CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Office of Spill Prevention and Response

Lower Sacramento River

GEOGRAPHIC RESPONSE PLAN | April 2023

Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, Sacramento Counties

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Spill Response Contact Sheet

Immediate Emergency Notifications for Oil Spills Call Upon Discovery of Spill	
	*** Staffed 24-Hours/Day**
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) †See Footnote on spill thresholds for notification and the Field Rule for San Joaquin Valley.	**(800) 852-7550***
Certified Unified Program Agency (CUPA) (CalOES Spill Report will be emailed to CUPA as part of their immediate notification)	
Shasta County Environmental Health Division	**(530) 225-5787**
Tehama County Environmental Health	**(530) 527-8020**
Glenn County Air Pollution Control District	**(530) 934-6500**
Butte County Public Health Department	**(530) 552-3880**
Colusa County Environmental Health	**(530) 458-0395**
Sutter County Environmental Health	**(530) 822-7400**
Yolo County Environmental Health	**(530) 666-8646**
Sacramento County Environmental Management Department	**(916) 875-8550**
Federal Notification - National Response Center (as appropriate): If the spill equals or exceeds CERCLA Federal Reportable Quantities. ‡Federal Reportable Quantities: http://www.epa.gov/superfund/policy/release/rq/index.htm	**(800) 424-8802***
Infrastructure Emergency Notification: Promptly Notify	
Railroad, Pipeline, Fixed Facilities	
UPRR Railroad Emergency	**(888) 877-7267**
BNSF Railroad Emergency	**(800) 832-5452**
PG & E Natural Gas Pipeline (running along Hwy 5)	**(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*/(530) 242-4300 (Redding), (530) 527-2034 (Red Bluff), (530) 934-5424 (Willows), (530) 662-4685 (Woodland), (916) 843-3000 (Sacramento)**
U.S. Bureau of Reclamation (Keswick Dam)	**Business hrs: (530) 275-1554 After hrs: (530) 276-2306**

	*** Staffed 24-Hours/Day**
Infrastructure Emergency Notification: Promptly Notify (continued)	
State Water Resources Control Board, Division of Drinking Water, District 2 - Lassen District 21 - Redding, District 9 - Sacramento	**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***
U.S. Environmental Protection Agency	
24-Hour Duty Officer	**(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**
On-Call Pipeline Safety Engineer: Alin Podoreanu	**(916) 212-8891**
Local Fire and Law Enforcement	
Redding Police Department	**(530) 225-4200**
Red Bluff Police Department	**(530) 527-3131**
Colusa Police Department	**(530) 458-7777**
Sacramento Police Department	**(916) 808-5471**
Shasta County Sheriff	**(530) 245-6000**
Tehama County Sheriff	**(530) 529-7900**
Glenn County Sheriff	**(530) 934-6473**
Butte County Sheriff	**(530) 538-7321**
Colusa County Sheriff	**(530) 458-0200**
Sutter County Sheriff	**(530) 822-7307**
Yolo County Sheriff	**(530) 668-5280**
Sacramento County Sheriff	**(916) 874-5115**
Redding Fire Department	**(530) 225-4141**
Anderson Fire Protection District	**(530) 378-6699**
Lake California Volunteer Fire Department	**(530) 347-7900**
Red Bluff Fire Department	**(530) 527-1126**

	* Staffed 24-Hours/Day
Local Fire and Law Enforcement (continued)	
Los Molinos Fire Station	(530) 384-2345
Corning Fire Department	(530) 824-7044
Hamilton City Fire Department	(530) 826-3355
Colusa Fire Department	(530) 458-7721
Knights Landing Fire Department	(530) 735-6409
Sacramento Fire Department	(916) 808-1300
Affected or Adjacent Agencies to Notify Early-On as Appropriate; If In Doubt, Notify	
Utilities, Dams, Hydroelectric, Infrastructure (non-emergency)	
Keswick Dam	(530) 247-8500
ACID Diversion Dam	(530) 365-7329
Red Bluff Diversion Dam	(530) 247-8500
Coleman National Fish Hatchery	(530) 365-8622
Water Districts, Water Intakes and County Water Agencies	
Anderson-Cottonwood Irrigation District	(530) 365-7329
Bella Vista Water District	(530) 241-1085
Rio Alto Water District	(530) 347-3835
Proberta Water District	(530) 528-8604
El Camino Irrigation District	(530) 385-1559
Gerber-Las Flores Community Services District	(530) 385-1904
Corning Water District	(530) 824-2914
Deer Creek Irrigation District	(530) 839-2365
Los Molinos Mutual Water Company	(530) 384-2737
Tehama Colusa Canal Authority	(530) 934-8881
Rancho Tehama Association	(530) 585-2444
Mineral Water Company	(530) 595-3479
Glenn Colusa Irrigation District	(530) 865-2055
Cal Water Service (Chico District)	(530) 893-6300
Colusa County Water District	(530) 476-2669
Colusa Drain Mutual Water Company	(530) 458-4849
Knights Landing Community Services District	(530) 207-9101

	* Staffed 24-Hours/Day
Water Districts, Water Intakes and County Water Agencies (continued)	
Sacramento County Water Agency	(916) 874-6851
Freeport Regional Water Agency Intake/Sacramento County Department of Water Resources (24-hours)	(916) 876-7600
Sacramento River Water Treatment Plant Intake/City of Sacramento (24-hours)	(916) 808-4961
Woodland-Davis Clean Water Agency	(530) 379-4009
George Kristoff Water Treatment Plant/City of West Sacramento	(916) 617-4868
Metropolitan Water District	(916) 650-2600
Public Works and Traffic Control	
City of Redding Public Works	(530) 224-6068
City of Anderson Public Works	(530) 378-6640
City of Red Bluff Public Works	(530) 527-2605
City of Colusa Public Works	(530) 458-4941 After hrs: (530) 458-7721
West Sacramento Public Works	(916) 617-4850
City of Sacramento Public Works	(916) 808-8300
CalTrans District 2 (Shasta & Tehama County)	(530) 225-3426
CalTrans District 3 (Glenn, Butte, Colusa, Sutter, Yolo, & Sacramento County)	(530) 741-4572
Statewide Traffic Safety & Signs	(714) 468-1919
Additional Contact Information as Appropriate; If In Doubt, Notify	
Federal Agencies	
U.S. Department of the Interior, Regional Environmental Officer	(415) 420-0524
U.S.D.A. Forest Service: Forest Spill Coordinator, Belinda Walker, Asst. Regional Environmental Engineer	(909) 229-5201
U.S. Coast Guard Sector SF Incident Management Division	(415) 399-3543
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	
John Henderson (Field Response Coordinator)	(916) 930-5676
Damien Higgins (Regional Spill Response Coordinator)	(916) 414-6548
NOAA Fisheries (*Santa Rosa office*)	(707) 387-0737

	*** Staffed 24-Hours/Day**
Federal Agencies (continued)	
NOAA Scientific Support Coordinator, Jordan Stout	**(206) 526-6317***
FEMA Region IX, 24-Hour Duty Officer	**(510) 627-7250***
State Agencies	
Calif. Department of Fish and Wildlife	
Region 1, Regional Manager, Tina Bartlett	**(530) 225-2363**
Region 2, Regional Manager, Kevin Thomas	**(916) 358-2898**
Calif. Environmental Protection Agency	
CalEPA Duty Officer Email: epadofficer@calepa.mail.onmicrosoft.com	
Jason Boetzer, REHS Assistant Secretary Local Program Coordination and Emergency Management	**o: (916) 327-9558 c: (916) 715-3005**
John Elkins Environmental Program Manager Emergency Response, Refinery Safety, CalARP, & HMBP	**c: (916) 804-8349**
Kristi Placencia Emergency Response Coordinator	**o: (916) 327-7780 c: (916) 601-7845**
CAL FIRE - Office of the State Fire Marshal, Pipeline Safety - Sacramento	**(916) 263-6300**
CAL FIRE - Department of Forestry and Fire Protection-Northern Region Operations	**(530) 224-2490**
Calif. Department of Public Health, Duty Officer	**(916) 328-3605***
Regional Water Quality Control Board	
Redding	**(530) 224-4857**
Rancho Cordova	**(916) 464-3291**
State Water Resources Control Board, Division of Water Quality	**(916) 341-5455***
Calif. Department of Water Resources	**(916) 574-2714**
Calif. Geologic Energy Management Division	**(916) 322-1110**
Calif. Department Toxic Substance Control	**(800) 260-3972**
Native American Heritage Commission	**(916) 373-3710**
Ryan Bradshaw, Northeast CHRIS Information Center	**(530) 898-6256**
Bryan Much, Northwest CHRIS Information Center	**O: (707) 588-8455 C: (707) 332-1117**
Paul Rendes, North Central CHRIS Information Center	**(916) 278-6217**
Individual tribal contacts can be found on page 212	
State and Federally Managed Lands	
Calif. State Parks Northern Comms Center (Dispatch)	**(916) 358-0333**
Sacramento River National Wildlife Refuge	**(530) 934-2801**
Sacramento River Wildlife Area	**(916) 358-2882**

*** Staffed 24-Hours/Day**

Emergency Response Resources	
Ambulance Service	
American Medical Response (Redding)	**(530) 246-9111***
Phi Air Medical (Redding)	**(530) 221-0646***
Reach Air Medical Services (Redding)	**(530) 244-5192***
Westside Ambulance Association (Orland)	**(530) 336-5151***
First Responder EMS, Inc. (Chico)	**(530) 891-4357***
Bi-County Ambulance (Yuba and Sutter Counties)	**(530) 674-2780***
Reach 7 (Olivehurst)	**(916) 208-1610***
CALSTAR (Sacramento)	**(916) 921-4000***
Medic Ambulance Services (Sacramento)	**(707) 644-8989***
Hospitals	
Patients' Hospital of Redding	**(530) 225-8700***
Shasta Regional Medical Center	**(530) 244-5400***
Mercy Medical Center - Redding	**(530) 225-6000***
St. Elizabeth Community Hospital	**(530) 529-8000***
Enloe Medical Center	**(530) 332-7300***
Colusa Regional Medical Center	**(530) 619-0800***
Sutter General Hospital	**(916) 887-0000***
UC Davis Medical Center	**(916) 734-2011***
Mercy General Hospital	**(916) 453-4545***
Airports	
Redding Municipal Airport	**(530) 224-4320**
Benton Field Airport	**(530) 241-4204**
Red Bluff Municipal Airport	**(530) 527-2605**
Corning Municipal Airport	**(530) 824-7025**
Chico Municipal Airport	**(530) 893-6727**
Haigh Field Airport	**(530) 934-6530**
Willows-Glenn County Airport	**(530) 934-6530**
Colusa County Airport	**(530) 458-0466**
Sacramento International Airport	**(916) 929-5411**
Rio Linda Airport	**(916) 991-1725**
Sacramento Executive Airport	**(916) 875-9035**
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.	
California Poison Control System 24-Hour Hotline	**(800) 222-1222***
California Poison Control System provides poison/exposure information to emergency personnel and the public and has regional hospital capabilities for exposed victims. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego.	

Footnotes
†California State Warning Center (Califonia Governor's Office of Emergency Services, Cal OES) State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES [California Government Code (GC) §8670.25.5; California Water Code (WC) §13272, California State Oil Spill Contingency Plan]. If the release of oil is on land and is not discharged or threatening to discharge into State Waters; and (a) does not cause harm or threaten to cause harm to the public health and safety, the environment, or property; AND (b) is under 42 gallons, then no notification to the CSWC is required.
‡National Response Center The requirement for reporting oil spills stems from the Discharge of Oil Regulation, known as the "sheen rule." Under this regulation, oil spill reporting does not depend on the specific amount of oil spilled, but on the presence of a visible sheen created by the spilled oil. If a facility or vessel discharges oil to navigable waters or adjoining shorelines, waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act of 1974, or which may affect natural resources under exclusive U.S. authority, the owner/operator is required to follow certain federal reporting requirements. These requirements are found in two EPA regulations – 40 CFR part 110, Discharge of Oil regulation, and 40 CFR part 112, Oil Pollution Prevention regulation. The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center. The Oil Pollution Prevention regulation, part of which is commonly referred to as the "SPCC rule," identifies certain types of discharges from regulated facilities that also need to be reported to EPA. https://www.epa.gov/sites/production/files/2014-06/documents/spccfactsheetspillreportingdec06-1.pdf
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 4, Table 4-1 on pages 175 – 200
- Appendix F, Figure F-2, pages 243-244

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

- Chapter 3, Table 3-1, pages 31-42

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

- Appendix F, Table F-2, pages 241-242

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

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Lower Sacramento 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 actual or threatened oil spill releases to the Lower Sacramento 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. Revisions to the GRP will be completed every five 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 Lower Sacramento River area. The GRP boundary begins at the base of Keswick Dam near Redding and continues to downtown Sacramento at Highway 50. The GRP area is within Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento Counties and Local Emergency Planning Committee (LEPC) Regions III and IV.

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

Guiding Principles for GRPs

1. The safety and health of responders and the public always takes precedence over the protection of sensitive environmental or economic resources.

2. Source control and containment are always a higher priority over GRP strategy deployments but should occur concurrently if resources are available.

3. Environmental conditions (velocity/flow, water levels, gradient), together with the physical limitations of existing spill response technology, may preclude the effective protection of some areas.

4. Once a coordinated response has been established during an oil spill incident, booming strategy selection and prioritization are refined and supplemented based on real-time assessments. The UC has the authority to supersede the strategies proposed in this GRP.

5. Response personnel may find it necessary to deviate from the exact details provided for deploying a particular response strategy; response personnel should use their best judgment to modify existing strategies based on real-time conditions and notify UC accordingly. Response personnel should notify the Planning (i.e., Environmental Unit) and/or Operations Section staff regarding any opportunities for deploying additional strategies that might be used to take advantage of incident-specific conditions.

Control and Containment

Control and containment of an oil spill at the source is a higher priority than implementation of GRP response strategies. In the responder's best judgment, if control and initial containment of an oil spill at the source is not feasible or the source is controlled but oil has spread beyond initial containment, then the response strategies laid out in Chapter 3 of this GRP take precedence until a UC is formed. Spill response priorities beyond those described in this GRP should be based upon observations and spill trajectory information. During a spill, modifications to the strategies provided in Chapter 3 of this GRP may be made if approved by the Incident Commander (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 Sections include response methods, shoreline cleanup, applied response technologies, waste management, mutual aid, volunteers, non-floating oils, and procedures for the discovery of human remains and cultural and historic resources.

Standardized Response Language

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 exercises program [similar to the Sensitive Site Strategy Evaluation Program (SSSEP) for Area Contingency Plans (ACPs)] 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.

Lower Sacramento River Geographic Response Plan

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Appendices

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Lower Sacramento 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 Lower Sacramento River within Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento Counties (Figure 1-1). The upper extent of the GRP boundary begins at the base of Keswick Dam near Redding (Figure 1-2). The lower extent is where the river flows under Highway 50 in downtown Sacramento where it meets up with USCG Sector San Francisco Area Contingency Plan (ACP). The defined boundary encompasses approximately 297 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 Lower Sacramento River GRP, this includes emergency plans for Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento Counties, LEPC Region III and IV, and the Sector San Francisco ACP.

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 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. The basic framework for the response management structure is a system (e.g., a unified 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 OSC maintains authority. National Contingency Plan (NCP) – 40 CFR §300.105 and 40 CFR §300.120.

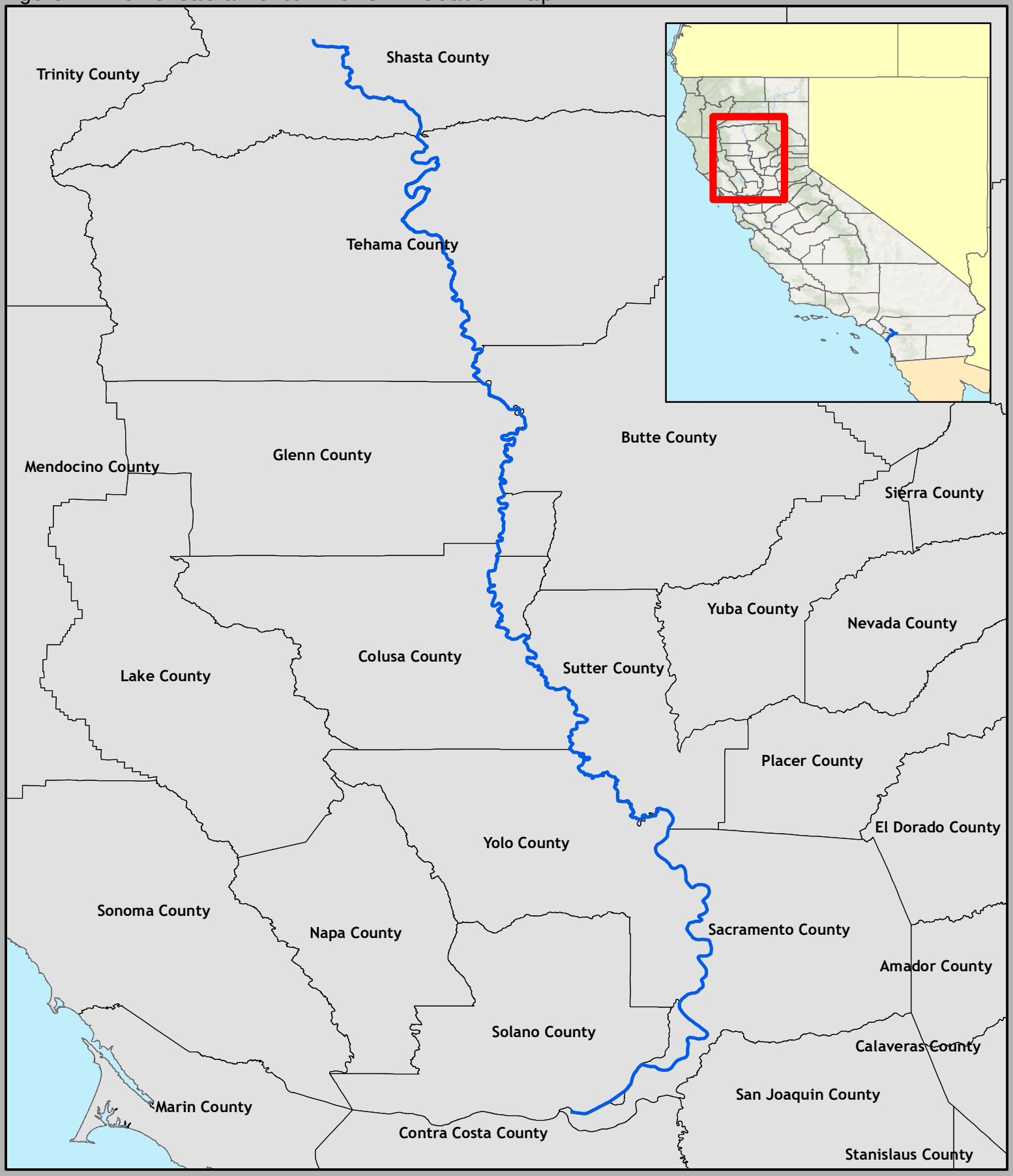
Responsible Party

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, or if no plan exists, in coordination with the Unified Command. 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: Lower Sacramento River GRP Location Map



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

Data Source: CDFW-OSPR, NHD (USGS)
Requestor: OSPR
Author: L. Guphy Gustafson
Date Created:07/27/2021

Lower Sacramento River Geographic Response Plan Location

0 15 30 Miles
0 25 50 Kilometers

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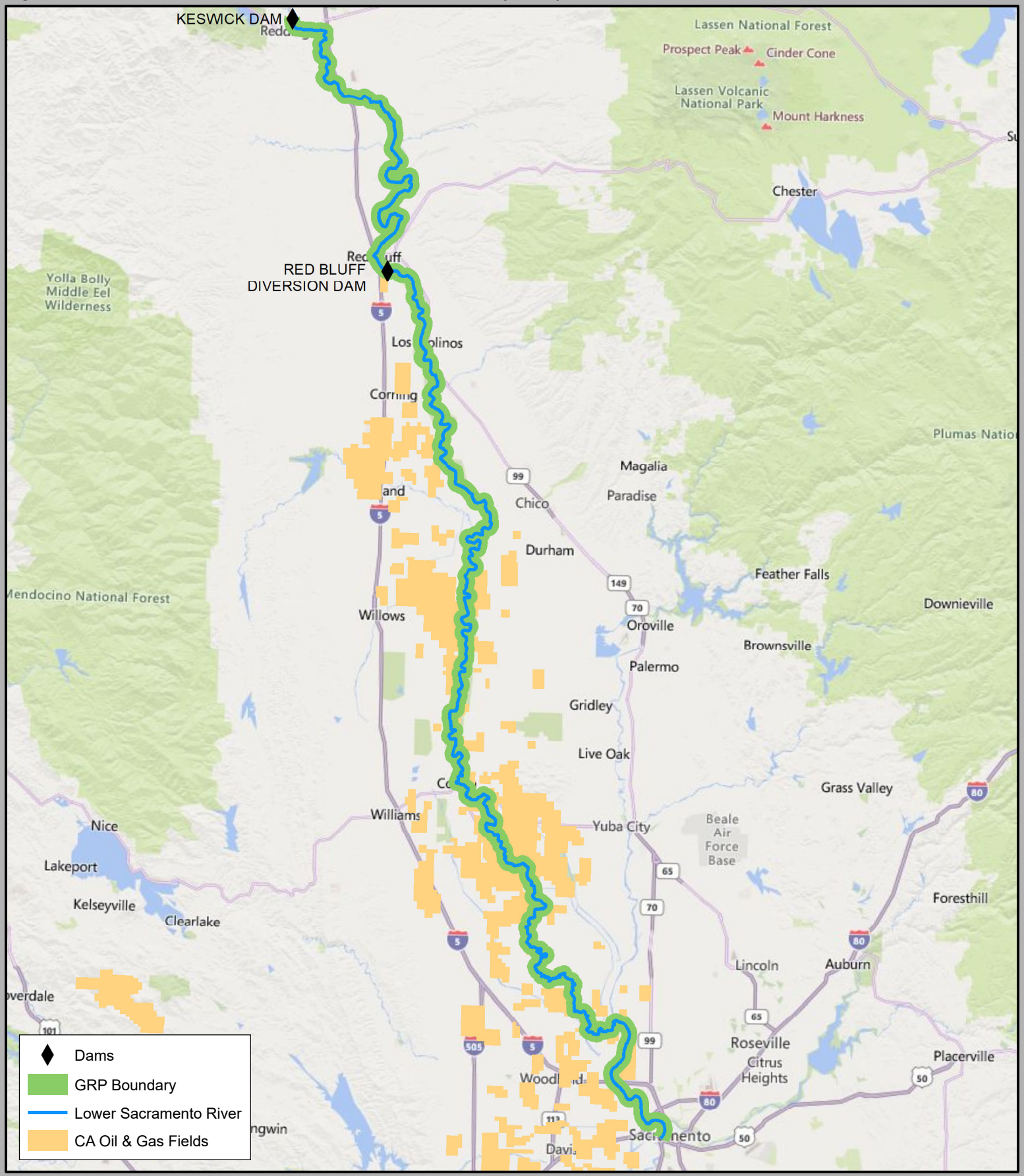
Figure 1-2: Lower Sacramento River GRP Boundary Map



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

Data Source: CDFW-OSPR, NHD
Author: L. Guphy Gustafson, CDFW
Date Created: 4/9/2020

C:\Work\GRPS\LowerSacramento\Maps\MXD\LowerSacramento_Boundary.mxd
Service Layer Credits: © 2020 Microsoft Corporation © 2020 HERE
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

Lower Sacramento River Geographic Response Plan Boundary

0 5 10 15 Miles

0 10 20 30 40 Kilometers

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Lower Sacramento 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 (e.g., 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, including the unhoused.

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.
- If there are unhoused encampments in the area, consider the following potential hazards:

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

Area Assessment

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

Site Safety

- Secure the scene:
    - Isolate the area and protect yourself and others.
- Use the 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/Explosion – Consider a blast radius of 0.6 miles (1 km).
- Gather intelligence from a safe distance before conducting an on-site assessment – understand the problem:
    - Train consist/waybill.
    - Observe placards and types of containers/railcars.
    - Use the appropriate monitoring devices to detect hazardous materials.
    - One product or multiple commodities. If multiple materials are involved, what is the potential outcome of their commingling, will there be reactivity?
- 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 including those associated with unhoused encampments.
- Consider current and expected weather.
- Consider worst-case scenario.
- Prepare for first responder rescue.
- Establish an accountability system for incident personnel.
- Establish a buddy-system for entering or passing by unhoused encampments.

Public Safety

- 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, unhoused encampments, businesses, public buildings and other areas from which occupants and property may need to be evacuated.
        - Locate and identify special needs individuals that require extraordinary care.
        - Provide security for evacuated areas.
    - Shelter-In-Place
        - Create a temporary safe refuge area by using the residence or business place.
        - Identify through CUPA (Section 2.9 below) or County Health (if not the CUPA), a shelter-in-place location for evacuated unhoused encampments.
        - Ensure, through community outreach, that the public understands what shelter in place means.
        - Limit travel in the affected area, when the process of evacuation puts the public in harm's way.
        - Provide clear information and instruction on the shelter in place process.
- Resource Notifications:
    - Identify resources to assist with shelter in place operations:
        - Local Office of Emergency Services

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

Isolation, Deny Entry, Traffic and Access

- Control all access/entry points to the incident.
- Control perimeter between all entry points.
    - Determine perimeter size using the 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 Lower Sacramento 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 the Lower Sacramento River, based on average velocity from the U.S. Geological Survey (USGS) National Hydrology Dataset, is 6.675 feet per second (3.955 knots)**.

***This numerical result is a mathematical calculation of the fastest mean velocity of water flow in the river based on the 2015 water year (July to July) monthly average NHD flow data. It does not represent the velocity at a specific geographic location along the river. Water velocity varies significantly based on the width and depth of the channel, with wide and/or deep channels supporting lower water velocities than that of narrow and/or shallow channels. The velocity calculation is provided for planning purposes. Realtime water velocity recorded in the field, at the time and location of a spill, will provide the best data for calculation of trajectory and positioning of containment and recovery assets.*

Current river stage for the Lower Sacramento River is available online from National Weather Service Advanced Hydrologic Prediction Service.

The California Data Exchange Center (CDEC) carries real time river stage information for various locations along the Sacramento River: Keswick Dam to Colusa, http://cdec.water.ca.gov/reportapp/javareports?name=USACBUL; Fremont Weir and Verona: http://cdec.water.ca.gov/reportapp/javareports?name=LSACBUL.

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	Contact Name and Phone Number
Butte County Fire Department, Kelly Ridge Fire Station	Kelly Ridge Fire Station 22 Walnut Avenue Oroville, CA	6 in x 12 in, 1,000 feet	Russell Fowler, Captain (530) 521-8056 (530) 538-7111 Emergency Command Center (after-hours) (530) 538-6841
Yuba City Fire Department	795 Lincoln Road Yuba City, Ca	6 in x 12 in, 1,000 feet	Peter H. Daley, III (530) 822-4698
Lake County Watershed Protection District	Corner of Campbell Lane and S. Main Lakeport, Ca	6 in x 12 in, 1,000 feet	Angela De Palma-Dow (530) 304-1809
City of Lakeport	591 Martin Street Lakeport, Ca	6 in x 12 in, 1,000 feet	Ron Ladd (707) 416-8458
City of Sacramento Fire Department	2812 Meadowview Road Sacramento, Ca	6 in x 12 in, 1,000 feet	Brian Mefford (916) 767-2292

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
- UAS equipment and pilots
- Certified HazMat Teams
- Swift Water Rescue Teams

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

CDFW has an Unoccupied 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. See Appendix F for additional UAS equipment and pilots.

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 Lower Sacramento 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	Contact Name and Phone Number
Redding Memorial Veterans Hall	1605 Yuba St. Redding, CA	Shasta County Dept. of Public Works (530) 225-5659
Caldwell Park Recreation Center	58 Quartz Hill Rd Redding, CA	Redding Recreation Main Office (530) 225-4095
Shasta District Fair and Event Center	1890 Briggs St. Anderson, CA	Event Center Office (530) 378-6789
Cottonwood Community Center	20595 Gas Point Rd Cottonwood, CA	Community Center Office (530) 347-1230
Red Bluff Community Center	1500 South Jackson St. Red Bluff, CA 96080	City of Red Bluff (530) 527-8177
Tehama County Sheriff's Office (Training Room)	22840 Antelope Rd Redding, CA	Tehama County Sheriff's Office (530) 529-7900
CalFire Headquarters	604 Antelope Blvd Red Bluff, CA	CalFire (530) 528-5199
Search & Rescue Building	2010 Park Ave Red Bluff, CA	Tehama County Sheriff's Office (530) 529-7000
Tehama District Fairgrounds	650 Antelope Blvd Red Bluff, CA	Main Fairgrounds Office (530) 527-5920
Hamilton City High School	620 Canal St. Hamilton City, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Hamilton City Fire Department	420 1st St. Hamilton City, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Glenn County Sheriff's Office	543 W. Oak St Willows, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Orland Fire Dept	810 5th St Orland, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Glenn County Fairgrounds	221 E Yolo St. Orland, CA	Main Office (530) 865-1168
Willows Fire Dept	445 S. Butte St. Willows, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Willows Memorial Hall	525 W Sycamore St Willows, CA	Glenn County Veteran's Services (530) 934-6524

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

Location	Address	Contact Name and Phone Number
Ord Bend Fire Department	3221 CA-45 Ord Bend, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Glenn-Codora Fire Department	1516 Highway 45 Glenn, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Butte City Fire Station	1947 Biggs-Willows Rd. Princeton, CA	Glenn County Sheriff's Office Office of Emergency Services (530) 934-6441 main office (530) 934-6431 dispatch
Butte County Fairgrounds	199 E Hazel St. Gridley, CA	Fairgrounds Administrative Office (530) 846-3626 M-F: 8:00am to 5:00pm
Colusa Casino Resort	3770 Hwy 45 Colusa, CA	Main Office (530) 458-8844
CARD Community Center	545 Vallombrosa Ave. Chico, CA	Chico Area Recreation and Park District (530) 895-4711
Colusa County Fairgrounds	10th St (Highway 20) Colusa, CA	44th District Ag Association (530) 458-2641
Joe Benatar Community Center	1719 Franklin Rd. Yuba City, CA	(530) 671-6810
Silver Dollar Fairgrounds	2357 Fair St. Chico, CA 95928	(530) 895-4666
Yolo County Fairgrounds	1250 Gum Ave. Woodland, CA	Main Office (530) 402-2222
Tehama County Veterans Memorial Hall	1620 Solano St. Corning, CA	(530) 824-5957
Tehama County Veterans Memorial Building	7980 Sherwood Blvd. Los Molinos, CA	(530) 384-2759

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.

Water Intakes

There are numerous drinking water and agricultural/irrigation water districts along the Sacramento River. Table 4-2, Resources-At-Risk Matrix, Economic Resources, page 205, lists the water agencies and districts between Redding and Sacramento, along with emergency/after-hours phone numbers, if available. These agencies and districts may not consistently receive the CalOES State Warning Center reports and may not be aware of a spill into the river.

The City of Sacramento, City of West Sacramento, and Sacramento County Water Agency sponsor the Sacramento River Source Water Protection Program. This partnership provides joint follow-up source water protection efforts based on recommendations from the Sacramento River Watershed Sanitary Survey Updates. This program is also coordinated with East Bay Municipal Utilities District and Woodland-Davis Clean Water Agency. The Sacramento River Source Water Protection Program seeks to preserve and protect the source water quality of the Sacramento River drinking water supply for current and future generations. The City of Sacramento maintains an extensive phone tree with all of its water agency partners and will provide assistance in making emergency contacts once notified of a spill. They do not consistently receive CalOES State Warning Center reports and should be notified as soon as possible once a spill has been reported. Please see Table 4-2, Resources-At-Risk Matrix, Economic Resources, page 205 and the Contact Sheet on page i.

There are three State Water Resources Control Board (SWRCB), Division of Drinking Water Districts that cover the GRP boundaries along the Lower Sacramento River: District 2 (Lassen), District 21 (Valley), and District 9 (Sacramento). There is a 24-hour Duty Officer available; they will receive notification of a spill/emergency from the CalOES State Warning Center. In order to connect with the 24-hour duty officer, contact the CalOES State Warning Center (800-855-7550) and ask for SWRCB - Division of Drinking Water Duty Officer. See Appendix F for Division of Drinking Water District Map with office phone numbers.

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. A list of CUPAs 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 Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento Counties (current as of 03/2021). 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: Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento County CUPAs

Agency Name	Address	Phone Number
Shasta County Environmental Health	1855 Placer Street, Suite 201 Redding, CA 96001	(530) 225-5787
Tehama County Environmental Health	633 Washington Street, Room 36 Red Bluff, CA 96080	(530) 527-8020
Glenn County Air Pollution Control District	720 North Colusa Street Willows, CA 95988	(530) 934-6500

Table 2-3: Shasta, Tehama, Glenn, Butte, Sutter, Colusa, Yolo, and Sacramento County CUPAs (continued)

Agency Name	Address	Phone Number
Butte County Environmental Health	202 Mira Loma Drive Oroville, CA 95965	(530) 538-7281
Sutter County Environmental Health	1130 Civic Center Boulevard Yuba City, CA 95993	(530) 822-7400
Colusa County Health and Human Services	146 7th St. Colusa, CA 95932	(530) 458-0395
Yolo County Environmental Health	292 West Beamer Street Woodland, CA 95695	(530) 666-8646
Sacramento County Environmental Management Department	11080 White Rock Road Rancho Cordova, Ca 95670	(916) 875-8550

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 the next chapter as needed to meet the challenges experienced during an actual response.

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

- Oil containment boom must be free of twists, gaps, and debris in order to remain effective. The deployment of oil containment boom or underflow dams is anticipated to be a component of response operations at all locations.

After Strategy Implementation (Things to Understand)

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

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

Lower Sacramento 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 strategies 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 Lower Sacramento River GRP. Each colored block (red, yellow, or blue) represents the map area for the corresponding response strategy detail sheet. Detailed information for each strategy location can be found in the response strategy summary matrix in Section 3.4 and the response strategy detail sheets in Section 3.5. Operational division maps can also be found in Section 3.5 before each grouping of response strategy and access/observation detail sheets.

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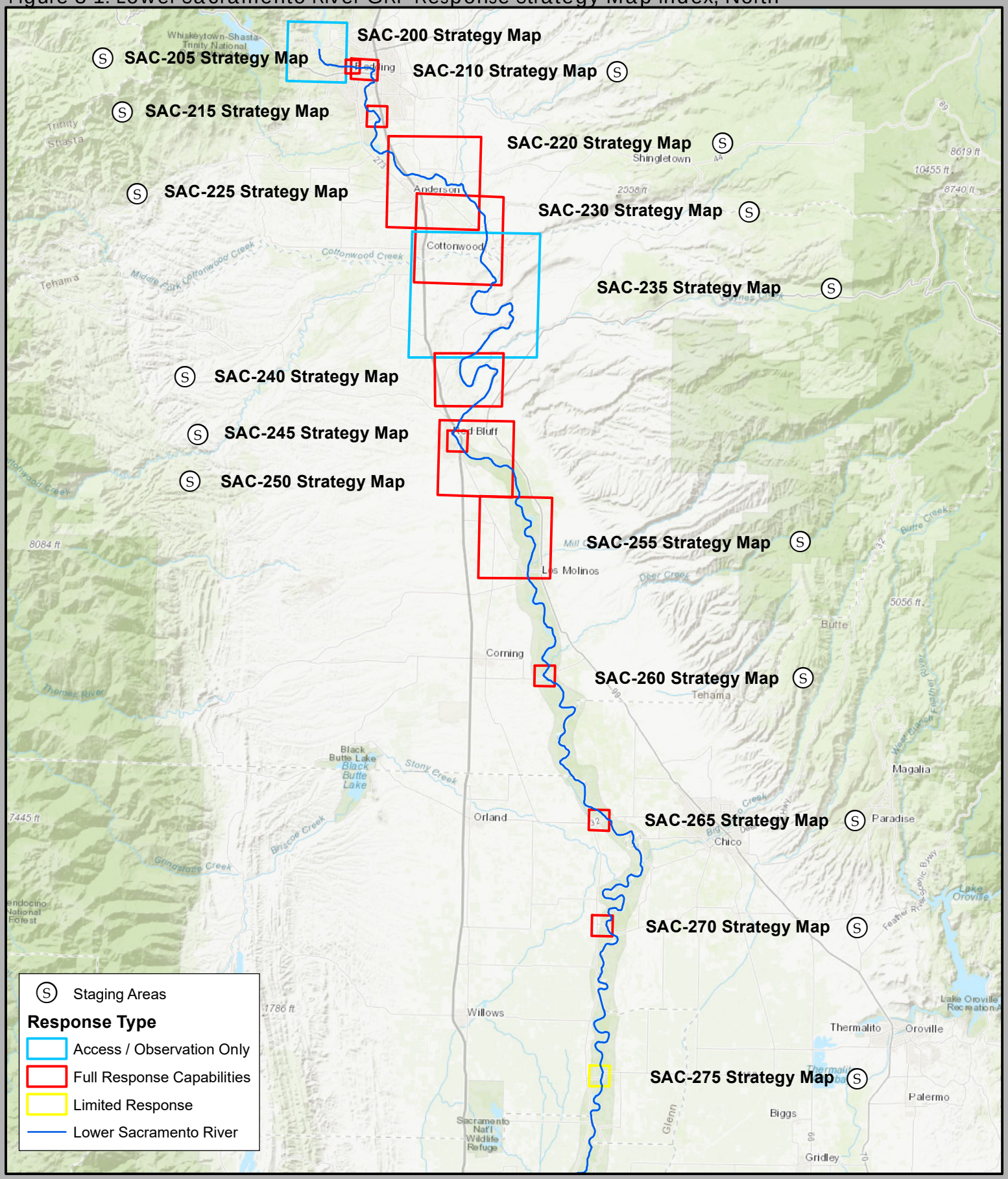
Figure 3-1: Lower Sacramento River GRP Response Strategy Map Index, North



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

Data Source: CDFW-OSPR, NHD
Author: L. Guphy Gustafson, CDFW
Date Created: 8/31/2023

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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

Lower Sacramento River Geographic Response Plan Index Map - North Plan Area

0 5 10 15 Miles
0 5 10 15 20 Kilometers

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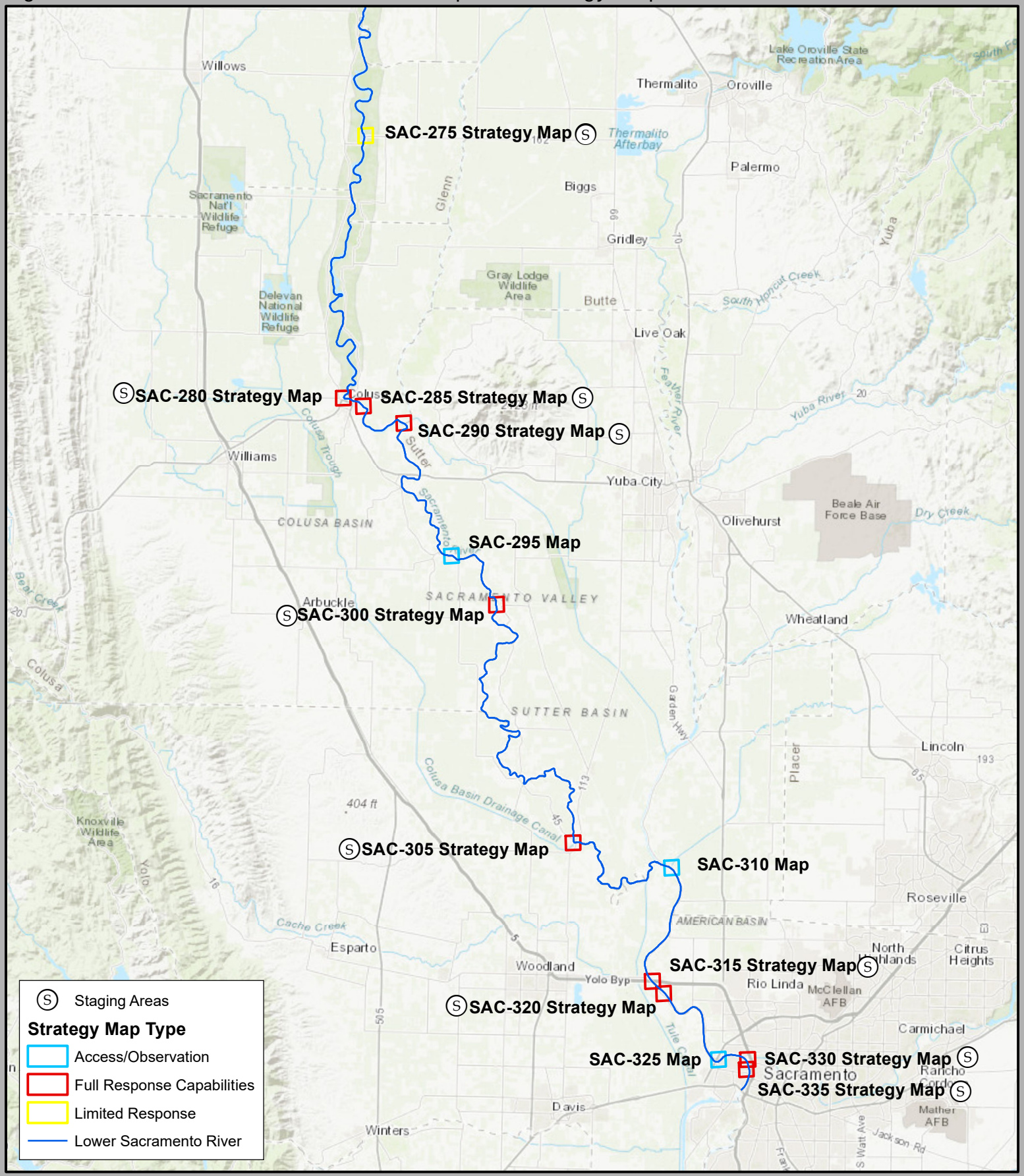
Figure 3-2: Lower Sacramento River GRP Response Strategy Map Index, South



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

Data Source: CDFW-OSPR, NHD
Author: L. Guphy Gustafson, CDFW
Date Created: 3/15/2021

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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

Lower Sacramento River Geographic Response Plan Index Map - South Plan Area

0 5 10 15 Miles
0 5 10 15 20 Kilometers

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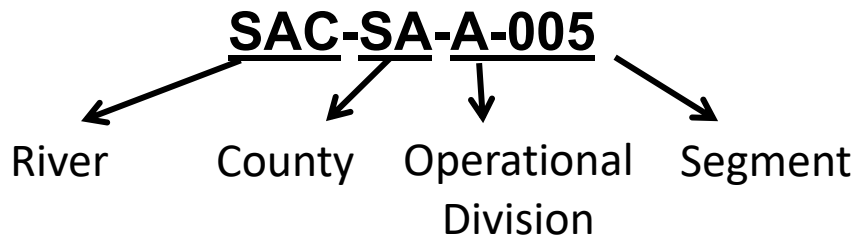
3.2 Naming Conventions – Operational Division and Segments and Site Strategies

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.



