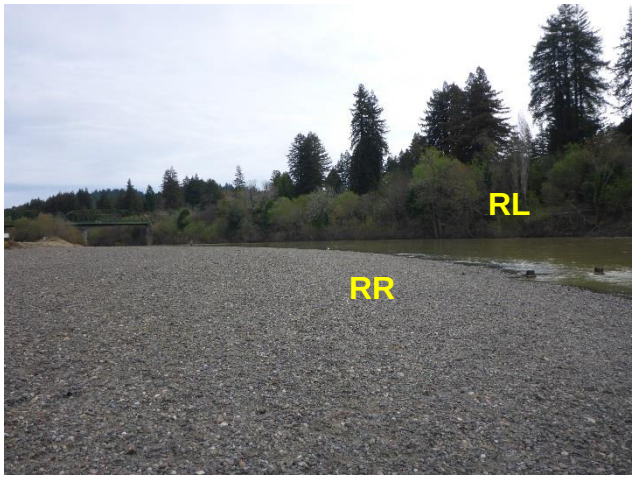
Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing, Beaches

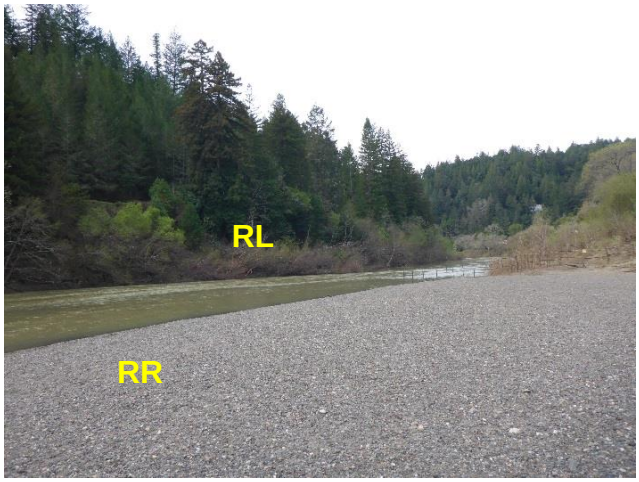
Boat Launches: Can launch boat from shore

ESI Shoreline Type: 5 – Mixed sand and gravel beaches and gently sloping banks; 9B – vegetated low banks

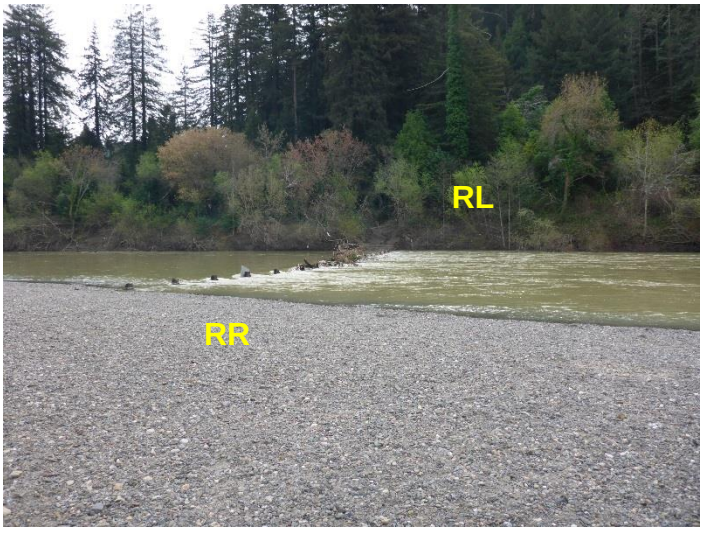
Site Images



Upstream



Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 03/15/2017

Response Strategy Site: Johnson's Beach (RUS-235)

Site Objectives: Collection

Implementation: Primary collection point upstream of dam, secondary collection point downstream

Staging Area Location and Capabilities/Amenities/Waste Management: No facilities on site;120 bbl vac truck and Adler tanks could be staged here.

Response Strategy Map (overview)

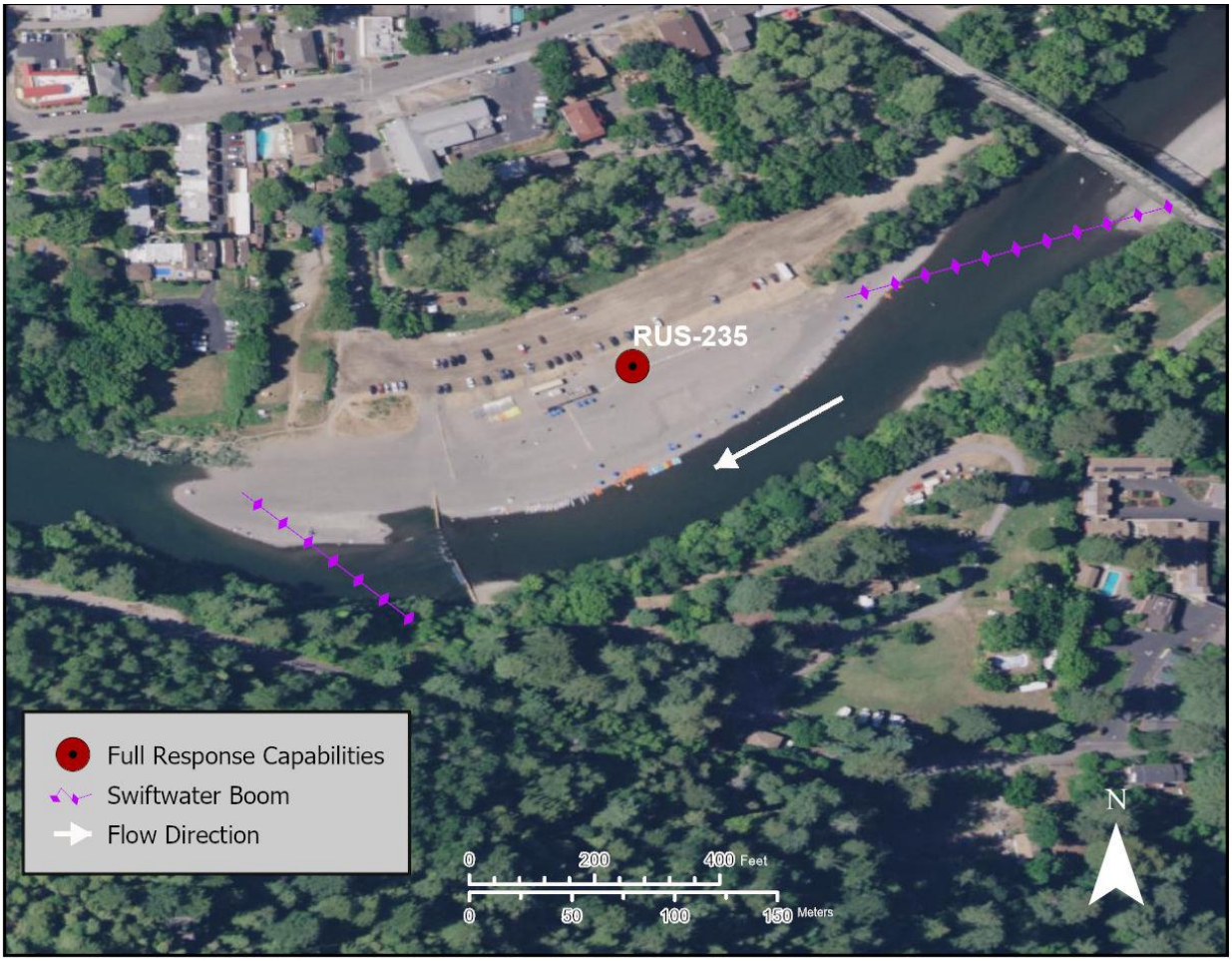


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	800 feet	
Anchors	Danforth	40	lb	5	3 midstream anchors for upstream strategy
Boat	Whaler	18	ft	2	
Stakes				6	Use to secure boom to shore
Personnel				8	4 boat crew, 4 shoreside

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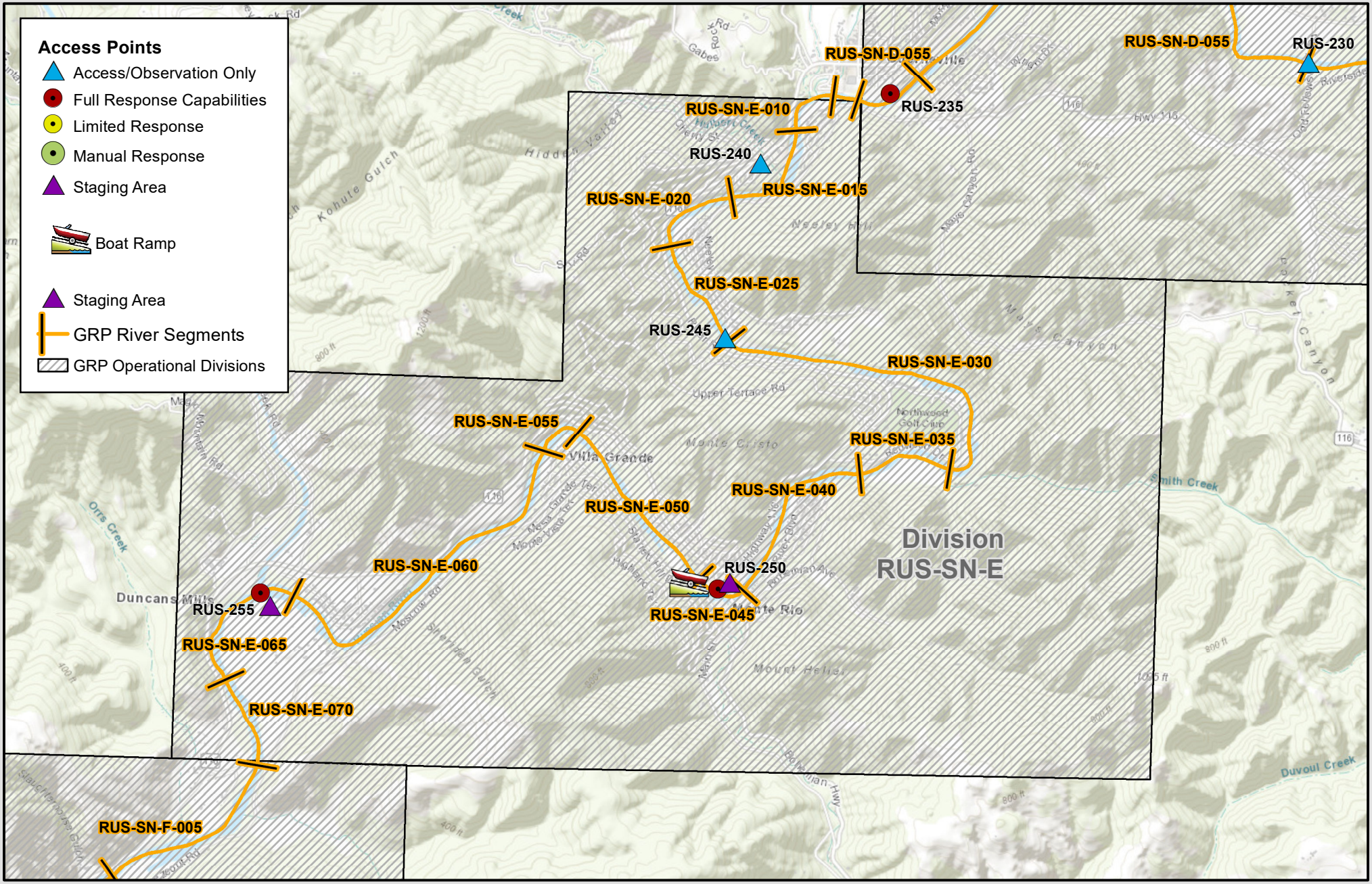
Figure 3-9: Russian River GRP Division RUS-SN-E Map



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

Author: S. Paine, CDFW
Date Created: 10/10/2019
Data Source: CDFW-OSPR, USGS

T:\Projects\Work_in_Progress\GRP_maps\RussianRiver\Maps\mxds\RussianRiver_SN_E_20190411.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-E

0 0.5 1 1.5 Miles

0 1 2 Kilometers

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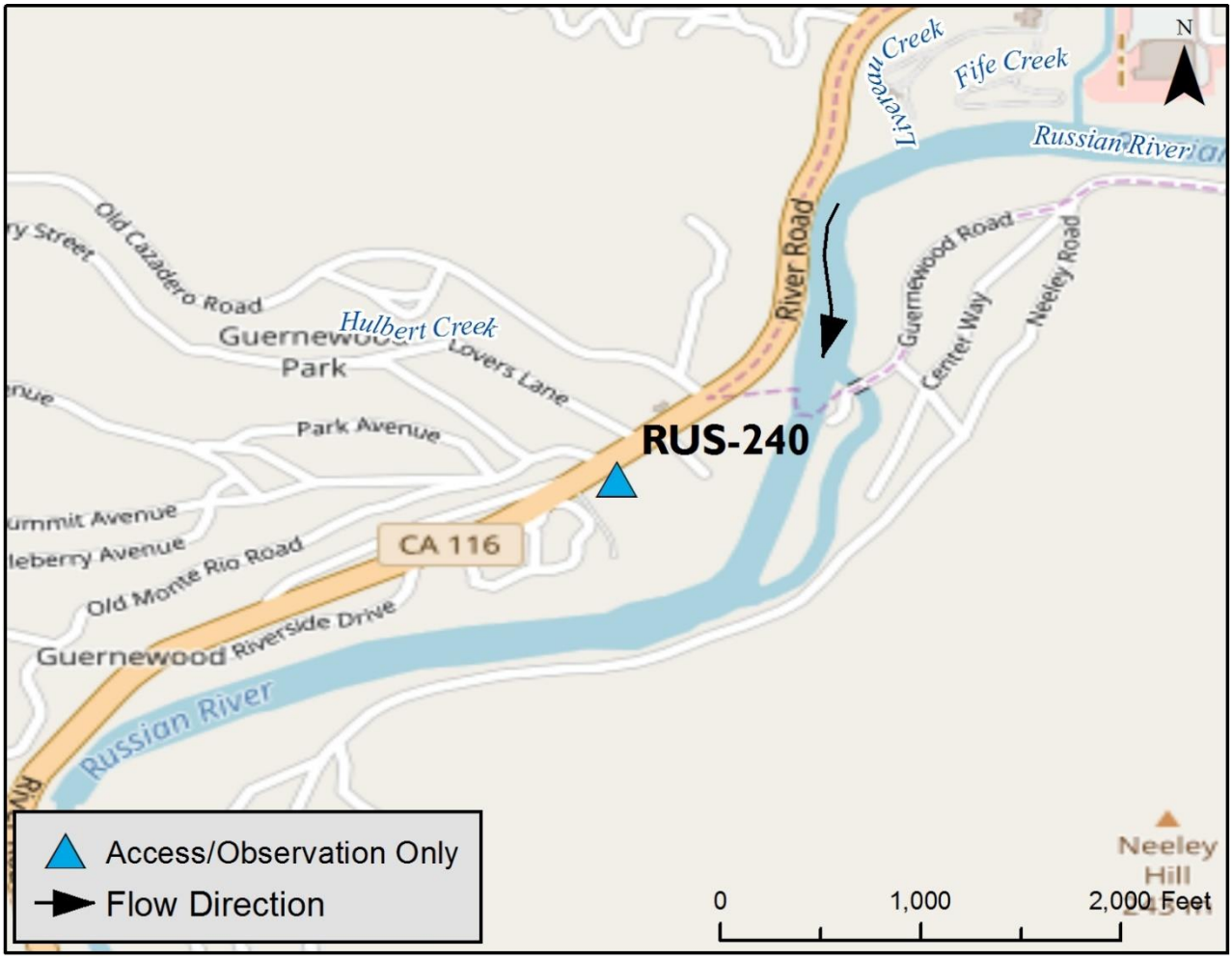
Access/Observation Site: Highway 116 – Roadside Access (RUS-240)

Latitude: 38.49510 **Longitude:** -123.00837	**Driving Directions**
Highway Post Mile: SON 11.141	Head west on Highway 116/River Road and proceed approximately 0.5mi west of Guerneville. Turnout is on the south side of the highway, across from Old Monte Rio Rd.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 168/3B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Steep access to shoreline
- Trip and fall hazards, slippery when icy or wet
- Parking is adjacent to highway

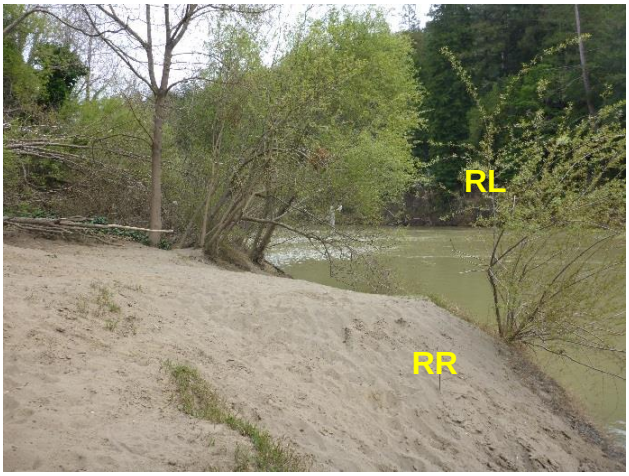
Site Description and Field Notes

Site Location/Segment: RUS-SN-E-015

An access point just west of Guerneville. Access to shoreline is down a steep vegetated path. Shoreline is lined with riparian tree species. The river widens at this point and has a relatively low gradient (water moves more slowly here). River width is ~75 meters.