SAC = Sacramento River

BU = Butte
CO = Colusa
GL = Glenn
SA = Sacramento
SH = Shasta
SU = Sutter
TE = Tehama
YL = Yolo

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., SAC-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 Lower Sacramento River:

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

3.4 Response Strategy Summary Matrix

Table 3-1 lists the response strategy and access/observation sites for the Lower Sacramento 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 #
SAC-200	**Keswick Dam** 16515 Keswick Dam Road Redding, CA 96003	N 40.610090 W -122.446288	Observation site	N/A	Response personnel can hike down to the river-right shoreline from the US Bureau of Reclamation office. Access the river-left shoreline from the FB trail on the east side of the dam or acces both shoreline via boat.	US Bureau of Reclamation operates Keswick Dam. Its possible to deploy boom below the dam if flows are reduced. However, it would be difficult to carry boom down the steep rocky hillside on the river right shoreline or to haul the boom via boat upstream from the Lake Redding Boat Launch.	There is limited staging area available at the Bureau of Reclamation office.	The discharge out of Keswick Dam can be swift and flows can change quickly with little or no warning. Steep rocky slope above river on river-right shoreline.	N/A	45	47
SAC-205 (S)	**Lake Redding Boat Launch** 44 Quartz Hill Road Redding, CA 96003	N 40.59408 W -122.39856	Deflection/ Collection. Consider cascading boom.	2,600 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	In low water flow conditions, deploy 1,000 feet of swift water boom from the river right shoreline above the UPRR bridge to eddy at boat launch facility on river left shoreline. Use additional 200 to 300 feet of boom to protect shoreline at collection area. If A.C.I.D. dam is in place and water diversion is actively occurring, deploy additional 300 feet of boom at mouth of the diversion structure to exclude floating product. In high water flow conditions, deploy three sets of 350-foot lengths of cascading boom toward boat ramp. Collect product in eddy at boat ramp and pump directly to vacuum truck.	 Stage equipment and manage wastes at the boat launch parking area.	Swift water. The A.C.I.D. diversion dam is located approximately 1,205 feet downstream of the boat launch. Vessel operators need to avoid this structure. Transient population frequents the park. Secure all equipment.	UPRR 259.04 - Valley Subdivision	45	49

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 #
S SAC-210	**Turtle Bay Boat Launch** 725 Auditorium Drive Redding, CA 96001	N 40.59056 W -122.38322	Deflection/ Collection. Consider cascading boom.	2,000 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Good collection eddy exists along the river right shoreline near the boat launch. Deploy 1,800 feet of swift water boom from the river left shoreline to the boat launch. Add additional 200 feet of boom for shoreline protection at collection area. Pump recovered product directly to vacuum truck on shore. In high flow river conditions, deploy three sets of 500-foot lengths of cascading boom toward eddy at boat launch.	 Stage equipment and manage wastes at the boat launch parking area.	There is a drinking water intake in the vicinty of this response site. Possible swift water at this location, depending on season. Difficult shoreline access near boat launch. Transient camps have been observed in this area. Secure all equipment.	UPRR 259.04 - Valley Subdivision is located approximatel y 0.8 miles upstream.	45	53
S SAC-215	**South Bonneyview Boat Launch** 3951 S. Bonneyview Road Redding, CA 96001	N 40.53747 W -122.35770	Deflection/ Collection. Consider cascading boom.	2,400 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Good collection eddy exists along river right shoreline near boat launch. Deploy three sets of 450-foot lengths of cascading boom from river left shoreline above bridge to the boat launch on the river right shoreline. Add additional 250 feet of boom for shoreline protection collection area. Pump recovered product directly to vacuum truck on shore.	 Stage equipment and manage wastes at the boat launch parking area.	Swift currents in vicinity of boat launch.	N/A	45	57

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 #
(S) SAC-220	**Anderson River Park Public Fishing Access** 2800 Rupert Road Anderson, CA 96007	N 40.4676 W -122.2800	Deflection/ Collection. Consider cascading boom.	2,800 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Attempt to deflect product to collection point in eddy at boat launch. Deploy three sets of 500-foot lengths of cascading boom from river left shoreline to the boat launch. Add additional 300 feet of boom for shoreline protection at the collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes at the boat launch parking area.	Sediment loading at boat launch may impact vessel launching. Shallow draft vessels recommended. Swift currents exist near boat launch. Be aware of possible submerged objects in river.	N/A	61	63
(S) SAC-225	**Balls Ferry Fishing Access** 23001 Ash Creek Road Anderson, CA 96007	N 40.4175 W -122.1929	Deflection/ Collection. Consider cascading boom.	2,200 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Start on river right shoreline above bridge crossing river and set three 500-foot lengths of cascading boom toward boat ramp. Add additional 200 feet of boom for shoreline protection at collection area. Collect product in eddy at boat ramp and pump directly to vacuum truck.	Stage equipment and manage wastes at the boat launch parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	61	67

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 #
(S) SAC-230	**Lake California Steelhead Landing** 19999 Lake California Dr. Cottonwood, CA 96022	N 40.3638 W -122.1855	Deflection/ Collection. Consider cascading boom.	2,300 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Starting from the river left shoreline above the boat launch, deploy three sets of 550-foot lengths of cascading swift water boom toward collection point at boat launch. Add additional 250 feet of boom for shoreline protection near collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes at the boat launch parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	71	73
SAC-235	**Jelly's Ferry Bridge**	N 40.3182 W -122.1890	Access/ Observation	N/A	There is a dirt unimproved boat launch on the east side of the Sacrmento River on BLM land at Jelly's Ferry Bridge. With some improvement, it may be possible to launch vessels at that location.	Access to the river is best on river left.	N/A	Swift water and possible submerged objects in river near bridge.	N/A	71	77

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 #
(S) SAC-240	**Bend Bridge Park** Bend Ferry Road Red Bluff, CA 96080	N 40.2631 W -122.2230	Deflection/ Collection. Consider cascading boom.	2,000 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Starting from river right shoreline above Bend Ferry Bridge, deploy three sets of 400-foot lengths of swift water boom toward collection point at boat launch. Add additional 250 feet of boom for shoreline protection near collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes in the county park parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	71	79
(S) SAC-245	**Red Bluff River Park** Willow Street Red Bluff, CA 96080	N 40.1727 W -122.2276	Deflection/ Collection. Consider cascading boom.	1,600 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Under low flow conditions, it may be possible to deploy 1,100 feet of swift water boom from river left shoreline to the eddy along the gravel bar on the river right shoreline. For higher flows, consider deploying three sets of 400-foot lengths of swift water boom to eddy on river right shoreline. Add additional 250 feet of boom for shoreline protection at collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes in the county park parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	83	85

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 #
(S) SAC-250	**Sycamore Grove Boat Launch** Sale Lane Red Bluff, CA 96080	N 40.1537 W -122.1991	Deflection/ Collection. Consider cascading boom.	2,300 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	From the river right shoreline near the dam, deploy three sets of 500-foot lengths of swift water boom toward the eddy at the boat launch. Deploy additional 300 feet of boom to protect shoreline at collection area. Pump recoverd product directly to vacuum truck on shore.	Stage equipment and manage wastes in boat launch parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	83	89
(S) SAC-255	**Mill Creek Park Boat Launch** 24670 Tehama Vina Road Los Molinos, CA 96055	N 40.0319 W -122.1172	Deflection/ Collection. Consider cascading boom.	2,700 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Starting from the river right shoreline above the boat launch, deploy three sets of 600-foot lengths of cascading swift water boom toward the collection point at the boat launch. Add additional 250 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes in boat launch parking area.	Sediment loading at boat launch may impact vessel launching. Shallow draft vessels recommended. Swift currents exist near boat launch. Be aware of possible submerged objects in river.	UPRR 210.90 - Valley Subdivision (located 0.20 miles downstream of boat launch)	93	95

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 #
(S) SAC-260	**Woodson Bridge Boat Launch** 25340 South Avenue Corning, CA 96021	N 39.9097 W -122.0909	Deflection/ Collection. Consider cascading boom.	1,700 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Starting from the river right shoreline above the boat launch, deploy three sets of 350-foot lengths of cascading swift water boom toward the collection point at the boat launch. Add additional 250 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.	Stage equipment and manage wastes in boat launch parking area.	Swift currents in vicinity of boat launch. Be aware of possible submerged objects in river.	N/A	93	99
(S) SAC-265	**Irvine Finch River Access** Irvine Finch River Access Rd. Chico, CA 95973	N 39.7502 W -121.9970	Collection. Consider cascading boom.	1,900 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Angle boom from river right, just underneath bridge, toward the collection area at the end of the boat ramp. May want to deploy boom in cascades.	Stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in near and there are possible submerged objects in river.	GLE 10.87	105	107
(S) SAC-270	**Ord Bend Park** 8201 Ord Ferry Rd. Glenn, CA 95943	N 39.6299 W -121.9943	Deflection/ Collection. Consider cascading boom.	1,350 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade using sections of boom from river left shoreline to the river right shoreline just below the inlet. Use additional boom to protect shoreline near collection area.	Stage equipment and manage wastes in boat lauch parking area.	Swift currents in area. Downed trees in near and there are possible submerged objects in river.	GLE 15.169	105	111

Response Strategy Number	Response Strategy Name and Location	Coordinates Latitude/ Longitude	Site Strategy Type	Minimum Boom Requirement (Feet)	Boat/Kayak/ Inflatable Raft Required To Access One or Both Shorelines?	Site Strategy Notes	Staging Area Notes	Site Hazards and Restrictions	Nearest Rail Milepost or Highway Postmile	Operational Division and Segment Map Page #	Response Strategy Detail Sheet Page #
(S) SAC-275	**Butte City Launching Facility** 8300 Hwy 162 Butte City, CA 95988	N 39.4648 W -121.9921	Deflection/ Collection. Consider cascading boom.	1,750 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade sections of boom from river right towards collection on river left shore. Collection may only be possible at low flows. Use boom to line shoreline near collection area.	Stage equipment and manage wastes in boat launch parking area.	Currents may be too swift under "normal" circumstances to allow for collection/deployment of boom. Downed trees in near and there are possible submerged objects in river.	GLE 78.083	115	117
(S) SAC-280	**City of Colusa Boat Launch** 810 Main St. Colusa, CA 95932	N 39.2169 W -122.0125	Deflection/ Collection. Consider cascading boom.	1,400 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Use two legs of boom to cascade and deflect product away from river left shore to collect near boat ramp on the river right shore. Use additional boom to corral product toward boat ramp. Use another section of boom to line shoreline and boat dock.	Stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in near and there are possible submerged objects in river.	COL 31.195	121	123
SAC-285	**Colusa Landing** 3249 Butte Slough Rd. Colusa, CA 95932	N 39.2097 W -121.9880	Deflection/ Collection. Consider cascading boom.	1,700 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade boom at steep angle to collect product at boat launch, use boom to line shoreline and collect product; Place deflection boom just ahead of boat docks to deflect product away.	Small parking area. Not much room to stage large amounts of equipment.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river Steep banks	N/A	121	127

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 #
SAC-290	**Wards Boat Landing** 2701 Butte Slough Rd. Colusa, CA 95932	N 39.1945 W -121.9383	Collection. Consider cascading boom.	2,400 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade boom at steep angle to collect product just upstream of boat docks, use boom to line shoreline and form a collection pocket. Place boom around boat docks to protect boats from getting impacted.	Small parking area. Not much room to stage large amounts of equipment.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river Steep banks	N/A	121	131
SAC-295	**Grimes Boat Landing** 1658 CA-45 Grimes, CA 95950	N 39.0701 W -121.8775	Observation site	N/A	N/A	N/A	Small parking area. Not much room to stage large amounts of equipment. Narrow road to access parking area.	Steep access to water's edge. Swift water during winter and spring flows. Narrow road to access boat landing.	COL 11.465	135	137
(S) SAC-300	**Tisdale Boat Launching Facility** Carnmore Rd. & Garmire Rd. Yuba City, CA 94993	N 39.0349 W -121.8220	Deflection/ Collection. Consider cascading boom.	2,300 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Deploy boom on the river right shore to attempt to slow down product coming from upstream and push it toward the collection point near the boat launch. Deploy boom to form a collection pocket; deploy boom to exclude product from an intake on river right shoreline; deflect product past Sutter Municipal intake.	Large area with plenty of room to stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks	N/A	135	139

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 #
(S) SAC-305	**Knights Landing Fishing Access** Knights Rd. Knights Landing, CA 95645	N 38.8005 W -121.7227	Deflection/ Collection. Consider cascading boom.	1,600 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Deploy legs of boom to deflect product toward river right shore, deploy boom from river right shore to collect product and to protect the shoreline, collect product in slow water near mouth of the tributary; deploy boom to protect water intake.	Large parking area with plenty of room to stage equipment.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks. Narrow foot path along river's edge.	YOLO 0.123	143	145
SAC-310	**Verona Village River Resort** 6985 Garden Hwy Nicolaus, CA 95659	N 38.7801 W -121.6041	Observation site	N/A	N/A	N/A	Small parking area on private property. Boat docks on site, but no launch ramp.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks and limited shoreline access.	YOLO 3.101	149	151
(S) SAC-315	**Elkhorn Boat Launch** 5827 Garden Hwy Sacramento, CA 95837	N 38.6728 W -121.6249	Deflection/ collection	3,100 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Deploy boom to deflect product past intake on river right (north of bridge); place deflection leg of boom north of bridge angling product toward the collection point at the boat dock; use boom to line shoreline and form an additional collection pocket just past the boat launch; deploy boom to protect boat docks at Alamar Marina.	Large area with plenty of room to stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks and limited shoreline access.	SAC 34.587	153	155

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 #
(S) SAC-320	**Elkhorn Regional Park** 18989 Old River Rd. West Sacramento, CA 95691	N 38.6612 W -121.6113	Deflection/ collection	1,500 feet	Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade boom toward boat launch for collection; use boom to line shoreline and use to collect product.	Large area with plenty of room to stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks and limited shoreline access.	SAC 33.766	153	159
SAC-325	**Sand Cove Park** 2005 Garden Hwy Sacramento, CA 95833	N 38.5998 W -121.5438	Observation site	N/A	Access to eastern shore is through a trail in Sand Cove Park.	N/A	Small parking area with limited facilities. Narrow path to shoreline would make it difficult to get response equipment to shoreline.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Gate to parking area automatically closes at dusk.	SAC 0.227	153	163
(S) SAC-330	**Discovery Park** 1000 Garden Hwy Sacramento, CA 95833	N 38.6003 W -121.5085	Collection/ exclusion	2,400 feet	Access along eastern shore is through Discovery Park. Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade boom to direct product toward boat launch; use boom deployed from inlet to direct product for collection; use boom to line dock and prevent product from moving into tributary.	Large area with plenty of room to stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Steep banks along some shoreline access. Lots of recreational activity in area.	SAC 25.006	153	165

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 #
Ⓢ SAC-335	**Broderick Boat Ramp** 103 4th St West Sacramento, CA 95605	N 38.5910 W -121.5102	Deflection/ collection	2,100 feet	Access along western shore is along Riverwalk Pathway. Response personnel need vessels to deploy boom. Jet boat or shallow draft vessel recommended.	Cascade boom across river from north of intake toward boat launch; extend boom from apex of boat dock extending to out; line shoreline with boom.	Large area with plenty of room to stage equipment and manage wastes in boat launch parking area.	Swift currents in area. Downed trees in the area near and there are possible submerged objects in river. Pipeline crosses river just south of boat launch. Large unhoused population in area.	SAC 24.25	153	169

Table Legend

RED	**Full Response Capabilites**	Access to site for large equipment and full deployment.
YELLOW	**Limited Response Capabilities**	Access to site may be limited; have to cross railraod tracks, etc., may not get large equipment to site.
BLUE	**Access/ Observation Site**	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.
Ⓢ	**Staging Areas**	Sites that could accommodate staging are denoted by the S Circle.
	Boat Launch	

3.5 Response Strategy Detail Sheets

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

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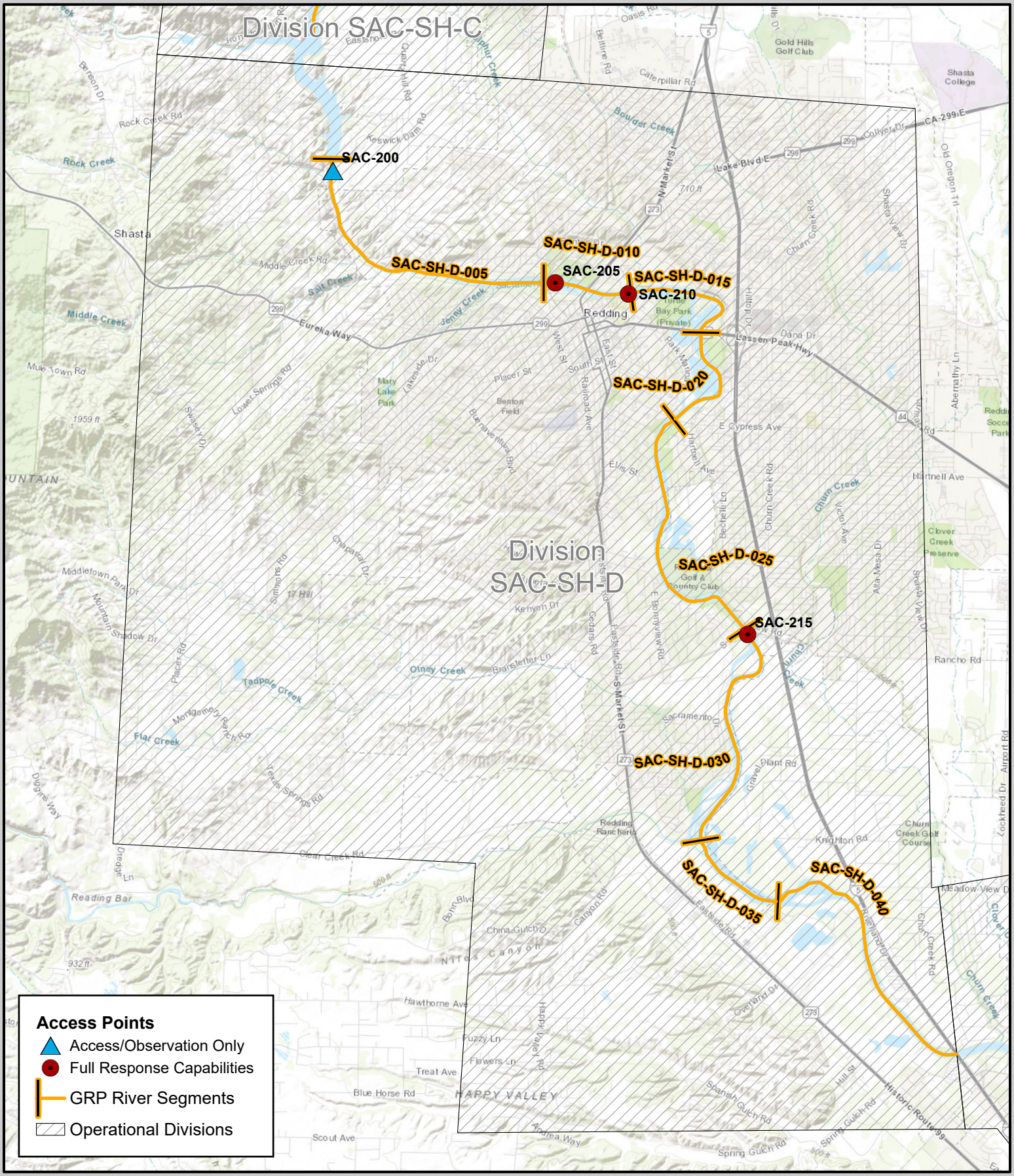
Figure 3-3: Lower Sacramento River GRP Division SAC-SH-D Map



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

Author: GEWING, CDFW
Date Created: 8/25/2023
Data Source: CDFW-OSPR, USGS

C:\TEMP\Work_In_Progress\2023\Field_Requests\ABurkholder\GRP\LowerSacramentoGRP-Complete\DivisionMapsSeries\LowerSacramento_DivisionMapSeries.aprx
Service Layer Credits: World Topographic Map: City of Redding GIS, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

Lower Sacramento River Geographic Response Plan Division SAC-SH-D

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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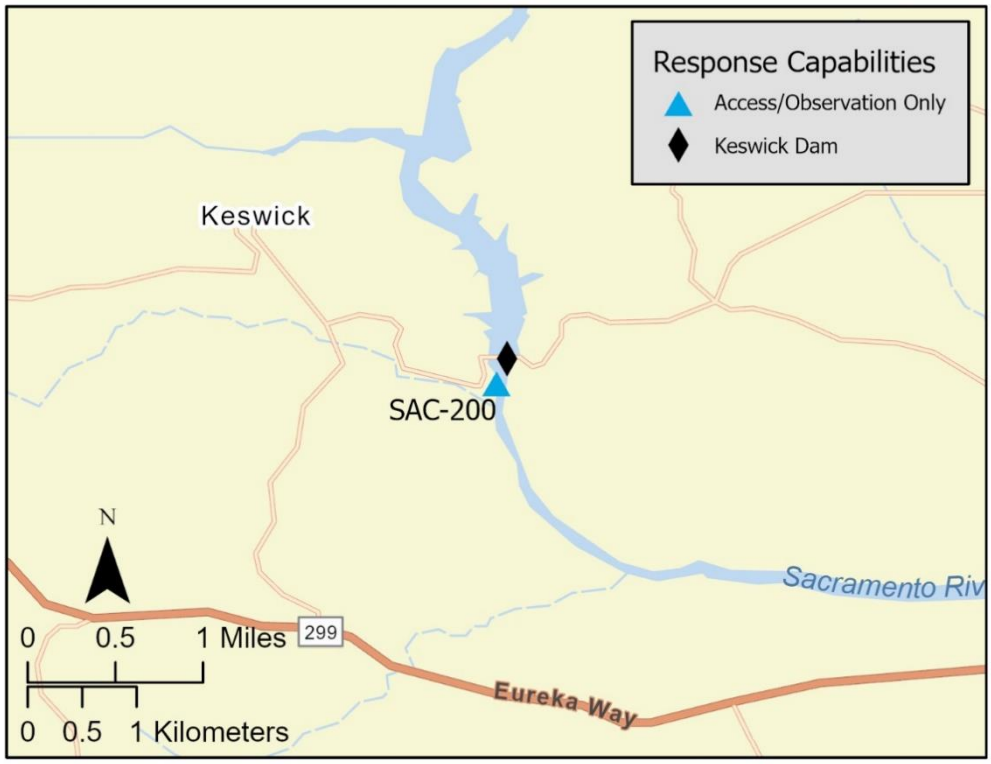
Driving Directions:	From I-5 in Redding, take Oasis Road – Exit 682 and head west. Follow Oasis Road to Lake Boulevard and head south at the signal. Take the first right onto Keswick Dam Road and head west. Follow Keswick Dam Road and cross over Keswick Dam. On the west side of Keswick Dam, take the first service road on the left and drive to the security check point at the Bureau of Reclamation Office. The nearest boat launch to Keswick Dam is the Lake Redding Boat Launch Facility at Lake Redding Park. To get to the Lake Redding Boat Launch, head east on Keswick Dam Road back over Keswick Dam. Turn right onto Quartz Hill Road and head south. Follow Quartz Hill Road south and then east to Lake Redding Park. Turn right into the park on Rio Drive. Follow road to river access and boat launch parking area.

Latitude: 40.610090 **Longitude:** -122.446288	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested

Nearest Address: 16515 Keswick Dam Road, Redding, CA 96003

Overview Street Map



Hazards, Restrictions and Advice for Responders

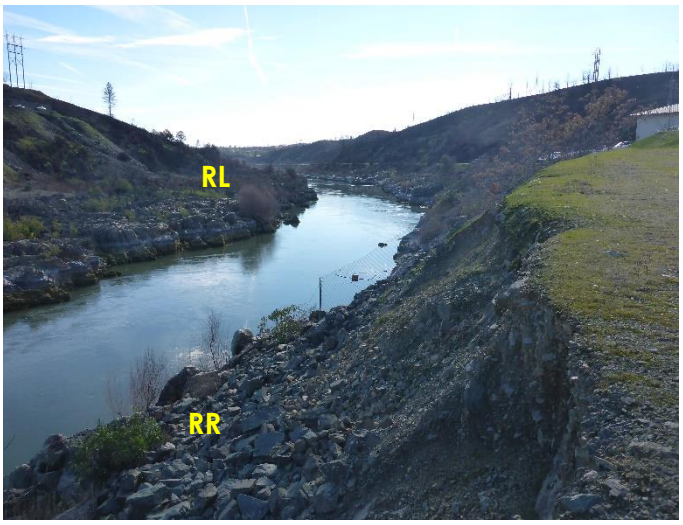
- Swift water below Keswick Dam.
- River flows are controlled by the Bureau of Reclamation and can change quickly.
- Steep rocky bank immediately below Keswick Dam.
- The Sacramento River Trail provides access to much of the river's shoreline. In some areas, water access is available on both the river right shoreline and the river left shoreline.

Site Description and Field Notes		
Site Location/Segment: SAC-SH-D-005	**Site Description and Field Notes:** The Sacramento River Trail provides best access to river right and river left shorelines. Small vehicles may be able to access the Sacramento River Trail with permission from the City of Redding. The Sacramento River Trail Ribbon Bridge and Diestelhorst Bridge downstream of Keswick Dam may be suitable response locations, depending on current and river flow.	
Site Contact/s:	U. S. Bureau of Reclamation (530) 275-1554 After Hours: (530) 276-2306, (530) 276-2188	City of Redding Parks and Recreation (530) 224-6100 After Hours: (530) 245-2073

Site Images

Upstream

Downstream



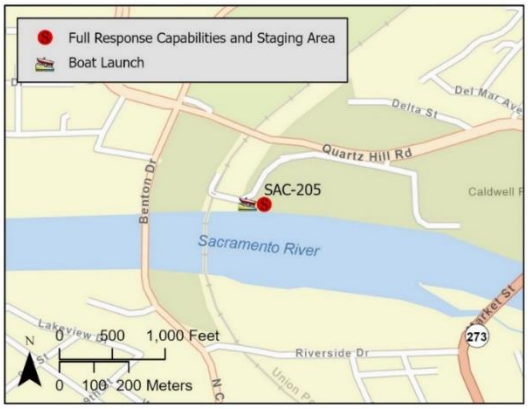
Straight Across

RR = River Right RL = River Left

Photo Date: 1/23/2019

Response Strategy Site: Lake Redding Boat Launch (SAC-205)			Page 1 of 3
Driving Directions:	From I-5 in Redding, take Exit 678 and merge onto Hwy 44/Hwy 299 west toward Eureka. Follow Hwy 44/Hwy 299 over the Sacramento River and continue west into downtown Redding. Hwy 44/Hwy 299 turns into Shasta Street/Hwy 299 as you enter town (one-way street). Follow signs for Hwy 299 and turn right (north) onto Pine Street (one-way street). Follow Pine Street one block north and turn left (west) onto Eureka Way. Stay in the right-hand lanes. Go one block west and turn right onto Market Street. Follow Market Street north over the Sacramento River. Turn left (northwest) onto Quartz Hill Road. Continue west-northwest on Quartz Hill Road and turn left (south) onto Rio Drive and enter the Lake Redding Park parking area. Continue down to the Sacramento River and Lake Redding Boat Launch.		
Latitude: 40.59408 **Longitude:** -122.39856	**Highway Postmile:** N/A	**Railroad Milepost:** UPRR 259.04 – Valley Subdivision	**Cell Service:** Yes – Verizon tested
Nearest Address: Redding Aquatic Center, 44 Quartz Hill Road, Redding, CA 96003			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- The Sacramento River has medium to swift current at this location.
- Unhoused population frequents the park. Secure all equipment.
- UPRR rail bridge over the Sacramento River is located approximately 375 feet upstream of the boat launch. Site elevation is 496 feet msl.
- Anderson-Cottonwood Irrigation District (A.C.I.D.) water diversion dam is located approximately 1,205 feet downstream of the boat launch. Vessel operators should exercise caution around this structure. The mouth of the diversion structure is located approximately 1,180 feet downstream of the boat launch along the river right shoreline. The water diversion occurs by gravity flow after wooden gates are installed along the dam causing river levels to rise behind the dam, usually during late spring and summer months.

Resources-At-Risk

Ecological: Bald Eagle, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS, Foothill Yellow-legged Frog

Economic: A.C.I.D. water diversion structures, Diestelhorst Bridge (National Register of Historic Places), Lake Redding Park, Caldwell Park, Redding Aquatic Center

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-SH-D-010	**Site Description and Field Notes:** A drinking water intake is located in the vicinity of this response site. Contact City of Redding at (530) 224-6029 for additional information and protection strategies.			
Gradient: Medium	**River Width:** 101 m (333 ft)	**Vehicular Access?** All vehicle types can access this site.	**Recreational Use?** Rafting, kayaking, fishing, water contact, city park.	**Boat Launches:** Lake Redding Boat Launch on site.
Site Contact/s:	City of Redding Parks & Recreation: (530) 224-6100 After Hours: (530) 245-2073			
ESI Shoreline Type:	6A - gravel bars and gently sloping banks, 8B - sheltered, solid man-made structures, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 1/23/2019

Response Strategy Site: Lake Redding Boat Launch (SAC-205) Ⓢ **Page 3 of 3**

Site Objectives: Deflection boom and product collection. Consider deploying cascading boom sets. Possible exclusion boom strategy at mouth of A.C.I.D. diversion structure. Limit shoreline impacts.

Implementation: Deploy 2,100 feet of cascading deflection boom toward boat ramp. Start on river right shoreline above Diestelhorst Bridge. Collect product in eddy at boat ramp and pump directly to vacuum truck. Use additional 200 feet of boom to protect river left shoreline at collection area.

If A.C.I.D. dam is in place and water diversion is actively occurring, deploy additional 300 feet of boom at mouth of the diversion structure to exclude floating product.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and other response resources at Lake Redding Park and Caldwell Park. Restrooms on site. Manage wastes on site.

Response Strategy Map (overview)

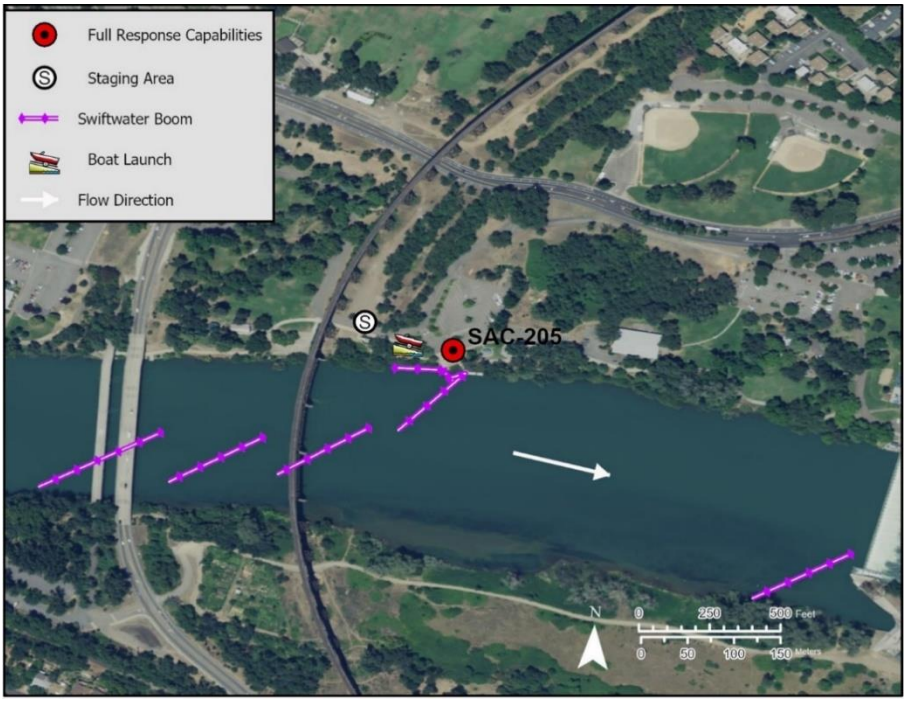


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,600	Includes 300 feet of boom for exclusion strategy at mouth of A.C.I.D. diversion structure.
Anchors	Danforth	25	lb	26	
Boat	Response and Boom Vessel			2	1 each, minimum.
Personnel				6	2 vessel operators, 2 deckhands, 2 personnel on shore
Stakes				26	

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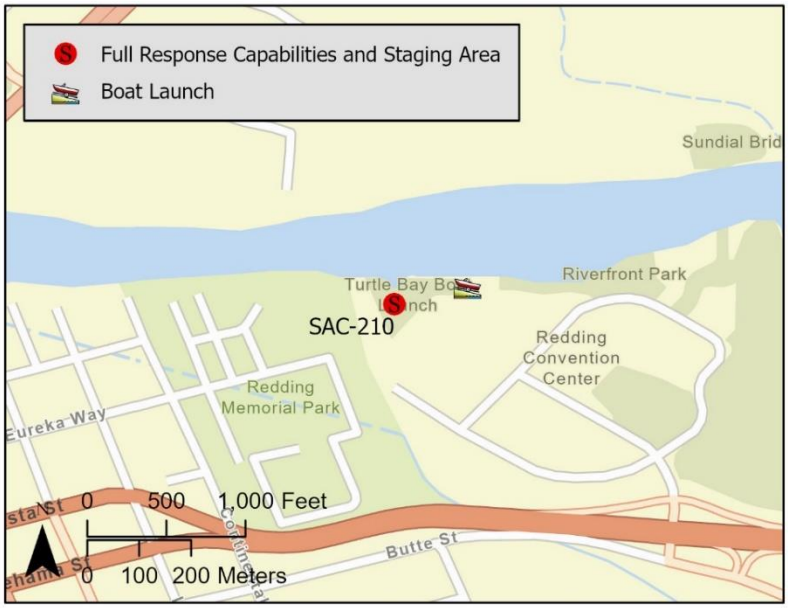
Response Strategy Site: Turtle Bay Boat Launch (SAC-210)			Page 1 of 3
Driving Directions:	From I-5 in Redding, take Exit 678 and merge onto Hwy 44/Hwy 299 west toward Eureka. Follow Hwy 44/Hwy 299 over the Sacramento River. Stay in the righthand lane. Take Exit 1 off of Hwy 44/Hwy 299 onto Sundial Bridge Drive. Follow Sundial Bridge Drive northwest around the Redding Civic Auditorium. Take unmarked paved road along Sacramento River and follow back toward the Redding Rodeo Grounds and the Turtle Bay Boat Launch.		
Latitude: 40.59056 **Longitude:** -122.38322	**Highway Postmile:** N/A	**Railroad Milepost:** UPRR 259.04 – Valley Subdivision, about 0.8 miles upstream	**Cell Service:** Yes – Verizon tested
Nearest Address: 725 Auditorium Drive, Redding, CA 96001			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- There is a drinking water intake in the vicinity of this response site. Contact the City of Redding at (530) 224-6029 and Bella Vista Water District at (530) 241-1085 for additional information and response strategies.
- The Sacramento River can have swift currents at this location.
- Unhoused encampments have been observed in the area.
- Difficult shoreline access near boat launch.
- Site elevation is 490 ft msl.
- Restrooms on site at boat launch. Nearby lodging and restaurant at Sheraton Hotel across from auditorium.

Resources-At-Risk

Ecological: Bald Eagle, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS, Foothill Yellow-legged Frog

Economic: Turtle Bay Exploration Park and Sundial Bridge, fishing guide services, local tourism

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

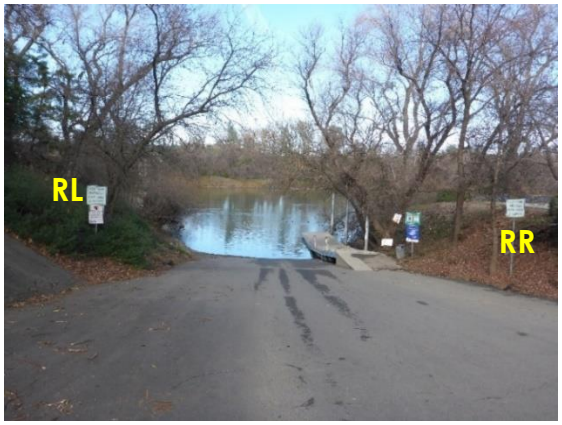
Site Location/Segment: SAC-SH-D-010	**Site Description and Field Notes:** Redding Civic Auditorium hosts educational classes during weekdays and special events on various dates and times. Redding Posse Grounds host special events. Sundial Bridge is local tourist attraction.			
Gradient: Low to High, depending on season and river flow	**River Width:** 143 m (470 ft)	**Vehicular Access?** All vehicle types can access this location.	**Recreational Use?** Boating, rafting, kayaking, fishing, water contact, tourist attraction, special events.	**Boat Launches:** Turtle Bay Boat Launch on site.
Site Contact/s:	City of Redding Parks & Recreation Business Hours: (530) 224-6100 After Hours: (530) 245-2073			
ESI Shoreline Type:	6A - Gravel bars and gently sloping banks, 8B - sheltered, solid man-made structures, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across/Boat Launch



RR = River Right **RL = River Left**

Photo Date: 1/23/2019

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: There is a good collection eddy along the river right shoreline near the boat launch. Deploy 1,800 feet of cascading swift water boom from the river left shoreline to the boat launch on the river right shoreline. Add additional 200 feet of boom for shoreline protection at the collection area. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and manage wastes in parking lot and open space near boat launch.

Response Strategy Map (overview)

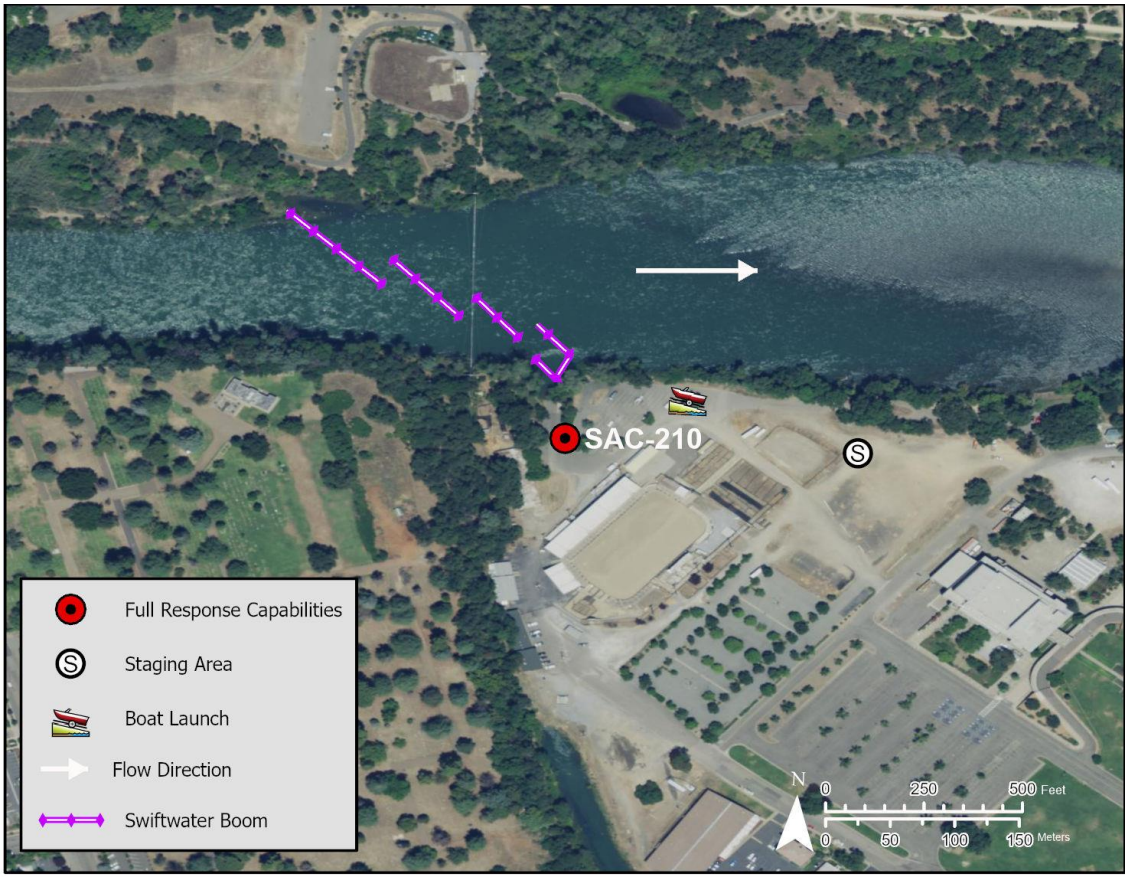


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	12 in	ft	2,000	Use 1,800 feet of boom to cascade across river. Use an additional 200 feet to protect shoreline near collection area.
Response Vessel	Response and Boom Vessel			2	1 each, minimum.
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum
Anchors	Danforth	75 lb 25 lb	lb	8 – 75 12 – 25	

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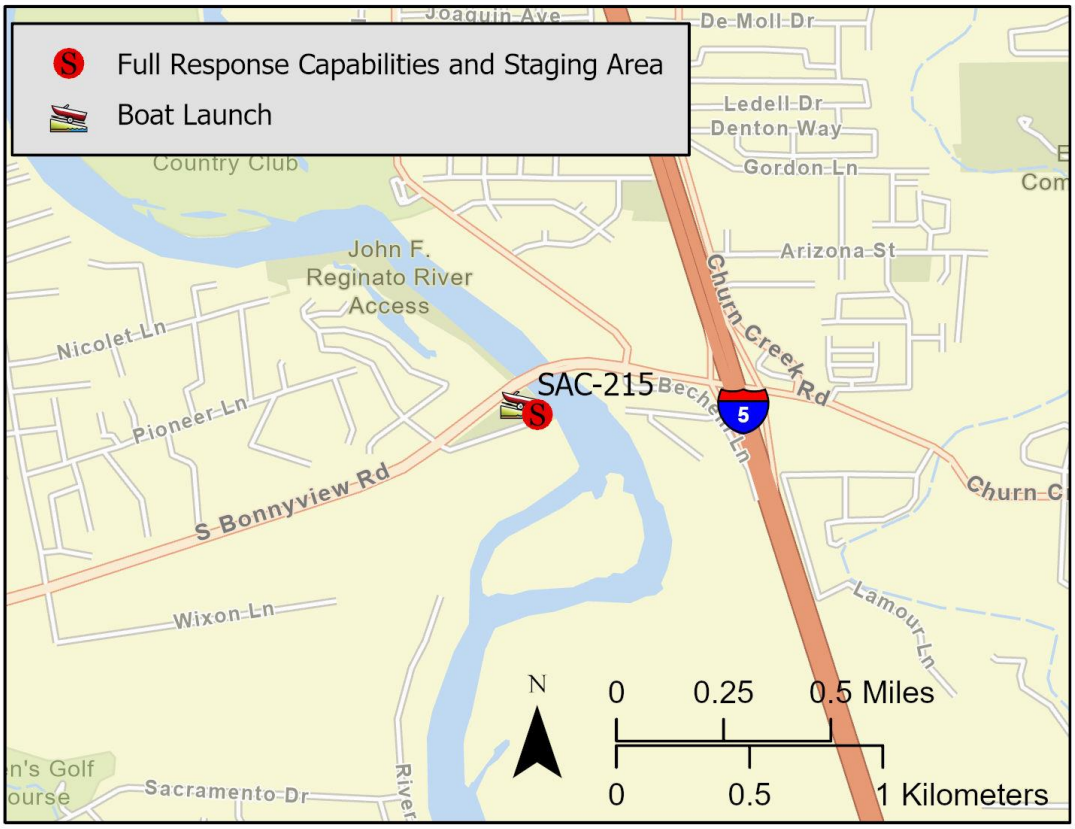
Response Strategy Site: South Bonneyview Boat Launch (SAC-215)			Page 1 of 3
Driving Directions:	From I-5, take Exit 675 and head west on South Bonneyview Road. Cross over the Sacramento River and turn left (south) into the parking lot for the South Bonneyview Boat Launch and John Reginato River Access.		
Latitude: 40.53747 **Longitude:** -122.35770	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 3951 South Bonneyview Road, Redding, CA 96001			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- River currents can be swift in the vicinity of the boat launch.
- Water intake pumps located on the river left shoreline across from the boat launch will need at least 200 feet of exclusion/deflection boom deployed for protection.
- Site elevation is 468 feet msl.
- A trail exists along the river-right shoreline above and below the boat launch.

Resources-At-Risk

Ecological: Bald Eagle, Bank Swallow, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS

Economic: Fishing guide services, local tourism

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-SH-D-030	**Site Description and Field Notes:** Restrooms located on site. Facility closes between 2200 hours and 0500 hours each evening. Nearby lodging and food located off South Bonneyview Road on east side of Sacramento River.			
Gradient: Medium	**River Width:** 125 m (410 ft)	**Vehicular Access?** All vehicle types can access this location.	**Recreational Use?** Fishing, rafting, kayaking, water contact	**Boat Launches:** South Bonneyview Boat Launch located on site.
Site Contact/s:	City of Redding Parks & Recreation Business Hours: (530) 224-6100 After Hours: (530) 245-2073			
ESI Shoreline Type:	6A - gravel bars and gently sloping banks, 6B - rip rap, 8F - vegetated, steeply sloping bluffs, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across/Boat Launch

RR = River Right **RL = River Left**

Photo Date: 1/23/2019

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts. Protect water intake pumps across from boat launch.

Implementation: Deploy 2,000 feet of cascading swift water boom from the river left shoreline above bridge to the boat launch on the river right shoreline. Add additional 200 feet of boom for shoreline protection at the collection area. Additionally, deploy 200 feet of exclusion/deflection boom around water pump intakes across from boat launch. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and manage wastes in parking lot and open space near boat launch.

Response Strategy Map (overview)

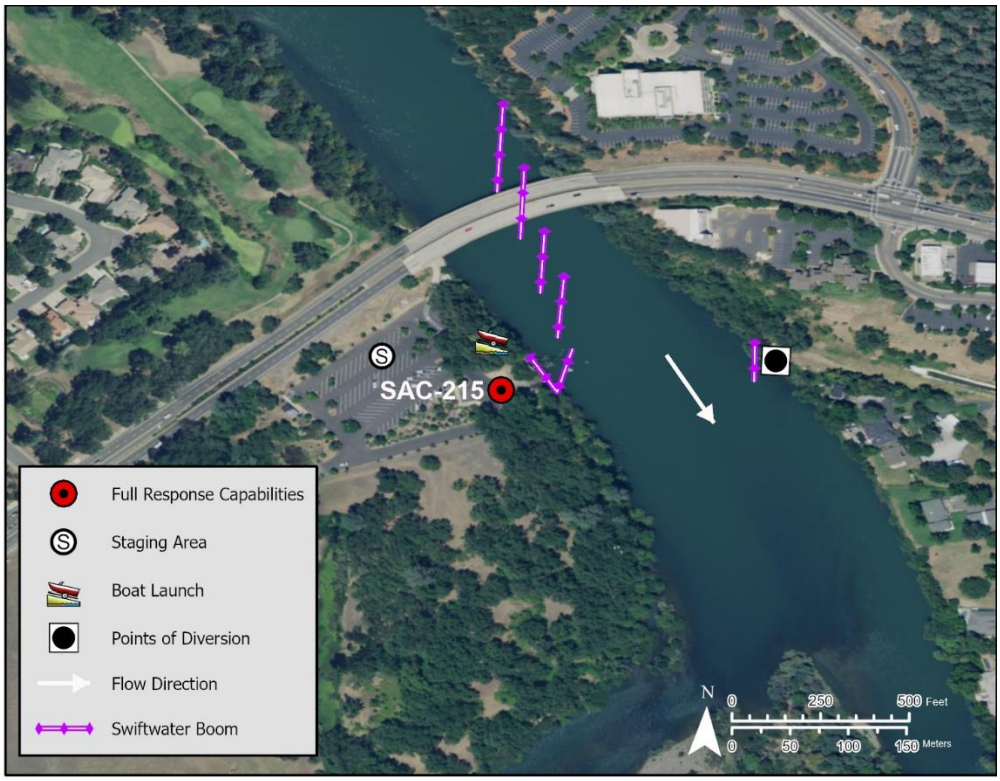


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,400	Includes 200 feet of boom for shoreline protection and 200 feet of exclusion/deflection boom for water pump intakes.
Anchor	Danforth	25	lb	24	
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum.
Personnel				8	2 vessel operators and 2 deckhands, minimum
Stakes				6	

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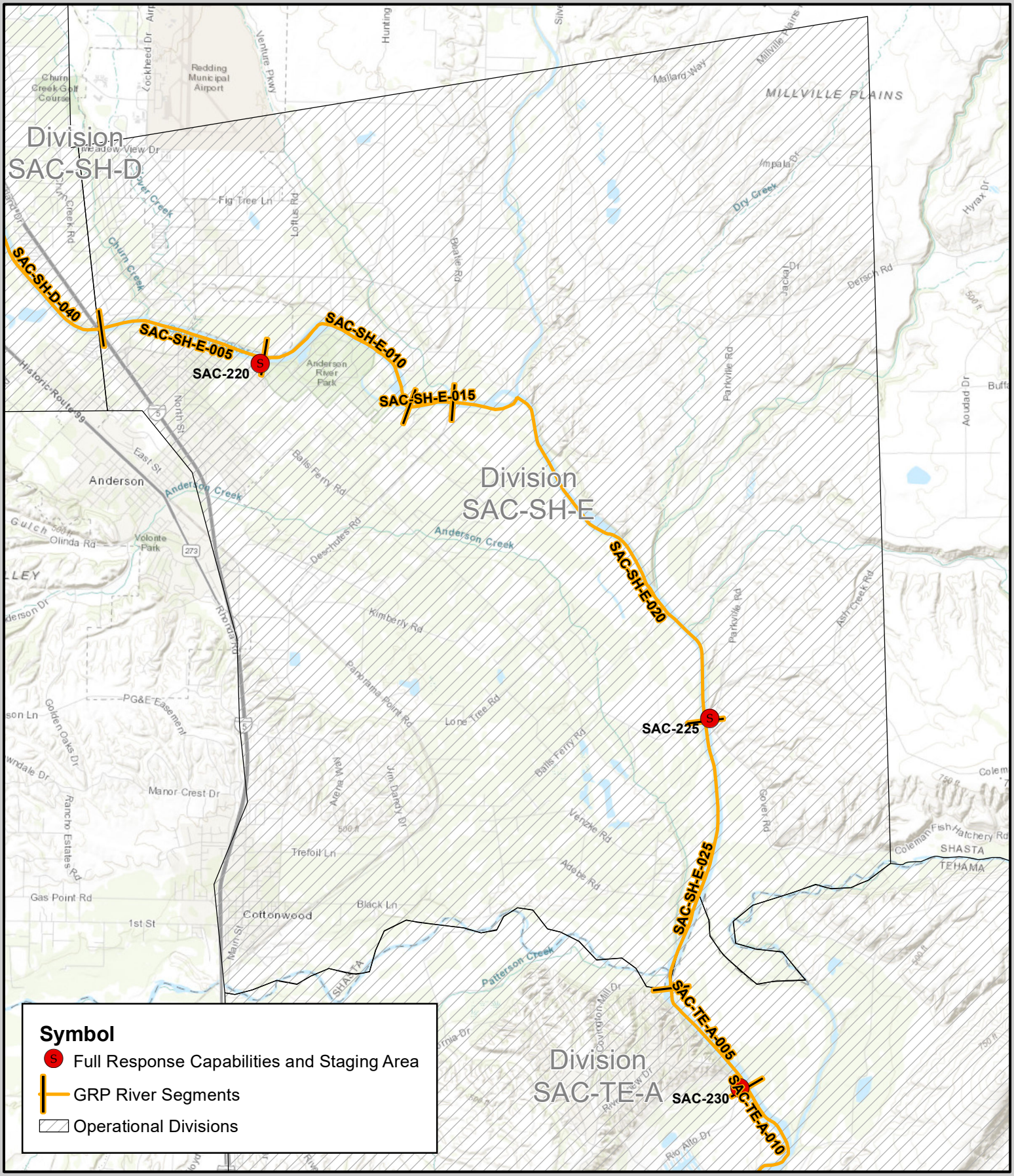
Figure 3-4: Lower Sacramento River GRP Division SAC-SH-E Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
Data Source: CDFW-OSPR, USGS

C:\Work\GRPS\LowerSacramento\Maps\MXD\LowerSacramento_SAC-SH_E_030420.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

Lower Sacramento River Geographic Response Plan Division SAC-SH-E

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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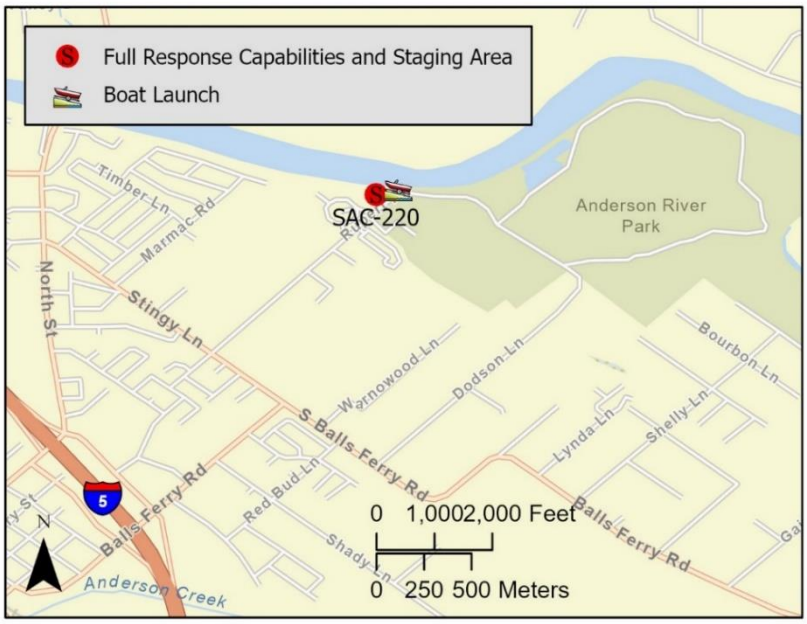
Response Strategy Site: Anderson River Park Public Fishing Access (SAC-220) (S)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 668 onto Balls Ferry Road and turn right (east). Continue east on Balls Ferry Road and stay in the left lane. At the stop sign, turn left (north) onto Stingy Lane. Continue north on Stingy Lane and turn right (east) onto Rupert Road. Continue east on Rupert Road and enter Anderson River Park. Boat launch is located on left side of Rupert Road near the Sacramento River. From South: Use I-5 North, take Exit 668 and turn left (east) onto North Street. Continue east on North Street and turn right (south) onto Stingy Lane. Continue south on Stingy Lane and turn left (east) onto Rupert Road. Continue east on Rupert Road and enter Anderson River Park. Boat launch is located on left side of Rupert Road near the Sacramento River.		
Latitude: 40.4676 **Longitude:** -122.2800	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: Anderson River Park, 2800 Rupert Road, Anderson, CA 96007			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Sediment loading at boat ramp may impact vessel launching, shallow draft vessels recommended.
- Swift river currents may be present near boat launch.

Resources-At-Risk

Ecological: Bald Eagle, Bank Swallow, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Anderson River Park operations, fishing guide services, local tourism

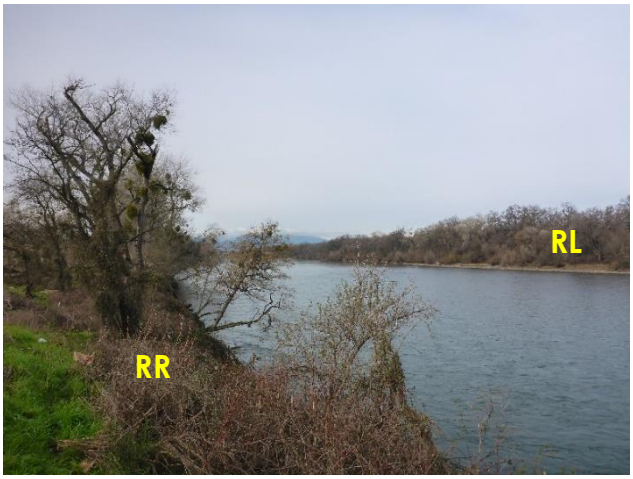
Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

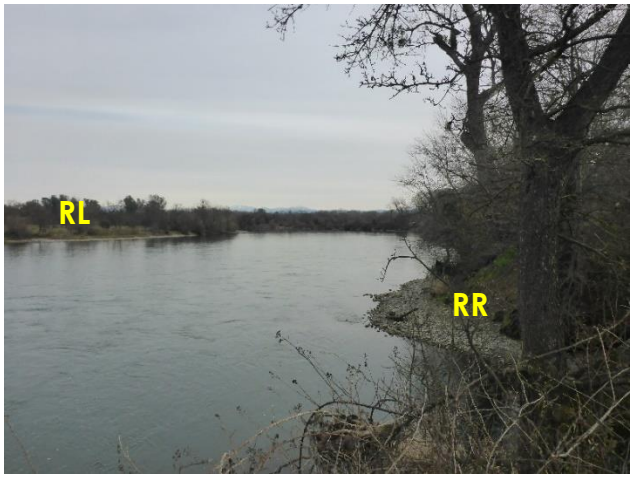
Site Location/Segment: SAC-SH-E-005	**Site Description and Field Notes:** Restrooms on site. Shoreline access is limited on both sides of the river in this area due to heavy vegetation.			
Gradient: Medium to High	**River Width:** 146 m (480 ft)	**Vehicular Access?** All vehicle types can access this location.	**Recreational Use?** City park, fishing, rafting/kayaking, water contact.	**Boat Launches:** Public fishing access and boat launch located on site.
Site Contact/s:	City of Anderson (530) 378-6626			
ESI Shoreline Type:	6A - gravel bars and gently sloping banks, 9B - vegetated low banks			

Site Images

Upstream



Downstream



Straight Across

RR = River Right **RL = River Left**

Photo Date: 1/23/2019

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: Attempt to deflect product to collection point in eddy at boat launch. Use as many kickers as necessary to deflect toward collection point. Deploy 2,500 feet of cascading swift water boom from river left shoreline to the boat launch on river right shoreline. Add additional 300 feet of boom for shoreline protection at the collection area. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and manage wastes in parking lot near boat launch. Additional staging areas available in the park.

Response Strategy Map (overview)

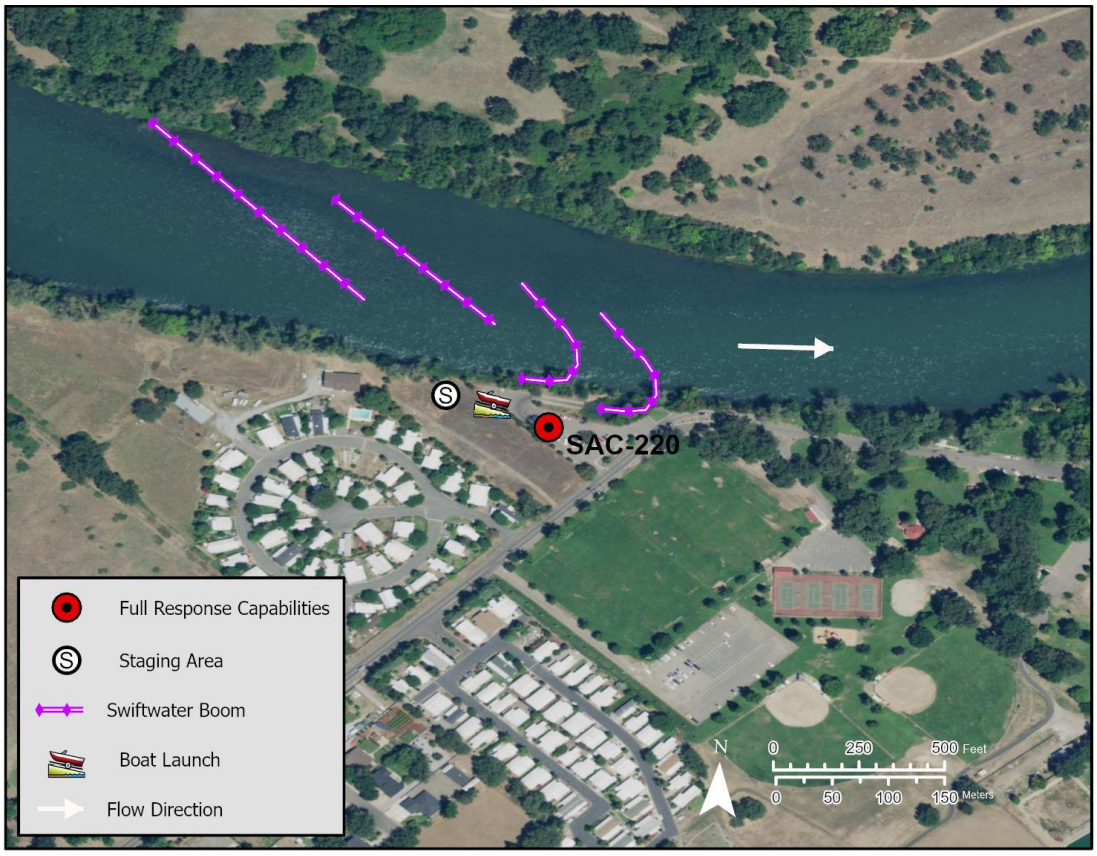


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	in	2,800 ft	Includes 300 feet of boom for shoreline protection at collection point.
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum.
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum
Anchors	Danforth	25	lb	28	
Stakes				6	

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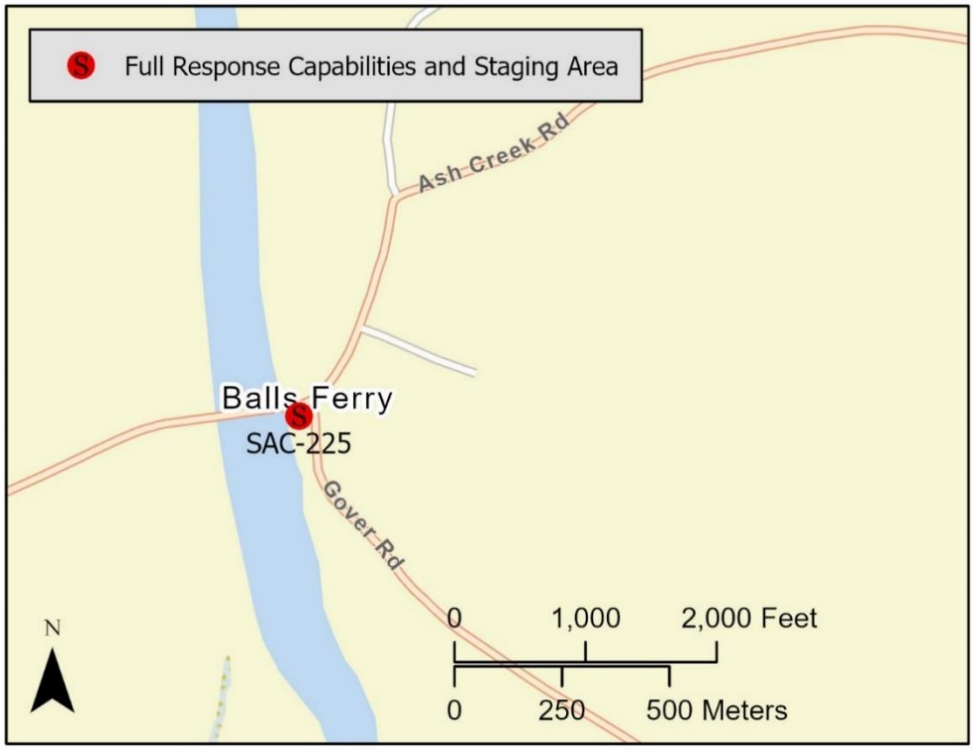
Response Strategy Site: Balls Ferry Fishing Access (SAC-225)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 667, head east on Deschutes Road. Continue east through the roundabout on east side of I-5 for approximately 2 miles. Turn right (south) onto Balls Ferry Road and continue 3.1 miles. Turn left (east) onto Ash Creek Road. Continue east 1.3 miles and cross over the Sacramento River. Turn right (south) onto Gover Road. From South: Use I-5 North, take Exit 667B, head east on Deschutes Road and follow directions above.		
Latitude: 40.4175 **Longitude:** -122.1929	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 23001 Ash Creek Rd, Anderson, CA 96007			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water and submerged objects in river
- Strong currents

Resources-At-Risk

Ecological: Bank Swallow, Tri-colored Blackbird, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS

Economic: Fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-SH-E-020	**Site Description and Field Notes:** Small boat launch facility with adjacent parking area. Restroom on site.			
Gradient: Medium	**River Width:** 145 m (477 ft)	**Vehicular Access?** All vehicle types can access this facility.	**Recreational Use?** Boating, rafting, kayaking, fishing.	**Boat Launches:** Balls Ferry Fishing Access and boat launch are located on the southwest corner of Ash Creek Road and Gover Road.
Site Contact/s:	Shasta Co. Dept of Public Works – Facilities Management (530) 225-5659			
ESI Shoreline Type:	1B - exposed, solid, man-made structure, 6A - gravel bars and gently sloping banks, 8B - sheltered solid man-made structures, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 6/20/2019

Response Strategy Site: Balls Ferry Fishing Access (SAC-225) Ⓢ **Page 3 of 3**

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: Start on river right shoreline above bridge crossing river and deploy 2,000 feet of cascading swift water boom toward boat ramp. Add additional 200 feet of boom for shoreline protection at collection area. Collect product in eddy at boat ramp and pump directly to vacuum truck.

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

Response Strategy Map (overview)

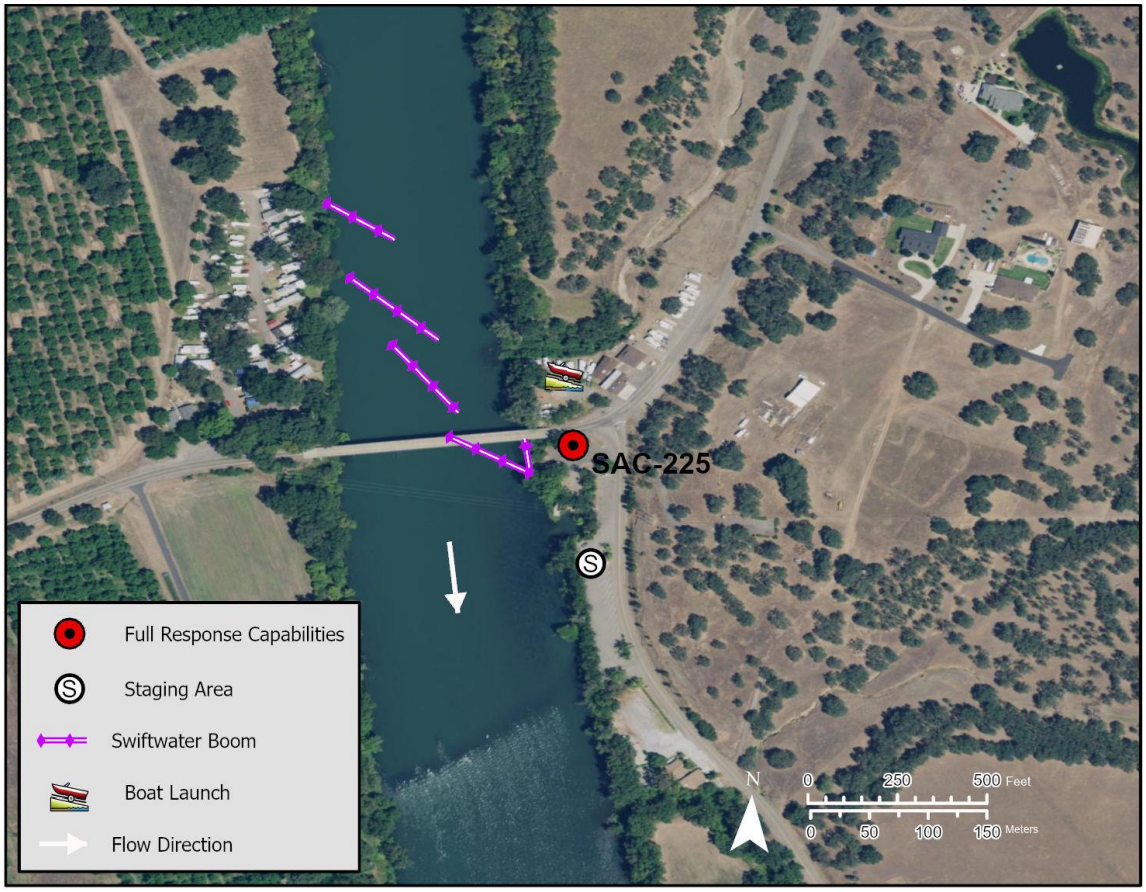


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,200 ft	Includes 200 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	22	
Stakes				6	Use to secure boom to the shore
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum.
Personnel				8	2 vessel operators and 2 deckhands, minimum

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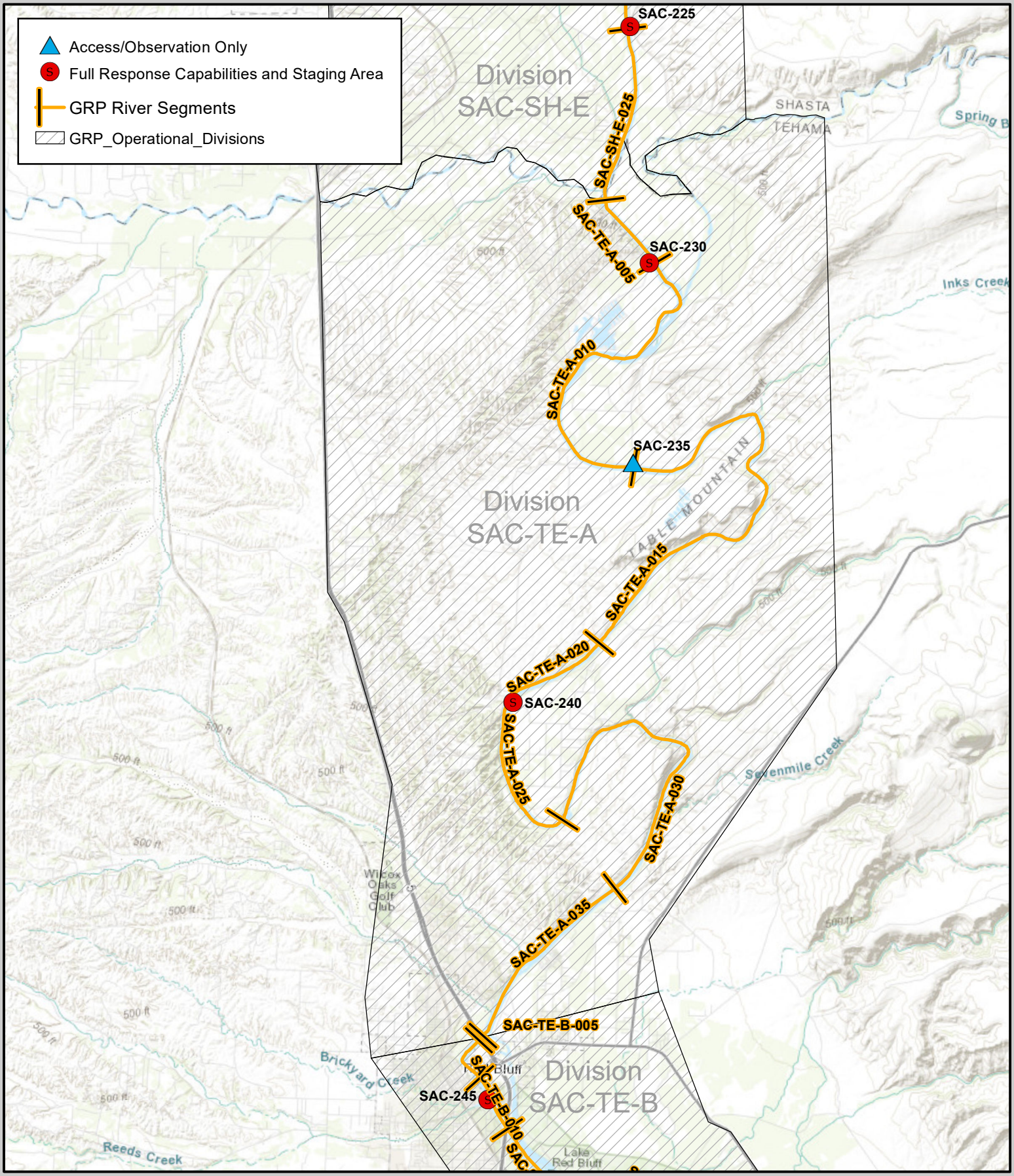
Figure 3-5: Lower Sacramento River GRP Division SAC-TE-A Map



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

Author: LGustafson, CDFW
Date Created: 2/9/2022
Data Source: CDFW-OSPR, USGS

C:\Work\GRPS\LowerSacramento\Maps\MXD\LowerSacramento_SAC-TE-A_030420.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

Lower Sacramento River Geographic Response Plan Division SAC-TE-A

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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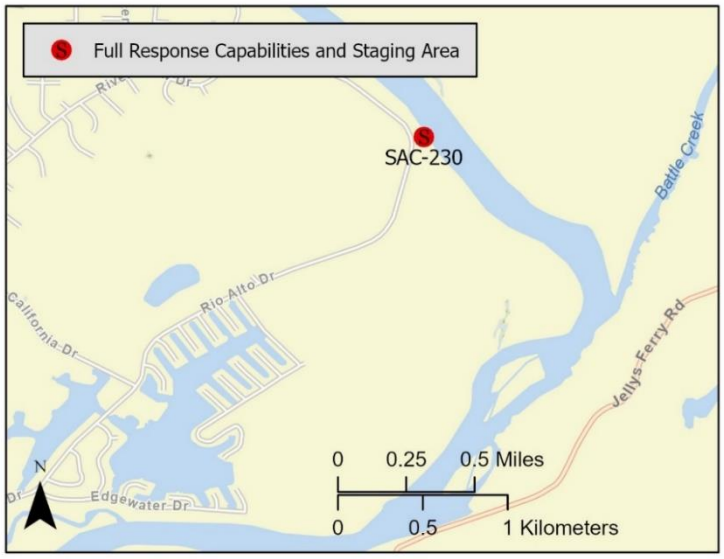
Response Strategy Site: Lake California Steelhead Landing (SAC-230)			Page 1 of 3
Driving Directions:	From North: Use I-5 South to Cottonwood, take the Bowman Road exit, Exit 662. Turn left onto Bowman Road, over the overpass, turn right onto Lake California Drive at the Park & Ride. Proceed 3.5 miles on Lake California Drive to the guard shack/entry gate for the Lake California community. Check in with security personnel at guard shack, then proceed 1.8 miles southeast on Lake California Drive to River View Drive. Turn left (east) onto River View Drive. Continue 2.0 miles southeast and turn left into Lake California Steelhead Landing boat launch. From South: Use I-5 North to Cottonwood, take the Bowman Road exit, Exit 662. Continue straight ahead from the offramp and turn right onto Lake California Drive at the Park & Ride. Continue with directions above.		
Latitude: 40.3638 **Longitude:** -122.1855	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 19999 Lake California Drive, Cottonwood, CA 96022			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Lake California is a gated private community. Responders must check in with security at the guard shack before entering the community.
- Responders need to be aware of swift water conditions and possible submerged objects in the river.