Site Contact/s:
Russian River Fire District – (707) 869-2811

Site Images



Upstream

Downstream

Entrance

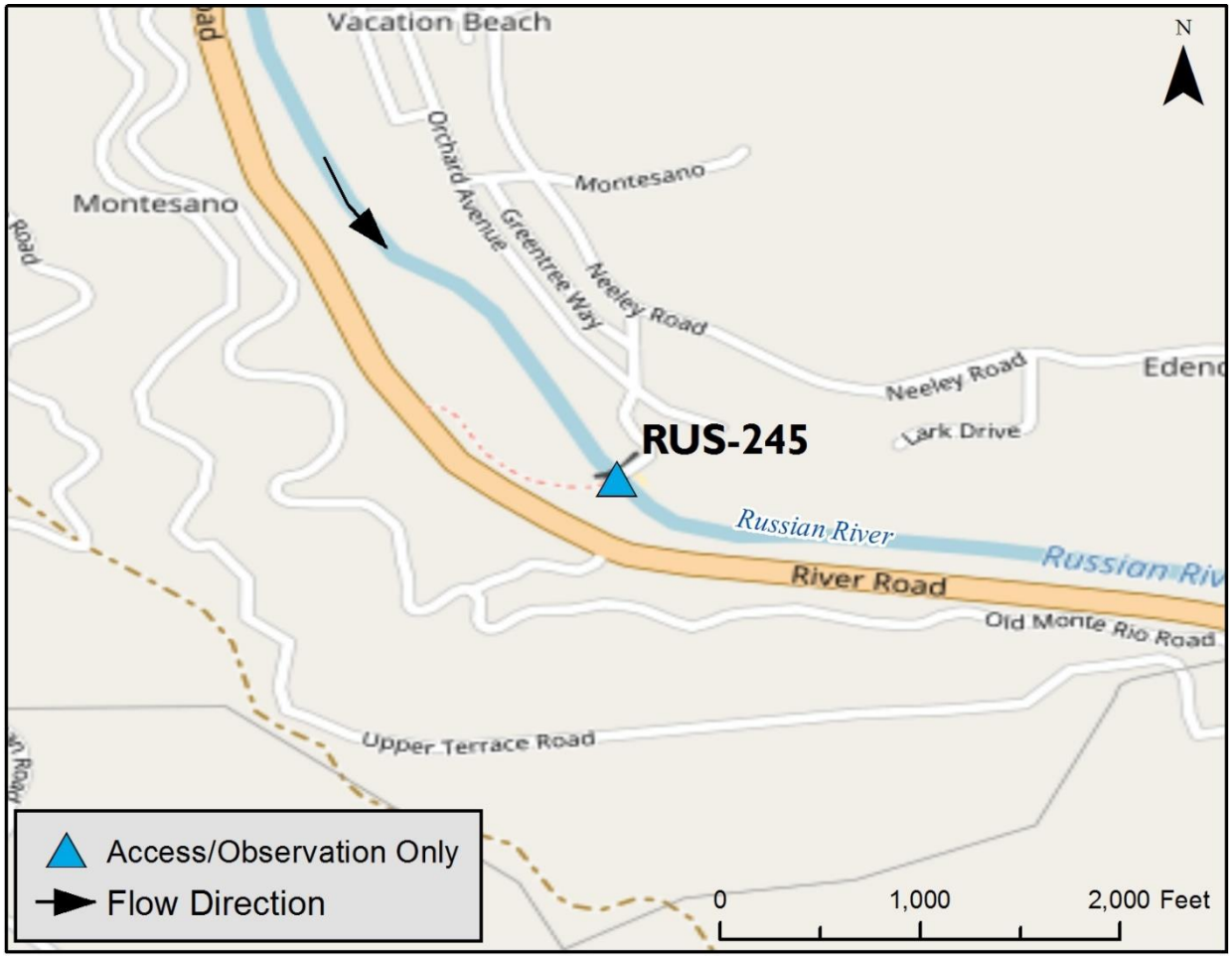
RR = River Right RL = River Left

Photo Date: 03/15/2017

Access/Observation Site: Vacation Beach Dam (RUS-245)

Latitude: 38.48337 **Longitude:** -123.01091	**Driving Directions**
Highway Post Mile: SON 9.796	Head west on Highway 116/River Road and proceed approximately 1.7mi southwest of Guerneville. Take a left on Summer Bridge road. Parking is along the side of the road next to the seasonal bridge. This road is closed during times of high flow.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 168/3B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Parking along the side of the road
- Trip and fall hazards, slippery when icy or wet
- Access to the shoreline is difficult when road is closed, due to debris (e.g., downed trees, mud, etc.)

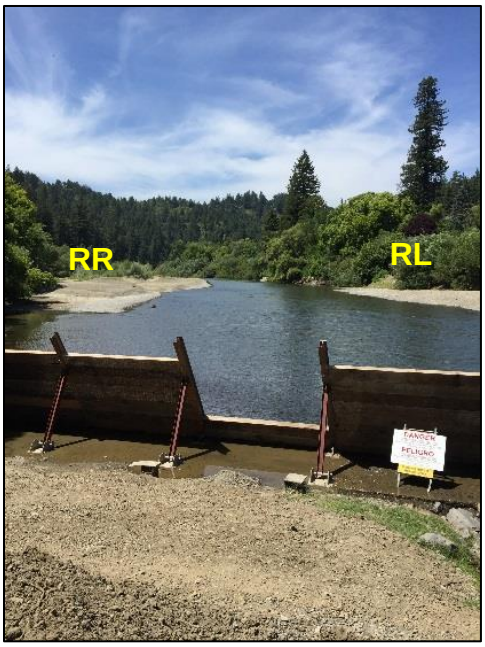
Site Description and Field Notes

Site Location/Segment: RUS-SN-E-025

This site has a seasonal bridge and dam that is in place from late spring through summer. The road is closed when the bridge is not in place. The shoreline is sandy on both side of the river. The river has a medium gradient in this location and has a width of ~50 meters.

Site Contact/s:
Russian River Recreation & Park District – (707) 869-9184

Site Images



Upstream

Downstream

Straight Across

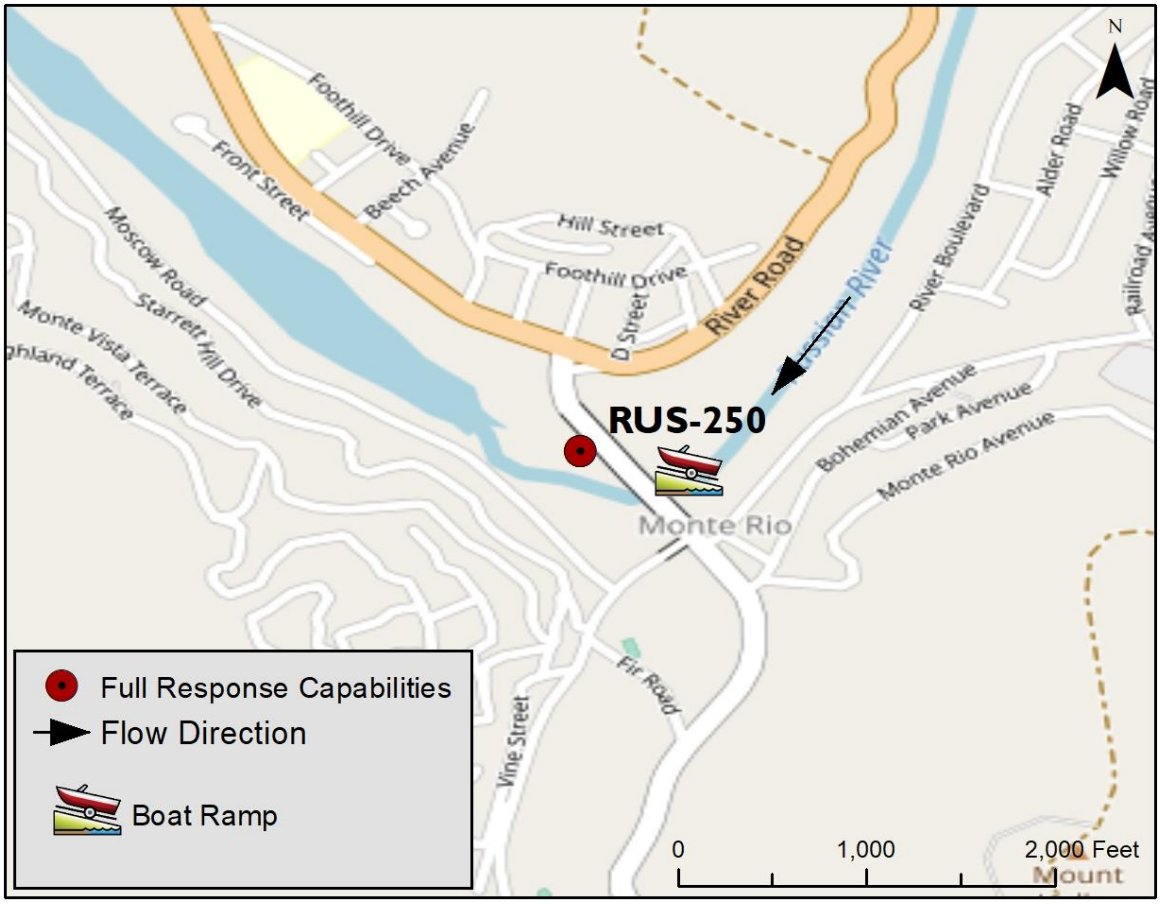
RR = River Right RL = River Left

Photo Date: 06/06/2017

Response Strategy Site: Monte Rio Beach (RUS-250)  Page 1 of 3

Latitude: 38.46655 **Longitude:** -123.01085	**Driving Directions**
Highway Postmile: SON 7.778	Going west on Highway 116 (when entering the town of Monte Rio), turn left onto Bohemian Highway, then take an immediate right into the Monte Rio Fishing Access parking lot. Proceed to the beach through a gate, which is open during daylight hours in the summer months, to a kayak rental facility.
Railroad Milepost: N/A	
Nearest Address: 20488 Highway 116, Monte Rio 95462 **Thomas Guide #:** 173/1B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Area maintained by Monte Rio Park & Recreation District
- Boat launch on-site
- Trip and fall hazards, slippery when icy or wet
- High use recreational beach, rafting, and fishing area

Resources-At-Risk

Ecological: Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, Greene's narrow-leaved daisy

Economic: Monte Rio Beach, Rio Villa Beach Resort, Village Inn & Restaurant

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 30 meters (98 feet)

Gradient: Low

Site Contact/s:

Monte Rio Park & Recreation District
(707) 865-2487

Site Location/Segment: RUS-SN-E-065

The beach area is >300m long and >30m wide. East of Monte Rio Bridge is known, locally, as Big Rock Beach. There are kayak and canoe rentals here during the summer. The parking lot is only open seasonally and closes at 8pm. West of the bridge is known as Sandy Beach, which can be accessed from the upper parking area. Dutch Bill Beach is across the river from Sandy Beach. It is accessible from Main St.

Vehicular Access: 4WD Pick-Up

Recreational Use: Rafting, Fishing, Beaches

Boat Launches: Boat launch on-site

ESI Shoreline Type: 5 – mixed sand and gravel beaches and gently sloping banks; 9B – vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 05/24/2017

Site Objectives: Collection

Implementation: Deploy strategy on east side of bridge

Staging Area Location and Capabilities/Amenities/Waste Management: Boat launch on site and large parking area, though boats may need to be launched from shore east of bridge due to [possible] flow and water level concerns.

Response Strategy Map (overview)

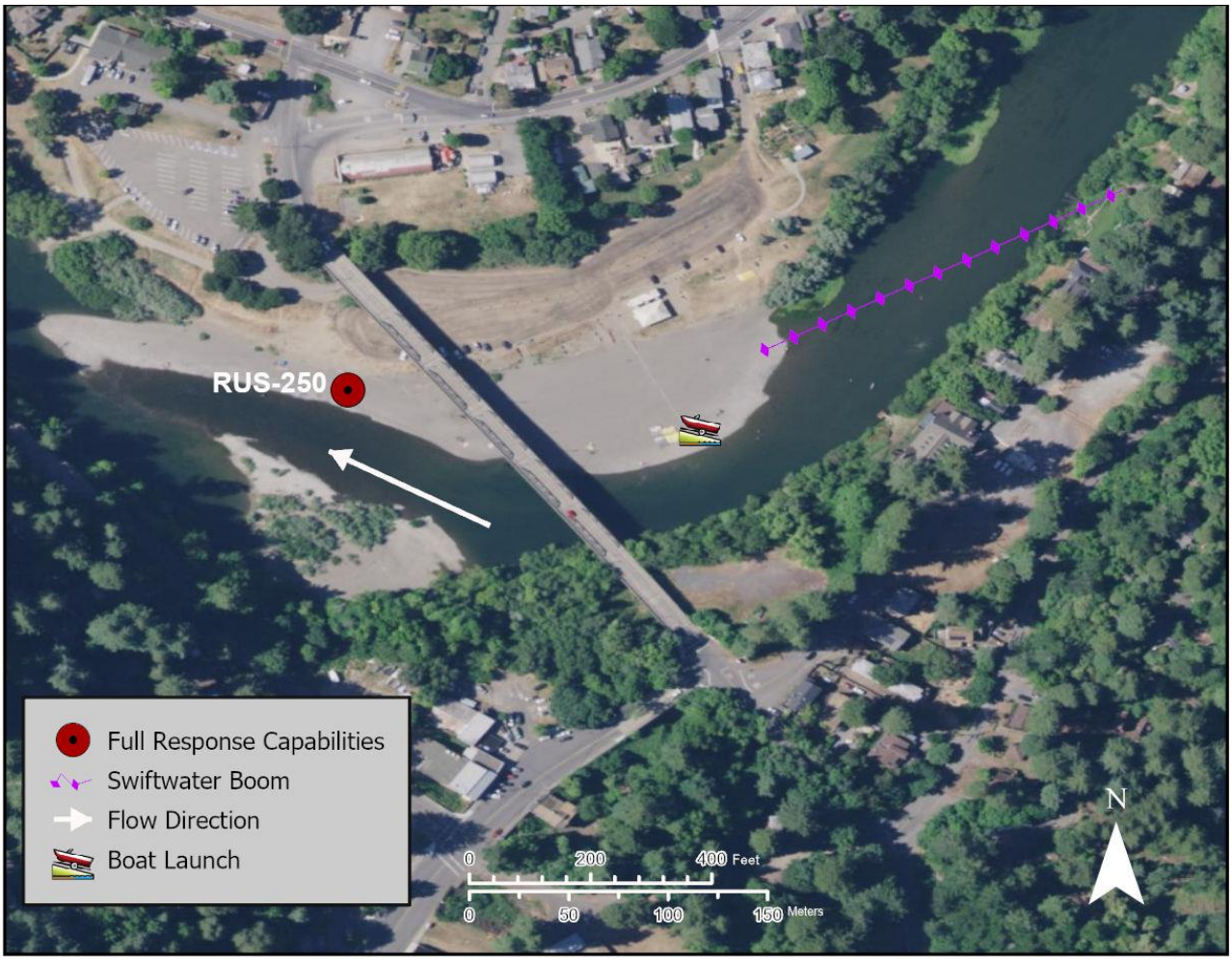


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	400 feet	
Anchor	Danforth	40	lb	2	Mid-stream anchors
Stakes				3	Secure boom to shoreline
Boat	Skiff	16	ft	2	
Personnel				8	4 boat crew, 4 shore side

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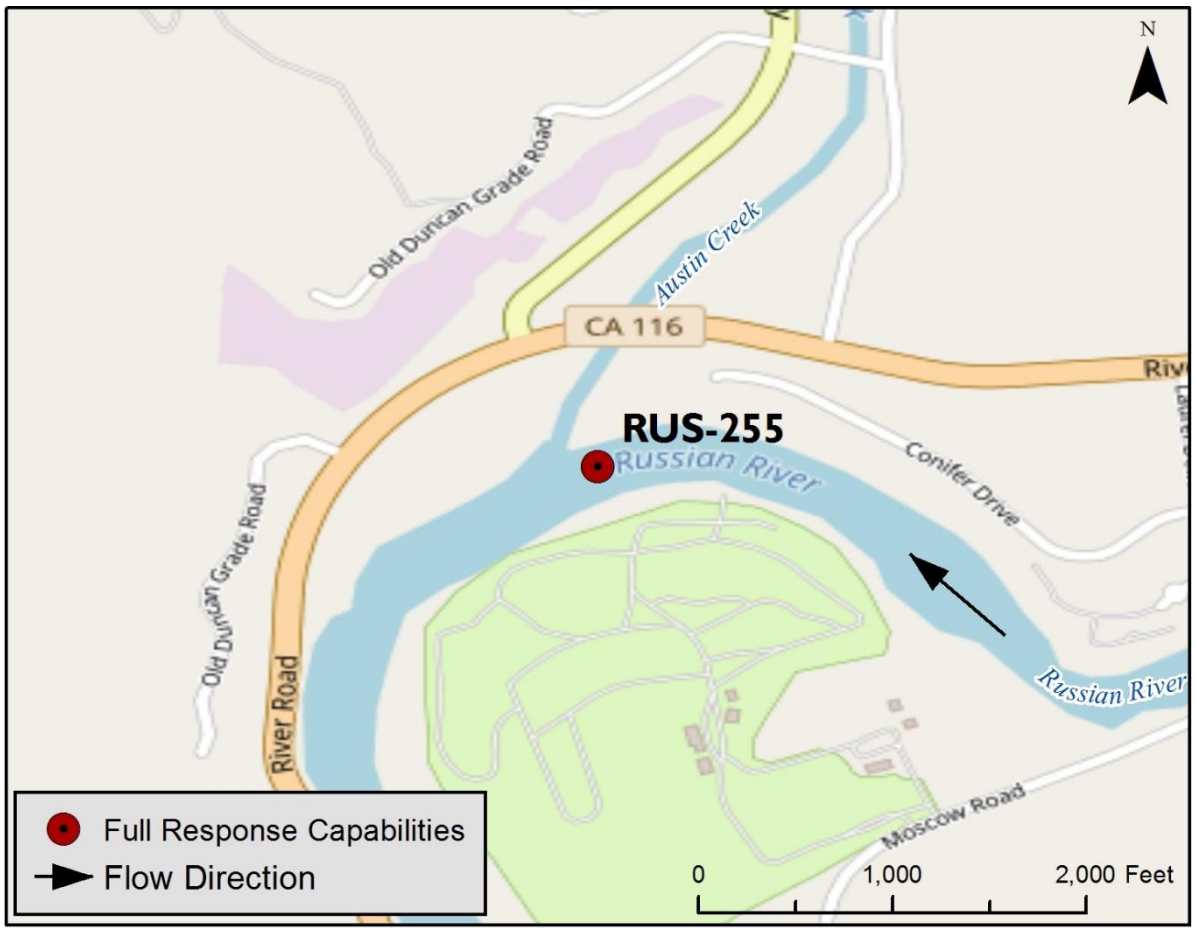
Latitude: 38.46532 **Longitude:** -123.04987	**Driving Directions**
Highway Postmile: N/A	From Highway 116 (in Monte Rio), turn left onto Bohemian Highway then turn right onto Main Street. Take a left on Moscow Road and continue for ~2.5mi. Turn right into Casini Ranch and follow Stagecoach Road down to the river.
Railroad Milepost: N/A	
Nearest Address: 22855 Moscow Rd., Duncan Mills 95430 **Thomas Guide #:** 173/1B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Shoreline is through a privately-run campground
- Large parking spaces and facilities on-site
- Vehicle must stop at check-in station
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Foothill Yellow-legged Frog, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch

Economic: Casini Ranch Family Campground, St. Joseph's Camp

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 80 meters (262 feet)

Gradient: Medium

Site Contact/s:

Casini Ranch Campground
(800) 451-8400

Site Location/Segment: RUS-SN-E-065

Private campground with a couple of beach areas. Facilities are located on site. Large parking areas. High recreational use area. Beach width varies depending on water flow/time of year.