Resources-At-Risk

Ecological: Bald Eagle, Bank Swallow, Least Bell's Vireo, Osprey, Townsend's Big-eared Bat, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead– Central Valley DPS, Foothill Yellow-legged Frog, Western Pond Turtle, Valley Elderberry Longhorn Beetle

Economic: Fishing, boating, recreation, tourism

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-TE-A-005	**Site Description and Field Notes:** N/A			
Gradient: Low	**River Width:** 158 m (519 ft)	**Vehicular Access?** All vehicle types can access this location	**Recreational Use?** Boating, fishing, rafting, kayaking, water contact	**Boat Launches:** Boat launch is located on-site at Steelhead Landing
Site Contact/s:	Lake California Gate – Guard Shack (24 hr): (530) 347-7903 Office: (530) 347-7900			
ESI Shoreline Type:	9B - vegetated low banks, 6B - riprap			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 6/20/2019

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: Starting from the river-left shoreline, deploy 2,100 feet of cascading swift water boom toward the collection point at the boat launch. Add additional 200 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.

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

Response Strategy Map (overview)

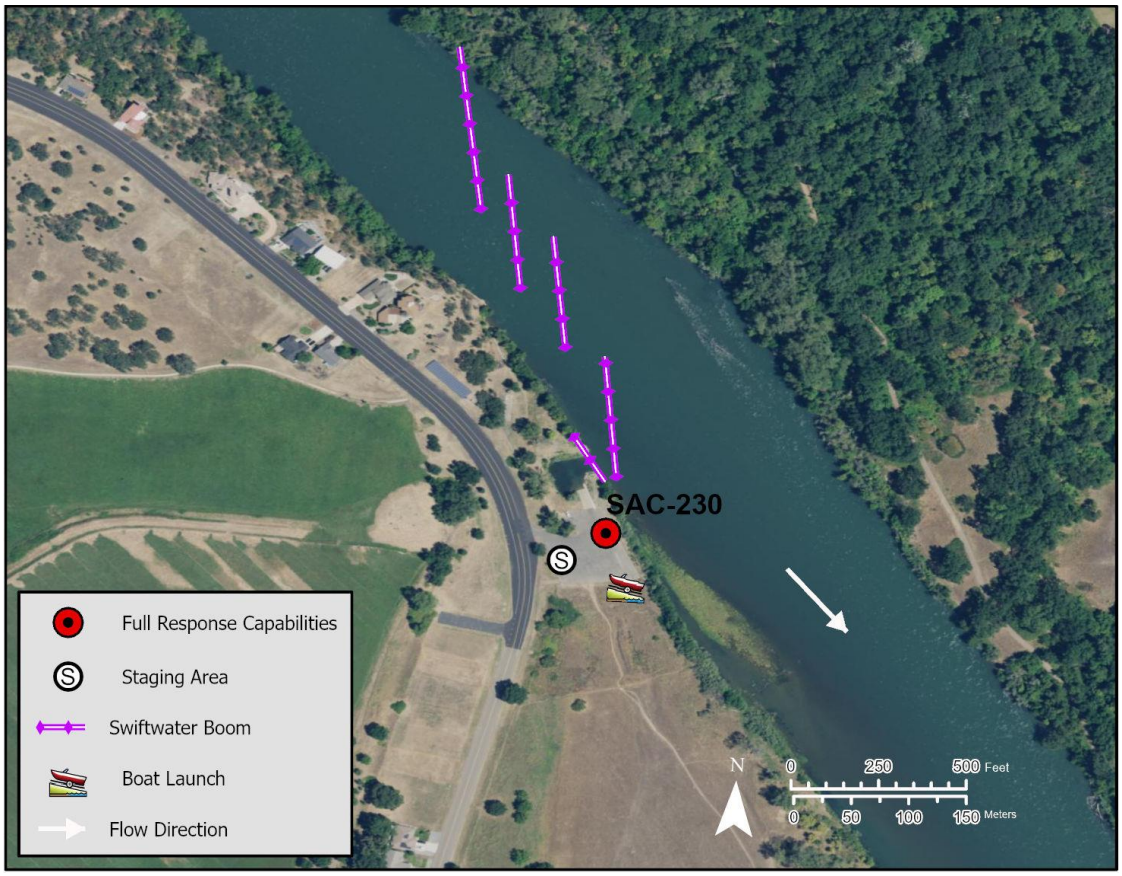


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	in	2,300 ft	Includes 200 feet of boom for shoreline protection at collection point
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum
Anchors	Danforth	25	lb	23	
Stakes				6	

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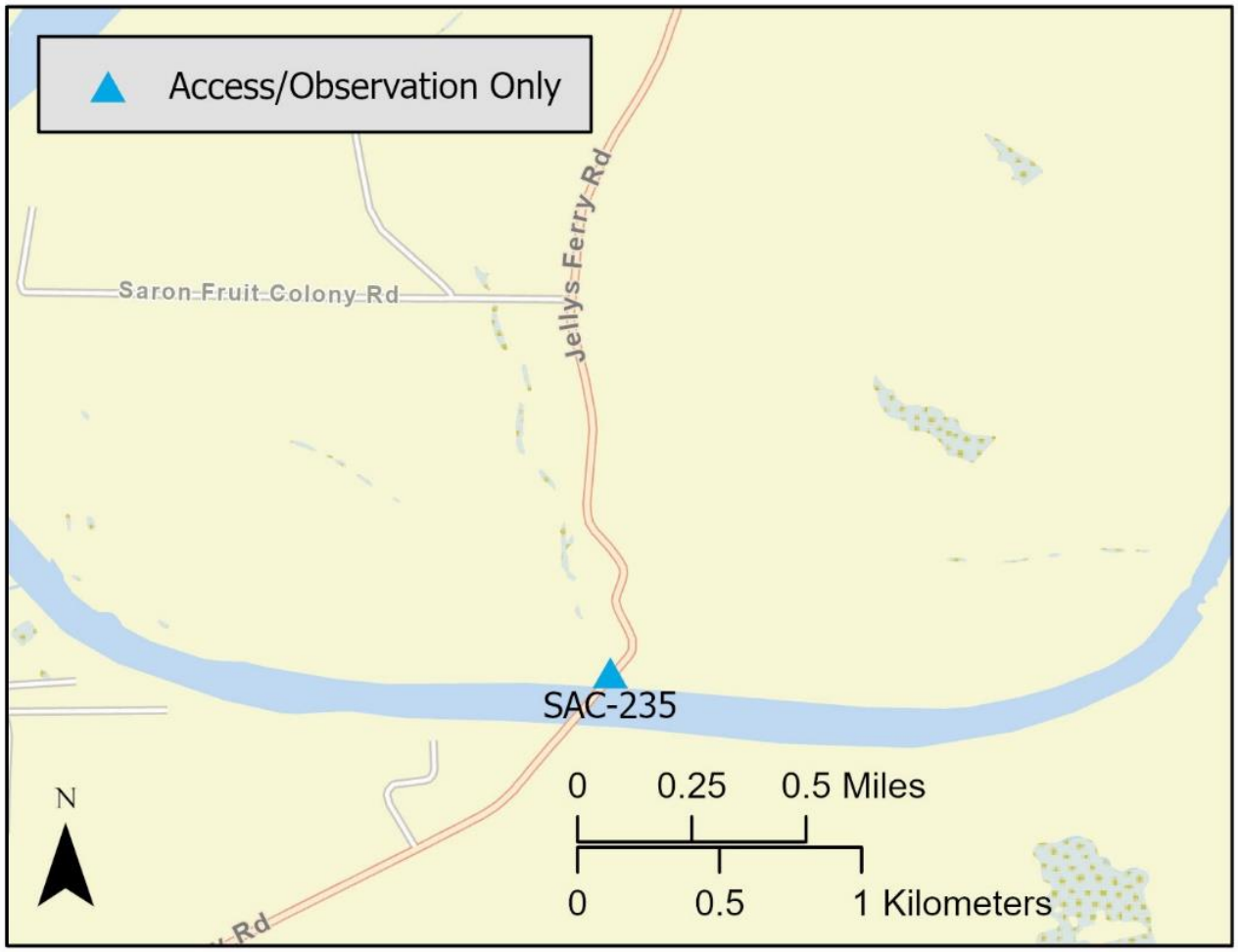
Access/Observation Site: Jelly's Ferry Bridge (SAC-235)			Page 1 of 2
Driving Directions:	From I-5, take the Jelly's Ferry Road exit, Exit 653. Turn onto Jelly's Ferry Road traveling east approximately 7.5 miles to the Jelly's Ferry Bridge. Observation Site is located on east side of Sacramento River.		
Latitude: 40.3182 **Longitude:** -122.1890	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address and Thomas Guide #: N/A			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water and strong currents
- Undeveloped dirt boat launch in poor condition is located under bridge on river-left bank

Access/Observation Site: Jelly's Ferry Bridge (SAC-235)		Page 2 of 2
Site Description and Field Notes		
Site Location/Segment: SAC-TE-A-015	**Site Description and Field Notes:** Pit toilet on site. Hiking trails provide some shoreline access. It's possible to launch boats here with minor improvement to dirt boat launch. River is approximately 400 feet wide at bridge. River gradient is medium to high.	
Site Contact/s:	Bureau of Land Management Redding Field Office (530) 224-2100	

Site Images

Upstream

Downstream

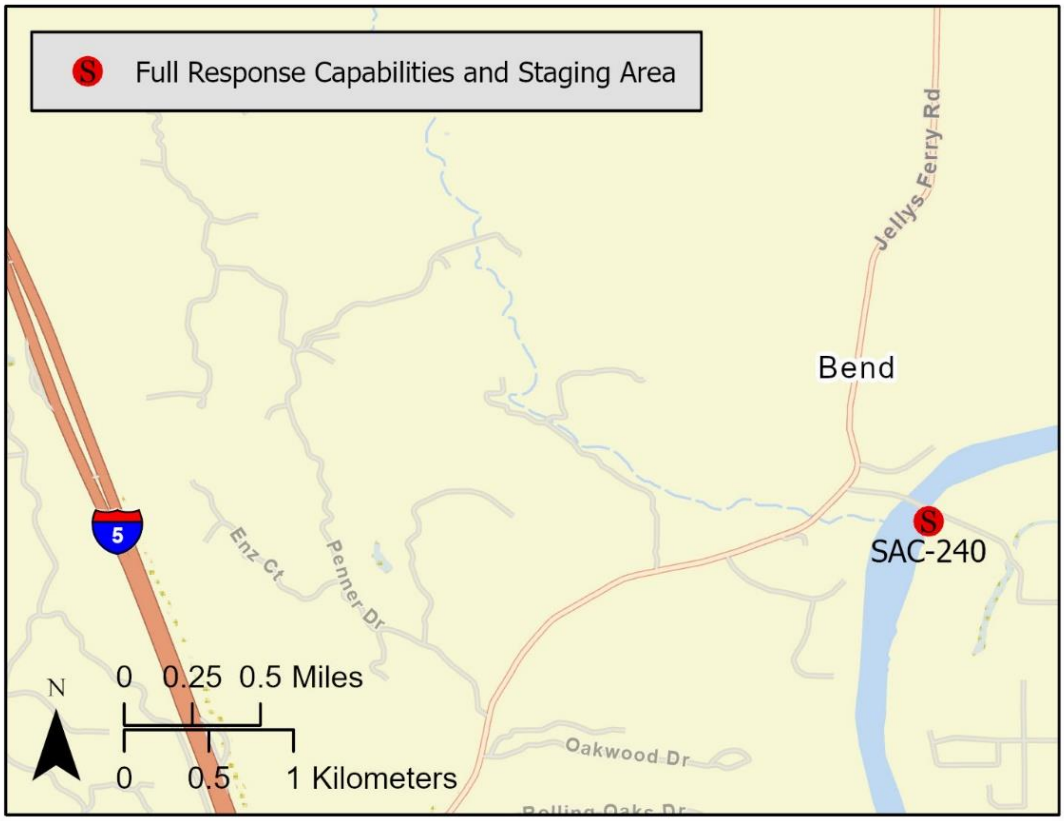
Straight Across

RR = River Right **RL = River Left**

Photo Date: 6/20/2019

Response Strategy Site: Bend Bridge Park (SAC-240)			Page 1 of 3
Driving Directions:	From I-5, take the Jelly's Ferry Road exit, Exit 653. Turn onto Jelly's Ferry Road traveling northeast for 2.6 miles and turn right (east) onto Bend Ferry Road. Travel 0.4 miles and cross over the Sacramento River. Enter Bend Bridge Park and Boat Launch from the north side of Bend Ferry Road		
Latitude: 40.2631 **Longitude:** -122.2230	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address and Thomas Guide #: Bend Ferry Road, Red Bluff, CA 96080			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Responders should be aware of swift water and possible submerged objects in river.
- This is a county park with on-site restrooms.

Resources-At-Risk

Ecological: Bald Eagle, Least Bell's Vireo, Pallid Bat, Western Red Bat, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS, Foothill Yellow-legged Frog, Ahart's Paronychia, Red Bluff Dwarf Rush, Slender Orcutt Grass

Economic: Fishing guide services, local tourism

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

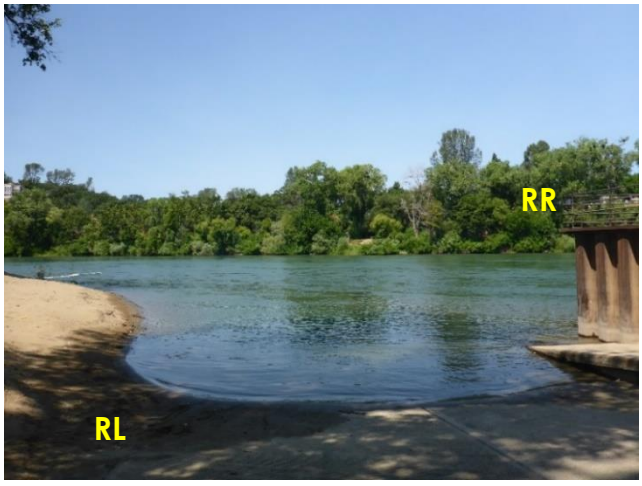
Site Location/Segment: SAC-TE-A-025	**Site Description and Field Notes:** N/A			
Gradient: Medium to High	**River Width:** 120 m (393 ft)	**Vehicular Access?** All vehicle types can access this location.	**Recreational Use?** Boating, rafting, kayaking, fishing, water contact.	**Boat Launches:** Boat launch located on site.
Site Contact/s:	Tehama County Parks (530) 528-1111			
ESI Shoreline Type:	1B - exposed solid man-made structure, 5 - mixed sand and gravel bars with gently sloping banks, 8F - vegetated steeply sloping bluffs, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across



RR = River Right **RL = River Left**

Photo Date: 6/20/2019

Response Strategy Site: Bend Bridge Park (SAC-240) Page 3 of 3

Site Objectives: Deflection boom and product collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: Starting from the river right shoreline above the Bend Ferry Bridge, deploy 1,800 feet of cascading swift water boom toward collection point at the boat launch. Add additional 200 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and managing wastes in the county park parking area.

Response Strategy Map (overview)

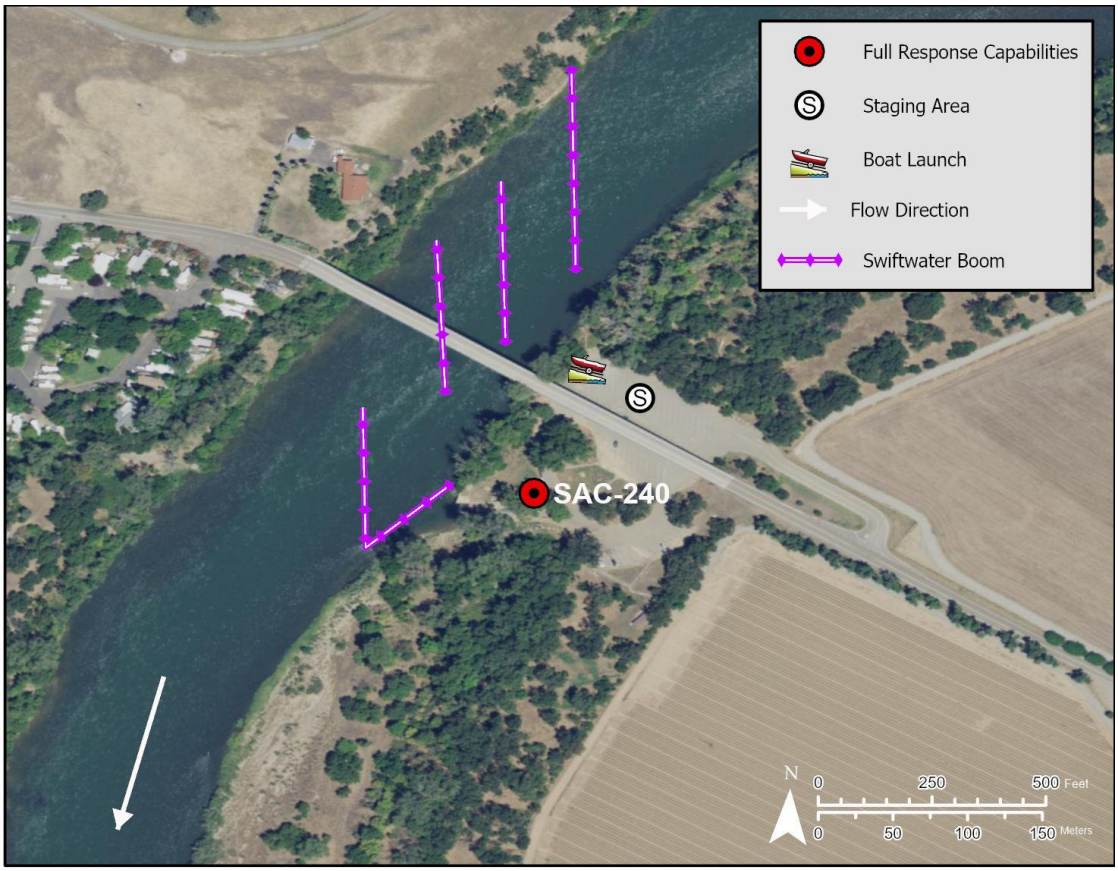


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,000	Includes 200 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	20	
Stake				6	Used to secure boom to shore
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum
Boat	Response and Boom Vessel	25	ft	2	1 each

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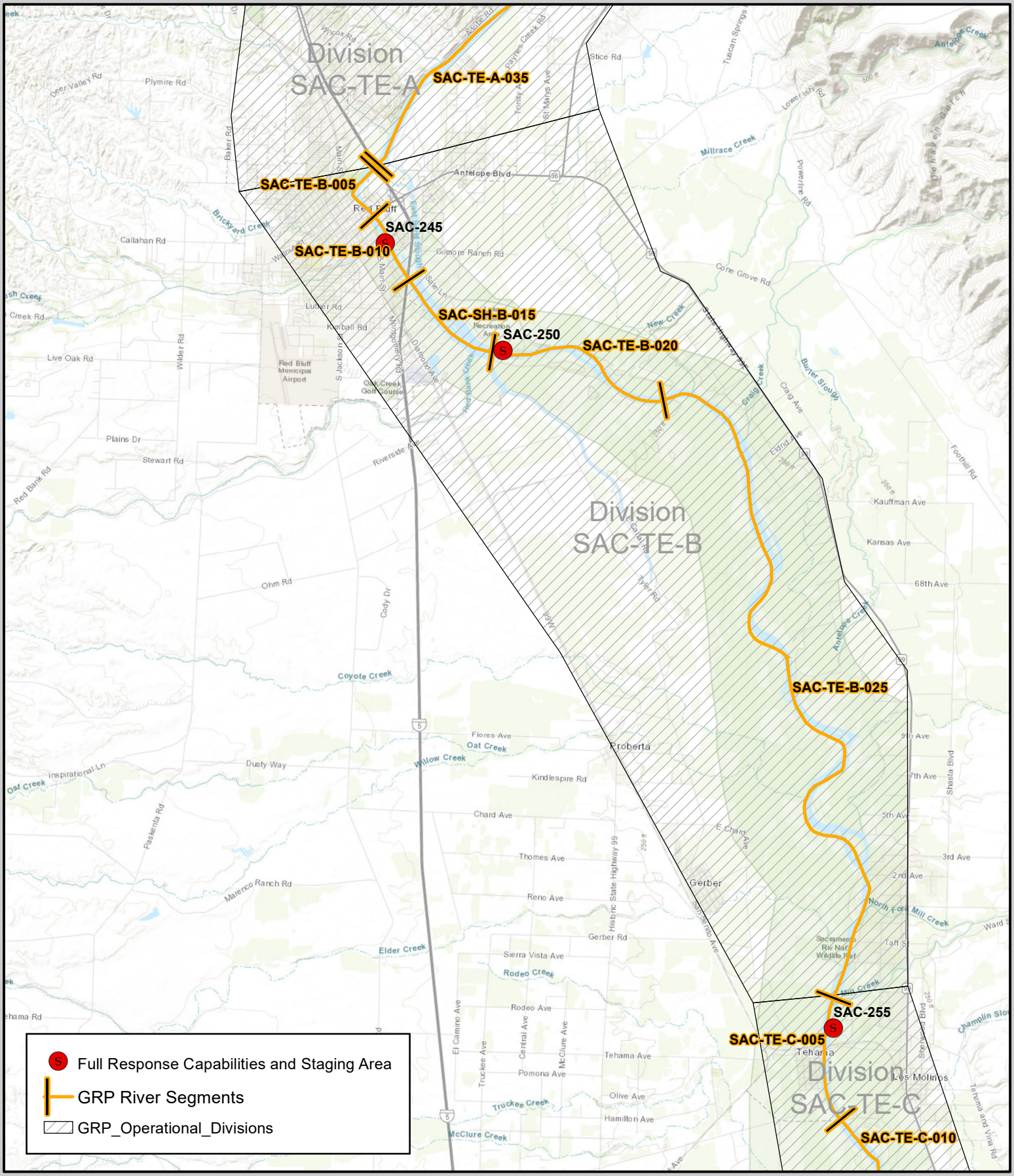
Figure 3-6: Lower Sacramento River GRP Division SAC-TE-B Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-TE-B

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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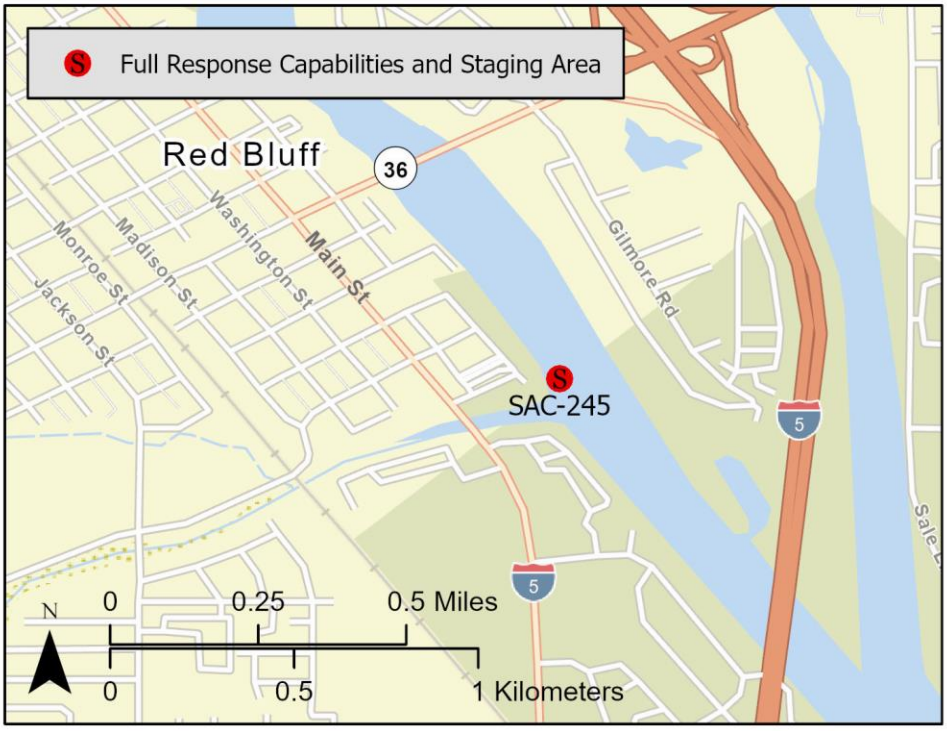
Response Strategy Site: Red Bluff River Park (SAC-245)			Page 1 of 3
Driving Directions:	From I-5, take Exit 649 onto Hwy 36/Antelope Blvd. Head west and cross over Sacramento River. Turn left (south) onto Main Street. Continue south for 0.35 miles and turn left (east) onto Willow Street. Follow Willow Street east into the park.		
Latitude: 40.1727 **Longitude:** -122.2276	**Highway Postmile:** N/A	**Railroad Milepost:** UPRR MP 222.82, Valley Subdivision – Tracks cross Reeds Creek upstream of Sacramento River	**Cell Service:** Yes – Verizon tested
Nearest Address: 2 Rio Street, Red Bluff, CA 96080			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- The UPRR tracks cross over Reeds Creek, about 2,000 feet west of the Sacramento River.
- Vehicles can access the river right shoreline from the park.
- Restrooms are located on site.
- Park closes at 2200 hours.

Resources-At-Risk

Ecological: Least Bell's Vireo, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Steelhead – Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Park and recreation, local tourism, fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-TE-B-010	**Site Description and Field Notes:** The confluence of Reeds Creek and the Sacramento River is directly downstream of the park boat launch on river-right shoreline.			
Gradient: Low	**River Width:** 95 m (312 ft)	**Vehicular Access?** All vehicle types can access the park. High clearance vehicles recommended for accessing Sacramento River river-right shoreline.	**Recreational Use?** Boating, rafting, kayaking, fishing, water contact.	**Boat Launches:** Unimproved boat launch and river shoreline access is located at the south end of the park. It is possible to launch shallow draft vessels into Sacramento River from river right shoreline. Its only accessible in high flows.
Site Contact/s:	Tehama County Parks (530) 528-1111			
ESI Shoreline Type:	6A - gravel bars and gently sloping banks, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 9/17/2019

Response Strategy Site: Red Bluff River Park (SAC-245) Ⓢ **Page 3 of 3**

Site Objectives: Deflection/collection. Consider cascading boom set. Limit shoreline impacts.

Implementation: From the river left shoreline, deploy 1,400 feet of cascading swift water boom toward collection area on river right shoreline. Add additional 200 feet of boom for shoreline protection at collection area. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and manage wastes in the county park parking area.

Response Strategy Map (overview)

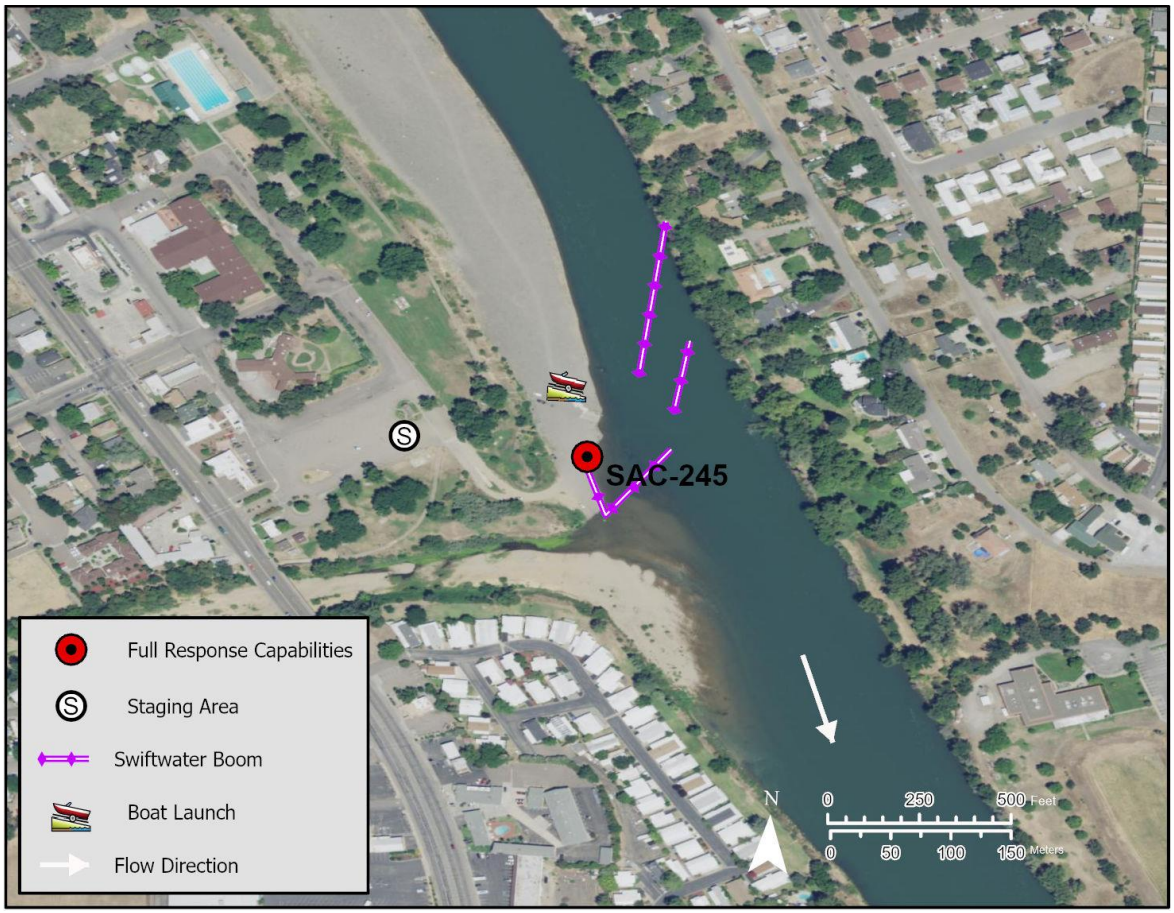


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	1,600	Includes 200 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	16	
Stake				6	Used to secure boom to shore
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum

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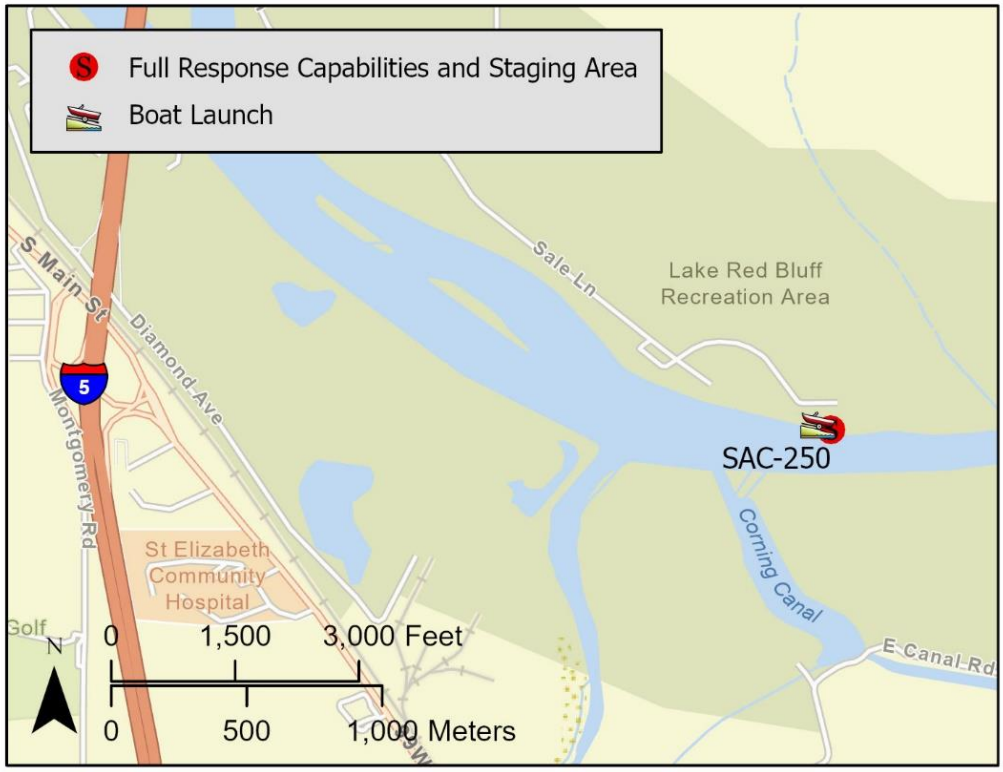
Response Strategy Site: Sycamore Grove Boat Launch (SAC-250)			Page 1 of 3
Driving Directions:	Take Exit 649 off I-5 and head east on Antelope Blvd./Hwy 36 East for approximately 0.4 miles and turn south onto Sale Lane. Continue south on Sale Lane approximately 2.8 miles and enter Sycamore Grove Campground.		
Latitude: 40.1537 **Longitude:** -122.1991	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address and Thomas Guide #: N/A			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Boat launch and campground gate is locked after hours.
- Swift water with possible submerged objects.
- Red Bluff Diversion Dam is located upstream of the boat ramp.
- The Tehama-Colusa Canal Authority operates a water intake and pumping station along the river right shoreline above Red Bluff Diversion Dam.

Resources-At-Risk

Ecological: Bank Swallow, Least Bell's Vireo, Pallid Bat, Western Red Bat, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Green Sturgeon, Steelhead – Central Valley DPS

Economic: Sycamore Grove Campground, fishing guide services, local tourism, Tehama-Colusa Canal Authority (intake located above boat ramp)

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-TE-B-020	**Site Description and Field Notes:** Site consists of a campground and boat launch with showers and bathrooms on site.			
Gradient: High	**River Width:** 140 m (460 ft)	**Vehicular Access?** All vehicle types can access this location.	**Recreational Use?** Fishing, boating, rafting, kayaking, water contact.	**Boat Launches:** Boat launch facility is located south of the campground.
Site Contact/s:	Mendocino National Forest (530) 934-3316			
ESI Shoreline Type:	1B - exposed solid man-made structures, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 6/20/2019

Site Objectives: Deflection boom and product collection. Consider cascading boom strategy. Limit shoreline impacts.

Implementation: Starting from the river right shoreline above the boat launch, deploy 2,000 feet of cascading swift water boom toward the collection point at the boat launch. Add additional 300 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.