Vehicular Access: 4WD Pick-Up

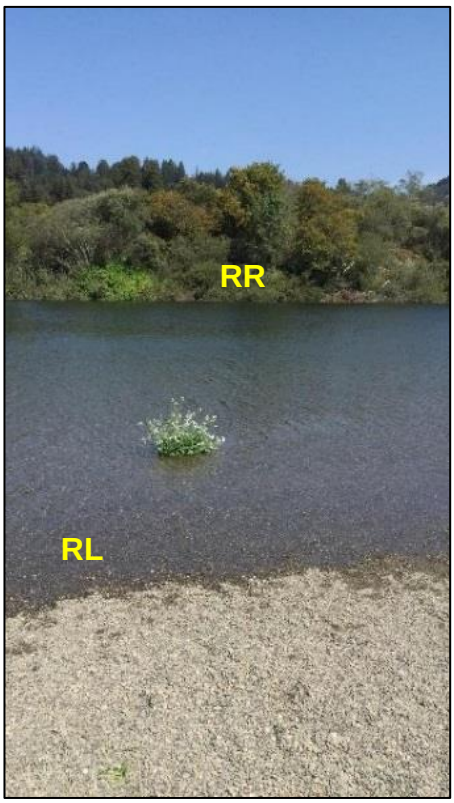
Recreational Use: Campground. Rafting, Fishing, Beaches

Boat Launches: May be able to launch boat from shore; Launch upstream at Monte Rio Beach or downstream from Jenner boat launch

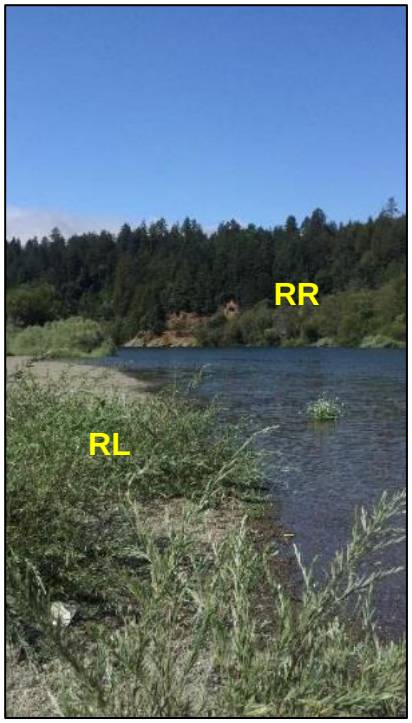
ESI Shoreline Type: 5 – mixed sand and gravel beaches and gently sloping banks; 9B – vegetated low banks

Site Images

Upstream



Straight Across



Downstream

RR = River Right RL = River Left

Photo Date: 08/22/2017

Site Objectives: Collection

Implementation: Avoid snags in the middle of the river; anchor boom near staircase on the NE side of the river

Staging Area Location and Capabilities/Amenities/Waste Management: 70 bbl vac truck could be staged here

Response Strategy Map (overview)

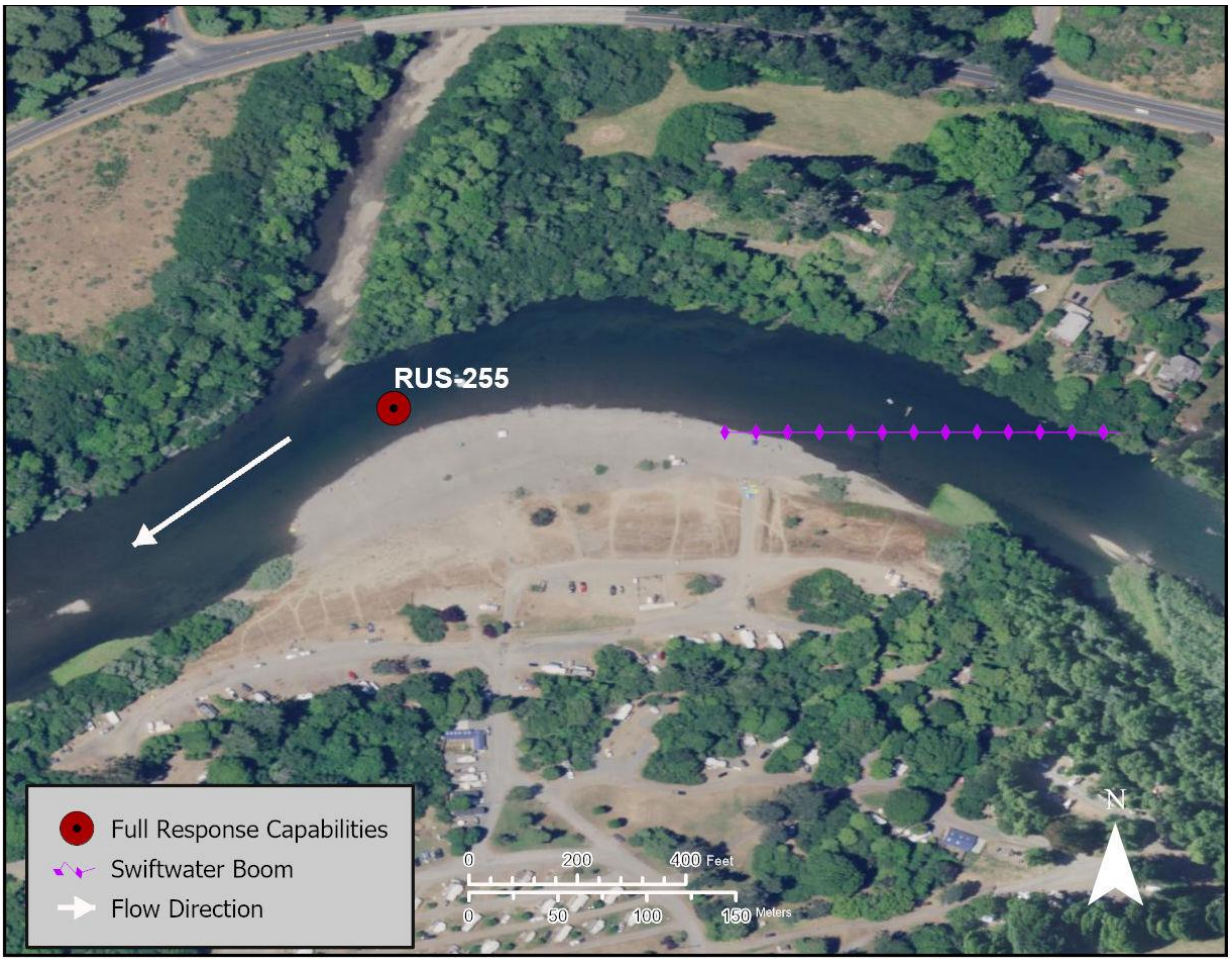


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	400 feet	
Anchoring	Danforth	40	lb	2	
Stakes				3	To secure boom to shoreline
Boat	Skiff	16	ft	2	
Personnel				8	4 boat crew, 4 shore side staff

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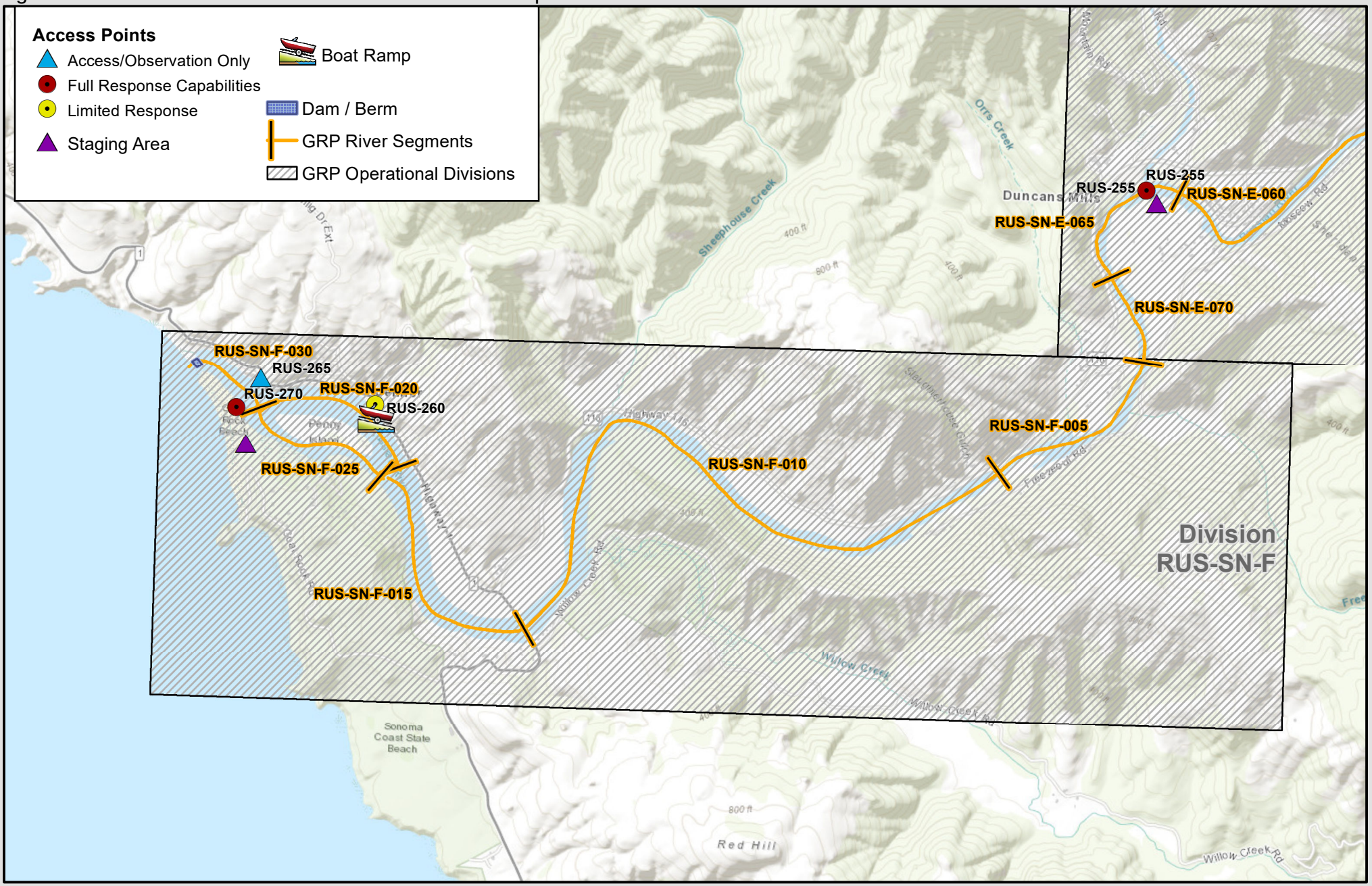
Figure 3-10: Russian River GRP Division RUS-SN-F Map



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

Author: S. Paine, CDFW
Date Created: 10/10/2019
Data Source: CDFW-OSPR, USGS

T:\Projects\Work_in_Progress\GRP_maps\RussianRiver\Maps\mxds\RussianRiver_SN_F_20190411.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Russian River Geographic Response Plan Division RUS-SN-F

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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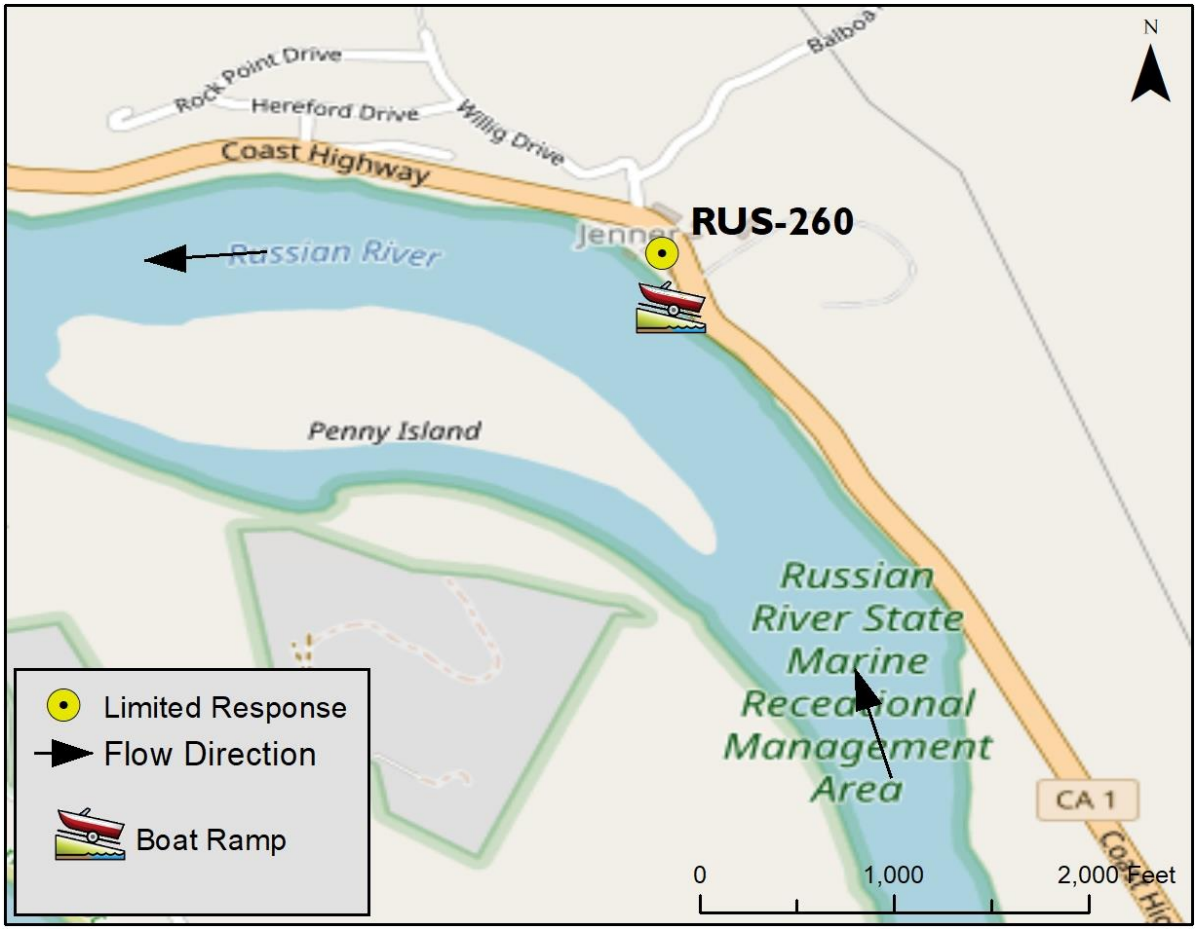
Response Strategy Site: Sonoma Coast Visitor Center (RUS-260) Page 1 of 3

Latitude: 38.44933 **Longitude:** -123.11510	**Driving Directions**
Highway Postmile: SON 21.182	Proceeding north on Highway 1 on the southern side of Jenner. Turn left into the Sonoma Coast Jenner Visitor Center (right across from the Jenner Inn).
Railroad Milepost: N/A	
Nearest Address: 10451 CA-1, Jenner 95450 **Thomas Guide #:** 173/1B	
Cell Service: Yes	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Boat ramp is run by CA State Parks Division of Boating & Waterways
- Limited parking (~10 spaces)
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: Bank Swallow, Sonoma tree vole, California Giant Salamander, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, longfin smelt, perennial goldfields

Economic: Jenner Visitors Center Boat Ramp

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 180 meters (590 feet)

Gradient: Low

Site Contact/s:

CA State Parks Division of Boating & Waterways
(707) 875-3483

Site Location/Segment: RUS-SN-F-020

Shoreline is mostly vegetated with small area of sand/cobble. Boat launch area with limited parking. Penny Island lays directly across from the boat launch.

Vehicular Access: N/A

Recreational Use: Kayaking

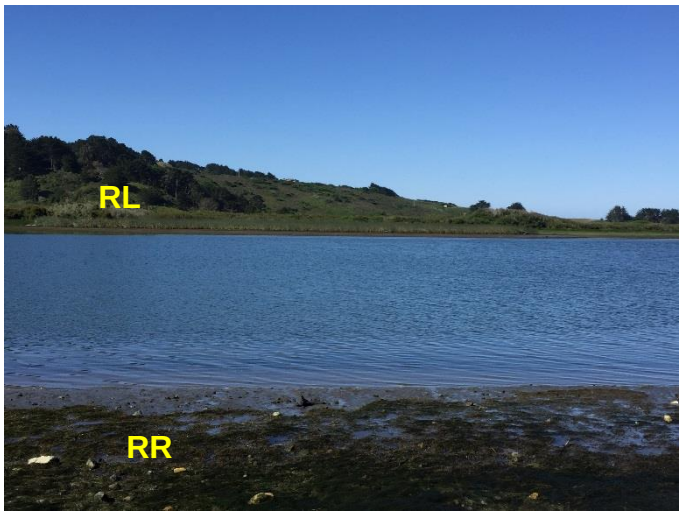
Boat Launches: On-site

ESI Shoreline Type: 1B – Exposed man-made structure; 5 –Mixed sand and gravel beaches and gently sloping banks; 9B – Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 05/01/2018

Response Strategy Site: Sonoma Coast Visitor Center (RUS-260)

Site Objectives: Collection

Implementation: Depending on where the threat is coming from (marine or upstream) the strategy could angle to the east or west.

Staging Area Location and Capabilities/Amenities/Waste Management: On-site staging is limited due to the small size of the parking area.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	8	inch	650 feet	
Anchoring	Danforth	40	lb	3	
Stakes				3	Stakes will secure boom to shoreline
Boat	Whaler	18	ft	2	
Personnel				8	4 boat crew, 4 shoreside

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Access/Observation Site: River's End (RUS-265)

Latitude: 38.45085 **Longitude:** -123.12498	**Driving Directions**
Highway Post Mile: SON 21.801	From Highway 1, just west of Jenner, take a left onto Buke Avenue at the River's End Restaurant and Inn and take a left onto an unnamed road that will take you down to the water's edge.
Railroad Milepost: N/A	
Nearest Address: 11048 CA-1, Jenner 95450 **Thomas Guide #:** 173/1B	
Cell Service: No	

Overview Street Map

Hazards, Restrictions and Advice for Responders

- Access to shoreline is through private property
- Steep access to shoreline
- Trip and fall hazards, slippery when icy or wet
- Limited vehicle access

Site Description and Field Notes

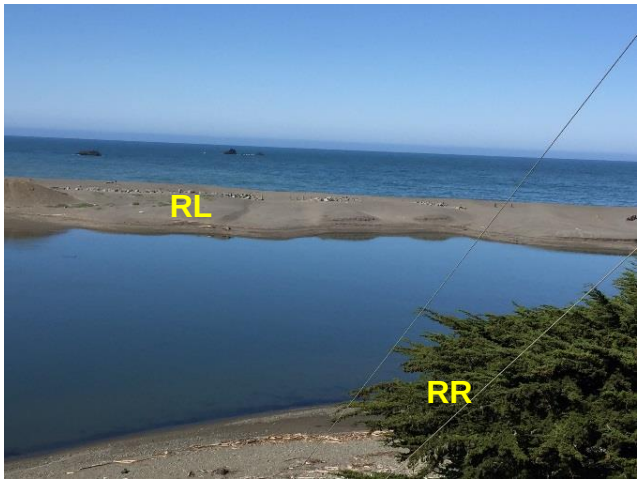
Site Location/Segment: RUS-SN-F-020

Private property with limited parking on-site. Short stretch of sand/gravel beach (~120 meters). Property is directly across from Sonoma Coast State Park. A portion of strategy 2-122-A found in the ACP (it is also associated with RUS-270) occurs along this shoreline.

Site Contact/s:
River's End Restaurant & Inn – (707) 865-2484

Site Images

Upstream



Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 05/01/2018

Response Strategy Site: Sonoma Coast State Park (RUS-270)

Latitude: 38.44662 **Longitude:** -123.12601	**Driving Directions**
Highway Postmile: N/A	From Highway 1, south of Jenner, take Goat Rock exit and proceed ~1.8mi to the end of the road at Goat Rock Beach Access. The Russian River is on the eastside of the beach, with ocean on the west side.
Railroad Milepost: N/A	
Nearest Address: **Thomas Guide #:** 173/1B	
Cell Service: Yes	

Overview Street Map

Hazards, Restrictions and Advice for Responders

- Property is managed by California State Parks
- Gate to enter park is open from 8am to sunset
- Heavy surf and wave action on the outer coast
- Seal haul-out area on the beach at the river mouth
- Trip and fall hazards, slippery when icy or wet

Resources-At-Risk

Ecological: longfin smelt, Chinook salmon, coho salmon, steelhead trout, Russian River tule perch, Myrtle's silverspot butterfly, bluff wallflower, perennial goldfields, Tidestrom's lupine

Economic: River's End Restaurant & Inn

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

River Width: 275 meters (902 feet)

Gradient: Low

Site Contact/s:

CA State Parks Dispatch
(916) 358-0333

CA State Parks Russian River District Office
(707) 865-2394

Site Location/Segment: RUS-SN-F-030

South side of the mouth of the Russian River. Mouth of the river may be closed during times of low flow (i.e., summer months). Large sandy beach. Seal haul out/pupping area. Marshes are on both banks of the river. Large parking area and bathroom facilities. This is also an environmentally sensitive site (2-122-A Russian River Inlet) in the San Francisco Bay & Delta Area Contingency Plan (ACP).

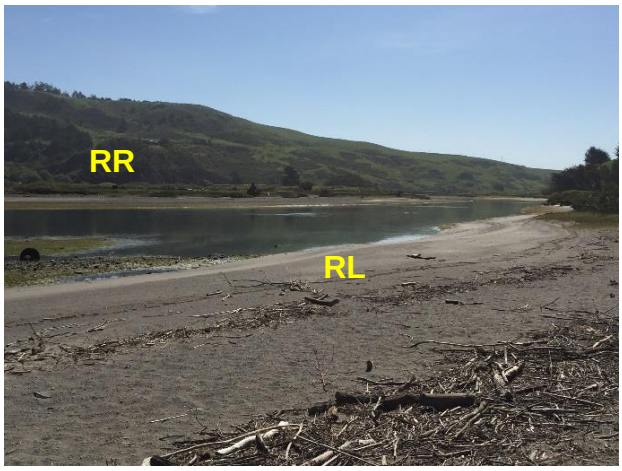
Vehicular Access: 4WD Pick-Up, ATV

Recreational Use: Rafting, Beaches

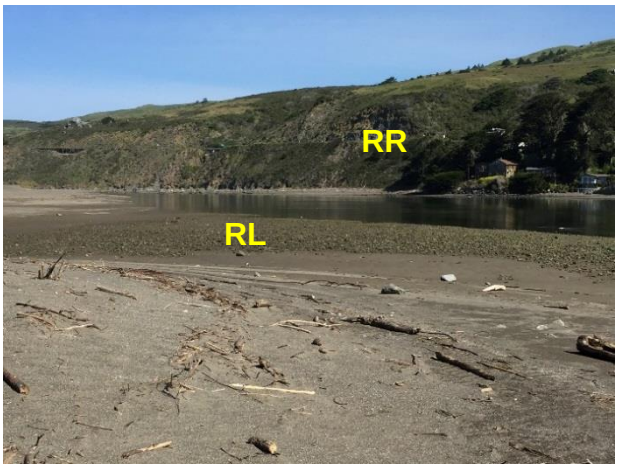
Boat Launches: Sonoma Coast Visitor Center in Jenner (RUS-260)

ESI Shoreline Type: 4 – Sandy beach and gently sloping banks

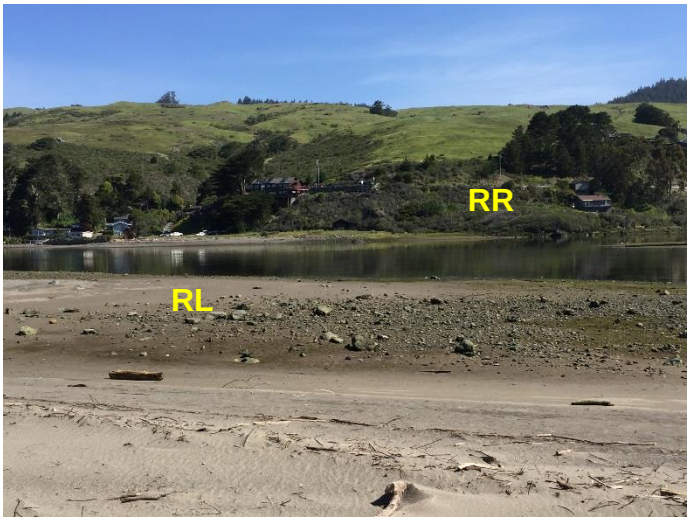
Site Images



Upstream



Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 05/01/2018

Site Objectives: Prevent spread of product to river by exclusion and/or collection.

Implementation: 1. Under low flow conditions, neap tides, non-stormy seas – construct a sediment dike across the river mouth (to be done when the spill is coming from the marine environment); 2. If circumstances dictate that the berm cannot be built, deploy boom to collect product on the south side of the channel (Can be implement for a spill originating in the marine or riverine environment).

Staging Area Location and Capabilities/Amenities/Waste Management: Large parking area is located at the State Park

Response Strategy Map (overview)

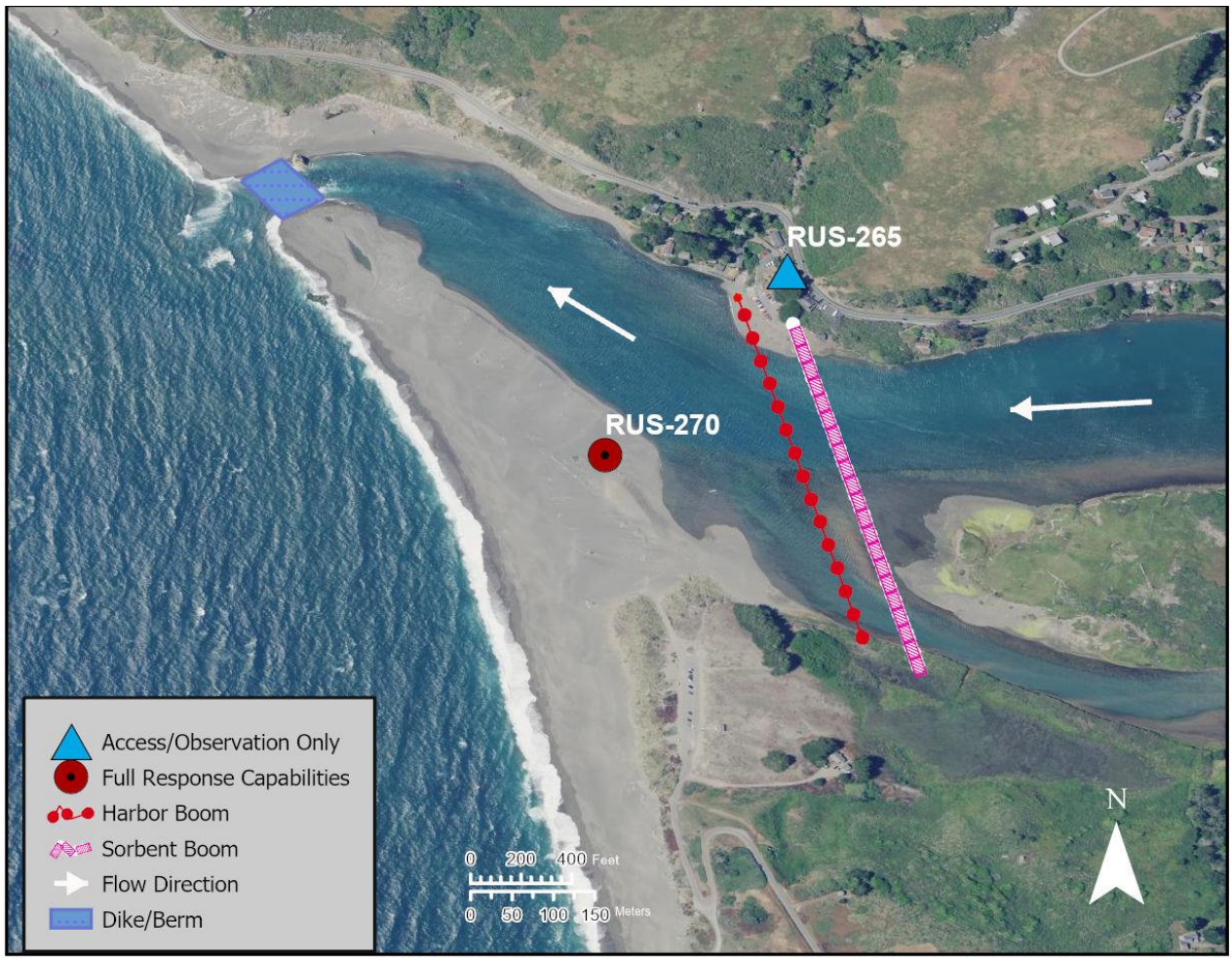


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Harbor	36	in	1200 feet	
Anchor	Danforth	25	lb	12	
Stakes				6	To use to anchor the boom to the shore
Boat	skiffs	16	ft	3	
Staff				12	6 – boat staff, 6 – shore side staff

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Russian River
Geographic Response Plan

Chapter 4 - Resources at Risk

4.0 Chapter Overview

This chapter provides information on the environmental, economic, and tribal, cultural and historic resources-at-risk in the Russian River 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, 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 tribal and cultural resources, historic properties, and tribal representatives.

The information provided in this chapter can be used for:

- Assisting the 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 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 Wildlife, Fisheries, Plants and Sensitive 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; U.S. Fish and Wildlife Service (USFWS) designated wetland habitats; commercial and recreational fisheries; and protected lands. Table 4-1 below is a comprehensive list of the known species, habitats, and protected lands that exist within the boundaries of the Russian River GRP as well as seasonal and special considerations including nesting and spawning seasons, seasonal migration, large species concentrations, rookeries and blooming periods for special plant species. The 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 4-1 below. Information on the species and habitats listed in Table 4-1 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 Environmental Unit 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.

Wetlands

Table 4-1 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, 1979, Classification of Wetlands and Deepwater Habitats of the United States)

The USFWS definition includes: swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools; periodically inundated saltflats; 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. (Adapted from Cowardin, Carter, Golet and LaRoe (1979) Wetlands Subcommittee Federal Geographic Data Committee, August 2013; and http://resources.ca.gov/wetlands/introduction/defining_wetlands.html).

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 – 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					
Bank Swallow	*Riparia riparia*	State: T Fed: -	CWHR: Banks, burrows, riparian areas USFWS: N/A	Uses holes dug in cliffs and riverbanks for cover. Will also roost on logs, shoreline vegetation, and telephone wires.	Arrives in early March and peaks by early May. Migrants are observed through early or mid-September. There are few winter records in CA.
Mammals					
pallid bat	*Antrozous pallidus*	State: SSC Fed: -	CWHR: Common in low elevations USFWS: N/A	Grasslands, shrublands, woodlands, and forests. Use Rocky areas for roosting. Very sensitive to disturbance of roosting sites.	Hibernates in winter near the summer day roost.
Townsend's big-eared bat	*Corynorhinus townsendii*	State: SSC Fed: -	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.
Sonoma tree vole	*Arborimus pomo*	State: SSC Fed: -	CWHR: Fog belt in the north coast USFWS: N/A	Occurs in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats.	Breeds year-round, but mostly from Feb through Sept

Fish					
Chinook salmon	*Oncorhynchus tshawytscha*	State: - Fed: T	CWHR: N/A USFWS: California coastal ESU	Juveniles may spend from 2 to 4 months in freshwater before migrating to estuarine areas as smolts and then into the ocean to feed and mature. They prefer streams that are deeper and larger than those used by other Pacific salmon species**.**	Adults enter the river as early as September, with the majority of the run occurring between mid-October and mid-November. Spawning generally occurs between late November and January.
coho salmon	*Oncorhynchus kisutch pop. 4*	State: E Fed: E	CWHR: N/A USFWS: Central California ESU	Typically associated with low gradient reaches of tributary streams, which provide suitable spawning areas and good juvenile rearing habitat.	Spawning occurs mainly from Nov to Jan, although it can extend to Feb or March
hardhead	*Mylopharodon conocephalus*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Low to mid-elevations in relatively undisturbed habitats of larger streams with high water quality.	Spawning in April and May.
longfin smelt	*Spirinchus thaleichthys*	State: T Fed: -	CWHR: N/A USFWS: N/A	Use estuarine wetland and slough habitat as adults before migrating upriver to spawn.	Spawning occurs from Nov - May, with a peak from Feb - April.
Pacific lamprey	*Entosphenus tridentatus*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Adults use gravel areas to build nests, while ammocoetes need soft sediments in which to burrow during rearing. Nests are generally associated with cover, including gravel and cobble substrates, vegetation and woody debris.	Adults migrate from at least March into July. Adults over summer in the river prior to spawning the following spring. Juveniles (ammocoetes) spend 3 to 7 years in freshwater.
riffle sculpin	*Cottus gulosus*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Live in permanent, cool, headwater streams where riffles and rocky substrates predominate. Such streams are clear and shaded, with moderate gradients.	Mature at the end of their second year, and spawn in February, March, and April.

Russian River roach	*Lavinia symmetricus, subspecies*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Found in main river where there is cover. Most common around the mouths of tributaries with pools up to 1m deep.	Spawn in spring and early summer, after water temperatures exceed 16^{o} C.
Russian River tule perch	*Hysterocarpus traski pomo*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Clear, flowing water and abundant cover, such as beds of aquatic macrophytes, submerged tree branches, overhanging plants, and large boulders.	Mating occurs from July-Sept. Young are born during May-June when food is abundant.
Sacramento hitch	*Lavinia exilicauda exilicauda*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	Inhabit warm, lowland, waters including clear streams, turbid sloughs, lakes and reservoirs. In streams they are generally found in pools or runs among aquatic vegetation.	Young of the year spend first 2 months shoaling in shallow water or staying close to beds of aquatic plants before moving out into more open water.
steelhead	*Oncorhynchus mykiss*	State: SSC Fed: FT	CWHR: N/A USFWS: Central California DPS	In streams, deep low-velocity pools are important wintering habitats. Spawning habitat consists of gravel substrate free of excessive silt.	Juveniles may spend up to 2 yrs in freshwater before migrating to estuarine areas. Juvenile steelhead may also rear in estuary.
Amphibians					
California Giant Salamander	*Dicamptodon ensatus*	State: SSC Fed: -	CWHR: near streams in damp forests USFWS: N/A	Occur in humid coastal forests, especially in Douglas fir, redwood, red fir, and montane and valley-foothill riparian habitats.	Breeds from March to May, with peak in May.
California Red-legged Frog	*Rana draytonii*	State: SSC Fed: T	CWHR: streams, marshes, ponds USFWS: wherever found	Requires permanent or nearly permanent pools for larval development. Intermittent streams must retain surface water in pools year-round.	Active all year coastally, but with periods of inactivity (late summer - early winter) elsewhere.