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

Response Strategy Map (overview)

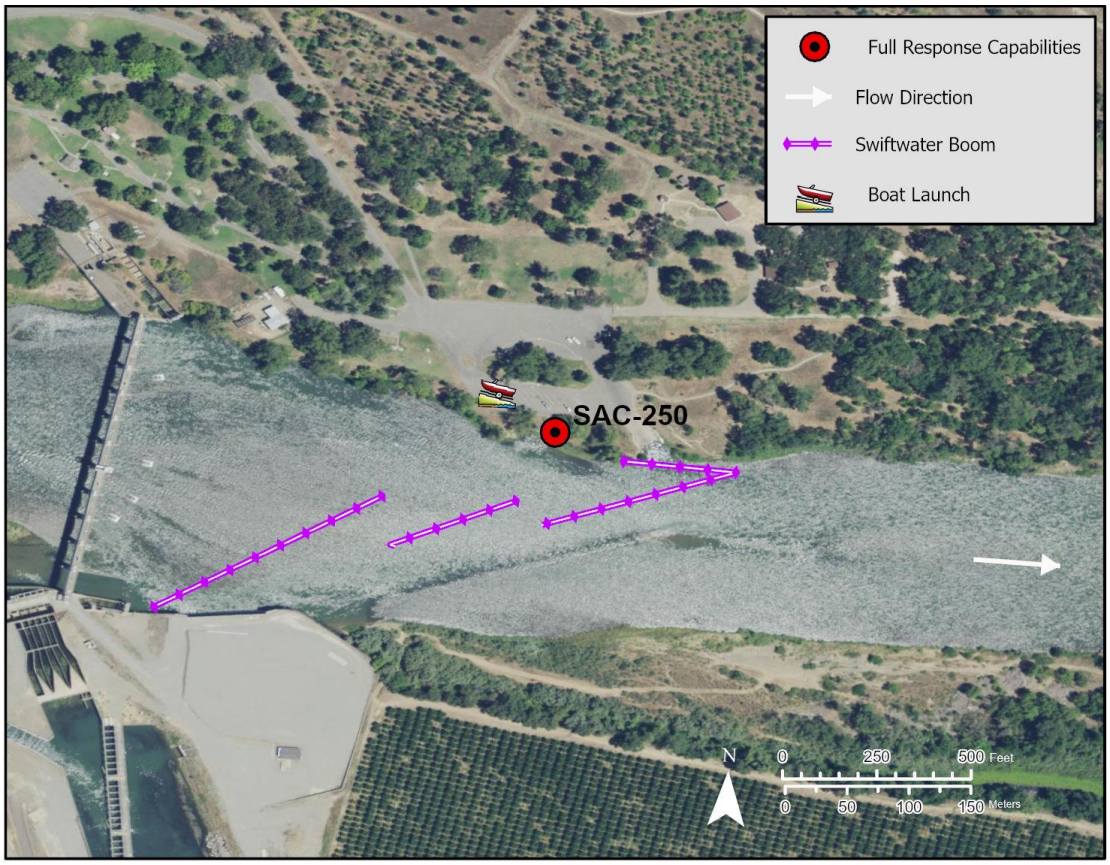


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,300	Includes 300 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	23	
Stakes				6	Used to secure boom to shore
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum

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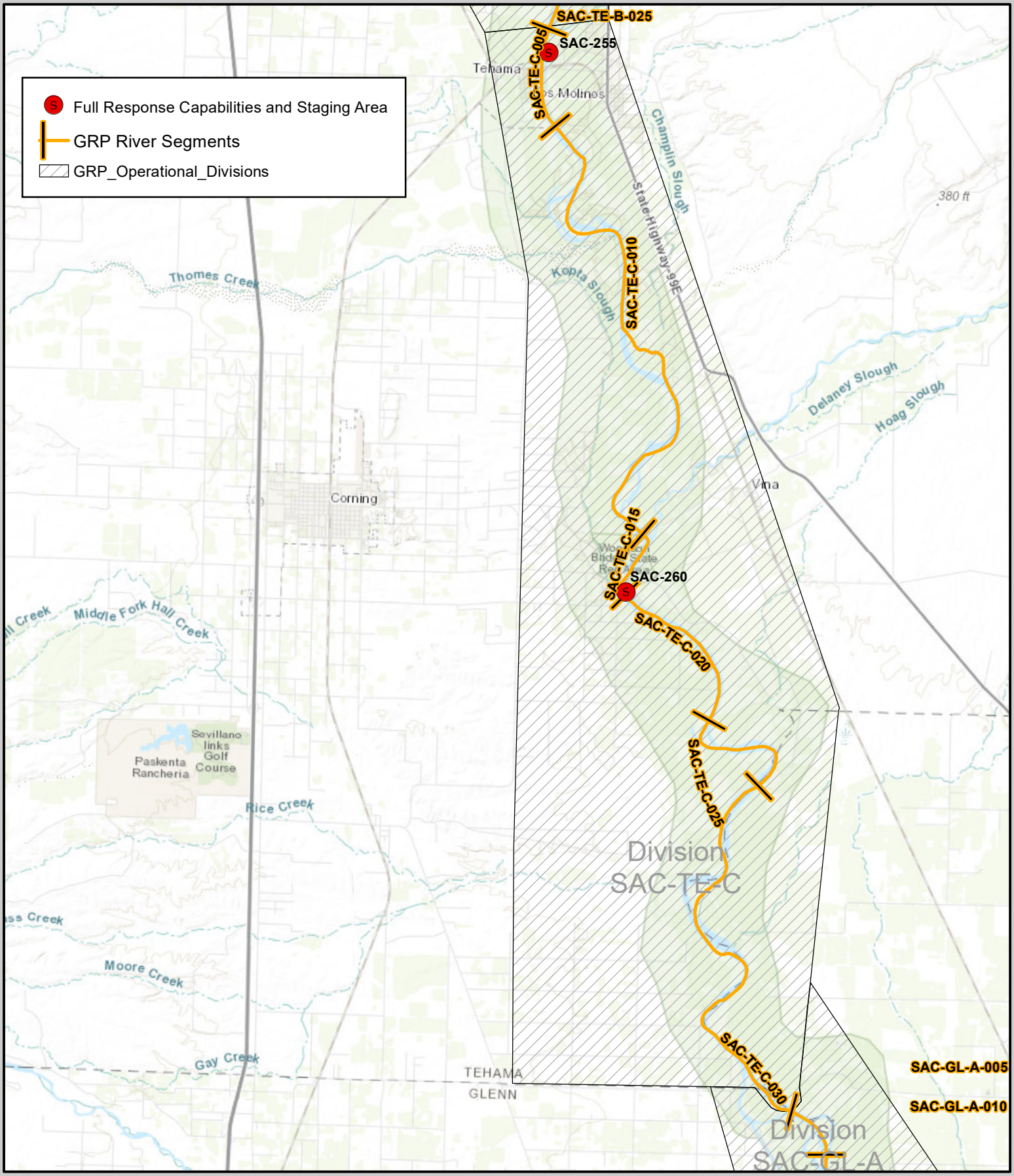
Figure 3-7: Lower Sacramento River GRP Division SAC-TE-C Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-TE-C

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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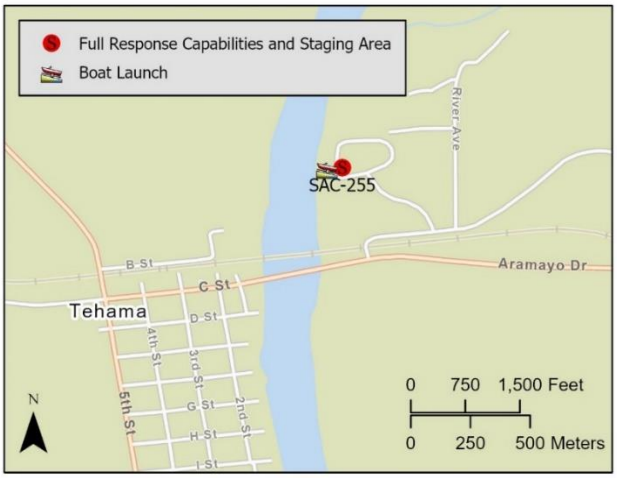
Response Strategy Site: Mill Creek Park Boat Launch (SAC-255) (S)			Page 1 of 3
Driving Directions:	Take the Gyle Road exit, Exit 636, off I-5 and head east. After 4.5 miles, Gyle Road bends to the north and turns into 5th Street. Continue north on 5th Street and turn right (east) at the stop sign at Tehama Avenue/C Street. Continue east on C Street and cross over the Sacramento River. On the east side of the Sacramento River, turn left (north) onto Mill Creek Park/Tehama Vina Road. Follow road under the railroad overcrossing and turn left into Mill Creek Park. **NOTE:** THE RAILROAD OVERCROSSING OVER MILL CREEK PARK/TEHAMA VINA ROAD HAS 8.0 FEET OF CLEARANCE. If vehicles need additional clearance beyond 8.0 feet, then continue heading east on C Street (which turns into Aramayo Way on east side of river) until reaching the signal at Hwy 99. Turn north onto Hwy 99 and then turn left (west) onto Tehama Vina Road. Follow Tehama Vina Road west until reaching the entrance to Mill Creek Park.		
Latitude: 40.0319 **Longitude:** -122.1172	**Highway Postmile:** N/A	**Railroad Milepost:** UPRR 210.90 – Valley Subdivision (located 0.20 miles downstream of boat launch)	**Cell Service:** Yes – Verizon tested
Nearest Address: 24670 Tehama Vina Road, Los Molinos, CA 96055			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water and submerged objects in river.
- Be aware of the low 8.0 ft railroad overcrossing at west end of Tehama Vina Road.
- Park and boat launch are susceptible to flooding at high river flows in winter.

Resources-At-Risk

Ecological: Bank Swallow, Least Bell's Vireo, Western Yellow-billed Cuckoo, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Green Sturgeon, Steelhead – Central Valley DPS, Western Pond Turtle, Valley Elderberry Longhorn Beetle

Economic: Fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-TE-C-005	**Site Description and Field Notes:** County park with restrooms on site.			
Gradient: High	**River Width:** 175 m (575 ft)	**Vehicular Access?** All vehicle types can access this location. Be aware of the low railroad overcrossing at west end of Tehama Vina Road.	**Recreational Use?** Fishing, boating, rafting, kayaking, water contact.	**Boat Launches:** Boat launch is located at the parking area near the river.
Site Contact/s:	Tehama County Parks (530) 528-1111			
ESI Shoreline Type:	1B - exposed solid man-made structure, 6A - mixed sand and gravel bars and gently sloping banks, 9B - vegetated low banks			

Site Images

Upstream

Downstream

Straight Across/Boat Launch

RR = River Right **RL = River Left**

Photo Date: 9/9/2019

Site Objectives: Deflection boom and product collection; consider cascading boom strategy; limit shoreline impacts.

Implementation: Starting from the river right shoreline above the boat launch, deploy 2,400 feet of cascading swift water boom toward the collection point at the boat launch. Add additional 300 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.

Staging Area Location and Capabilities/Amenities/Waste Management: Stage equipment and managing wastes in the boat launch parking area.

Response Strategy Map (overview)

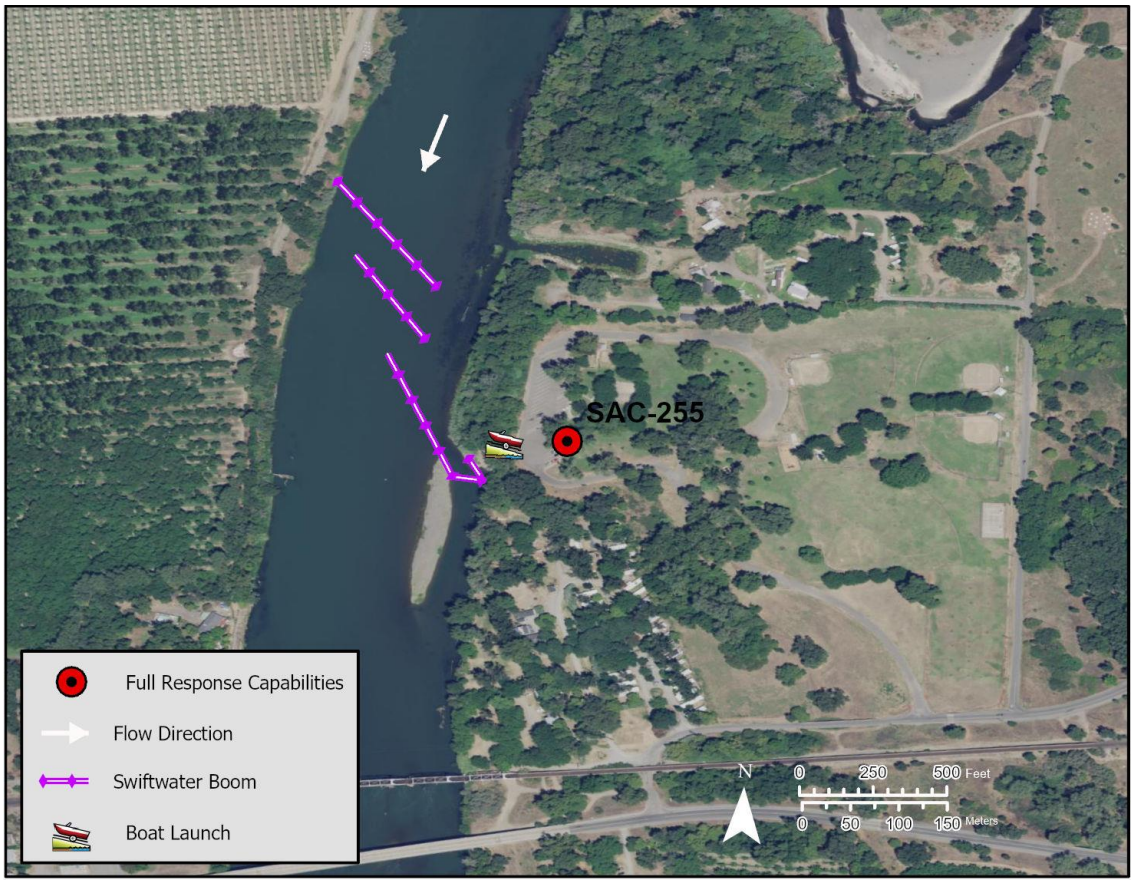


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	2,700	Includes 300 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	27	
Stakes				6	
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum

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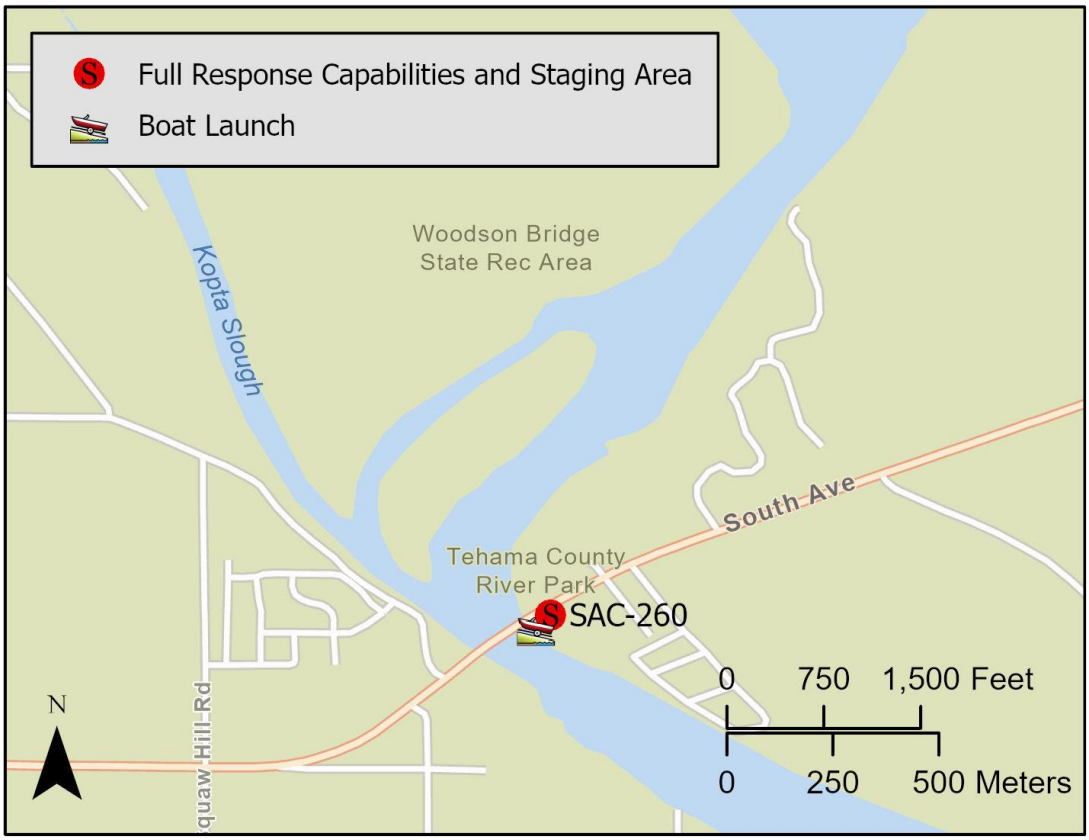
Response Strategy Site: Woodson Bridge Boat Launch (SAC-260)			Page 1 of 3
Driving Directions:	Take Exit 630 off I-5 onto South Avenue and head east. Continue east on South Avenue for 6 miles and turn south into Tehama County River Park. You can also enter this area from the north side of South Avenue by entering the Woodson Bridge State Recreation Area.		
Latitude: 39.9097 **Longitude:** -122. 0909	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 25340 South Avenue, Corning, CA 96021			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Response personnel need to be aware of swift currents and possible submerged objects in the river.
- High river flows can flood the parking area near the river.

Resources-At-Risk

Ecological: Bank Swallow, Swainson's Hawk, Western Yellow-billed Cuckoo, Western Red Bat, Chinook Salmon – Central Valley Spring-run ESU, Chinook Salmon – Sacramento River Winter-run ESU, Green Sturgeon, Steelhead – Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Fishing guide services, campground and trailer park on-site, local tourism

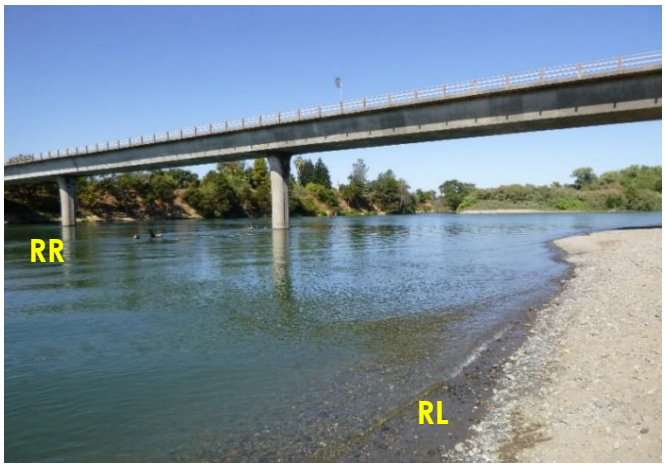
Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-TE-C-020	**Site Description and Field Notes:** Site is an oak woodland park with nature preserve. Camping and restrooms on site.			
Gradient: Medium	**River Width:** 104 m (340 ft)	**Vehicular Access?** All vehicle types can access this location	**Recreational Use?** Boating/rafting/kayaking, fishing, water contact, camping	**Boat Launches:** The boat launch is by the Sacramento River near the east side of the bridge
Site Contact/s:	Woodson Bridge State Recreation Area (530) 839-2112		Tehama County Parks (530) 528-1111	
ESI Shoreline Type:	1B - exposed solid man-made structure, 5 - mixed sand and gravel bars with gently sloping banks, 9B - vegetated low banks			

Site Images

Upstream



Downstream

Straight Across/Boat Launch

RR = River Right **RL = River Left**

Photo Date: 8/26/2019

Site Objectives: Deflection boom and product collection; consider cascading boom strategy; limit shoreline impacts.

Implementation: Starting from the river right shoreline above the boat launch and bridge, deploy 1,400 feet of cascading swift water boom toward the collection point at the boat launch. Add additional 300 feet of boom for shoreline protection near the collection area. Pump recovered product directly to vacuum truck on shore.

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

Response Strategy Map (overview)

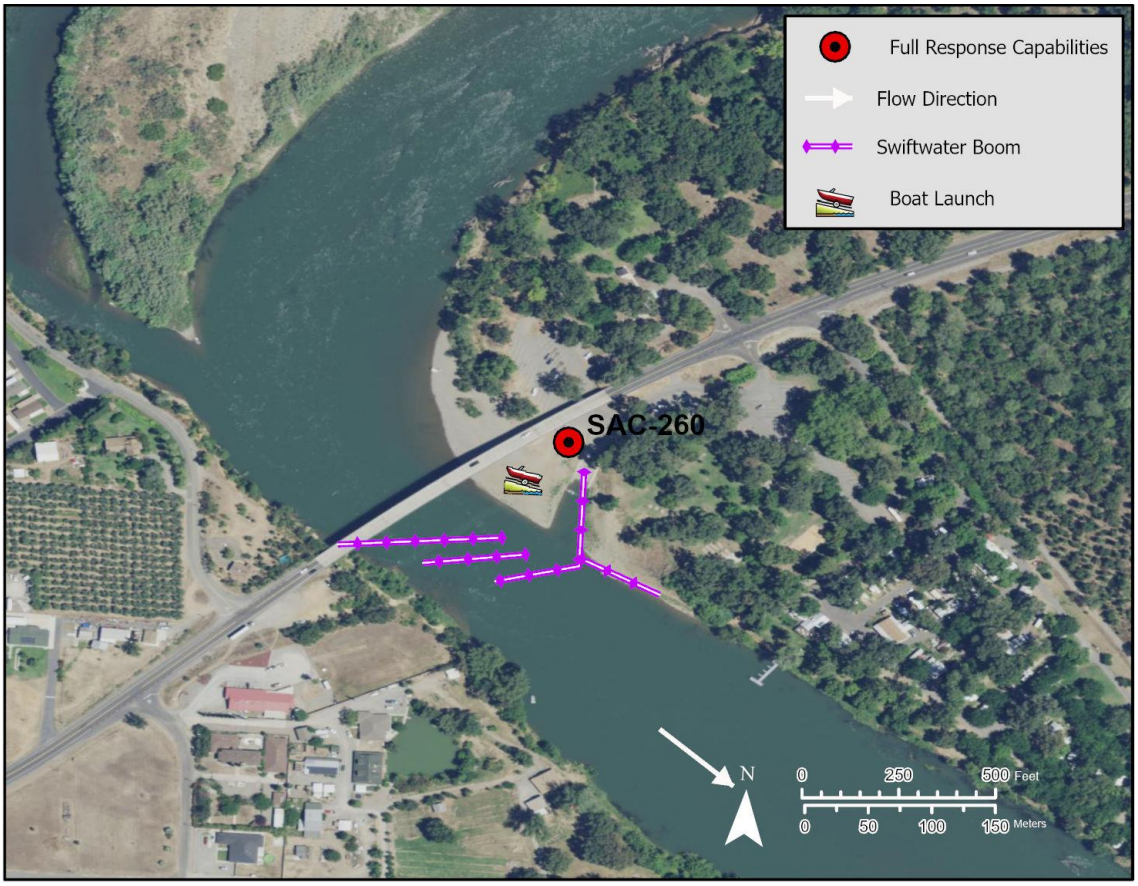


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	1,700	Includes 300 feet of boom for shoreline protection at collection point.
Anchors	Danforth	25	lb	17	
Stakes				6	Used to secure boom to shore
Boat	Response and Boom Vessel	25	ft	2	1 each, minimum
Personnel				6 to 10 crew	2 vessel operators and 2 deckhands, minimum

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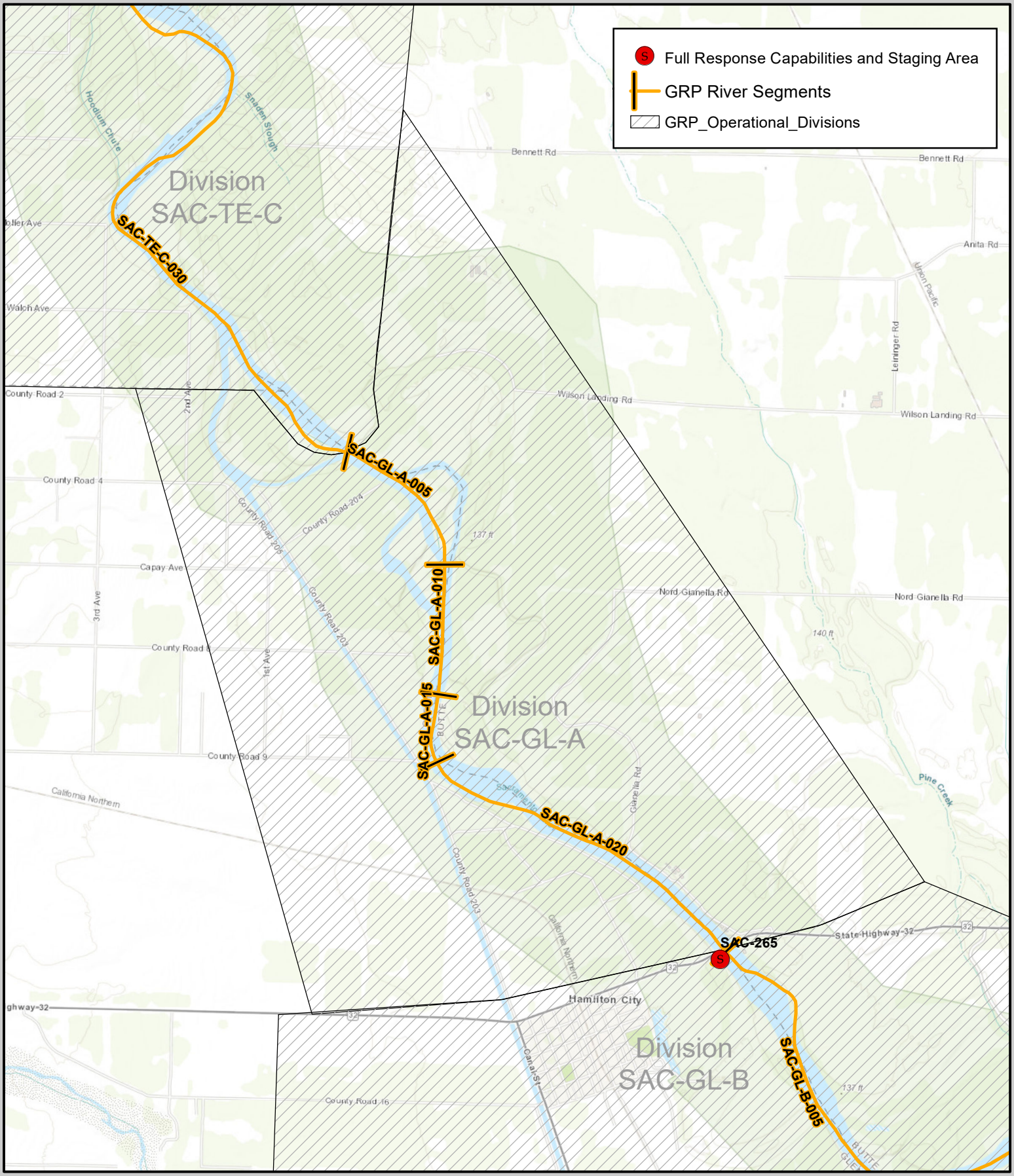
Figure 3-8: Lower Sacramento River GRP Division SAC-GL-A Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
Data Source: CDFW-OSPR, USGS

C:\Work\GRPS\LowerSacramento\Maps\MXD\LowerSacramento_SAC-GL-A_030420.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

Lower Sacramento River Geographic Response Plan Division SAC-GL-A

0 0.25 0.5 0.75 Miles
0 0.5 1 Kilometers

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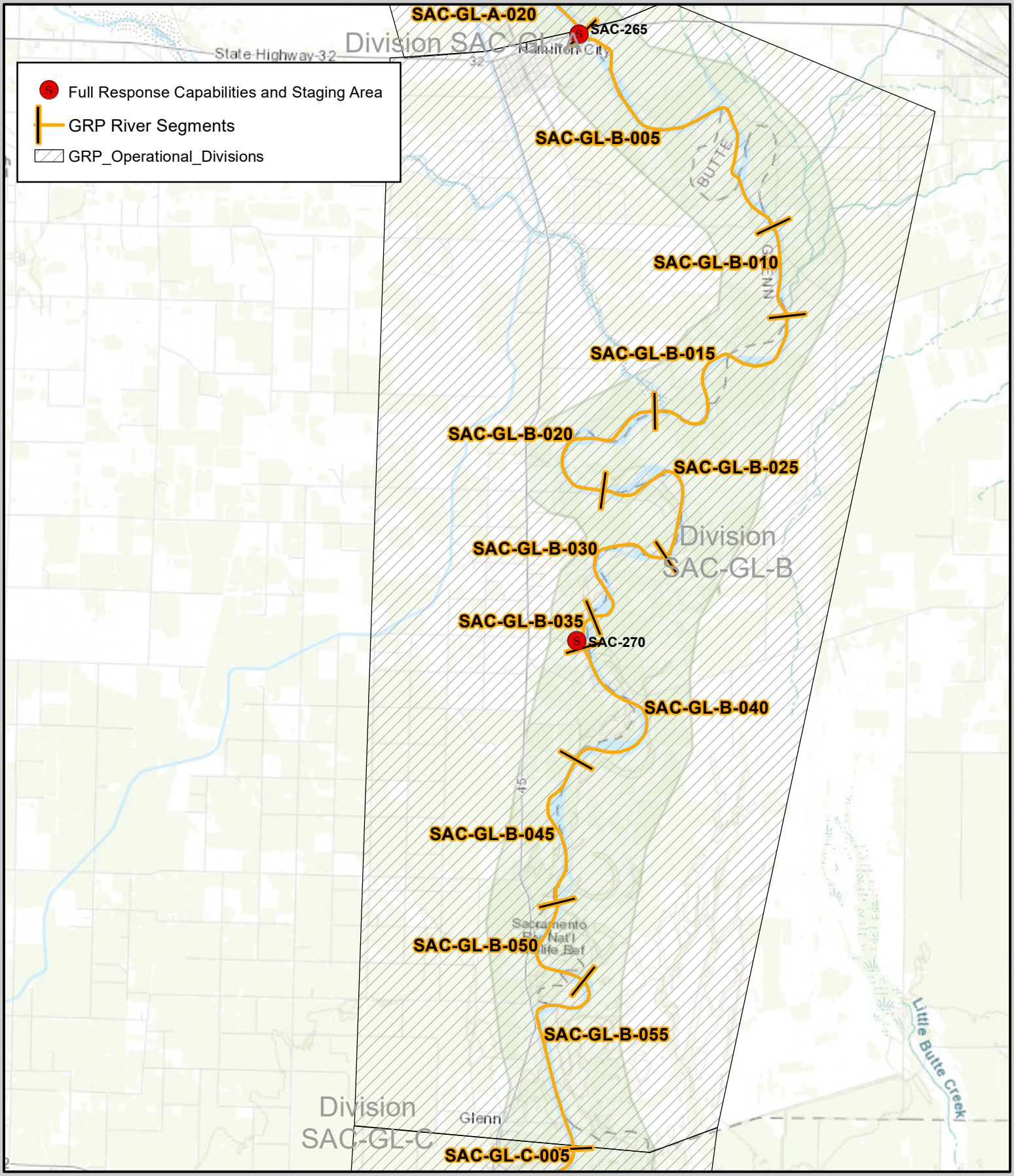
Figure 3-9: Lower Sacramento River GRP Division SAC-GL-B Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
Data Source: CDFW-OSPR, USGS

C:\Work\GRPS\LowerSacramento\Maps\MXD\LowerSacramento_SAC-GL-B_030420.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

Lower Sacramento River Geographic Response Plan Division SAC-GL-B

0 0.75 1.5 2.25 Miles

0 1.5 3 Kilometers

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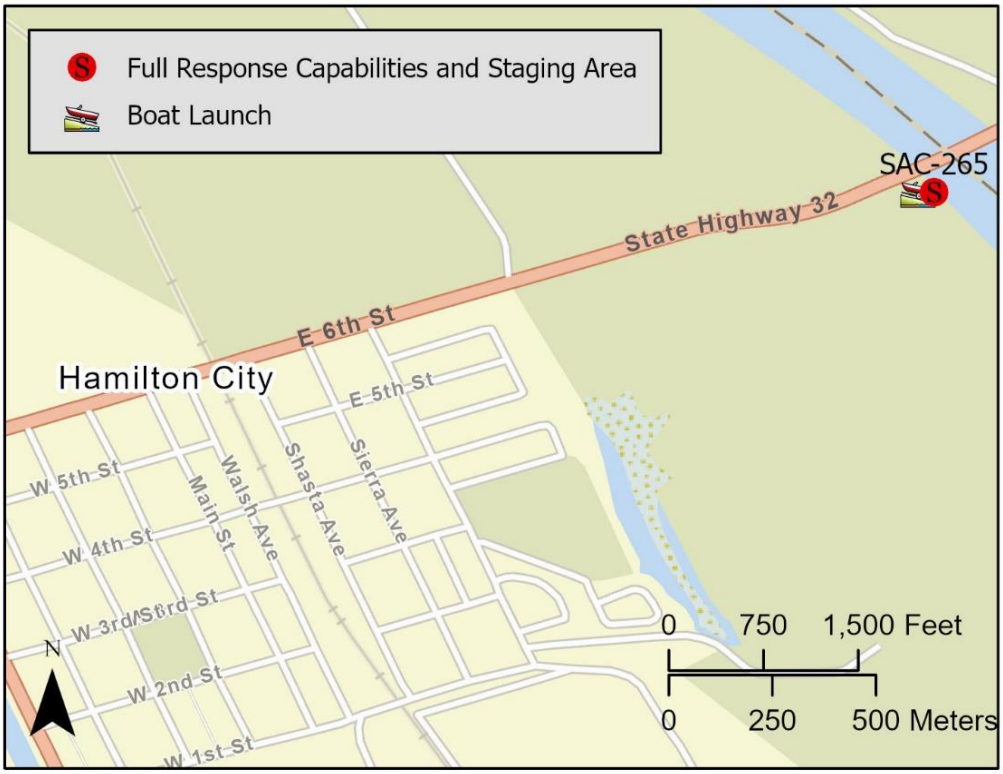
Response Strategy Site: Irvine Finch River Access (SAC-265)			Page 1 of 3
Driving Directions:	From North: Take Exit 630 off I-5 onto South Avenue and head east. Continue east on From North: Use I-5 South, take Exit 621. Turn left onto 1-5 BUS, turn right to stay on I-5 BUS, left onto Road 9. Right onto 6 Avenue. Turn left onto CA-32E to Irvine Finch River Access Road. From South: Use I-5 North, take Exit 619 for CA-32 toward Orland Chico. Right on CA-32. Right onto Irvine Finch Access Road.		
Latitude: 39. 7502 **Longitude:** -121.9970	**Highway Postmile:** GLE 10.87	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: Irvine Finch River Access Rd, Chico, CA 95973, **Thomas Guide #:** 163/3B			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Bank Swallow, Steelhead – Central Valley DPS

Economic: Fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-GL-B-005	**Site Description and Field Notes:** Dense riparian habitat along shoreline. Large parking area with facilities that could make for a good staging area. Part of the Bidwell-Sacramento River State Park.			
Gradient: Medium	**River Width:** 194.77 m (639 ft)	**Vehicular Access?** Vehicle accessibility to the water's edge on the boat ramp	**Recreational Use?** Rafting, fishing	**Boat Launches:** Boat launch on site
Site Contact/s:	Bidwell-Sacramento River St Park (530) 342-5185			
ESI Shoreline Type:	9B – Vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 9/18/2019

Site Objectives: Deflection/Collection

Implementation: Cascade from bridge using 4 – 400-foot lengths of boom and angle towards collection point at boat ramp. Use 300 feet of boom to line shoreline and collection area.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging can be done at the parking area on site.