Foothill Yellow-legged Frog	*Rana boylii*	State: CT Fed: -	CWHR: In or near rocky streams USFWS: N/A	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.	Active all year in the warmest localities but may become inactive or hibernate in colder areas. Breeding may commence from mid-March to May.
Red-bellied Newt	*Taricha rivularis*	State: SSC Fed: -	CWHR: streams, forest USFWS: N/A	Inhabits primarily redwood forest, but also found within mixed conifer, valley-foothill woodland, montane hardwood and hardwood-conifer habitats.	Primarily active at night. Migrates to streams during fall and winter rains.
Reptiles					
western pond turtle	*Emys marmorata*	State: SSC Fed: -	CWHR: Permanent or nearly permanent water USFWS: N/A	Submerged logs, rocks, mats of floating vegetation, or open mud banks.	Spring or early summer, females move overland to find sites for egg-laying.
Invertebrates					
Myrtle's silverspot butterfly	*Speyeria zerene myrtleae*	State: - Fed: E	CWHR: N/A USFWS: N/A	Found in areas that are sheltered from the wind, below 820ft elevation, and within 3mi of the coast.	Adult flight season may range from late June to early Sept.
California freshwater shrimp	*Syncaris pacifica*	State: E Fed: E	CWHR: N/A USFWS: N/A	Found only in low-elevation and low-gradient streams. Streams of 30-91cm in depth with exposed live roots of trees. The banks have overhanging woody debris or stream vegetation and vines such as stinging nettles, grasses, vine maple and mint.	Adults breed once a year in the fall.

Plants**					
Blasdale's bent grass	*Agrostis blasdalei*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Coastal dunes	Perennial grass that blooms in May-July.
blue coast gilia	*Gilia capitata ssp. chamissonis*	State: - Fed: - Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Coastal dunes and coastal scrub	Annual herb that blooms from April-July.
bluff wallflower	*Erysimum menziesii concinnum*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Coastal bluff scrub, coastal dunes, and coastal prairie.	Annual/perennial herb that blooms from Feb-July.
coastal bluff morning-glory	*Calystegia purpurata ssp. saxicola*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Coastal bluff scrub, coastal dunes, coastal scrub, and North Coast coniferous forest.	Perennial herb that typically blooms from April-Sept.
Colusa layia	*Layia septentrionalis*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Chaparral, valley grassland, and foothill woodland.	Annual herb that blooms from April-May.
Greene's narrow-leaved daisy	*Erigeron greenei*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Chaparral	Perennial herb that blooms from May-Sept.
holly-leaved ceanothus	*Ceanothus purpureus*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Chaparral	Shrub that blooms from March-May.
minute pocket moss	*Fissidens pauperculus*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	North Coast coniferous forest	Moss

Napa false indigo	*Amorpha californica var. napensis*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Broad-leafed upland forest (openings), chaparral, cismontane woodland.	Perennial deciduous shrub that blooms from April - July.
narrow-anthered brodiaea	*Brodiaea leptandra*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Valley grassland, foothill woodland	Perennial herb that flowers from May - July.
perennial goldfields	*Lasthenia californica ssp. macrantha*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Northern coastal scrub	Annual herb that blooms from Jan - Nov.
Tidestrom's lupine	*Lupinus tidestromii*	State: E Fed: E Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Coastal dunes	Perennial herb that bloom from April - June.

^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

*Use CDFW's CWHR habitat classifications and note if there is USFWS critical habitat designated (or adjacent)

USFWS Critical Habitat Mapper - https://www.arcgis.com/home/item.html?id=2c2453ee613f47cdae9dbd0ed7939409

NOAA Fisheries West Coast Critical Habitat Mapper - http://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html

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**
Estuarine Deepwater	Consists of deep-water 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.	Includes all wetlands and deep-water habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.	Tidal saltwater continuously covers the substrate.
Marine Deepwater	Consists of the open ocean overlying the continental shelf and its associated high-energy coastline. Marine habitats are exposed to the waves and currents of the open ocean and the Water Regimes are determined primarily by the ebb and flow of oceanic tides. Salinities exceed 30ppt, with little or no dilution except outside the mouths of estuaries. Shallow coastal indentations or bays without appreciable freshwater inflow, and coasts with exposed rocky islands that provide the mainland with little or no shelter from wind and waves, are also considered part of the Marine System because they generally support typical marine biota.	Includes all wetlands and deep-water habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.	Tidal saltwater continuously covers the substrate.

Estuarine Wetland (unconsolidated shore)	Consists of deep-water 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.	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.	The substrate in these habitats is flooded and exposed by (either regularly or irregularly flooded) tides; includes the associated splash zone.
Estuarine Wetland (emergent)	Consists of deep-water 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.	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.	The substrate in these habitats is (irregularly or regularly) flooded and exposed by tides; includes the associated splash zone.
Marine Wetland	Consists of the open ocean overlying the continental shelf and its associated high-energy coastline. Marine habitats are exposed to the waves and currents of the open ocean and the Water Regimes are determined primarily by the ebb and flow of oceanic tides. Salinities exceed 30ppt, with little or no dilution except outside the mouths of estuaries. Shallow coastal indentations or bays without appreciable freshwater inflow, and coasts with exposed rocky islands that provide the mainland with little or no shelter from wind and waves, are also considered part of the Marine System because they generally support typical marine biota.	Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75% 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.	Substrate maybe irregularly or regularly flooded

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 0.5ppt. It also includes wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5m (8.2ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5ppt.	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.
Freshwater Forested 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 0.5ppt. It also includes wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5m (8.2ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5ppt.	Trees are the dominant life form - i.e., the tallest life form with at least 30% areal coverage. Trees are defined as woody plants at least 6m in height.	Water in this system may occur seasonally or permanently.
Freshwater Scrub-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 0.5ppt. It also includes wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5m (8.2ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5ppt.	Woody plants less than 6m tall are the dominant life form - i.e., the tallest life form with at least 30% areal coverage. May represent a successional stage leading to Forested Wetland, or they may be relatively stable communities.	All water regimes except Subtidal and Regularly Flooded-Tidal Fresh are included.

Freshwater Pond (unconsolidated bottom)	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 0.5ppt. It also includes wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5m (8.2ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5ppt.	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.
Freshwater Pond (aquatic bed)	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 0.5ppt. It also includes wetlands lacking such vegetation, but with all of the following characteristics: (1) area less than 8ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5m (8.2ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5ppt.	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.

Lake (unconsolidated bottom)	Includes wetlands and deep-water habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with 30% or greater areal coverage; and (3) total area of at least 8ha. Similar wetlands and deep-water habitats totaling less than 8ha are also included in the Lacustrine System if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin equals or exceeds 2.5m at low water. Lacustrine waters may be tidal or nontidal, but ocean-derived salinity is always 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 a vegetative cover less than 30%.	Includes all deep-water habitats (i.e., areas > 2.5 m deep below low water) in the Lacustrine System. Many small Lacustrine Systems have no Limnetic Subsystem.
Lake (unconsolidated shore)	Includes wetlands and deep-water habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with 30% or greater areal coverage; and (3) total area of at least 8ha. Similar wetlands and deep-water habitats totaling less than 8ha are also included in the Lacustrine System if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin equals or exceeds 2.5m at low water. Lacustrine waters may be tidal or nontidal, but ocean-derived salinity is always 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.	Includes all wetland habitats in the Lacustrine System. It extends from the shoreward boundary of the System to a depth of 2.5 m (8.2 ft) below low water, or to the maximum extent of nonpersistent emergents if these grow at depths greater than 2.5 m

Source: Classification of Wetlands and Deepwater Habitats of the US

Source: https://www.fws.gov/wetlands/data/mapper.html

Commercial and Recreational Fisheries (Public Health, Fisheries Closure)			
Common Name	**Scientific Name**	**Contact Information**	**Seasonal and Special Considerations, Notes**
steelhead	*Oncorhynchus mykiss*	CDFW Fishing Regulations	Must have a nontransferable *Steelhead Fishing Report and Restoration Card*. Only artificial lures with barbless hooks may be used from Apr 1 - Oct 31 (2 hatchery trout or hatchery steelhead). Only barbless hooks may be used from Nov1 1 - May 31 (4 hatchery trout or hatchery steelhead). https://www.wildlife.ca.gov/Regulations
striped bass	*Morone saxatilis*	CDFW Fishing Regulations	Season open all year. Limit 2. Minimum size 18"
catfish	*Ictalurus spp.*	CDFW Fishing Regulations	Season open all year. No limit.
bullhead	*Ameiurus spp.*	CDFW Fishing Regulations	Season open all year. No limit.
American shad	*Alosa sapidissima*	CDFW Fishing Regulations	Season open all year. Limit 25.
bluegill	*Lepomis macrochirus*	CDFW Fishing Regulations	Season open all year. Limit 25 sunfish and crappie
green sunfish	*Lepomis cyanellus*	CDFW Fishing Regulations	Season open all year. Limit 25 sunfish and crappie
redear sunfish	*Lepomis microlophus*	CDFW Fishing Regulations	Season open all year. Limit 25 sunfish and crappie
black crappie	*Pomoxis nigromaculatus*	CDFW Fishing Regulations	Season open all year. Limit 25 sunfish and crappie
largemouth bass	*Micropterus salmoides*	CDFW Fishing Regulations	Season open all year. Limit 5. Minimum size 12"
smallmouth bass	*Micropterus dolomuieu*	CDFW Fishing Regulations	Season open all year. Limit 5. Minimum size 12"
crayfish	*Various spp.*	CDFW Fishing Regulations	Season open all year. No limit. See CDFW Fishing Regulations for specific approved methods of take.

Designated or Protected Lands			
Area Name	**Designation****	**Contact Information**	**Seasonal and Special Considerations, Notes*****
Russian River State Marine Conservation Area	Marine Protected Area	Sonoma Coast State Park (707) 875-3483	Protects resources by allowing for only specific types of recreational and/or commercial take to occur.
Russian River State Marine Recreational Management Area	Marine Protected Area	Sonoma Coast State Park (707) 875-3483	Protects steelhead, Chinook, and Coho salmon populations which aggregate at the mouth of the Russian River.
Sonoma Coast State Park	State Park	Sonoma Coast State Park (707) 875-3483	Long sandy beaches below rugged headlands, a craggy coastline with natural arches and secluded coves.
Greater Farallones National Marine Sanctuary	National Marine Sanctuary	NOAA Greater Farallones National Marine Sanctuary (415) 561-6622	GFNMS is a globally significant, diverse, and productive marine ecosystem that supports abundant wildlife and valuable fisheries.

**State and federal wildlife refuges, wildlife areas, ecological reserves, wild and scenic rivers, etc.

***Environmental Sensitivity Index (ESI) maps provide a concise summary of coastal resources that are at risk if an oil spill occurs nearby. https://response.restoration.noaa.gov/resources/environmental-sensitivity-index-esi-maps

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4.2 Wildlife Response Plan

Wildlife are put at risk or injured when oil is spilled into marine or inland waters of the state, or 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 ICS. 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 within the Operations Section is to provide for coordinated, immediate, and effective protection, rescue, rehabilitation, and minimization of risk of injury to wildlife resources and habitat during oil spills. The principal objectives during a spill response are to:

- Minimize injuries to wildlife and habitats from the contamination and/or the response actions.
- Provide best achievable rescue and care for 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: communication with/through the Planning Section to response teams in the field; 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.

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 Wildlife Branch 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, including early on in a response, before a UC is established.

Wildlife Avoidance Measures

Avoidance measures may be recommended by the WBD (Operations Section) or EU (Planning Section) for the purpose of minimizing disturbance that could result in injury to wildlife during an oil spill response. By keeping a safe distance from identified sensitive areas, field responders 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. Avoidance measures may include exclusion zones or placing limits on:

ingress/egress routes, unnecessary disturbance of sensitive areas, low altitude flights, night operations, and other activities.

4.3 Oiled Wildlife Care Network

The OWCN is a cooperative system of specialized wildlife rehabilitation centers and organizations. The OWCN is administered by the Wildlife Health Center at UC Davis. The Wildlife Health Center has an MOU with OSPR for operation of the OWCN to establish and equip wildlife rescue and rehabilitation stations and provide services to rescue and rehabilitate oiled wildlife. During an oil spill, OSPR activates and directs activities of the OWCN within the Wildlife Branch. The OWCN maintains a corps of veterinarians, paid staff, and professionally trained volunteers. The OWCN enlists more than 40 rehabilitation, academic, and private non-profit organizations to 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 the OWCN, see www.owcn.org.

4.4 Economic Resources-At-Risk

Economic resources listed in this chapter are facilities, businesses, infrastructure or locations that could be severely impacted if an oil spill were to occur. Economically sensitive resources are separated into six categories: water intakes, infrastructure, recreational, waterfront businesses, commercial fisheries, and any additional economic resources not already captured. Table 4-2 below lists the known economic resources that exist within the boundaries of the Russian River GRP as well as contact information for each resource.

Table 4-2: Resources-At-Risk Matrix – Economic Resources

Name	Agency/ Company	Contact Info.	Phone
Drinking, Industrial, and Agricultural Intakes			
District 3 Mendocino Co. (Sheri Miller)	State Water Resources Control Board - Division of Drinking Water	50 D Street, Suite 200 Santa Rosa 95404	(707) 576-2145
District 18 Sonoma Co. (Janice Thomas)	State Water Resources Control Board - Division of Drinking Water	50 D Street, Suite 200 Santa Rosa 95404	(707) 576-2006
Operations and Maintenance Center	Sonoma County Water Agency	204 Concourse Blvd Santa Rosa 95403	Operations Desk (24hrs): (707) 523-1070
Redwood Valley District	California Water Service	14034 Armstrong Woods Rd Guerneville 95446	(707) 869-0050
	Sweetwater Springs Water District	17081 CA-116 Guerneville 95446	(707) 869-4000
Dams and Hydroelectric Facilities			
Healdsburg Memorial Dam	Sonoma County Regional Parks	13839 Old Redwood Hwy Healdsburg 95448	Ranger Station: (707) 433-1625
Mirabel Dam	Sonoma County Water Agency		Operations Desk (24hrs): (707) 523-1070
Johnson's Beach Dam	Russian River Recreation and Park District	16215 First St., Guerneville 95446	(707) 869-9184
Vacation Beach Dam	Russian River Recreation and Park District		(707) 869-9184
Recreational- Parks, Marinas, Boat Ramps, Fishing Guide Service, Sporting Goods Stores			
Russian River RV Campground		33655 Geyers Rd., Cloverdale 95425	(707) 894-3184
Cloverdale River Park	Sonoma County Regional Parks	31820 McCray Rd., Cloverdale 95425	Ranger Station: (707) 433-1625
Alexander Valley RV Park & Campground		2411 Alexander Valley Rd., Healdsburg 95448	(707) 431-1453
Del Rio Woods Recreations	Sonoma County Regional Parks	2656 S Fitch Mountain Rd., Healdsburg 95448	(707) 473-0501
SOAR Inflatables/Russian River Adventures		20 Healdsburg Ave., Healdsburg, CA 95448	(707) 433-5599
River's Edge Kayak & Canoe Trips		1 Healdsburg Ave., Healdsburg 95448	(707) 433-7247
Healdsburg Veterans Memorial Beach	Sonoma County Regional Parks	13839 Old Redwood Hwy, Healdsburg 95448	Ranger Station: (707) 433-1625
Riverfront Regional Park	Sonoma County Regional Parks	7821 Eastside Rd, Healdsburg 95448	Ranger Station: (707) 433-1625

Wohler Bridge Fishing Access	Sonoma County Regional Parks	9765 Wohler Rd, Forestville 95446	Ranger Station: (707) 433-1625
Steelhead Beach Regional Park	Sonoma County Regional Parks	9000 River Rd., Forestville 95436	Ranger Station: (707) 433-1625
Burke's Canoe Trips		8600 River Rd., Forestville 95436	(707) 887-1222
Sunset Beach River Park	Sonoma County Regional Parks	11060 River Rd., Forestville 95436	Ranger Station: (707) 433-1625
River Bend Resort		11820 River Rd., Forestville 95436	(707) 887-7662
Rubicon Adventures		9743 CA-116 Forestville 95436	(707) 887-2452
EcoRing-EcoRiver		P.O. Box 536 Guerneville 95443	(707) 865-2575
Johnson's Beach	Russian River Recreation and Park District	16215 First St., Guerneville 95446	(707) 869-9184
King's Sport & Tackle		15905 River Rd., Guerneville 95446	(707) 869-2156
Parker's Resort		16220 Neeley Rd., Guerneville 95446	(707) 869-1894
Monte Rio Beach	Monte Rio Park & Recreation District	20488 Highway 116, Monte Rio 95462	(707) 865-2487
Casini Ranch Family Campground		22855 Moscow Rd., Duncans Mills 95430	(800) 451-8400
Duncans Mills Camping Club		25387 Steelhead Blvd., Duncans Mills 95430	(888) 422-6736
Russian River Outfitters		25375 Steelhead Blvd. Duncans Mills 95430	(707) 865-9080
St. Joseph's Camp		22776 Moscow Rd., Duncans Mills 95430	(707) 865-2135
Willow Creek Environmental Campground		25381 Steelhead Blvd., Duncans Mills 95430	(707) 875-3483
WaterTreks EcoTours and Kayak Rentals		Highway 1, PO Box 39, Boat Launch Area, Jenner 95450	(707) 865-2249
Jenner Visitors Center Boat Ramp	CA State Parks Division of Boating & Waterways	Coast Highway Jenner 95450	(707) 875-3483
River Dependent Waterfront/Neighboring Businesses (those that may be immediately or directly impacted)			
Toad Hallow Vineyards		4024 Westside Rd., Healdsburg 95448	(707) 431-1441
Gracianna Winery		6914 Westside Rd., Healdsburg 95448	(707) 486-3771

Westside Farms	Ramey Wine Cellars	7097 Westside Rd., Healdsburg 95448	(707) 433-0870
Creekside Inn & Resort		16180 Neeley Rd., Guerneville 95446	(707) 869-3623
Farmhand		15025 River Rd., Guerneville 95446	(707) 604-7795
Guerneville Lodge		15905 River Rd., Guerneville 95446	(707) 869-0102
Korbel Champagne Cellars		13250 River Rd., Guerneville 95446	(707) 824-7000
Murphy's Circle Cottages		16685 CA-116 Guerneville 95446	(415) 577-0772
Grandma's House		20280 River Blvd., Monte Rio 95462	(650) 534-7314
Meadow View Cottages		20308 CA-116 Monte Rio 95462	(650) 534-7314
Northwood Golf Course		19400 CA-116 Monte Rio 95462	(707) 865-1116
Northwood Lodge & Resort		19455 CA-116 Monte Rio 95462	(707) 865-1655
Rio Villa Beach Resort		20292 CA-116, Monte Rio 95462	(707) 865-1143
River View Garden Resort		20250 CA-116, Monte Rio 95462	(707) 865-2214
Village Inn & Restraurant		20822 River Blvd, Monte Rio 95462	(707) 865-2304
Russian River Rodeo Association		23450 Moscow Rd., Duncans Mills 95430	(707) 865-9854
Russian River Sportsman Club		25150 Steelhead Blvd., Duncans Mills 95430	(707) 865-9429
Russian House #1		Highway 1, Jenner 9960	(707) 865-9456
Bridgehaven		9965 CA-1, Jenner 95450	(707) 865-2473
Jenner Inn & Cottages		10400 CA-1, Jenner 95450	(707) 865-2377
River's End Restaurant & Inn		11048 CA-1, Jenner 95450	(707) 865-2484
Commercial Fisheries			
N/A			
Additional Economic Resources			
Mendocino Redwood Co.		6500 Durable Mill Rd., Calpella 95418	(707) 485-8731

4.5 Tribal and Cultural Resources and Historic Properties at Risk

Cultural and historic sensitive sites are present within this GRP area. Due to the nature of this information, details regarding the location and type of cultural resources present are not included in this document. However, in order to ensure that tactical response strategies do not inadvertently harm cultural and historic sensitive sites, the Northwest Information Center (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) under the California Historical Resources Information System (CHRIS), who can access this sensitive information, should be consulted before disturbing any soil or sediment during a response action. The USCG or USEPA may hire an Historic Properties Specialist to help identify the location of these sensitive resources and/or assign resources to monitor cleanup operations or provide a list of professional archeologists that can be contracted to monitor response activities. Table 4-3 lists contact information for the appropriate CHRIS Information Center for the GRP area.

Tribal Notification

Oil spills which occur on or near federally recognized 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 CA Public Resource Code (PRC) Section 21073 states “California Native American tribe means a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004.” When it is determined that an oil spill has the potential to impact cultural resources, the tribal representatives listed in Table 4-3, provided by NAHC, will be contacted and invited to participate in the response for the purpose of cultural resource protection. A notification call will also be placed to the NAHC.

Section 106 of the National Historic Preservation Act of 1966 requires tribal consultation in all steps of the process when a federal agency project or effort may affect historic properties that are either located on tribal lands, or when any Native American tribe or Native Hawaiian organization attaches religious or cultural significance to the historic property, regardless of the property’s location. When an oil spill response occurs on tribal land, the federal agency must notify appropriate Native American tribes of the undertaking and give those tribal groups the opportunity to consult, should they wish to do so.

In the event of an oil spill that may impact tribal resources, the federal agency is responsible for notifying appropriate Native American tribes. In the absence of an FOSC, the SOSC will ensure appropriate notification of and coordination with tribes.

After the UC is established, an Historic Properties Specialist will coordinate with the EU on cultural and historic resources-at-risk concerns. Procedures for managing the discovery of human skeletal remains and cultural and historic resources can be found in Section 9 of the GRP CM.

Table 4-3: Resources-At-Risk Matrix – Tribal, Cultural and Historic Properties

Agency/ Company	Contact Info.	Phone
Historical and Cultural Resources		
Northwest Information Center: 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	much@sonoma.edu nwic@sonoma.edu	(707) 588-8455 Cell: (707) 332-1117
Website	www.sonoma.edu/nwic	
Tribal Resources (State Agency)		
Native American Heritage Commission	1550 Harbor Blvd., Suite 100, West Sacramento, CA	(916) 373-3710
Steven Quinn	Steven.Quinn@nahc.ca.gov	(916) 373-3710
Katy Sanchez	Katy.Sanchez@nahc.ca.gov	(916) 373-3710
CDFW Tribal Liaison		
Nathan Voegeli	nathan.voegeli@wildlife.ca.gov	(916) 651-7653
Local Tribal Contact Information		
Debra Ramirez, Chairperson Redwood Valley or Little River Band of Pomo rvrsecretary@comcast.net	3250 Road I Redwood Valley, Ca 95470	(707) 485-0361
Patricia Hermosillo, Chairperson Cloverdale Rancheria of Pomo Indians of California	555 S. Cloverdale Blvd., Suite A Cloverdale, Ca 95425	(707) 894-5775
Chris Wright, Chairperson Dry Creek Rancheria Band of Pomo Indians	P.O. Box 607 Geyserville, Ca 95441	(707) 522-4233
Merlene Sanchez, Chairperson Guidiville Rancheria of California admin@guidiville.net	P.O. Box 339 Talmage, Ca 95481	(707) 462-3682
Iyesha Miller, Chairperson Hopland Band of Pomo Indians selliott@hoplandtribe.com	3000 Shanel Road Hopland, Ca 95449	(707) 472-2100
Aimie R. Lucas, Chairwoman Cahto Tribe	P.O. Box 1239 Laytonville, Ca 95454	(707) 984-6197
Marjorie Mejia, Chairperson Lytton Rancheria of California margiemejia@aol.com	437 Aviation Blvd. Santa Rosa, Ca 95403	(707) 575-5917
Jaime Cobarrubia, Chairperson Manchester Band of Pomo Indians	P.O. Box 623 Arena Point, Ca 95468	(707) 882-2788
Jose Simon III, Chairperson Middletown Rancheria	P.O. Box 1035, Middletown, Ca 95461	(707) 987-3670

Local Tribal Contact Information (continued)		
Leona Willams, Chairperson Pinoleville Pomo Nation	500 B Pinoleville Drive Ukiah, Ca 95482	(707) 463-1454
Salvador Rosales, Chairperson Potter Valley Tribe pottervalleytribe@pottervalleytribe.com	2251 South State Street Ukiah, Ca 95482	(707) 462-1213
James Russ, President Round Valley Indian Tribes of the Round Valley Reservation tribalcouncil@rvit.org	77826 Covelo Road Covelo, Ca 95428	(707) 983-6126
Michael Knight, Chairperson Sherwood Valley Band of Pomo Indians svradministrator@sbcglobal	190 Sherwood Hill Drive Willits, Ca 95490	(707) 459-9690
Reno Keoni Franklin, Chairperson Kashia Band of Pomo Indians of the Stewarts Point reno@stewartspoint.org	1420 Guerneville Rd. Ste 1 Santa Rosa, Ca 95403	(707) 591-0580
Abreanna Gomes Kashia Band of Pomo Indians abby@stewartspoint.org ***GRP Subcommittee Member**	1420 Guerneville Rd. Ste 1 Santa Rosa, Ca 95403	(707) 331-4621
Noyo River Indian Community, Chairperson noyojetty1@earthlink.net	P.O. Box 91 Fort Bragg, Ca 95437	
Scott Gabaldon, Chairperson Mishewal-Wappo Tribe of Alexander Valley scottg@mishewalwappotribe.com	2275 Silk Road Windsor, Ca 95492	(707) 494-9159
Gene Buvelot Federated Indians of Graton Rancheria gbuvelot@gratonrancheria.com	6400 Redwood Drive, Ste 300 Rohnert Park, Ca 94928	(415) 279-4844 Cell (707) 566-2288 ext 103
Michael Hunter, Chairperson Coyote Valley Band of Pomo Indians	P.O. Box 39/ 7901 Hwy 10, Redwood, Ca 95470	(707) 485-8723
Greg Sarris, Chairperson Federated Indians of Graton Rancheria	6400 Redwood Drive, Ste 300 Rohnert Park, Ca 94928	(707) 566-2288 Office

Appendix A
GRP Development and Contributors

The Russian River GRP was developed through a collaborative effort among the state, federal, and local government agencies listed below, as well as industry and oil spill response organization partners and tribal and environmental NGO representatives:

Federal Representatives
U.S. Environmental Protection Agency, Region 9 and 10
U.S. Department of Agriculture Forest Service
U.S. Department of the Interior

State Representatives
Calif. Environmental Protection Agency
Calif. Office of Emergency Services
Calif. Department of Fish & Wildlife, Region 3
CALFIRE State Fire Marshal's Office, Pipeline Safety Division
Native American Heritage Commission

Local Representatives
Santa Barbara County Public Health
Sonoma County Fire
Sonoma County Regional Parks
Sonoma County Water Agency
Mendocino County Environmental Health

Tribal Representatives
Bear River Band of Rohnerville Rancheria
San Manuel Band of Mission Indians
Kashia Band of Pomo Indians (KDEP)

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

Environmental Non-Governmental Organizations
Trout Unlimited
Russian River Watershed Association

Other Organizations
Russian River Chamber of Commerce and Visitors Centers

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Appendix B
Site Description

1.0 Overview

This section provides a description of the physical features, hydrology, and climate, found along the Russian River corridor and includes an overview of the oil spill risks in the region. The Russian River, a southward-flowing river, is approximately 110 miles long. It drains from Sonoma and Mendocino counties in Northern California, originating approximately 15 miles north of Ukiah. It terminates at the Pacific Ocean via the Russian River Estuary at the town of Jenner. It is the second-largest river (after the Sacramento River) flowing through the nine-county Greater San Francisco Bay Area. The upper extent of the Russian River GRP boundary is at the first railroad crossing over the Russian River, where Hwy 20 meets Hwy 101, near Lake Mendocino (Figure 1-2). The lower extent is where the Russian River empties into the Pacific Ocean at Jenner. The defined boundary encompasses approximately 104 river miles.

1.1 Physical Features

The Russian River flows through a series of alluvial valleys separated by bedrock canyons. The alluvial valleys were formed by lateral fault blocks of the San Andreas Fault system. Most tributaries of the Russian River watershed follow the northwest/southeast trend created by these faults' movements. Faults also effect the groundwater movements of this watershed; Surface water may infiltrate to become groundwater where a creek crosses a fault, or groundwater may become surface flow along a fault (Russian River Independent Science Review Panel, page 13). Approximately 15-20% of the Russian River watershed is made up of valleys and alluvial plains, most notably the Santa Rosa Plains, Alexander Valley, Hopland Valley, Ukiah Valley, Redwood Valley, and Potter Valley. The watershed is unique amongst northern California coastal rivers for these large alluvial river valleys. The remaining percentage of the river's watershed is comprised of hilly and mountainous terrain that connect the valleys via gorges along the river's course (State Water Resources Control Board (SWRCB), 1997).

The river has been heavily manipulated by man. Since the late 19th century the Russian River has been diverted for irrigation and municipal water supply, dammed, and gravel mined. The gravels of the Russian River are highly valuable due to the durable hard rock needed for making strong earthquake resistant concrete. In some areas the channel bottom has dropped up to 25 feet resulting in severe bank erosion. Mining has also caused the river to be cut off from the floodplains and reduced the amount of riparian habitat (Russian RiverKeeper, 2018). This river engineering has eliminated the old river meanders, wetlands, and about 80% or more of the area the river used to occupy, and the width in most areas has shrunk by over 50% in the last 120 years (Russian RiverKeeper, 2018).

Hydrology

Stream flow processes in this watershed are defined by interactions between surface water and groundwater. This landscape combined with a Mediterranean climate can naturally produce dry and intermittent conditions in many creeks while allowing for perennial flow conditions in others (Russian River Independent Science Review Panel, 2016). Additionally, stream flow is affected by a number of other natural features, including geology, rainfall intensity, slope, the degree of saturation of soils, and vegetative cover and size. This river's stream flow is also highly affected by man-made features, including the operation of diversions, reservoirs, and the location and amount of groundwater pumping (Russian River Independent Science Review Panel, 2016). The river is now disconnected from its former floodplains from Ukiah to Jenner and no longer spreads out in its alluvial valleys during the rainy season. "Whereas the River once meandered across its floodplain, overflowing its bank with winter rains, changing the land as it changed course, it now runs straighter, faster, and warmed in many stretches" (Sonoma County Water Agency and Circuit Rider Productions, Inc., 1998).

Flow of the Russian River is largely controlled by the releases from reservoirs and a hydroelectric power project. The two major reservoirs that provide water supply for the Russian River watershed are Lake Mendocino and Lake Sonoma. Both provide flood protection (managed by the U.S. Army Corps of Engineers) and water supply storage (releases managed by the Sonoma County Water Agency [SCWA]). The SCWA release water to meet downstream demands from agricultural, commercial, and residential water uses and other public water systems and to maintain minimum instream flow requirements for recreation and fish habitat (SWRCB, 1997). The Potter Valley Project, owned and operated by Pacific Gas and Electric (PG&E), is a hydroelectric project that provides an interbasin water transfer to the East Fork of the Russian River. PG&E releases water to generate electricity and maintain minimum instream flow requirements. Additionally, there are over 1,406 existing water diversions within the Russian River watershed in Mendocino and Sonoma Counties (SWRCB, 1997).

"Flow releases in the Russian River are controlled by the State Water Resources Control Board's Decision 1610, which stipulates that the annual minimum summer low flow in the Russian River downstream of Dry Creek as:

- 125 cfs during normal water conditions
- 85 cfs during dry water supply conditions
- 35 cfs during critical water supply conditions" (SCWA, 2005)

Climate

The Russian River watershed has a Mediterranean climate characterized by mild, wet winters and hot, dry summers. Precipitation is primarily in the form of rainfall delivered during large, winter storm events, termed atmospheric rivers. About 93% of annual precipitation occurs between October and May with an average annual rainfall in the watershed of 42 inches. The orographic effects of mountain ranges as well as proximity to the coast drive its rainfall patterns. Winters will have occasional periods of frost (Russian River Independent Science Review Panel, 2016).

Tides and Currents

The Russian River is tidally influenced at the mouth of the river, the Russian River Estuary. The estuary closes throughout the year as a result of a sandbar forming during the spring, summer, and fall when river flows are relatively low and long-period waves transport sand landward. Closures result in ponding of the Russian River behind the sandbar and water level increases in the Estuary. Natural breaching events occur when estuary water surface levels exceed the sandbar height and overtop the sandbar, scouring an outlet channel. SCWA mechanically breaches the sandbar every year since the 1960s to alleviate potential flooding of low-lying shoreline properties (SCWA, Russian River Estuary Management Project, 2018).

1.2 Risk Assessment

The Russian River is a critical hydrological resource in northern California with natural, cultural, and historical resources, all at risk of injury from oil spills. Over 90% of the riparian areas have been lost to development in urban areas, land clearing for farming, and channelization of tributaries and the main stem of the Russian River (Sonoma County Water Agency and Circuit Rider Production, 1998). Despite these impacts, the natural and beneficial uses of the Russian River and adjacent remaining floodplains still include fish and wildlife foraging, migration, and breeding; flood flow conveyance and storage; groundwater recharge; and recreational activities. The potential risks to these resources include oil transporting via vehicles and roads, recreational vessels, and other risk factors. Prevention of and preparation for oil spills impacting this river is paramount.

Road Systems

Roadways that run adjacent to or cross over rivers and/or have storm drains pose an oil spill risk. The Russian River is vulnerable to incidents occurring on numerous major highways. The river flows generally southward to Redwood Valley, then past Calpella, where it borders U.S. Route 101. It parallels State Route 116 as it passes through Rio Nido and Guerneville. Additionally, State Route 1 crosses over the river before it flows into the Russian River Estuary and/or Pacific Ocean between Jenner and Goat Rock Beach. Commercial trucks that can contain hundreds to thousands of gallons of fuel and oil utilize these roadways daily. An accident on these roadways, especially with these commercial trucks, can result in spilled oil reaching the river.

Recreational Boating

Accidents involving recreational watercrafts have the potential to result in spills of anywhere from a few gallons of gasoline up to hundreds of gallons of diesel fuel. Examples of such accidents include collisions, vessel groundings, and mechanical failures. Since the river is relatively narrow, and relatively shallow, recreational boating is generally comprised of jet skis and aluminum boats with small outboard motors. The largest threat would be a grounded vessel near the mouth of the river that, through tidal fluctuations when breached, may release product back up into the river.

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 and power lines. PG&E's Potter Valley Hydroelectric Project upstream from the GRP could potentially release hydraulic oil and power lines could release mineral oil into the river from downed transformers. An additional and unique risk is from heavy equipment failures operating at one of the many wineries located along the river. Although not petroleum-based, it is worth noting that a natural gas pipeline runs along Highway 101 up to Willits.

Sources:

Dr. Matt Kondolf. Overview and History of the Russian River Watershed. Retrieved from: http://www.russianriverisrp.org/Downloads/Presentation2.pdf

Russian River Independent Science Review Panel. 2016. Conceptual Model of Watershed Hydrology, Surface Water and Groundwater Interactions and Stream Ecology for the Russian River Watershed. Retrieved from: http://www.russianriverisrp.org/Downloads/ISRP_FINAL_REPORT.pdf

Russian RiverKeepers, 2018. Retrieved from: https://russianriverkeeper.org

Russian River Watershed Council. 2002. Plan of Action: A Living Document for the Phase II Development of the Russian River Watershed Management Plan. Retrieved from: http://www.krisweb.com/biblio/russian_rrwc_mooreiacofanogoltsman_2002.pdf

Sonoma County Water Agency. Russian River Estuary Management Project, 2018. Retrieved from: http://www.scwa.ca.gov/

Sonoma County Water Agency. 2005. Sonoma County Water Agency's Mirabel Rubber Dam/Wohler Pool Fish Sampling Program: Year 5 Results.