Response Strategy Map (overview)

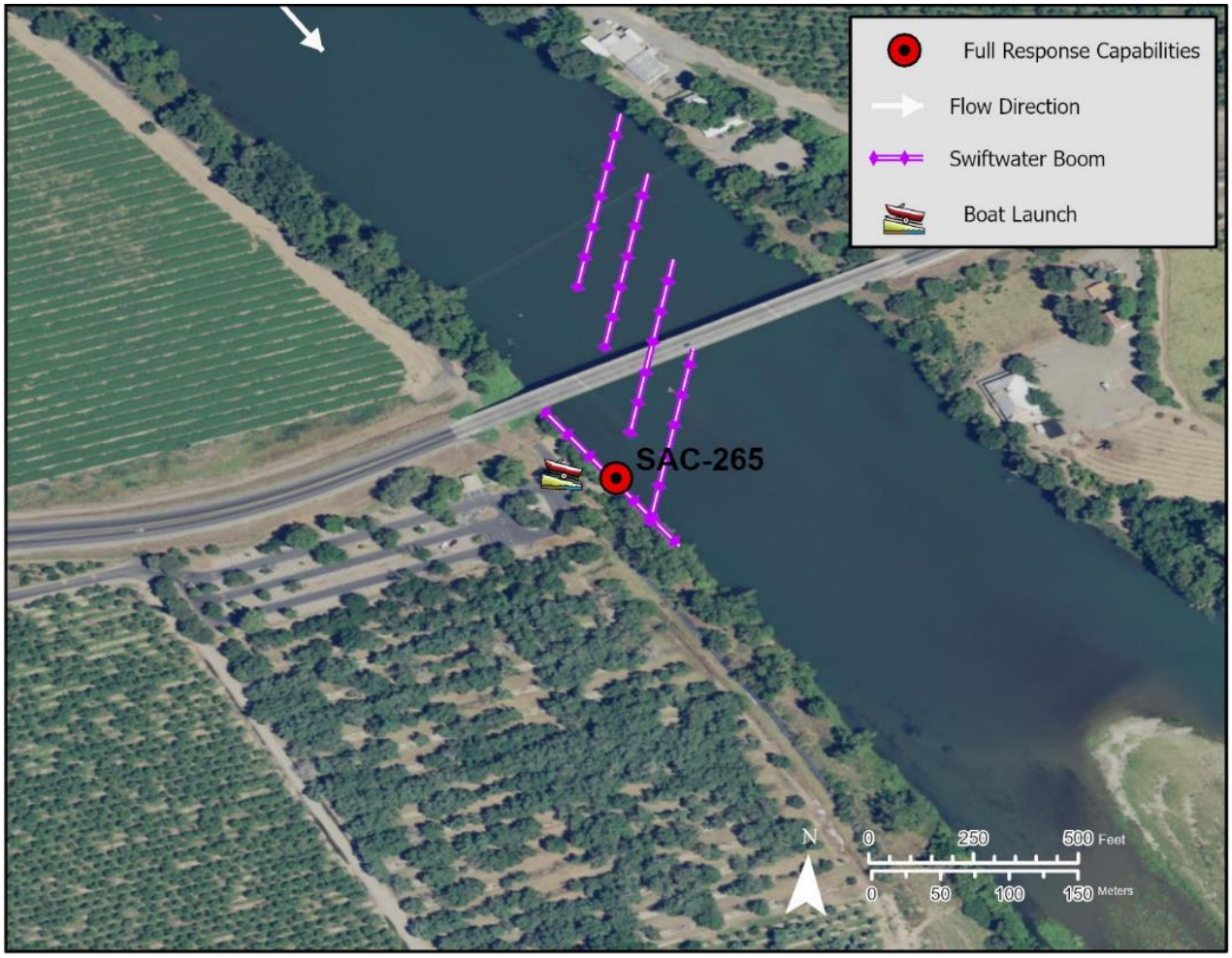


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	1,900	
Anchors	Danforth	22	lb	19	
Stakes				6	Used to secure boom to shore
Boat	Response and Boom Vessel	25	ft	2	Use response vessels
Personnel				8	2 people would be on each response vessel

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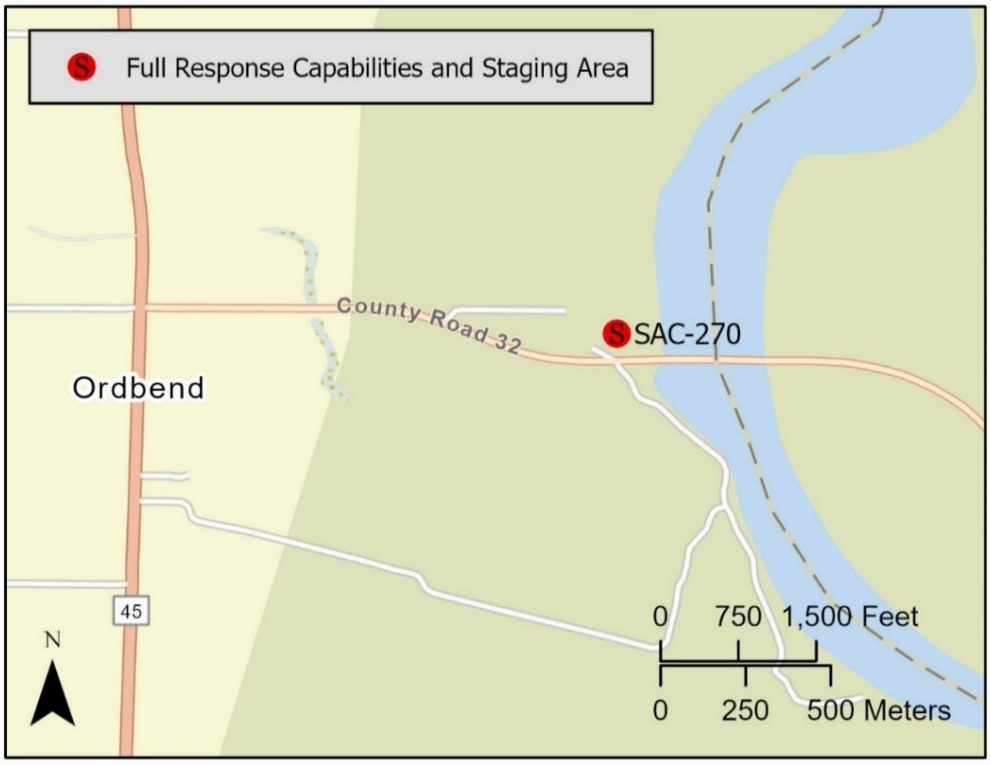
Response Strategy Site: Ord Bend Park (SAC-270)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 619 for CA-32 toward Orland/Chico. Turn right onto CA-45 S/Canal St. Left onto County Road 32. Left into Ord Bend Park Boat Launch. From South: Use I-5 North, take Exit 569 for Hahn Road. Turn right on Hahn Rd. Left on Lone Star Road. Right on Hwy-20. Left on Market Street (in Colusa), continue onto CA-45/13th Street. Right onto County Rd-32, turn into Ord Bend Park.		
Latitude: 39.6299 **Longitude:** -121.9943	**Highway Postmile:** GLE 15.169	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 8201 Ord Ferry Rd., Glenn, CA, 95943 **Thomas Guide #:** 163/3B			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Bank Swallow, Steelhead – Central Valley DPS, Giant Garter Snake

Economic: Fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Site Description and Field Notes

Site Location/Segment: SAC-GL-B-035	**Site Description and Field Notes:** Heavily vegetated banks on river right; gravel shoreline on river left. Large parking area with facilities that could be used as a staging area. Roads in the area are subject to flooding. No public access to river left. Inlet that leads to boat launch is dynamic and is subject to change from year to year.			
Gradient: Medium	**River Width:** 118.87 m (390 ft)	**Vehicular Access?** No access along shoreline	**Recreational Use?** Fishing, rafting	**Boat Launches:** Boat launch facility on site
Site Contact/s:	Glenn County Parks (530) 934-6545			
ESI Shoreline Type:	9B – vegetated low banks, 6A – gravel beaches			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 9/18/2019

Response Strategy Site: Ord Bend Park (SAC-270) Ⓢ **Page 3 of 3**

Site Objectives: Deflection/collection

Implementation: Cascade using 4 - 300-foot sections of boom from river left shoreline to the river right shoreline just below the inlet. Use additional 150 feet of boom to protect shoreline near collection area.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on site

Response Strategy Map (overview)

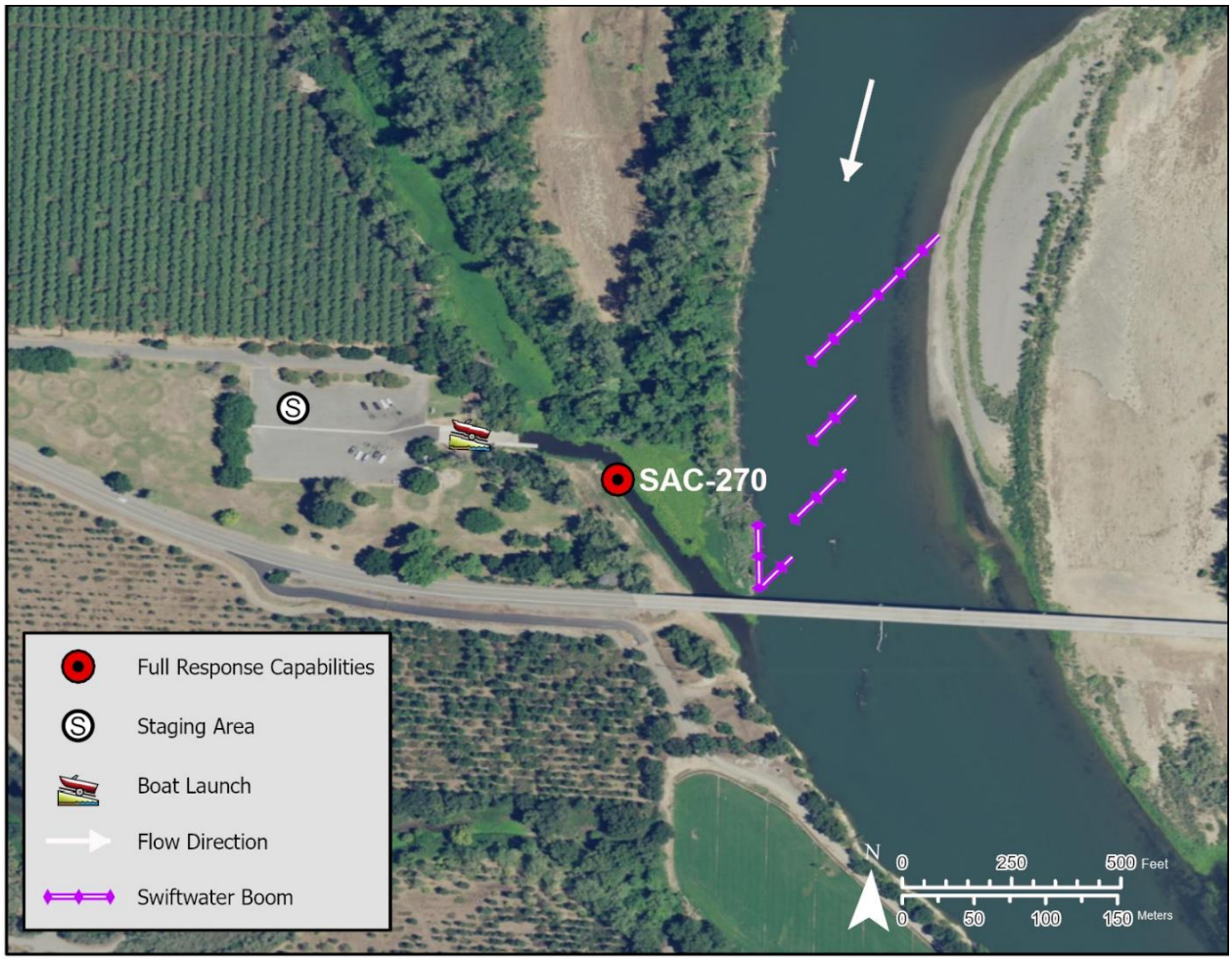


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swift Water Boom	6 in x 6 in	ft	1,350	
Anchors	Danforth	25	lb	11	
Stakes				6	Used to secure boom to shore
Boat		25	ft	2	Support Vessel
Personnel				8	2 people on each boat, and 4 on the shore

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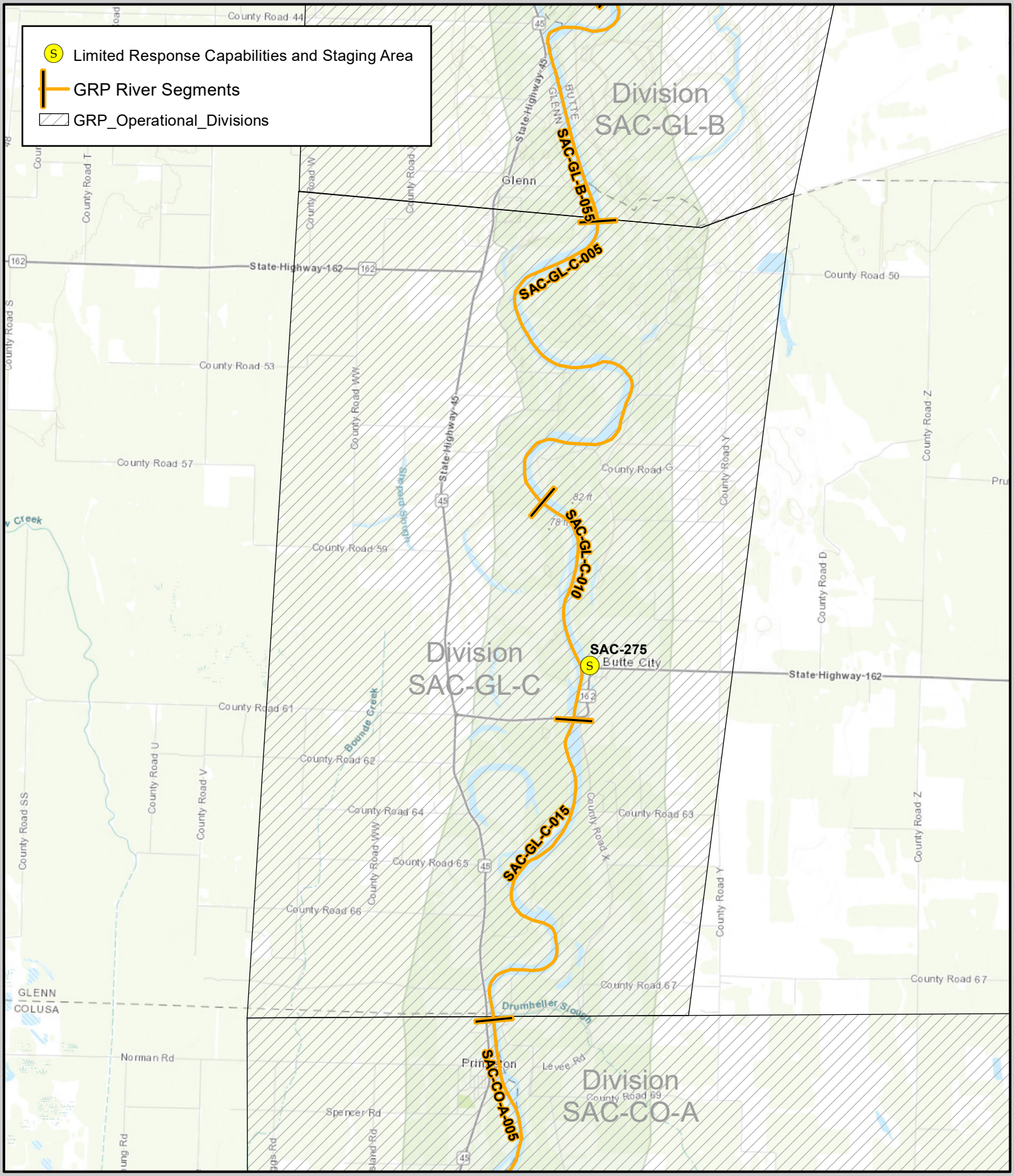
Figure 3-10: Lower Sacramento River GRP Division SAC-GL-C Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-GL-C

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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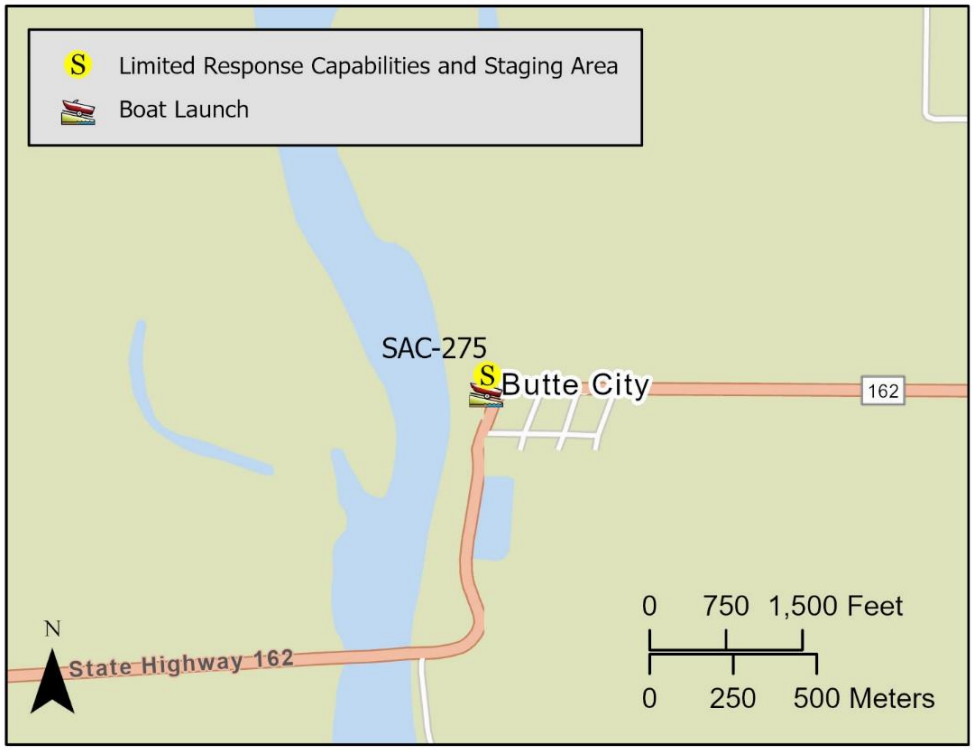
Response Strategy Site: Butte City Launching Facility (SAC-275)			**Page 1 of 3**
Driving Directions:	From North: Use I-5 South, take Exit 601, left on 1-5 BUS. Right onto Hwy 99 West. Left onto Road-60, continue onto Road 61, continue onto CA-162E to Butte City. Turn left to Butte City Launching Facility. From South: Use 1-5 North, take Exit 569 for Hahn Road. Left onto Lone Star Road. Right onto Hwy 20E. Left on Market Street (in Colusa), continue on CA-45N/13th Street. Right onto CA-162E. Continue to Butte City, left to Butte City Launching Facility		
Latitude: 39.4648 **Longitude:** -121.9921	**Highway Postmile:** GLE 78.083	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 8300 Hwy 162, Butte City, CA, 95920 **Thomas Guide #:** 163/B1			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Bank Swallow, Western Yellow-billed Cuckoo, Swainson's Hawk, Tricolored Blackbird, steelhead – Central Valley DPS, Giant Garter Snake, Valley Elderberry Longhorn Beetle

Economic: Fishing guide services

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northeast Information Center at (530) 898-6256.

Response Strategy Site: Butte City Launching Facility (SAC-275)				Page 2 of 3
Site Description and Field Notes				
Site Location/Segment: SAC-GL-C-010	**Site Description and Field Notes:** Moderate size parking with limited facilities (port-o-potties), could be used as a staging area. Area is subject to high flow. River left in this area is probably 550 m of gravel beach exposed when river is at moderate flow. River right (near boat launch) spots of gravel but predominantly riparian vegetation. Difficult area to collect product due to high flow.			
Gradient: Medium/High	**River Width:** 149 m (489 ft)	**Vehicular Access?** No shoreline vehicle access	**Recreational Use?** Rafting, fishing, boating	**Boat Launches:** Launching facility on site
Site Contact/s:	Glenn County (530) 934-6545			
ESI Shoreline Type:	9B – vegetated low banks, 6A – gravel beaches			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 9/18/2019

Response Strategy Site: Butte City Launching Facility (SAC-275) (S) **Page 3 of 3**

Site Objectives: Deflection/Collection

Implementation: Cascade 4 - 400-foot sections of boom from river right towards collection on river left shore. Collection may only be possible at low(er) flows. Use 150 feet of boom to line shoreline.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on site.

Response Strategy Map (overview)

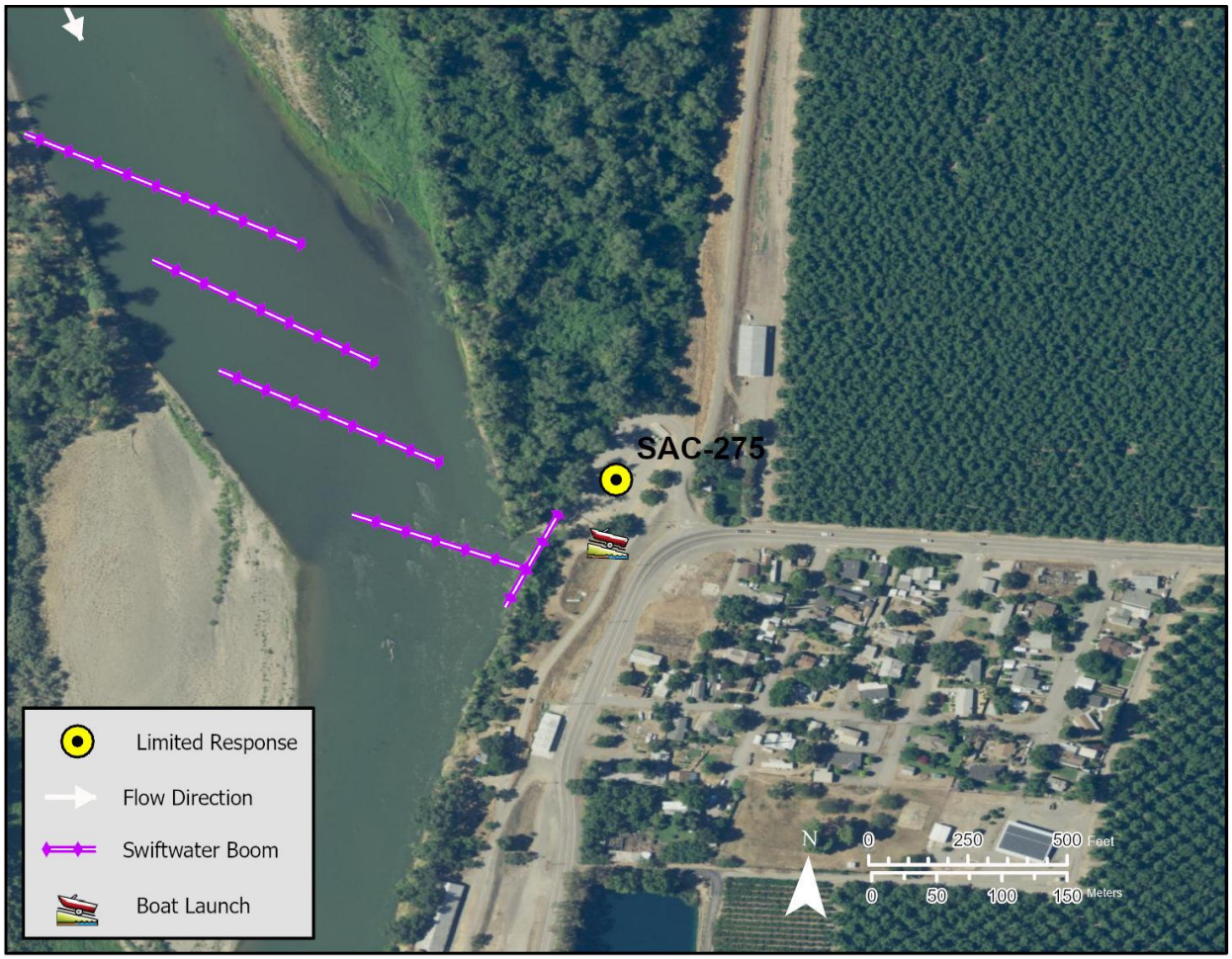


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	1,750	
Anchor	Danforth	22	lb	17	
Stakes				6	Use stakes to secure boom to shoreline
Boat		25	ft	2	Support vessel
Personnel				8	2 people on each vessel, 4 people on shore

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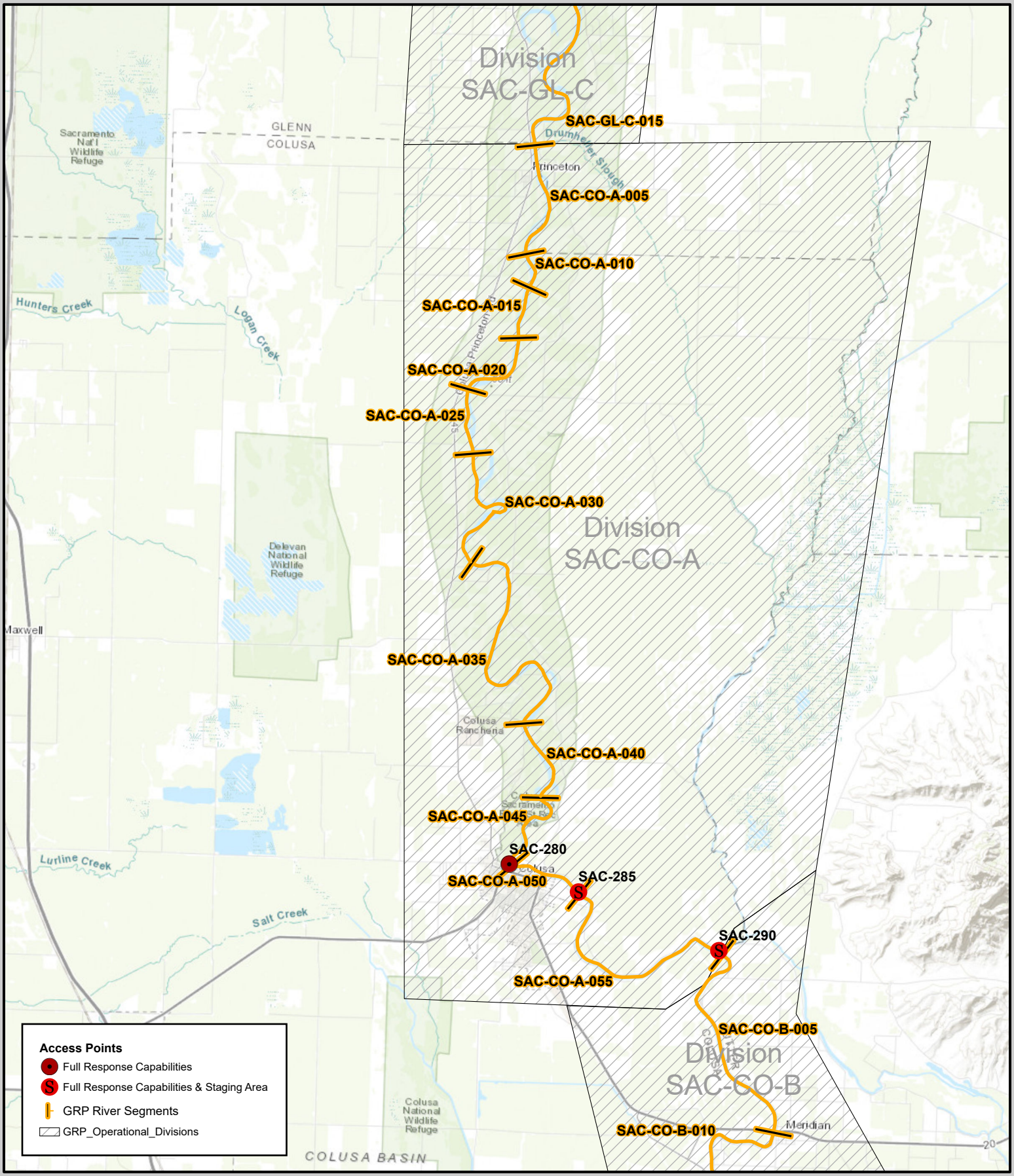
Figure 3-11: Lower Sacramento River GRP Division SAC-CO-A Map



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

Author: LGustafson, CDFW
Date Created: 8/11/2022
Data Source: CDFW-OSPR, USGS

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Service Layer Credits: World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lower Sacramento River Geographic Response Plan Division SAC-CO-A

0 1 2 3 Miles
0 2 4 Kilometers

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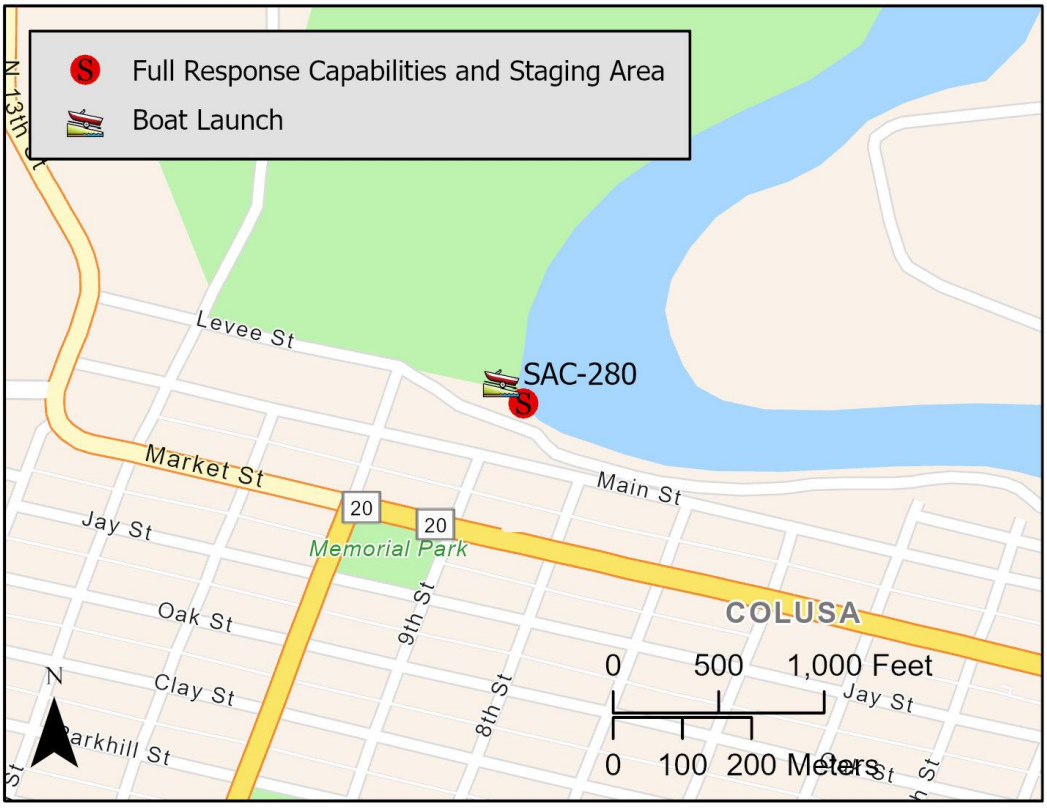
Response Strategy Site: City of Colusa Boat Launch (SAC-280)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 586 to Maxwell Colusa Road. Left on Maxwell Colusa Road. Right on CA-45S. Left on Main Street (in Colusa). Left on to 10th Street, continue onto Levee Street to parking area. From South: Use I-5 North, take Exit 569 for Hahn Road. Right on Hahn Road. Left onto Lone Star Road. Right onto State Hwy 20, continue onto 10th Street (in Colusa), straight onto Levee Street into Colusa Boat Launch.		
Latitude: 39.2169 **Longitude:** -122.0125	**Highway Postmile:** COL 31.195	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 810 Main St., Colusa, CA, 95932 **Thomas Guide #:** 163/B1			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Tricolored Blackbird, Steelhead – Central Valley DPS, Longfin Smelt

Economic: Sacramento River State Recreation Area, Sacramento River National Wildlife Area

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

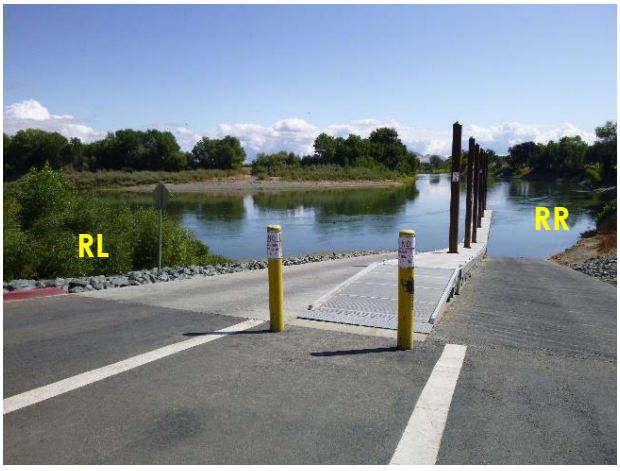
Site Location/Segment: SAC-CO-A-045	**Site Description and Field Notes:** Site adjacent to Colusa-Sacramento River State Recreation Area and Sacramento State Park. There is approximately 9 yards of sand adjacent to boat launch which may be a good place to ground oil. Current is very strong in the center of the river. Site has a large parking area and launch facility. Can be used as a staging area.			
Gradient: Medium	**River Width:** 140 m (462 ft)	**Vehicular Access?** No vehicle access along shore.	**Recreational Use?** Boating, fishing, rafting	**Boat Launches:** Boat launch on site.
Site Contact/s:	City of Colusa (530) 329-9198			
ESI Shoreline Type:	9B – vegetated low banks			

Site Images

Upstream

Downstream

Straight Across/Boat Launch



RR = River Right **RL = River Left**

Photo Date: 9/18/2019

Site Objectives: Deflection/Collection

Implementation: Use two legs – 400-feet each, to cascade and deflect product away from river left shore to collect near boat ramp on river right shore. Use additional 300 feet of boom to corral product toward boat ramp. Use another 300 feet to line shoreline and boat dock.

Staging Area Location and Capabilities/Amenities/Waste Management: Large staging area on site.

Response Strategy Map (overview)

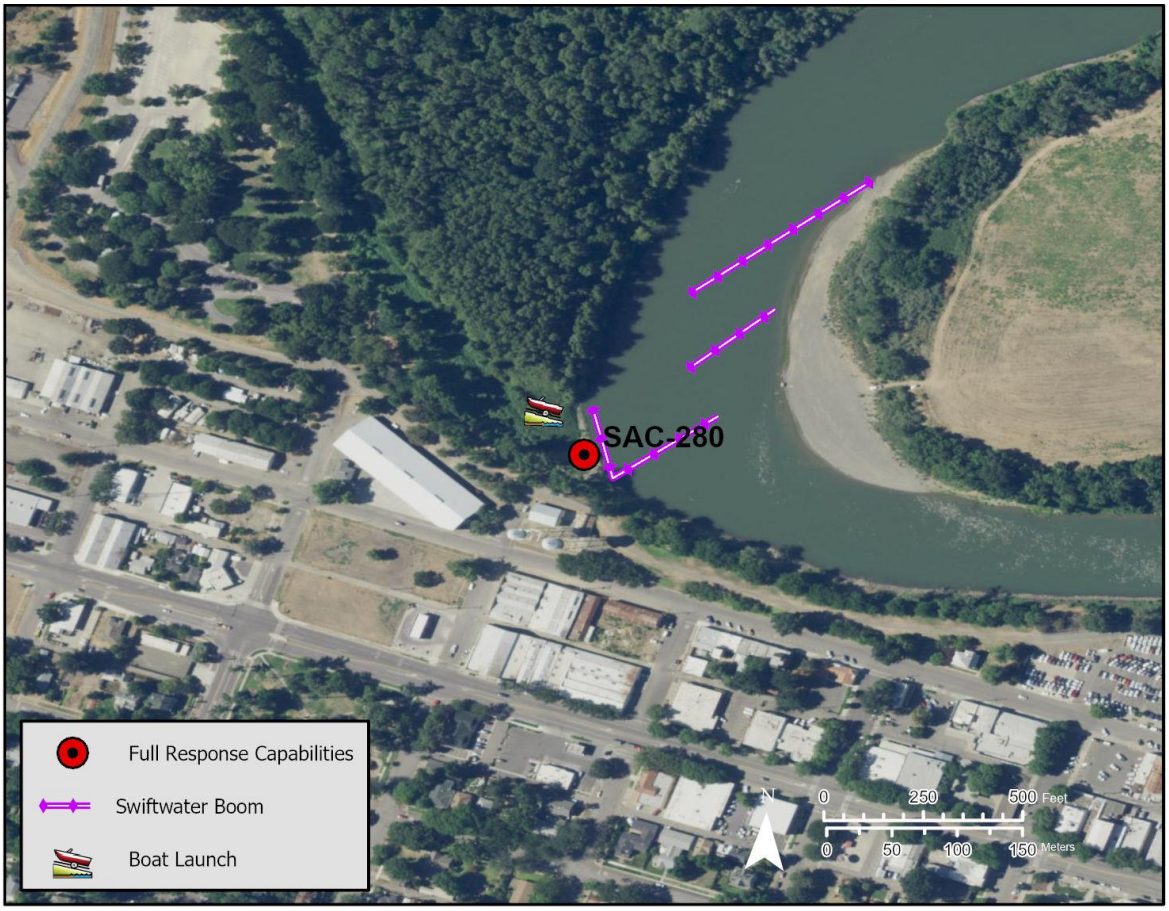


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	1,400	
Boom	Sorbent		ft	300	
Anchor	Danforth	22	lb	11	
Stakes				6	
Boat				2	Support vessel
Personnel				8	2 people per vessel, 4 shoreside

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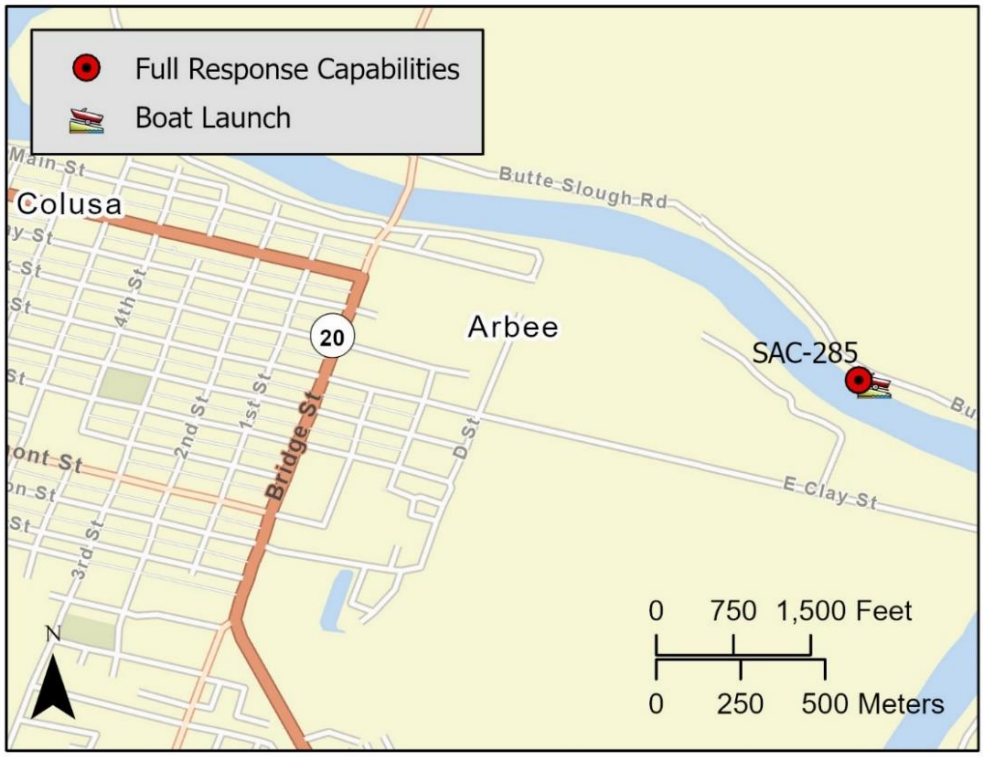
Response Strategy Site: Colusa Landing (SAC-285)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 586 toward Maxwell Road. Left onto Maxwell Colusa Road. Right onto CA-45S. Right onto Butte Slough Road. and continue to Colusa Landing. From South: Use I-5 North, take Exit 569. Left onto Lone Star Road. Right onto State Hwy-20E. Right onto Market Street thru Colusa.		
Latitude: 39.2097 **Longitude:** -121.9880	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 3249 Butte Slough Road, Colusa, CA, 95932 **Thomas Guide #:** 169/B2			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects
- Steep banks
- Steep launch area

Resources-At-Risk

Ecological: Tricolored Blackbird, Swainson's Hawk, Steelhead **–** Central Valley DPS

Economic: Colusa Landing & RV Rentals, Rocco's on the River, water diversions in the immediate area.

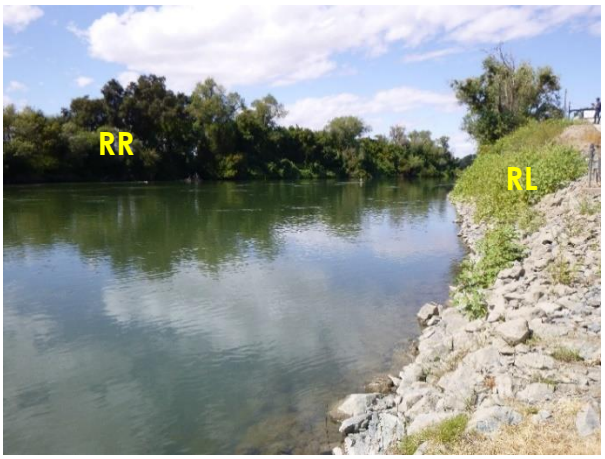
Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Northwest Information Center at (707) 664-0880.

Site Description and Field Notes

Site Location/Segment: SAC-CO-A-050	**Site Description and Field Notes:** Boat launch and marina on site with a small, narrow parking lot. RV rental spaces available. Limited facilities on site. Rocco's on the River restaurant shares the parking area. Limited direct shoreline access.			
Gradient: High	**River Width:** 90m (294ft)	**Vehicular Access?** No vehicular access to shoreline	**Recreational Use?** Fishing, boating	**Boat Launches:** Boat launch on site
Site Contact/s:	Rocco's on the River (530) 458-7837		Colusa Landing (530) 458-2118	
ESI Shoreline Type:	9B – vegetated low banks			

Site Images

Upstream



Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 9/18/2019

Site Objectives: Deflection/Collection

Implementation: Cascade 3 – 400-foot lengths of boom at steep angle to collect product at boat launch. Use 300 feet of boom to line shoreline and collect product. Place 200 feet of deflection boom just ahead of boat docks to deflect product away from boat docks.

Staging Area Location and Capabilities/Amenities/Waste Management: On-site staging is limited. There is the ability to stage vac trucks for product collection on site.