Sonoma County Water Agency. 2010. Notice of Preparation of Environmental Impact Report. Retrieved from: https://www.sonomawater.org/fish-flow

Sonoma County Water Agency and Circuit Rider Production, Inc. 1998. A Guide to Restoring Native Riparian Habitat in the Russian River Watershed. Retrieved from: https://drive.google.com/file/d/0Bw2mEv2uSUGZVG9OaUhpdDB0aW8/view?pref=2&pli=1

State Water Resources Control Board (SWRCB). 1997. Staff Report Russian River Watershed. Retrieved from: http://www.krisweb.com/biblio/russian_swrcb_dwr_1997_staffrptproposedactions.pdf

Wikipedia contributors. 2018. Russian River (California). Retrieved from: https://en.wikipedia.org/w/index.php?title=Russian_River_(California)&oldid=843247208

Appendix C
Comments, Corrections, or Suggestions

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. OSPR values stakeholder input 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 WildlifeOffice 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 Geographic Response Plans 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:_____Ph:_____

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
Relationship to Other Plans

Area Plan for Emergency Response to Hazardous Materials Incidents in Mendocino County

The Mendocino County Area Plan establishes the policies, responsibilities, and procedures required to protect the health and safety of Mendocino County's population, the environment, and public and private property from the effects of hazardous materials incidents. The Plan is the principal guide for agencies of Mendocino County, its incorporated cities, and other local government entities in mitigating hazardous materials emergencies. This plan is consistent with the Standardized Emergency Management System (SEMS) and is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between local, state, and federal agencies, in hazardous material emergencies.

The Plan's objectives are: to enable emergency response personnel to evaluate hazardous materials and take appropriate emergency actions, train and equip emergency response personnel to efficiently and effectively mitigate hazardous materials incidents, describe the overall emergency response organization for hazardous materials incidents occurring within Mendocino County, establish lines of authority and coordination for hazardous materials incidents, facilitate mutual aid to supplement local resources, and describe procedures for accessing outside funding (e.g. state and federal funding) for the mitigation of, and recovery from, hazardous materials incidents.

Mendocino County Operational Area Emergency Operations Plan

This Emergency Operations Plan (EOP) serves as the primary guide for coordinating and responding to all emergencies and disasters within Mendocino County. The EOP addresses response to and short-term recovery from disasters and emergency situations affecting the Mendocino County Operational Area. The purpose of this plan is to facilitate multi-agency and multi-jurisdictional coordination during emergency operations, particularly between Mendocino County, local and tribal governments, special districts as well as state and Federal agencies.

This plan establishes the emergency management organization necessary for response to any emergency or disaster affecting the Mendocino County Op Area, the overall operational concepts associated with the management of emergencies. The plan provides a flexible platform for planning and response to all hazards and emergencies that are likely to impact Mendocino County.

Sonoma County Operational Area Local Oil Spill Contingency Plan

Under Section 22 of the Lempert-Keene-Seastrand Act, local governments are encouraged to prepare, update, or revise a Local Oil Spill Contingency Plan (LOSCP) as part of their existing Hazardous Materials Emergency Incident Response Area Plan. The LOSCP is consistent with Area Plans, Local Coastal Plans, Local Emergency Response Plans, and Federal Area Plans.

The purpose of this plan is to provide policy and procedures for the following: a coordinated local role within Federal and State response structure for a discharge or threat of a discharge of a petroleum product which will impact the coastal or bay environments of Sonoma County; identifying key contacts to be notified in the event or pending threat of an oil spill, as well as the Local Government On-Scene Coordinator; identifying the areas of significant and sensitive natural resources of the county; response resources which may be available to augment federal, state and private spill response efforts; and logistical information.

Sonoma County Hazardous Material Incident Response Plan (Hazardous Materials Plan)

The Hazardous Material Incident Response Plan is intended to serve primarily as an administrative oversight, reference, preparedness and planning document for all local and regional government agencies who may respond to a hazardous materials emergency with County Fire's jurisdiction, including transportation incidents. This Plan should function as a response planning and guidance resource in support of hazardous materials emergency responses within County Fire's jurisdiction area. This Hazardous Materials Incident Response Plan is also intended to be used as a key planning and resource document by County Fire and allied agencies.

The primary objective of this Plan is to assist in the prevention or mitigation of damage to the health and safety of persons, the environment and property from the release or threatened release of hazardous materials into the workplace or environment.

Sector San Francisco Area Contingency Plan (ACP), Area Committee ACP-2

The statutes (OPA 90 and SB 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 CDFW Office of Spill Prevention and Response (OSPR) 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 (FOSC) for the area, is responsible for developing an Area Contingency Plan (ACP) which, when implemented in conjunction with the National Contingency Plan (NCP), 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 extends from the southern Mendocino County border to the northern Santa Cruz County border. The inland boundary is determined by the USCG/USEPA boundary. This line generally follows Hwy 1 along the coast. Inside the San Francisco Bay, the boundary is Hwy 37 (to the north) and Hwy 5 (to the east).

California State Oil Spill Contingency Plan

The California State Oil Spill Contingency Plan is an independent document generally describing the state's response to discharges of oil to all marine or inland surface waterways of California. This version of the Plan supersedes all previous California state oil spill plans (whether statewide or marine specific). Where an incident may involve oil and a chemical release, an assessment will need to be made whether to prepare for and respond to the incident primarily as an oil spill or primarily as a chemical release.

Oil spill incidents often involve a response from multiple agencies having different jurisdictional authorities, capabilities, and functions. In some circumstances, the jurisdictional mandates of several agencies may overlap. Use of the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) to organize spill response ensures that inter-agency responsibilities are collectively addressed.

Incident management generally includes the development of objectives, strategies and tactics, the ordering and release of resources, and coordination with other appropriate response agencies to ensure that all resources are properly utilized and that this coordinating function is performed in a manner designated to minimize risk to other persons and to the environment.

Federal Region 9 Regional Contingency Plan

The Federal Region 9 Regional Contingency Plan (RCP) is intended for use by Local, Tribal, State, and Federal emergency response personnel as a tool for obtaining resources to respond to an oil or hazardous materials incident. It outlines the response mechanisms that would be activated among the various levels of the response community in the event of an emergency situation. It is not intended to displace Local emergency response plans, but rather it is intended to coordinate with Local plans and build on the mechanisms set forth in State emergency response plans.

The objective of the RCP is to describe response protocols and assist in providing a coordinated response capability in the event of a release or threat of release endangering human health and welfare or the environment. The RCP expands upon the planning and response requirements set forth in the NCP, augments coordination with State and Tribal authorities, and integrates existing Tribal, State and Federal plans for Federal Region 9. The RCP incorporates both coastal and inland areas.

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Appendix F
Local/Regional Asset Resources

- **Table F-1: Local/Regional Asset Resources Table**
- **Figure F-1: Cal OES NorCal Certified HazMat Material Teams Map**
- **Table F-2: Cal OES Statewide List of Certified California HazMat Teams by Type**
- **ICP Facility Assessment Check Sheet**

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Table F-1: Local/Regional Response Assets

Resource	Home Base/Owner	Contact Information and Comments
Air Monitoring Equipment		
HazMat/Chemical Monitoring	Sonoma County Hazmat	(707) 565-1152
HazMat/Chemical Monitoring	Santa Rosa Fire Department	(707) 543-3500
Communication Equipment: Portable Radio/Mobile Repeaters		
Radio equipment cache	Ukiah Fire Department	(707) 463-6274
Communications van	Mendocino County Sheriff's	(707) 463-4411
Communications van	Mendocino County OES	(707) 463-4080
Communications van	Cal Fire	(Northern Region - Mendocino Unit) (707) 967-1400 (Northern Region - Sonoma-Lake-Napa Unit)
HazMat Teams		
HazMat Team - Type 3	Santa Rosa Fire Department	(707) 543-3500
HazMat Team - Type 2	Sonoma County Hazmat	(707) 565-1152
See Figure G-1 below, Cal OES Certified Hazardous Material Teams Map, for Additional Type 1-3 HazMat Teams and Table G-2 for a list of statewide Certified California HazMat Teams by Type.		
Swift Water Rescue Teams		
Sonoma County Sheriff's Office Dive Team	Sonoma County Sheriff's Office	24/7 Dispatch (707) 565-2121
Mendocino County Sheriff's Search and Rescue (SAR)	Mendocino County Sheriff's Office	(707) 391- 6770; in an emergency call 911

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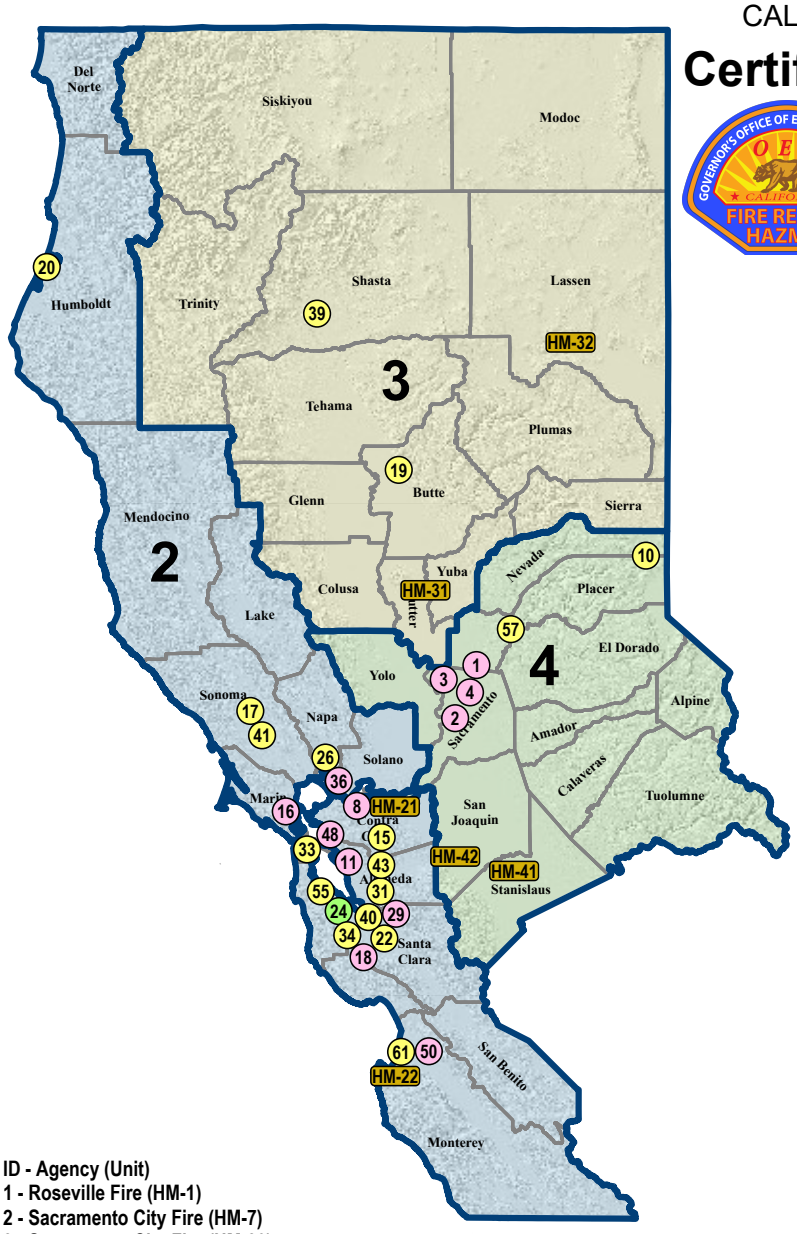
Figure F-1: Cal OES NorCal Certified HazMat Material Teams Map

State of California
CALIFORNIA OFFICE OF EMERGENCY SERVICES

Certified Hazardous Material Teams

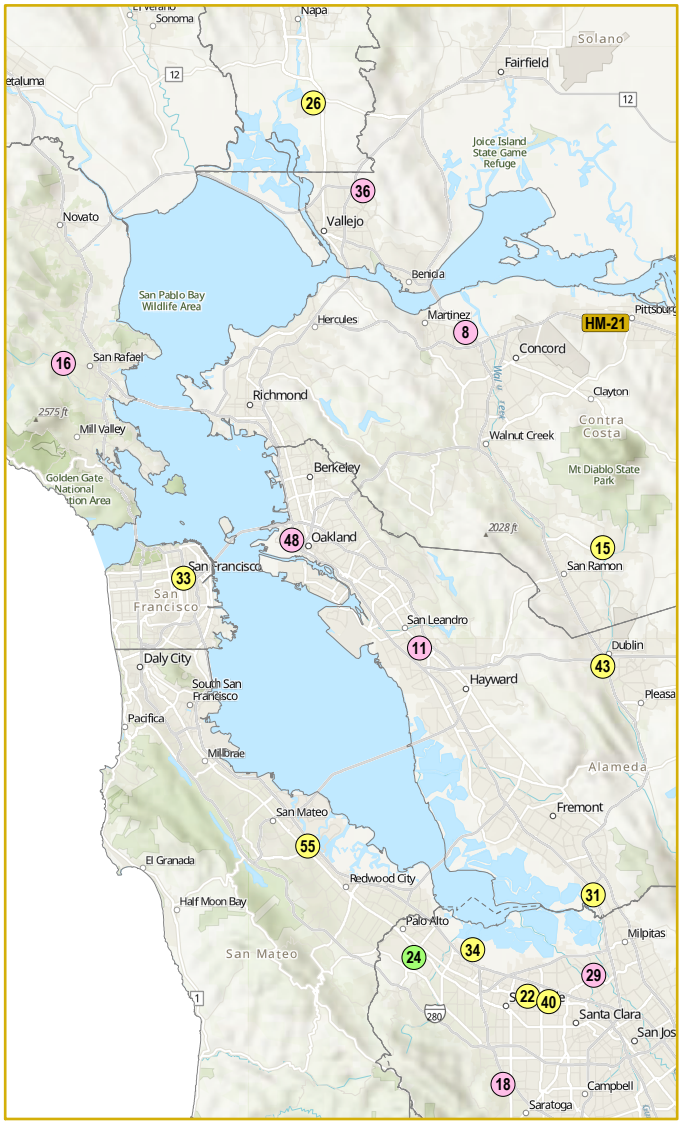
By Type as of April, 2018



Certified Haz-Mat Teams

Unit Type

- Type 1
- Type 2
- Type 3
- Type 2 - Cal OES Sponsored
- Mutual Aid Regions
- County Boundaries



ID - Agency (Unit)
1 - Roseville Fire (HM-1)
2 - Sacramento City Fire (HM-7)
3 - Sacramento City Fire (HM-30)
4 - Sac Metro Fire (HM-109)
8 - Contra Costa JPA (HM-1)
10 - Truckee Fire (HM-1)
11 - Alameda Co. Fire (HM-12)
15 - San Ramon Valley Fire (HM-35)
16 - Marin County JPA (HM-1)
17 - Sonoma County OES (HM-2936)
18 - Santa Clara County Fire (HM-72)
19 - Butte County Interagency Team (HM-5)
20 - Humboldt Bay Fire (HM-8190)
22 - Sunnyvale Dept. Public Safety (HM-2)
24 - Palo Alto Fire (HM-2)
26 - Napa County - Cal FIRE (HM-27)
29 - San Jose City Fire (HM-29)
31 - Fremont City Fire (HM-57)
33 - San Francisco City Fire (HM-1)
34 - Mountain View Fire (HM-55)
36 - Solano County JPA (HM-1)
39 - Shasta-Cascade JPA (HM-24)
40 - Santa Clara City Fire (HM-9)
41 - Santa Rosa City Fire (HM-1)
43 - Livermore-Pleasanton Fire (HM-92)
48 - Oakland City Fire (HM-2599)
50 - Salinas JPA (Monterey Co) (HM-1)
55 - Belmont FPD (San Mateo Co) (HM-14)
57 - Placer County-Central (HM-10)
61 - Presideo of Monterey (HM-H2MT61)

Cal OES Sponsored Teams
ID - Agency (Unit)
HM-21 - Contra Costa County (HM-21)
HM-22 - Seaside Fire (HM-22)
HM-31 - Yuba City Fire (HM-31)
HM-32 - Susanville Fire (HM-32)
HM-41 - Modesto Fire (HM-41)
HM-42 - South County Fire (HM-42)

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Miles

N W E S

May 3, 2018
Produced by: Cal OES GIS
Source: Cal OES Hazardous Materials Div
N:\1 Daily Operations\Response\Fire and Rescue \Projects\Fire Rescue Hazmat\1 Project \Hazmat Material Teams.aprx

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Table F-2: Cal OES Statewide List of Certified California HazMat Teams by Type