Response Strategy Map (overview)

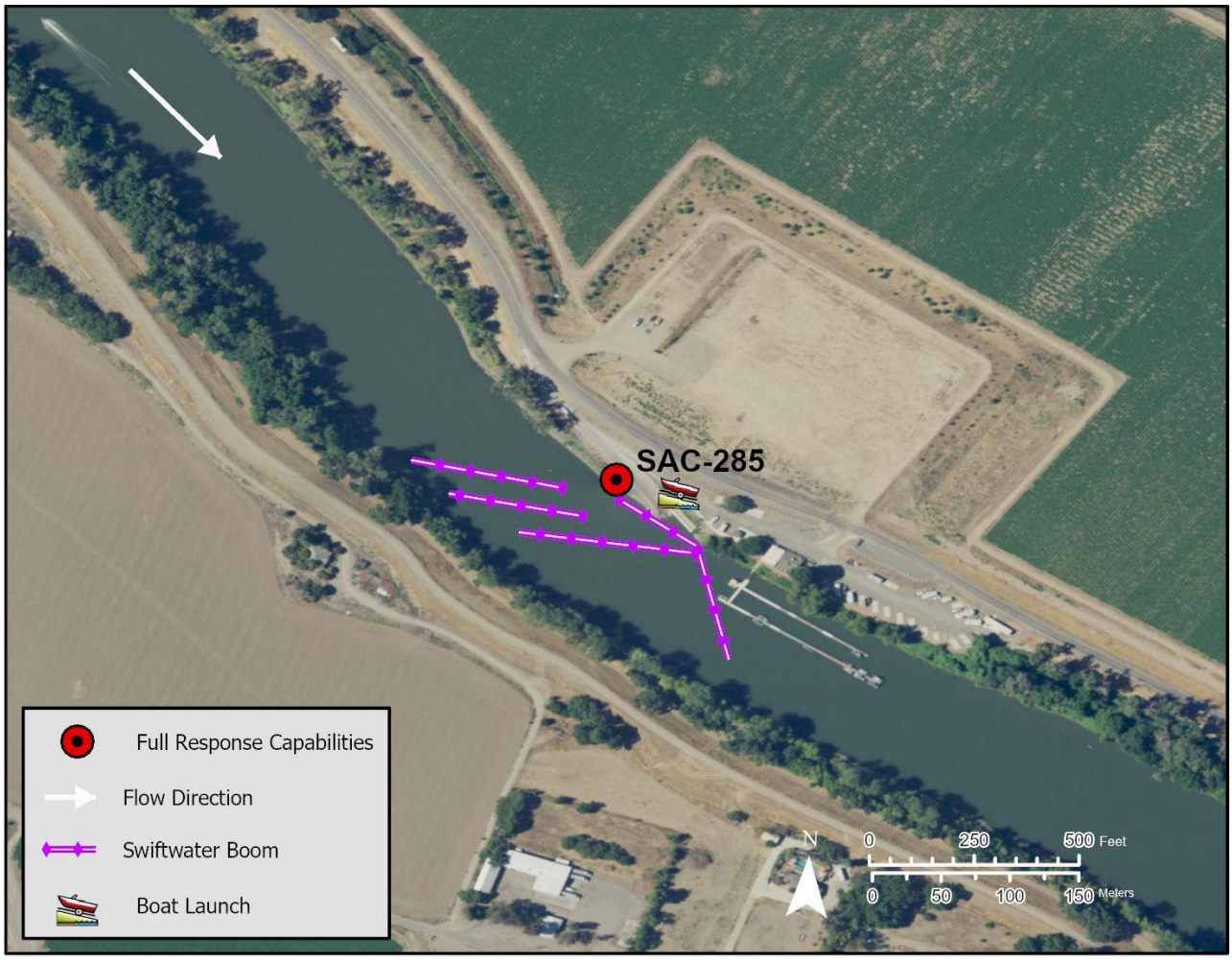


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	1,700	
Anchors	Danforth	25	lb	17	
Stakes				6	Use to secure boom to shore
Boat	Response vessel	25	ft	2	
Personnel				8	2 people on each vessel, 4 people on the shore

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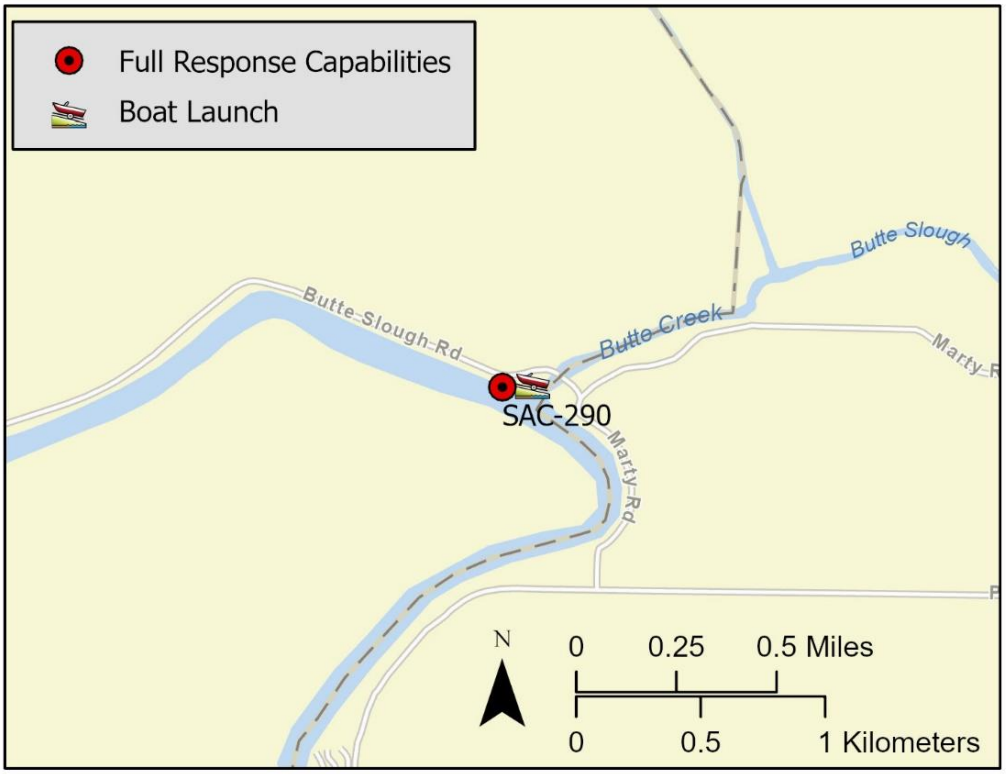
Response Strategy Site: Ward's Boat Landing (SAC-290)			Page 1 of 3
Driving Directions:	From North: Use I-5 South, take Exit 586 toward Maxwell Road. Left onto Maxwell Colusa Road. Right onto CA-45S. Right onto Butte Slough Road and continue to Ward's Boat Landing. From South: Use I-5 North, take Exit 569. Left onto Lone Star Road. Right onto State Hwy-20E. Right onto Market Street thru Colusa.		
Latitude: 39.1945 **Longitude:** -121.9383	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 2701 Butte Slough Road, Colusa, CA, 95932 **Thomas Guide #:** 169/B2			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects
- Steep banks
- Potential shallow water conditions when launching boat

Resources-At-Risk

Ecological: Swainson's Hawk, Western Yellow-billed Cuckoo, Steelhead – Central Velley DPS, Valley Elderberry Longhorn Beetle

Economic: Ward's Boat Landing, water intakes in the vicinity.

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

Site Location/Segment: SAC-CO-A-055	**Site Description and Field Notes:** Site is a small RV park with full-time residents. There is limited parking with 1 small bathroom on site. There is no access to the shoreline due to the abundance of heavy vegetation. Lovey's Landing (south of Ward's) may offer an additional observation area, with very limited access to the shoreline.			
Gradient: Medium	**River Width:** 105 m (345 ft)	**Vehicular Access?** No vehicular access to shoreline	**Recreational Use?** Fishing, boating	**Boat Launches:** Boat launch on site
Site Contact/s:	Ward's Boat Landing (530) 696-2672			
ESI Shoreline Type:	9B – vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 9/18/2019

Site Objectives: Collection/Exclusion

Implementation: Cascade 3 - 400-foot legs of boom at steep angle to collect product just upstream of boat docks, use 300 feet of boom to line shoreline and form a collection pocket. Place 900 feet of boom around boat docks to protect boats from getting impacted and place boom in a chevron to prevent product from entering cove/canal.

Staging Area Location and Capabilities/Amenities/Waste Management: On-site staging is limited.

Response Strategy Map (overview)

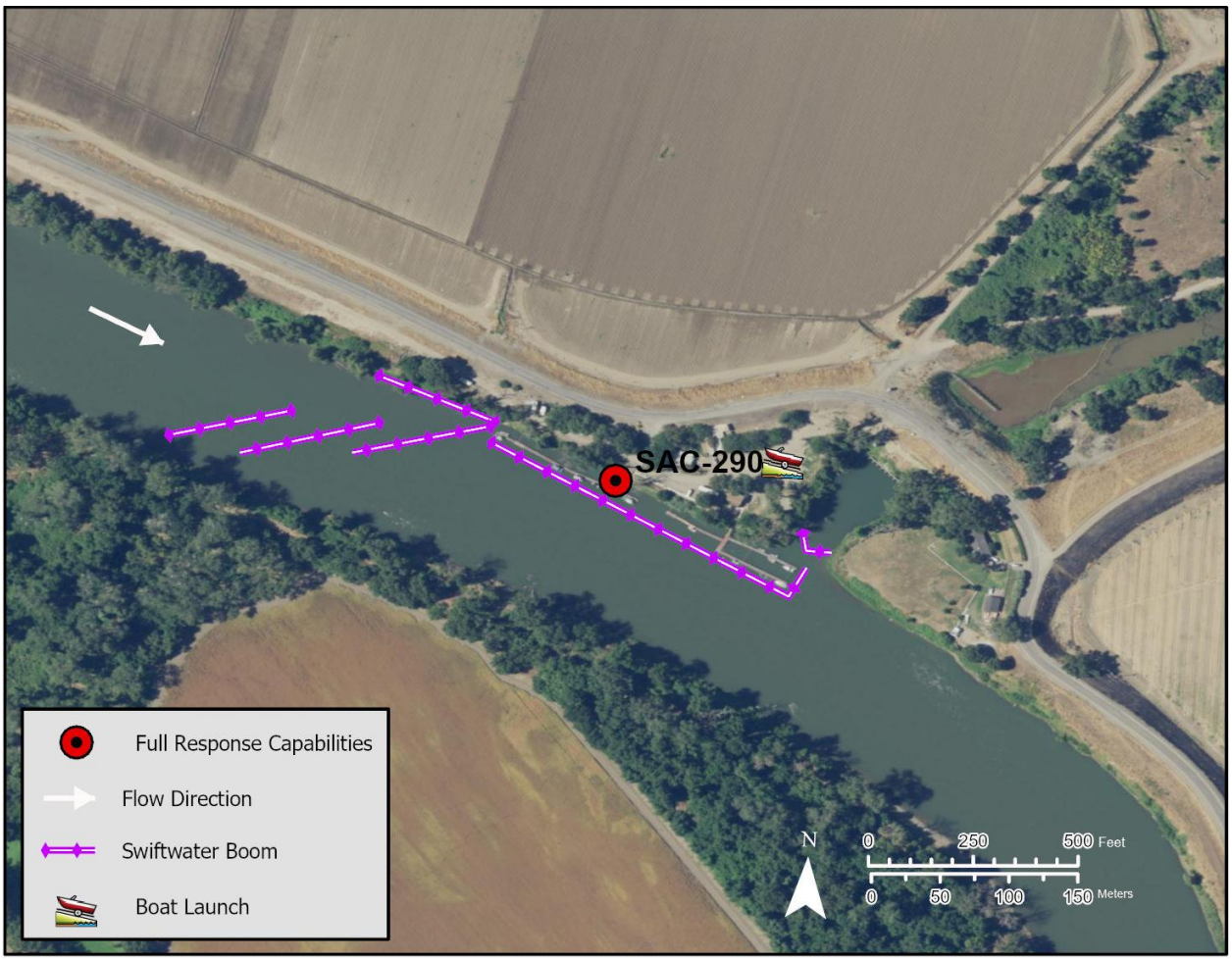


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	2,400	
Anchors	Danforth	25	lb	21	
Stakes				6	Use to secure boom to shore
Boat	Response vessel	25	ft	2	
Personnel				8	2 people on each vessel, 4 people on the shire

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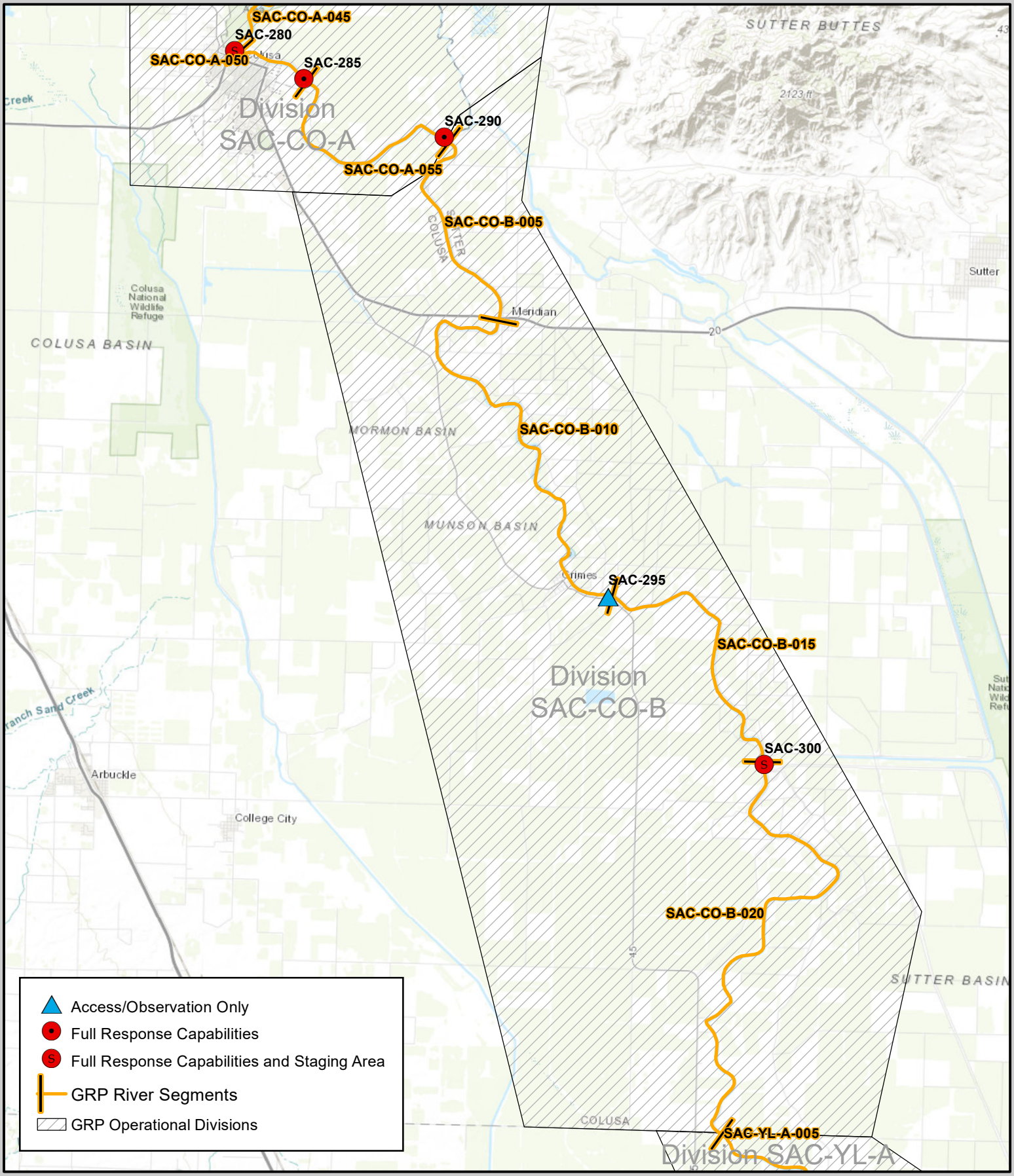
Figure 3-12: Lower Sacramento River GRP Division SAC-CO-B Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-CO-B

0 1 2 3 Miles
0 2 4 Kilometers

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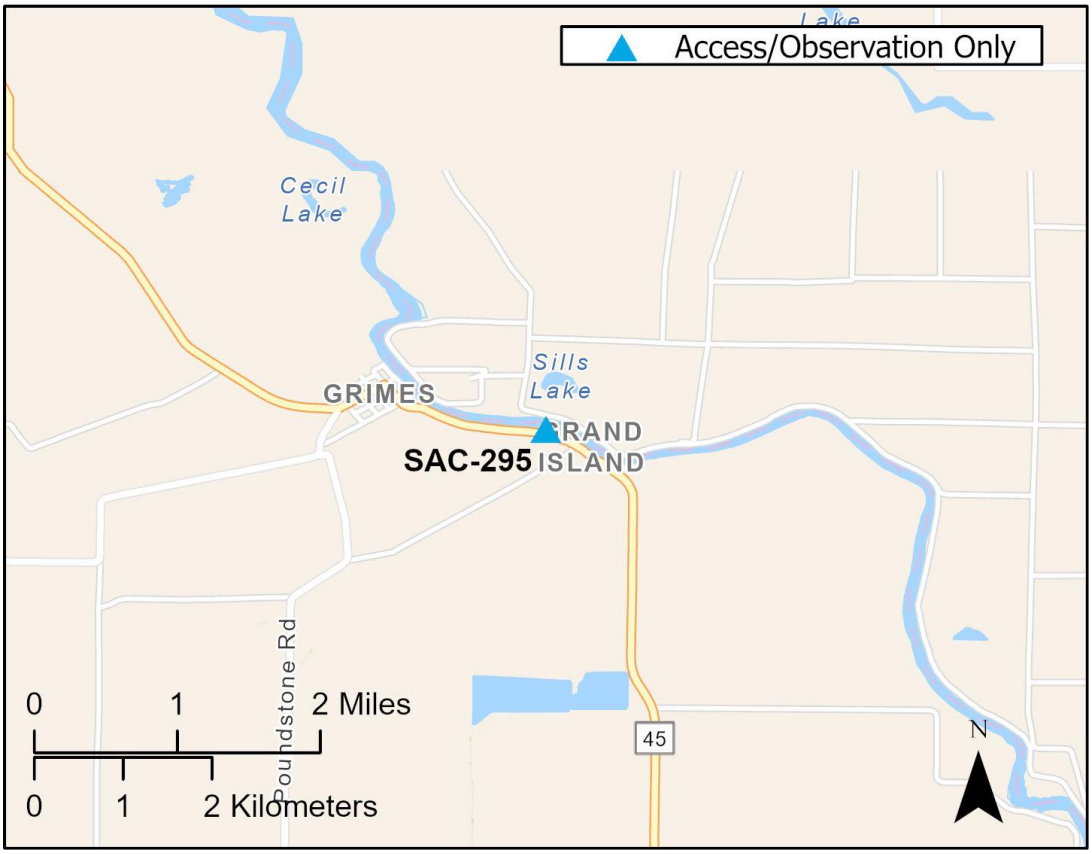
Access/Observation Site: Grimes Boat Landing (SAC-295)			Page 1 of 2
Driving Directions:	From North: Use I-5 South, take Exit 569 for Hahn Road. Left onto Hahn Road., continue onto Grimes-Arbuckle Road. Right onto CA-45S. Stay left toward 1st Street. Sharp right onto 1st Street. From South: Use I-5 North, take Exit 566 toward Arbuckle/College City. Right on Tule Road onto County 99W. Take left toward Grimes-Arbuckle Road. Continue onto Grimes-Arbuckle Road. Right onto CA-45S. Left toward 1st Street. Sharp right onto 1st Street.		
Latitude: 39.070083 **Longitude:** -121.877500	**Highway Postmile:** COL 11.465	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address Nearest Address: 1658 CA-45, Grimes, CA, 95950 **Thomas Guide #:** 169 B2			

Overview Street Map



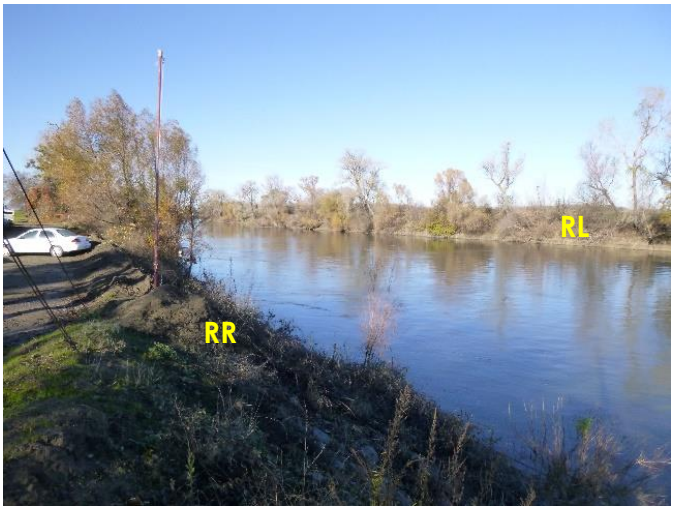
Hazards, Restrictions and Advice for Responders

- Steep access to water's edge
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when icy or wet
- Steep, narrow road from 1st Street up to access boat landing

Access/Observation Site: Grimes Boat Landing (SAC-295)		Page 2 of 2
Site Description and Field Notes		
Site Location/Segment: SAC-CO-B-015	**Site Description and Field Notes:** RV Park and restaurant (Wed-Sun, 0600-1500) on site. Steep vegetated banks along shoreline. Parking is limited. Excellent observation site, but with limited direct shoreline access. River is medium to low gradient at this site.	
Site Contact/s:	Grimes Boat Landing (530) 437-2333	

Site Images

Upstream



Downstream

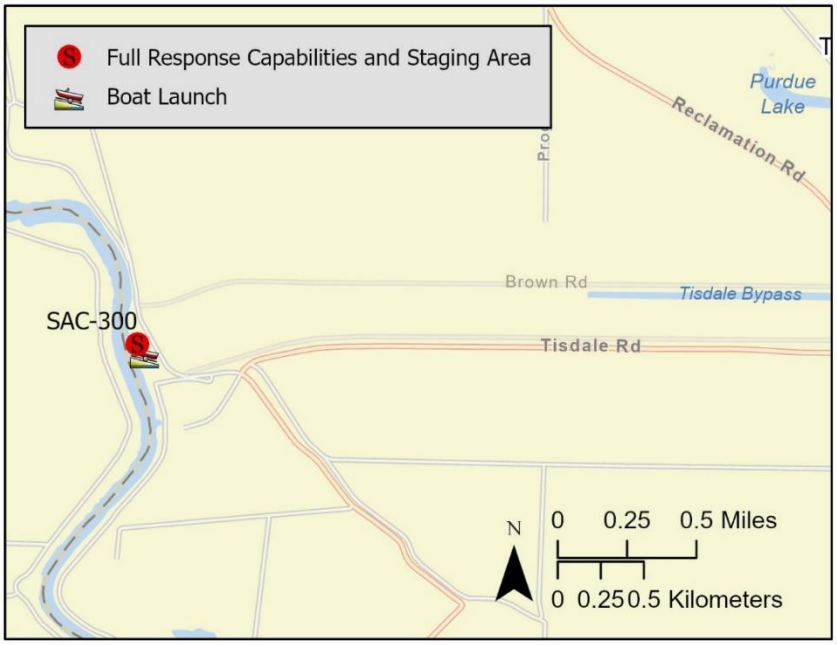
Straight Across

RR = River Right **RL = River Left**

Photo Date: 12/16/2019

Response Strategy Site: Tisdale Boat Launching Facility (SAC-300)			Page 1 of 3
Driving Directions:	From State Highway 20: Turn south on Tarke Road. Go approximately 2.8 miles, turn east on McGrath Road. Turn south on Garmire Road. Go over the bridge and turn right into the entrance to the boat launch facility. From State Highway 113: Turn northwest on Reclamation Road as you enter the town of Robbins. Go approximately 11.2 miles and turn east on Tisdale Road. Tisdale Road will go under Reclamation Road and continue westward for approximately 1.9 miles to the intersection with Cranmore Road. Turn right onto Cranmore Road. After traveling 1,000 feet, turn left (south) onto Tisdale Road. The entrance to the launching facility is ahead 0.20 miles at the end of the road.		
Latitude: 39.0251 **Longitude:** -121.8218	**Highway Postmile:** N/A	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: Cranmore Rd and Garmire Rd., Yuba City, CA, 94993 **Thomas Guide #:** 169 2C			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Swainson's Hawk, Steelhead – Central Valley DPS, Giant Garter Snake

Economic: Tisdale Boat Launch, agricultural intakes, Sutter Municipal Water Company

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

Site Location/Segment: SAC-CO- B-020	**Site Description and Field Notes:** Large parking area with a two-lane launch ramp. It is the only boat access point to the Sacramento River from the Sutter County side of the river. No bathrooms on site. Agricultural intake can be seen just across the river from the launch ramp. Sutter Municipal Water Company facility just downstream.			
Gradient: Medium	**River Width:** 27 m (264 ft)	**Vehicular Access?** No vehicular access to shoreline	**Recreational Use?** Fishing, boating, human contact	**Boat Launches:** Boat launch on site
Site Contact/s:	Sutter County Parks (530) 822-7473		Sutter Municipal Water Company (530) 738-4423	
ESI Shoreline Type:	8F – vegetated steeply sloping bluffs			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 12/16/2019

Site Objectives: Exclusion/Deflection/Collection

Implementation: Deploy 3 – 400-feet boom deflections on river right shore to attempt to slow down product coming from upstream and push it toward the collection point near the boat launch. Deploy 300 feet of boom to form a collection pocket; deploy 200 feet of boom to exclude product from an intake on river right shoreline; deploy 600 feet of boom to deflect product past intakes.

Staging Area Location and Capabilities/Amenities/Waste Management: Can stage equipment on site.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	2,300	
Anchors	Danforth	25	lb	21	
Stakes				15	Use to secure boom to shore
Boat		25	ft	2	Response vessel
Personnel				10	2 people on each vessel, 4 people on the shire

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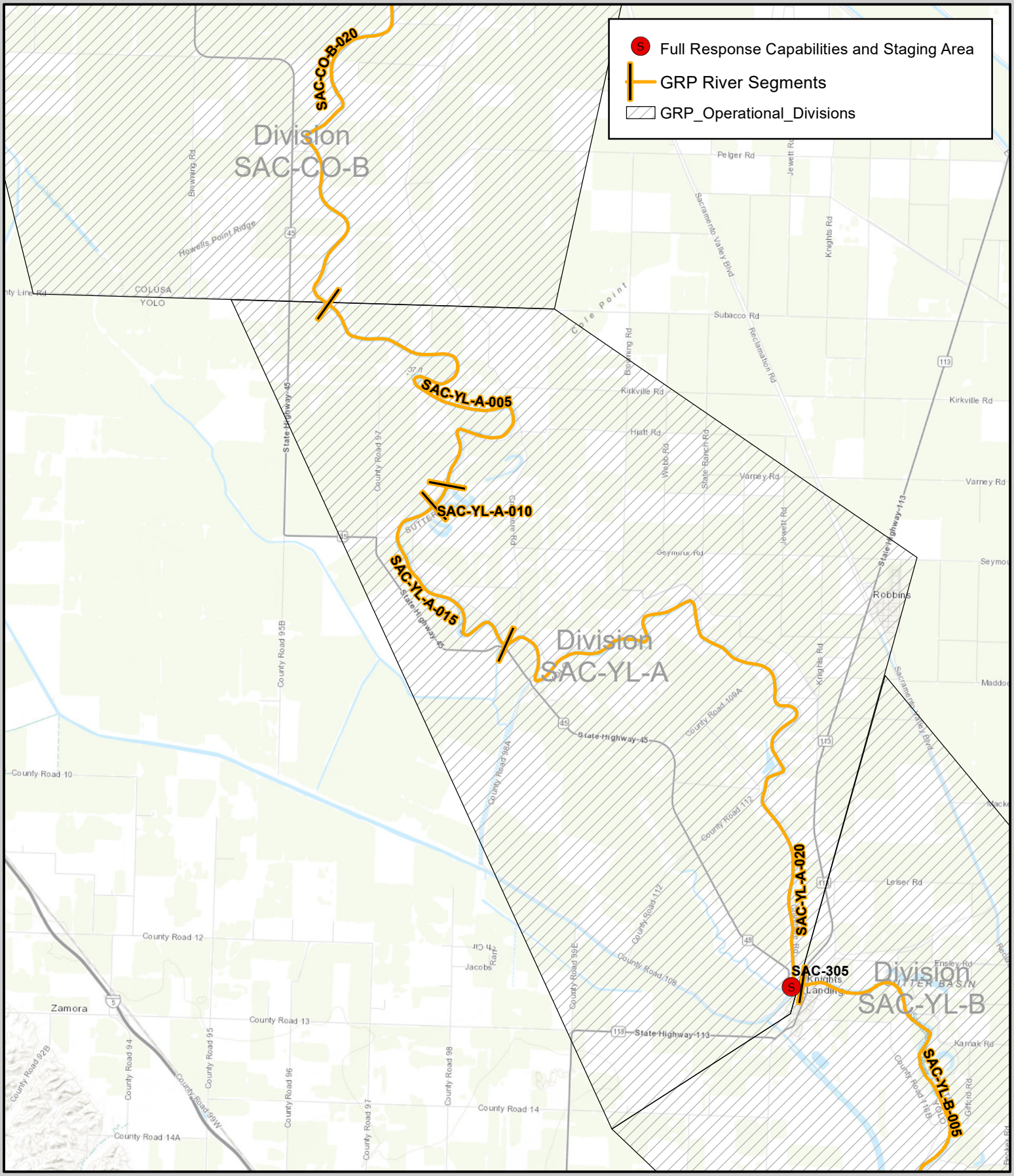
Figure 3-13: Lower Sacramento River GRP Division SAC-YL-A Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-YL-A

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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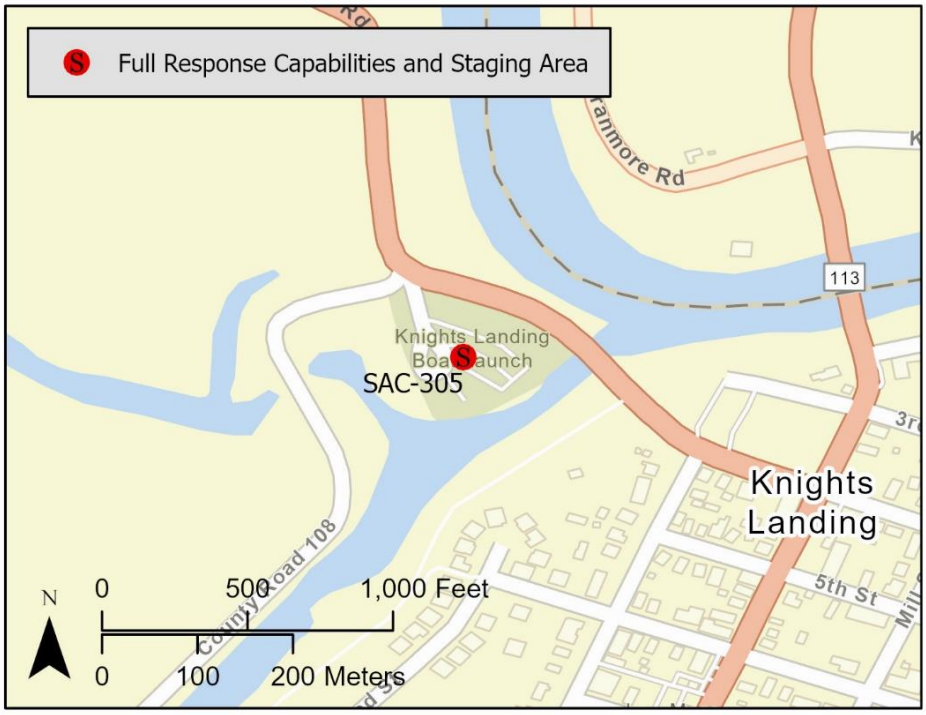
Response Strategy Site: Knights Landing Fishing Access (SAC-305)			Page 1 of 3
Driving Directions:	From South: Use I-80 East to CA-113 North. Take Exit 538 from 1-5 North toward Yuba City. Right onto CA-113 North/North East Street. Right onto County Road 17. Left onto County Road 102. Continue onto CA-113 North. Left onto CA-45 and left into parking area. From North: Use I-5 South. Take Exit 548 toward Zamora. Continue on County Hwy E10. Drive to CA-113 North in Knights Landing. Left on CA-45 and left into parking area.		
Latitude: 38.8005 **Longitude:** -121.7227	**Highway Postmile:** YOLO 0.123	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 9350 Hwy 45, Knights Landing, CA, 95645 **Thomas Guide #:** 163/3C			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Submerged objects
- Narrow foot path along river's edge

Resources-At-Risk

Ecological: Swainson's Hawk, Eulachon, Longfin Smelt, Sacramento Splittail, Steelhead – Central Valley DPS

Economic: Sting Rayz Beach Boardwalk, Colusa basin drainage canal, high use recreational fishing area.

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				
Site Location/Segment: SAC-YL-A-020	**Site Description and Field Notes:** Boat launch is into a short unnamed slough just off of Sacramento River. There is a dam at the end of the slough. Foot trail along shore from parking area, under the overpass to along the river right shoreline. Moderately vegetated along both shores. Large parking area with facilities, good staging area.			
Gradient: Low	**River Width:** 26 m (85 feet)	**Vehicular Access?** Only vehicle access near shoreline is down the boat ramp	**Recreational Use?** Fishing, rafting	**Boat Launches:** Boat launch on site
Site Contact/s:	Yolo County Parks (530) 406-4880-7837			
ESI Shoreline Type:	9B – vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 12/16/2019

Response Strategy Site: Knights Landing Fishing Access (SAC-305) Page 3 of 3

Site Objectives: Deflection/Collection

Implementation: Deploy 2 – 300-feet legs of boom to deflect product toward river right shore, deploy 2 – 300-feet leg of boom from river right shore to collect product and 200 feet to protect the shoreline, collect product in slow water near mouth of the tributary; deploy 200 feet of boom to protect water intake; use 200 feet of sorbent to line river right shore near collection area.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging area on site.