CERTIFIED CALIFORNIA HAZMAT TEAMS, BY TYPE (Items highlighted is new data since last update) – 4/30/18									
	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-8	1/13/2017	92807
	14	13	32	Burbank City FIre	XLC-BRK	1	HM-12	6/08/2017	91505
	10	10	9	Glendale City Fire	XLC-GLN	1	HM-24	7/06/2017	91208
	7	7	5up	Long Beach Fire Dept.	XLF-LOB	1	HM-24	10/06/2016	90802
	18	17	30	Los Angeles County Fire	XLB-LAC	1	HM-150	12/15/2010	91351
	51	46	37	Orange Co Fire Authority	XOR-ORC	1	HM-4	8/15/2017	92612
	49	44	26	Orange Co Fire Auth. (formerly Santa Ana hm-9)	XOR-ORC	1	HM-79	8/15/2017	92705
	45	40	23	Ventura County Fire	XVE-VNC	1	HM-50	6/07/2017	93010
	26	25	15	Vernon City Fire	XLE-VER	1	HM-151	7/15/2017	90058
	55	58	47	Santa Fe Springs Fire	XLE-SFS	1	HM # 851	4/20/2018	90670
	54	48	48	Santa Monica Fire	XLA-SMA	1	HM-4	10/27/2016	90404
	6	6	11	Alameda County Fire	XAL-ACF	2	HM-12	5/23/2017	94546
	5	5	7up	Contra Costa County JPA	XCC-CCH	2	HM-1	10/20/2016	94553
	33	31	17up	Marin County Fire Haz-Mat JPA	XMR-MRN	2	HM-1	8/02/2016	94960
	43	62	52	Oakland City Fire	XAL-OKL	2	HM # 2599	8/23/2013	94607
	61	60	50up	Salinas City Fire – Monterey County JPA	XMY-SLS	2	HM-2	6/14/2017	93901
	22	50	31	San Jose City Fire	XSC-SJS	2	HM-29	4/05/2017	95134
	24	23	19	Santa Clara County Fire	XSC-CNT	2	HM–72	3/14/2017	95014
	50	45	38up	Solano County O.E.S. (Fairfield City FD)	XSO-FRF	2	HM-1	7/18/2017	94533
	1	1	1	Roseville City Fire	XPL-RSV	4	HM-1	5/17/2016	95678
	2	2	2	Sacramento City Fire	XSA-SCR	4	HMRT-7	12/01/2016	95823
	3	3	3	Sacramento City Fire	XSA-SCR	4	HMRT-30	12/01/2016	95835
	4	4	4	Sacramento Metro F.P.D.	XSA-SAC	4	HM-109	11/17/2017	95608
	42	37	25up	Bakersfield Fire. Dept	XKE-BKF	5	HM-15	3/16/2017	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	4/26/2018	93703
	16	15	6	Fresno City Fire	XFR-FRN	5	HM-16	4/26/2018	93722
	11	11	14up	Merced County F.D.	XMD-MRD	5	HM-62	3/13/2013	95301
	32	30	41	Visalia Fire	XTU-VSA	5	HM-55	7/16/2017	93291
	67	73	62	Ontario City Fire	XBO-OTO	6	HM-133	8/7/2015	91761
	57	55	44u	Riverside City Fire	XRI-RIV	6	HM-2	4/7/2014	92503
	68	66	55	San Bernardino County Fire	XBO-BDC	6	HM-74	4/7/2014	92335
	9	69	56	San Diego City Fire	XSD-SND	6	HM-1	5/30/2014	92126
	48	70	57	San Diego City Fire	XSD-SND	6	HM-2	5/30/2014	92126
	71	72	61up	San Manuel Fire Dept.	XBO-SMI	6	HM-241	4/25/2017	92346
	15	14	7	U.S. Marine Corp Camp Pendleton	XSD-MCP	6	HM-1	8/25/2017	92055
				TYPE 1 TOTAL:			36		
TYPE 2	59	67	59	Santa Barbara City	XSB-STB	1	HM-1	11/03/2014	93101
	66	65	53	Santa Barbara County	XSB-SBC	1	HM-31	10/07/2013	93427
	72	74	63	San Luis Obispo County / CAL Fire	XSL-SLU	1	HM-1	1/05/2016	93446
	63	71	58	Belmont City Fire	XSM-BEL	2	HM-14	7/03/2014	94002
	41	35	33	Fremont City Fire	XAL-FRE	2	HM-57	4/04/2018	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	1/18/2018	94588
	20	49	36up	Mt. View Fire	XSC-MTV	2	HM-5	3/08/2017	94043
	35	32	29	Napa County Fire	XNA-NPA	2	HM-27	10/24/2010	94558
	73	75	64	Presidio of Monterey	XMY-POM	2	H2MT61	9/20/2017	93955
	44	39	35	San City Francisco Fire	XSF-SFR	2	HM-1	4/05/2011	94102
	28	27	16	San Ramon Fire Prot. Dist	XCC-SRM	2	HM-35	2/01/2017	94506
	23	52	45	Santa Clara City Fire	XSC-SNC	2	HM-9	6/19/2012	95051
	58	56	46up	Santa Rosa City Fire	XSN-SRS	2	HM-1	2/16/2018	95404
	8	8	18	Sonoma County Fire	XSN-SSR	2	HM-2936	3/07/2017	95403
	25	24	24	Sunnyvale Dept. Public Safety	XSC-SNY	2	HM-2	11/30/2016	94085
	36	33	20	Butte County Fire	XBU-BUT	3	HM-5	2/02/2017	95928
	12	54	42	Shasta-Cascade HM JPA (Redding Fire)	XSH-SHS	3	HM-24	2/17/2012	96002
	69	68	60	Placer Co. Fire (CDF)	XPL-PCF	4	HM-10	2/01/2015	95603
	13	12	10up	Truckee Fire Prot. District	XTB-TRK	4	HM-1	4/11/2018	96161
	47	42	40	Kern County Fire	XKE-KRN	5	HM-66	3/16/2017	93308
	60	59	49up	Corona City Fire	XRI-COR	6	HM-4	4/05/2013	92879
	56	57	43up	Hemet City Fire	XRI-HMT	6	HM-1	6/05/2013	92545
	64	63	51	Riverside County Fire	XRI-RRU	6	HM-34	5/14/2013	92596
	~~65~~	~~64~~	~~54~~	~~Riverside County Fire~~	~~XRI-RRU~~	~~6~~	~~HM-81~~	~~10/15/2013~~	~~92211~~
				TYPE 2 TOTAL:			24		
TYPE 3	21	20	27	Palo Alto Fire Dept.	XSC-PAF	2	HM-2	8/02/2010	94304
				TYPE 3 TOTAL:			1		
				TOTAL TEAMS PASSED INSPECTION			61		
				THIS CHART IS ALWAYS AVAILABLE ON OUR WEB SITE: http://www.caloes.ca.gov/FireRescueSite/Pages/Team-Typing-Information.aspx					

NOTES: Changes to HM Unit status:

1. Salinas City Fire HM-2 Upgraded from a Type 2 to a Type 1 and passed Re-Certification on 6/24/2017
2. Solano County OES HM-1 Upgraded from a Type 2 to a Type 1 and passed Re-Certification on 7/18/2017
3. San Manuel Fire Dept. HM-241 Upgraded from a Type 2 to a Type 1 on 4/25/2017
4. Mt. View Fire HM-5 Upgraded from a Type 3 to a Type 2 and passed Re-Certification on 3/08/2017
5. Santa Rosa City Fire HM-1 Upgraded from a Type 3 to a Type 2 and passed Re-Certification on 2/16/2018
6. Presidio of Monterey H2MT61 Entered into the Team Typing program as a Type 2 Team on 9/20/2017
7. Riverside Co. Fire, HM-81 discontinued and Removed their Type 3 HazMat Team from the program.
8. Burbank City Fire HM-12 Passed Re-Certification on 6/08/2017
9. Glendale City Fire HM-24 Passed Re-Certification on 7/06/2017
10. Orange Co. Fire Authority HM-4 Passed Re-Certification on 8/15/2017
11. Orange Co. Fire Authority HM-79 Passed Re-Certification on 8/15/2017
12. Ventura Co. Fire HM-50 Passed Re-Certification on 6/07/2017
13. Vernon City Fire HM-151 Passed Re-Certification on 7/15/2017
14. Santa Fe Springs Fire HM-851 Passed Re-Certification on 4/20/2018
15. Alameda Co. Fire HM-12 Passed Re-Certification on 5/23/2017
16. San Jose City Fire HM-29 Passed Re-Certification on 4/05/2017
17. Santa Clara Co. Fire HM-72 Passed Re-Certification on 3/14/2017
18. Sacramento Metro Fire HM-109 Passed Re-Certification on 11/17/2017
19. Bakersfield City FireHM-15 Passed Re-Certification on 3/16/2017
20. Fresno City Fire HM-1 Passed Re-Certification on 4/26/2018
21. Fresno City Fire HM-16 Passed Re-Certification on 4/26/2018
22. Visalia City Fire HM-55 Passed Re-Certification on 7/16/2017
23. USMC Camp Pendleton Fire HM-1 Passed Re-Certification on 8/25/2017
24. Fremont City Fire HM-57 Passed Re-Certification on 4/04/2018
25. Humboldt Bay Fire HM-8190 Passed Re-Certification on 2/26/2018
26. San Ramon Fire Prot. Dist. HM-35 Passed Re-Certification on 2/01/2017
27. Sonoma Co. Fire HM-2936 Passed Re-Certification on 3/07/2017
28. Butte Co. Fire HM-5 Passed Re-Certification on 2/02/2017
29. Truckee Fire HM-1 Passed Re-Certification on 4/11/2018
30. Kern Co. Fire HM-66 Pass Re-Certification on 3//16/2017

Changes to Chart Statistics:

1. The total number of TYPE 1 HM teams boosted to at 36.
2. The total number of TYPE 2 HM teams decreased to 24.
3. The total number of TYPE 3 HM teams decreases to 1.
4. The total number of typed Metropolitan HM Teams stayed the same at 61.

Above changes issued 4/26/2018 and posted on web page.

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 G
ACRONYMS

A

ACP Area Contingency Plan

ADC Accredited Disaster Council

API American Petroleum Institute

ART Applied Response Technologies

AST Above-Ground Storage Tank

B

BLM Bureau of Land Management

BOR Bureau of Reclamation

C

CA California

CalARP California Accidental Release Prevention Program

CalOES California Office of Emergency Services

CalEPA California Environmental Protection Agency

CalOSHA California Occupational Safety and Health Administration

CalTrans California Department of Transportation

CCR California Code of Regulations

CDF/CalFire California Department of Forestry and Fire Protection

CDFW California Department of Fish and Wildlife

CERT Community Emergency Response Team

CFR Code of Federal Regulations

CFS Cubic Feet per Second

CHEMTREC Chemical Transportation Emergency Center

CHP California Highway Patrol

CHMIRS California Hazardous Materials Incident Reporting System

CHRIS California Historical Resources Information Center

CLEMARS California Law Enforcement Mutual Aid Radio System

CLERS California Law Enforcement Radio System

CNPS California Native Plant Society

COTP Captain of the Port (USCG)

CUPA Certified Unified Program Agency

CWA Clean Water Act

CWHR California Wildlife Habitats Relationship (System)

D

DOGGR Division of Oil, Gas, and Geothermal Resources (Department of Conservation)

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

USEPA Environmental Protection Agency

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

IH Industrial Hygienist

IMH Incident Management Handbook

IMT Incident Management Team

ISB In-Situ Burning

J

JIC Joint Information Center

L

LEPC Local Emergency Planning Committee

LGOSC Local Government On-Scene Coordinator

M

MMAA Master Mutual Aid Agreement

MOU Memorandum of Understanding

N

NAHC Native American Heritage Commission

NALEMARS National Law Enforcement Mutual Aid Radio System

NCP National Contingency Plan

NEBA Net Environmental Benefit Analysis

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

PA Participating Agency

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

SIMA Spill Impact Mitigation Assessment

SMARS Statewide Mutual Aid Radio System

SOFR Safety Officer

SOP Standard Operating Procedures

SOSC State On-Scene Coordinator

SPCC Spill Prevention Containment and Countermeasures

SRT Self-Regulated Tide (gate)

SWA Surface Washing Agent

SWRCB State Water Resources Control Board

T

TSD Treatment, Storage, and Disposal

U

UC Unified Command

USCG United States Coast Guard

USEPA United States Environmental Protection Agency

USFWS United States Fish & Wildlife Service

USGS United States Geologic Survey

UST Underground Storage Tank

V

VC Volunteer Coordinator

VHF Very High Frequency

VU Volunteer Unit

VUL Volunteer Unit Leader

W

WISER Wireless Information System for Emergency Responders

WRGS Wildlife Recovery Group Supervisor

WRP Wildlife Response Plan

References

API Energy, Oil Spill Prevention and Response, Net Environmental Benefit Analysis, 2015. Retrieved from http://www.oilspillprevention.org/oil-spill-cleanup/oil-spill-cleanup-toolkit/net-environmental-benefit-analysis-neba.

API Energy, Options for Minimizing Environmental Impacts from Inland Spill Response, 2016. Retrieved from http://www.oilspillprevention.org/~/media/Oil-Spill-Prevention/spillprevention/r-and-d/inland/options-for-minimizing-e20161228t134857.pdf

California Department of Fish and Wildlife, California Wildlife Habitats Relationships (database), version 9.0, 2014. Retrieved from https://www.wildlife.ca.gov/Data/CWHR

California Department of Fish and Wildlife, Office of Spill Prevention and Response, Applied Response Technologies (ARTs) and Oil Spill Cleanup Agents (OSCAs), February 2019. Retrieved from https://www.wildlife.ca.gov/OSPR/OSRO/Oil-Spill-Cleanup-Agents

California Department of Fish and Wildlife, Office of Spill Prevention and Response, California State Oil Spill Plan, April 2017, retrieved from http://www.wildlife.ca.gov/OSPR/Contingency.

California Department of Fish and Wildlife, Office of Spill Prevention and Response, Wildlife Response Plan for Oil Spills in California, March 2016. Retrieved from http://www.wildlife.ca.gov/OSPR/Preparedness/Wildlife-Response

California Department of Fish and Wildlife, Office of Spill Prevention and Response and U.S. Coast Guard, Area Contingency Plan, Sector LA/LB, 2014. Retrieved from http://www.wildlife.ca.gov/OSPR/Contingency.

California Department of Fish and Wildlife, Office of Spill Prevention and Response and U.S. Coast Guard, Area Contingency Plan, Sector San Francisco Area, 2014. Retrieved from http://www.wildlife.ca.gov/OSPR/Contingency.

California Native Plant Society, Vegetation Assessment and Ranking of Fen and Wet Meadow Sites of the Shasta-Trinity National Forest, California, March 2012. Retrieved from https://www.cnps.org/wp-content/uploads/2019/01/veg-fen-shasta-trinity-2012.pdf

Dieck, J. J., and Robinson, L. R., 2004, Techniques and Methods Book 2, Collection of Environmental Data, Section A, Biological Science, Chapter 1, General classification handbook for floodplain vegetation in large river systems: U.S. Geological Survey, Techniques and Methods 2 A-l, 52 p.

Governor's Office of Emergency Response, California State Emergency Plan 2017, Retrieved from http://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/state-of-california-emergency-plan-emergency-support-functions.

Mendocino County, Area Plan for Emergency Response to Hazardous Materials Incidents in Mendocino County, November 2016.

Mendocino County, Mendocino County Operational Area Emergency Operations Plan, September 2016, Retrieved from http://www.mendocinosheriff.com/oes/EmergencyOperationsPlan.pdf.

Nevada County and Placer County Office of Emergency Service, Crude Oil/HazMat by Rail Operational Response Guide, 2015.

NOAA Fisheries, West Coast Region, Endangered Species Act Critical Habitat. Retrieved from http://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html.

NOAA Hazardous Materials Response and Assessment Division and the American Petroleum Institute, Options for Minimizing Environmental Impacts of Freshwater Spill Response, 1994. Retrieved from http://response.restoration.noaa.gov/sites/default/files/shoreline_countermeasures_freshwater.pdf

NOAA National Weather Service, Advanced Hydrologic Prediction Service. Retrieved from https://water.weather.gov/ahps2/hydrograph.php?wfo=lox&gage=blnc1

NOAA Office of Response and Restoration, Shoreline Assessment Manual, August 2013. Retrieved from https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/shoreline-assessment-manual.html

Plumas County, Plumas County Hazardous Materials Response Plan, August 2016. Retrieved from http://www.countyofplumas.com/DocumentCenter/View/15685

Region 9 Regional Response Team, Regional Contingency Plan, October 2005. Retrieved from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15499&inline=true

Region 10 Regional Response Team and Northwest Area Committee, Geographic Response Plans; Gray's Harbor (December 2013), Nooksack River (Draft, November 2016), and Middle Columbia River, John Day Pool (October 2015). Retrieved from https://www.rrt10nwac.com/GRP/Default.aspx

Sonoma County Fire and Emergency Services Department, Hazardous Materials Incident Response Plan (Hazardous Materials Area Plan), September 2017.

Sonoma County Fire and Emergency Services Department, Sonoma County/Operational Area Local Oil Spill Contingency Plan – An Annex to the Emergency Operations Plan, February 2011.

Sonoma County Water Agency, Sonoma County Water Agency's Mirabel Rubber Dam/Wohler Pool Fish Sampling Program Year 5 Results 2004, December 31, 2005.

Technical Response Planning, Hazardous Spill Containment Options and Recovery Methods, posted March 2011. Retrieved from: http://www.emergency-response-planning.com/blog/bid/36269/Hazardous-Spill-Containment-Options-and-Recovery-Methods

Union Pacific Railroad, Feather River Geographic Response Plan, January 2018.

U.S. Coast Guard, Incident Management Handbook, 2014. Retrieved from https://homeport.uscg.mil/Lists/Content/Attachments/2923/2014%20USCG%20Incident%20Management%20Handbook%20in%20English.pdf

U.S. Department of Transportation, Emergency Response Guide, 2016.

U.S. Environmental Protection Agency, National Contingency Plan, 2015. Retrieved from https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview

U. S. Fish and Wildlife Service, Critical Habitat Mapper, July 2013. Retrieved from https://www.arcgis.com/home/item.html?id=2c2453ee613f47cdae9dbd0ed7939409

U. S. Fish and Wildlife Service, National Wetlands Inventory, Wetland Mapper, October 2018. Retrieved from https://www.fws.gov/wetlands/data/mapper.html

U.S. Geological Survey, National Hydrography, Retrieved from: https://www.usgs.gov/core-sciencesystems/ngp/national-hydrography

Upper Mississippi River Basin Association, Inland Stranded Oil Habitat Fact Sheet for Response: Floodplain Forest, March 2016. Retrieved from: http://www.umrba.org/hazspills/floodplain-forest.pdf

Upper Mississippi River Basin Association, Inland Response Tactics Manual (prepared for USEPA, Region 5), August 2010. Retrieved from: http://www.umrba.org/hazspills/inland-response-tactics-manual8-2010.pdf