Response Strategy Map (overview)

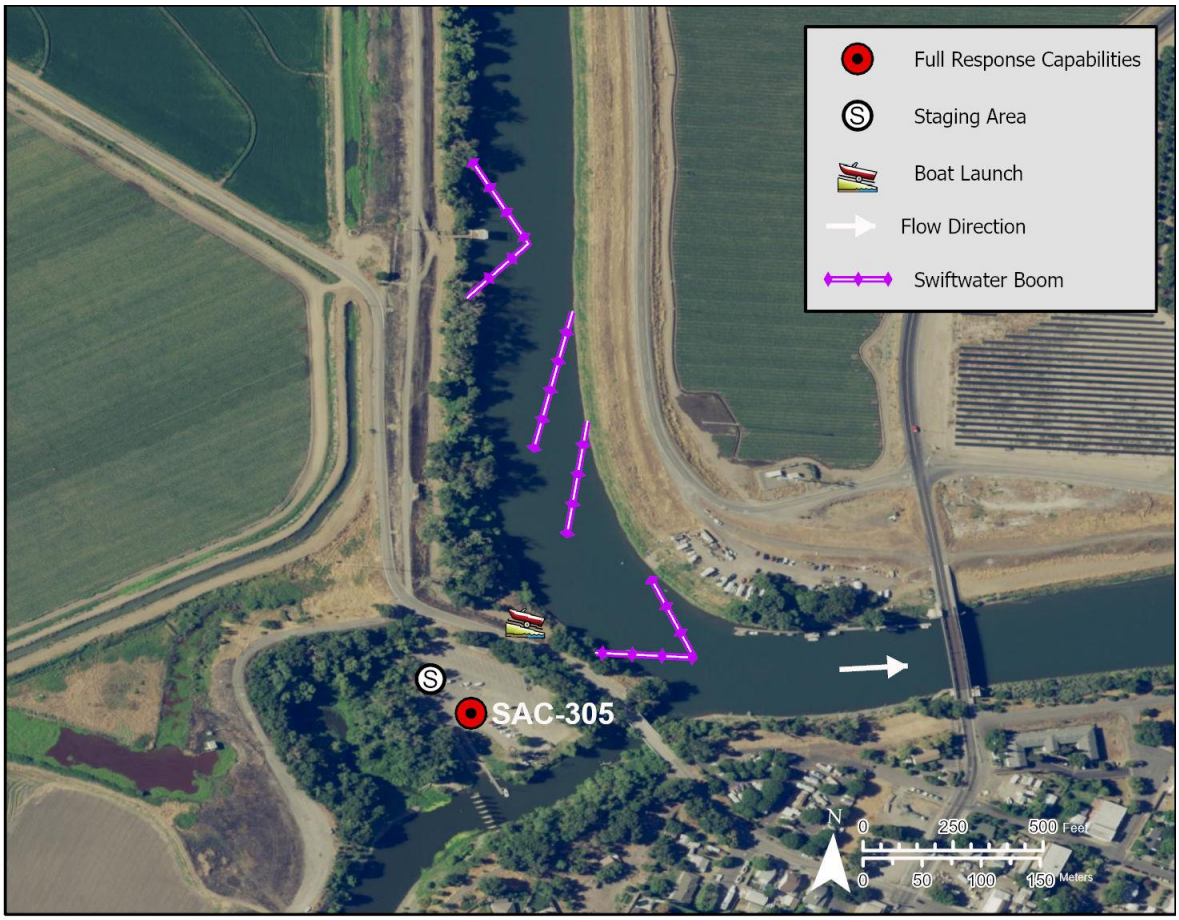


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	1,600	
Boom	Sorbent			200	
Anchors	Danforth	25	lb	16	
Stakes				12	Use to secure boom to shore
Boat	Response vessel	25	ft	2	
Personnel				8	2 people on each vessel, 4 people on the shore

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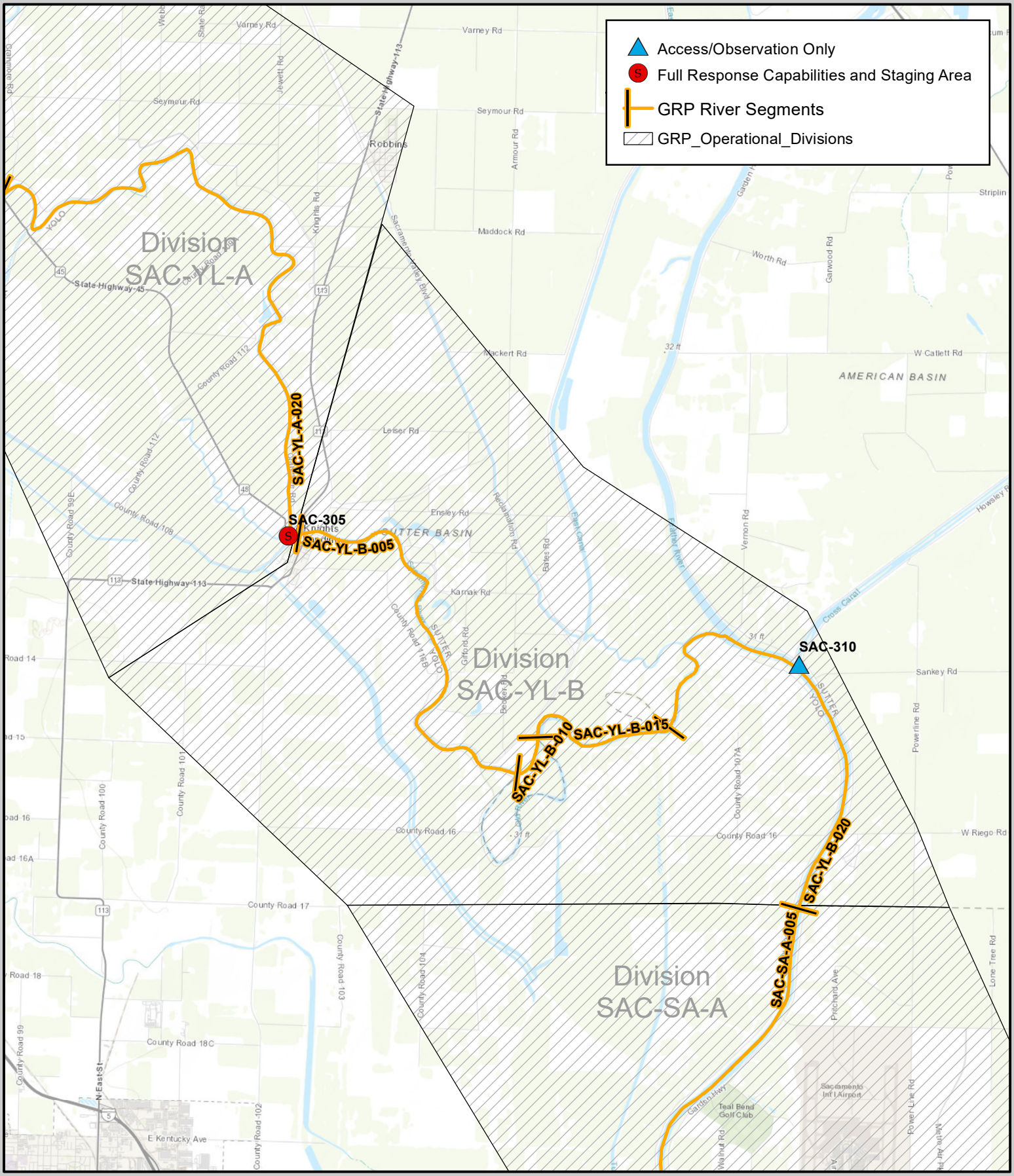
Figure 3-14: Lower Sacramento River GRP Division SAC-YL-B Map



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

Author: LGustafson, CDFW
Date Created: 1/20/2022
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

Lower Sacramento River Geographic Response Plan Division SAC-YL-B

0 0.5 1 1.5 Miles
0 1 2 Kilometers

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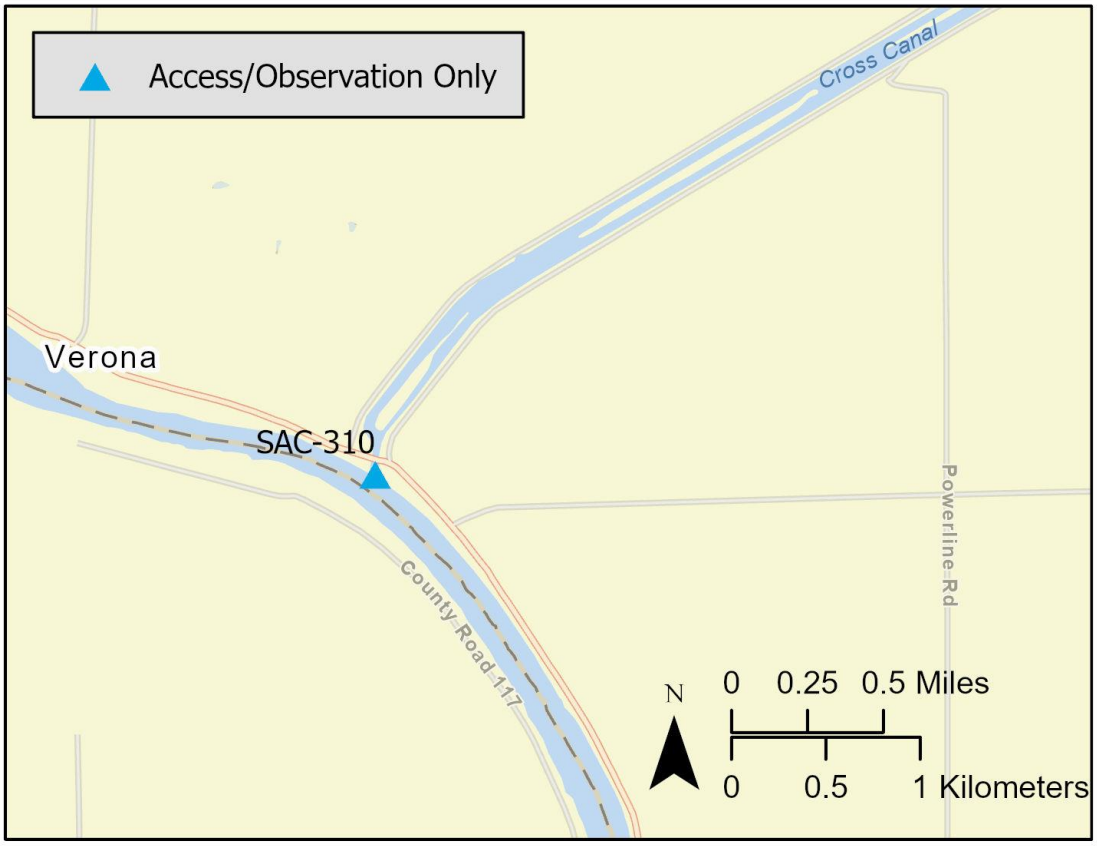
Access/Observation Site: Verona Village (SAC-310)			Page 1 of 2
Driving Directions:	From North: Use Hwy 99 South, exit onto Sankey Road. Right onto Garden Hwy. Left to Verona Village Resort. From South: Use I-5 to Hwy 99 North. Take Exit 311 for Riego Road. Left onto W Riego Road. Right onto Garden Hwy. Left to Verona Village Resort.		
Latitude: 38.780056 **Longitude:** -121.604139	**Highway Postmile:** 3.101	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon Tested
Nearest Address: 6985 Garden Hwy, Nicolaus, CA, 95659 **Thomas Guide #:** 234/D3			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property with small parking lot
- Trip and fall hazards, slippery when icy or wet
- Limited access

Site Description and Field Notes		
Site Location/Segment: SAC-YL-B-020	**Site Description and Field Notes:** Site is just south of Feather River confluence. Vegetated banks on both sides of the river. There is limited shoreline access at the site. Site is adjacent to the mouth of a small slough.	
Site Contact/s:	Verona Village Resort (530) 656-1321	

Site Images

Upstream

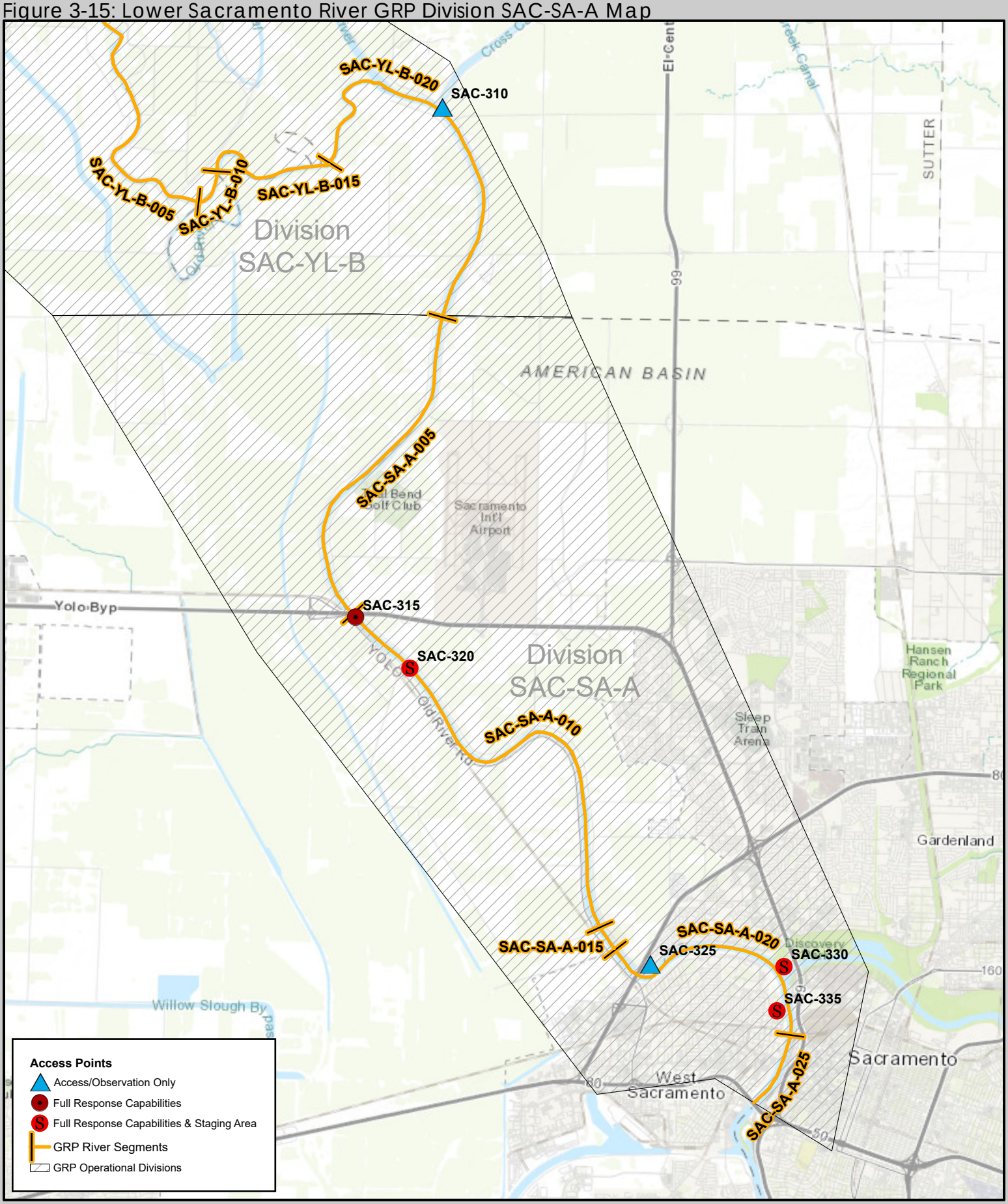
Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 8/22/2019

Figure 3-15: Lower Sacramento River GRP Division SAC-SA-A Map



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

Author: GEWING, CDFW
Date Created: 8/31/2023
Data Source: CDFW-OSPR, USGS

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Service Layer Credits: World Topographic Map: County of Sacramento, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

Lower Sacramento River Geographic Response Plan Division SAC-SA-A

0 1 2 Miles
0 1.5 3 Kilometers

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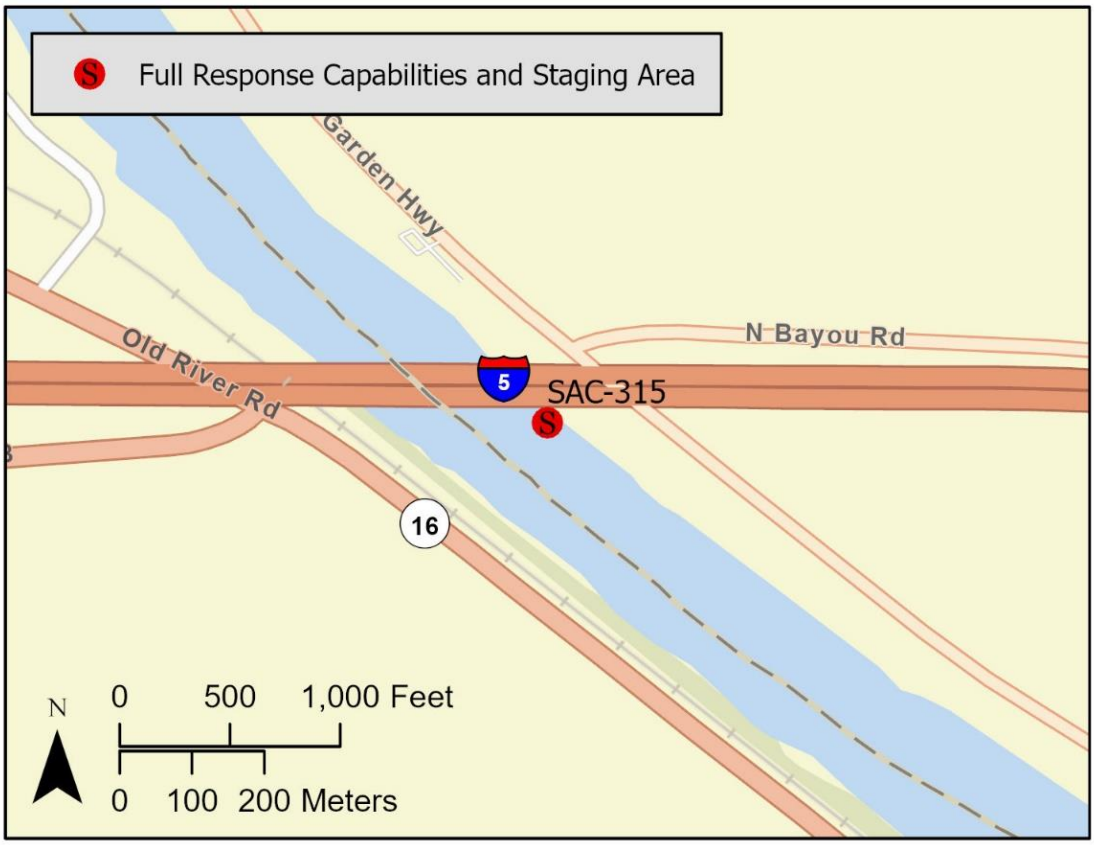
Response Strategy Site: Elkhorn Boat Launch (SAC-315)			Page 1 of 3
Driving Directions:	From I-5: Take Garden Hwy/Airport exit to Airport Blvd; follow boat launch signs to Crossfield Drive overpass, then turn left on North Bayou Way. Follow the North Bayou Way west from the airport to Garden Hwy. Entrance to boat launch on the west side of the road (under I-5).		
Latitude: 38.6728061 **Longitude:** -121.624917	**Highway Postmile:** SAC 34.587	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 5827 Garden Hwy, Sacramento, CA, 95832 **Thomas Guide #:** 234/D5			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Submerged objects
- Steep banks

Resources-At-Risk

Ecological: Swainson's Hawk, Longfin Smelt, Sacramento Splittail, Steelhead – Central Valley DPS, Giant Garter Snake

Economic: Water diversions in area, Alamar Marina Restaurant & Bar, Swabbies restaurant

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the North Central Information Center at (916) 278-6217.

Site Description and Field Notes

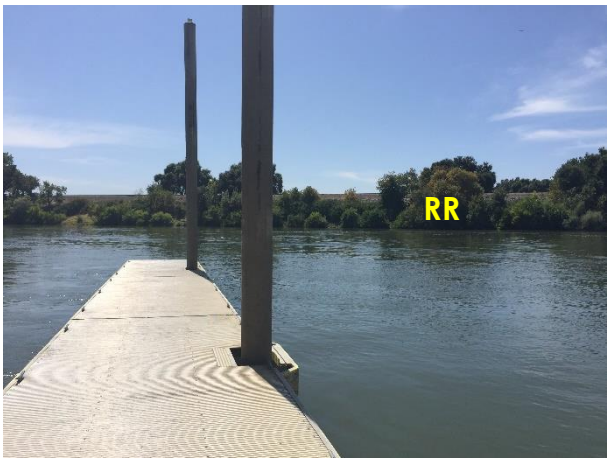
Site Location/Segment: SAC-SA-A-010	**Site Description and Field Notes:** Site is underneath the I-5 overpass, just downstream of an intake, on river right. Site has limited shoreline access. Large parking area, open sunrise to sunset. Site is just downstream of Alamar Marina Restaurant & Bar and Swabbies restaurant.			
Gradient: Low/Medium	**River Width:** 130 m (426 ft)	**Vehicular Access?** No vehicular access to shoreline	**Recreational Use?** Rafting, fishing, boating	**Boat Launches:** Boat launch on site
Site Contact/s:	Sacramento County Regional Parks (Dispatch) (916) 875-7275		Woodland-Davis Clean Water Agency (530) 379-4027	
ESI Shoreline Type:	9B – vegetated low banks, 8B – solid man-made structures			

Site Images

Upstream

Downstream

Straight Across



RR = River Right **RL = River Left**

Photo Date: 8/22/2019

Site Objectives: Deflection/Collection/Exclusion

Implementation: Deploy a 500-foot leg of boom to deflect product past intake on river right (north of bridge). Deploy 1 – 500-foot deflection leg of boom north of bridge and 1 – 400-foot deflection leg of boom from the northwest most bridge support angling product toward the collection point at the boat dock. Deploy 300-foot leg of boom from the tip of the boat ramp to collect product. Use 400 feet of boom to line shoreline and form an additional collection pocket just past the boat launch. Deploy 1000 feet of boom to protect boat docks at Alamar Marina.

Staging Area Location and Capabilities/Amenities/Waste Management: Large staging area capabilities on-site.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	3,100	
Anchors	Danforth	25	lb	25	
Stakes				6	Use to secure boom to shore
Boat		25	ft	2	Response vessel
Personnel				8	2 people on each vessel, 4 people on the shire

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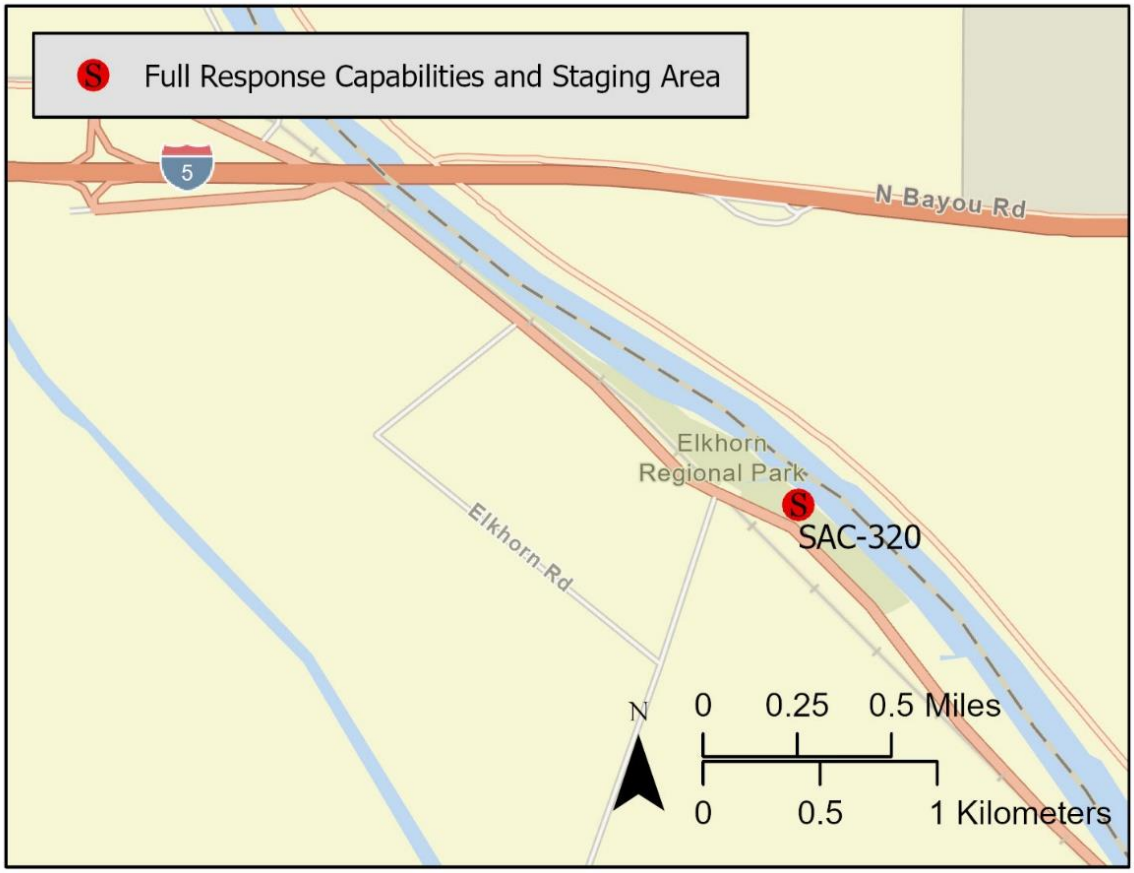
Response Strategy Site: Elkhorn Regional Park (SAC-320)			Page 1 of 3
Driving Directions:	From I-5: Take Exit 531 toward Road 22. Left onto County Road 118. Right onto Old River Road. Turn left into Elkhorn Regional Park.		
Latitude: 38.61222 **Longitude:** -121.611250	**Highway Postmile:** SAC 33.766	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 18989 Old River Rd., West Sacramento, CA, 95691 **Thomas Guide #:** 234/D5			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects

Resources-At-Risk

Ecological: Swainson's Hawk, Longfin Smelt, Sacramento Splittail, Steelhead **–** Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Elkhorn Regional Park**,** agricultural water intakes in area

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the North Central Information Center at (916) 278-6217.

Site Description and Field Notes

Site Location/Segment: SAC-SA-A-010	**Site Description and Field Notes:** This stretch of river has heavily vegetated banks on both its sides. Large parking area with facilities which could be used for staging. No shoreline access.			
Gradient: Low	**River Width:** 201 m (659 ft)	**Vehicular Access?** No shoreline access at this site	**Recreational Use?** Rafting, boating, fishing	**Boat Launches:** Boat launch on site
Site Contact/s:	Yolo County (530) 406-4880			
ESI Shoreline Type:	8B – vegetated low banks			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 8/22/2019

Site Objectives: Deflection/Collection

Implementation: Cascade 3 – 400-foot legs of boom toward boat launch for collection; use 300 feet of boom to line shoreline and use to collect product.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging area on site.

Response Strategy Map (overview)

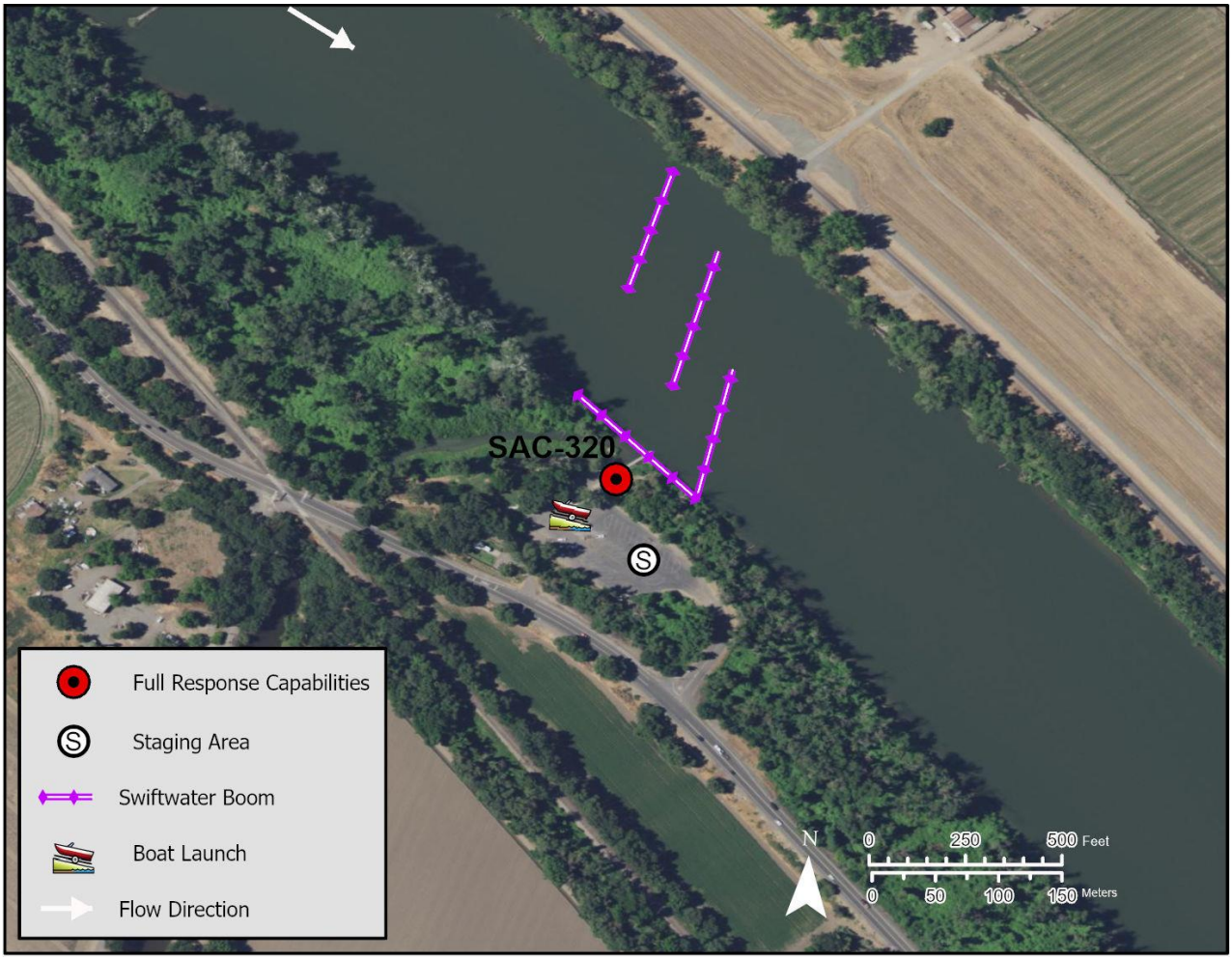


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	1,500	
Anchors	Danforth	25	lb	15	
Stakes				6	Use to secure boom to shore
Boat		25	ft	2	Response vessel
Personnel				8	2 people on each vessel, 4 people on the shire

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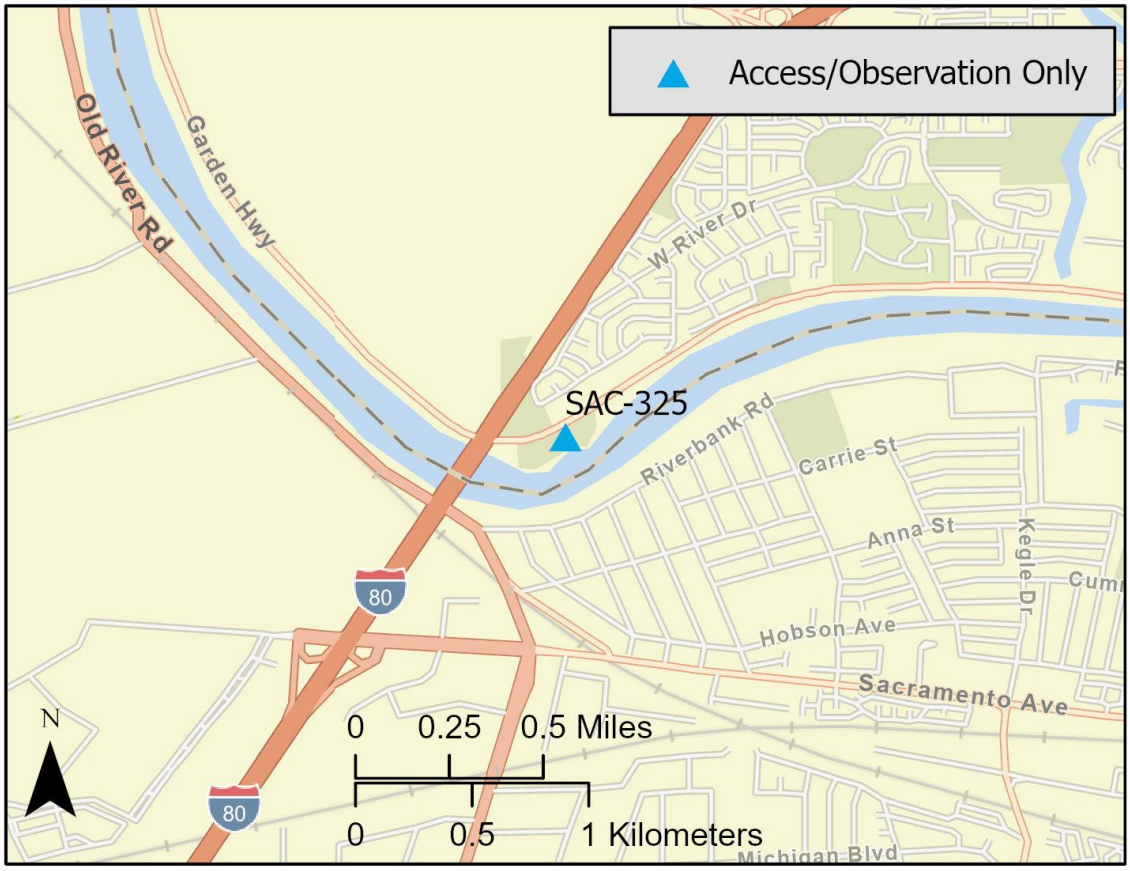
Access/Observation Site: Sand Cove Park (SAC-325)			Page 1 of 2
Driving Directions:	From North: Use I-80 to Sacramento, take Exit 85 for West El Camino Avenue. Turn right onto W El Camino Avenue. Turn right onto Orchard Lane. Stay on Orchard Lane then turn right onto Garden Highway. Travel approximately 0.9 mi and Sand Park is on the left. From South: Use I-5 North, take Exit 521A for Garden Highway. Keep right at the fork and merge onto Garden Highway. Travel approximately 4.8 mi and Sand Park is on the left.		
Latitude: 38.599840 **Longitude:** -121.543845	**Highway Postmile:** SAC 0.227	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address 2005 Garden Hwy, Sacramento **Thomas Guide #:** 235/A6			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Downed trees near shore
- Submerged objects
- Gates automatically close and lock at dusk

Site Description and Field Notes		
Site Location/Segment: SAC-SA-A-020	**Site Description and Field Notes:** Approximately 65 m of sandy beach along river left shore of the Sacramento River. River right shore is heavily vegetated. There is a small eddy on the northern side of the site. The parking area has approximately 50 parking spaces. This is an observation site only; narrow path from parking area to shore would make it difficult to get response equipment to the shore.	
Site Contact/s:	Sacramento County Parks (916) 875-7275	

Site Images

Upstream

Downstream

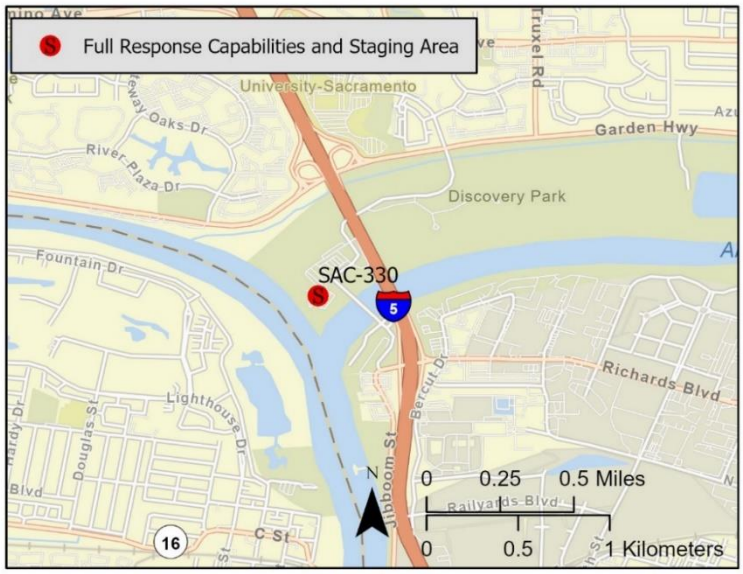
Straight Across

RR = River Right RL = River Left

Photo Date: 8/22/2019

Response Strategy Site: Discovery Park (SAC-330)			Page 1 of 3
Driving Directions:	From South: Use I-80 East, take exit toward Redding, merge onto I-5 North. Take Exit 520 for Richards Blvd. Turn left on Richards Blvd. Turn right after America's Best Value Inn (on the left). After Park kiosk (entrance) continue on Jibboom Street. Turn left on Natomas Park Drive into the parking area. From North: Use I-5 South, take Exit 520 for Richards Blvd., turn right on Richards Blvd. Turn right after America's Best Value Inn (on the left). After Park kiosk (entrance) continue on Jibboom Street. Take left on Natomas Park Drive into the parking area.		
Latitude: 38.600328 **Longitude:** -121.508504	**Highway Postmile:** SAC 25.006	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 1000 Garden Highway, Sacramento, CA, 95833 **Thomas Guide #:** 235/6B			

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects
- Steep banks
- Highly trafficked recreation area

Resources-At-Risk

Ecological: Least Bell's Vireo, Western Yellow-billed Cuckoo, Longfin Smelt, Steelhead – Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Discovery Park, Chevy's on the River, Sacramento Water Treatment Plant, Matsui Waterfront Park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the North Central Information Center at (916) 278-6217.

Site Description and Field Notes

Site Location/Segment: SAC-SA-A-020	**Site Description and Field Notes:** The boat launch is just off the Sacramento River (~30yds) in a small slough. High use public launch facility. Large parking, restrooms, and suitable area for staging. Just upstream of the confluence of the Sacramento River and the American River.			
Gradient: Low	**River Width:** 220 m (721 ft)	**Vehicular Access?** The heavily vegetated shore does not allow vehicle access	**Recreational Use?** Rafting, fishing, boating, hiking area	**Boat Launches:** Boat launch on site
Site Contact/s:	Sacramento County Regional Parks: (916) 875-7275			
ESI Shoreline Type:	9B – vegetated low banks			

Site Images

Upstream

Boat Launch Area

Straight Across

RR = River Right **RL = River Left**

Photo Date: 8/21/2019

Response Strategy Site: Discovery Park (SAC-330) Page 3 of 3

Site Objectives: Collection/exclusion

Implementation: Cascade 4 – 400-foot lengths of boom to direct product toward boat launch; use 400 feet of boom deployed from inlet to direct product for collection; use 400 feet of boom to line dock and prevent product from moving into tributary (east of boat launch).

Staging Area Location and Capabilities/Amenities/Waste Management: Large staging area on site.

Response Strategy Map (overview)

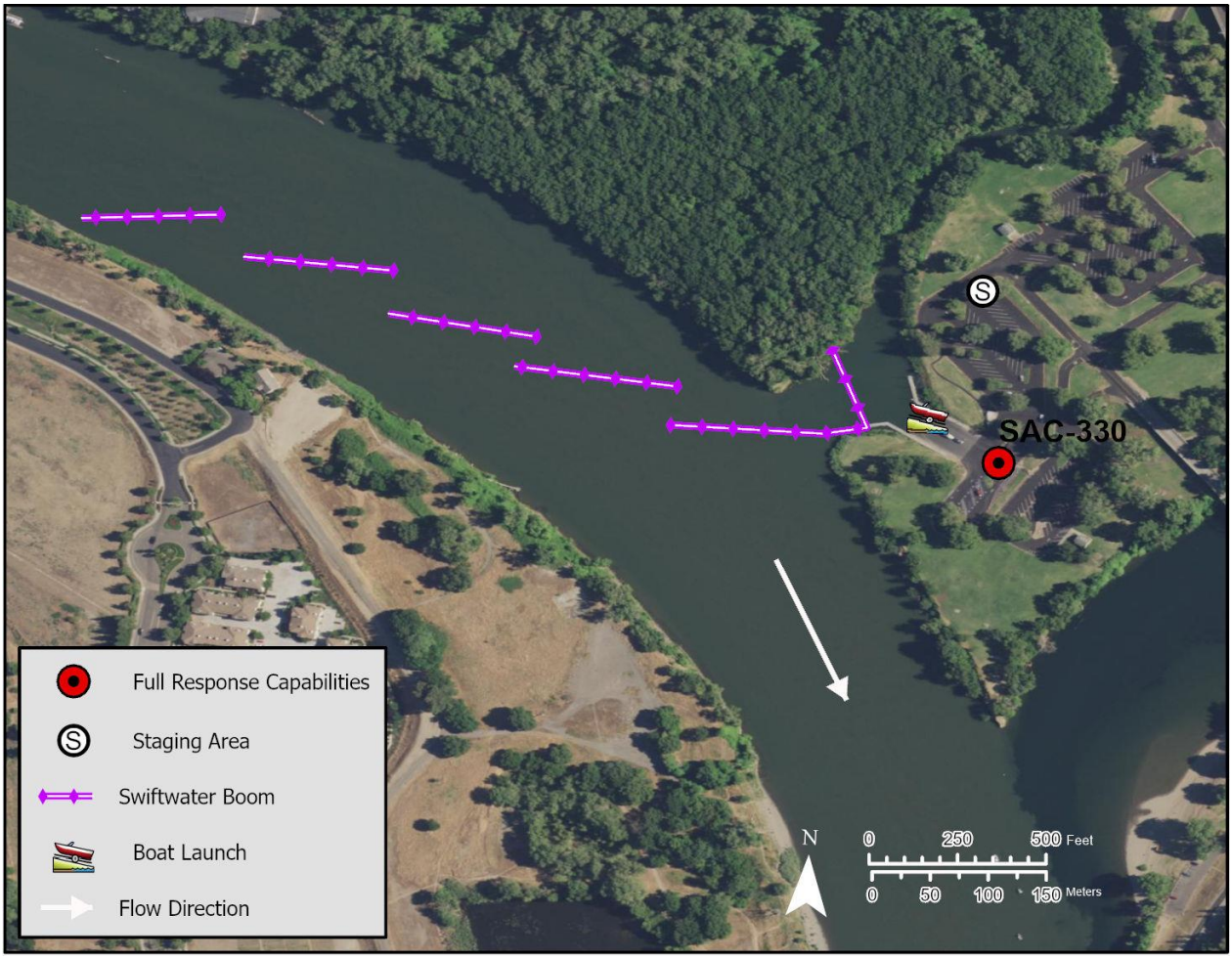


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	2,400	
Anchors	Danforth	25	lb	24	
Stakes				6	Use to secure boom to shore
Boat		25	ft	2	Response vessel
Personnel				8	2 people on each vessel, 4 people on the shore

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Response Strategy Site: Broderick Boat Ramp (SAC-335)			Page 1 of 3
Driving Directions:	From South: Use I-80 East, take Exit 3 toward Downtown Sacramento/Jefferson Blvd. Keep left to continue to Tower Bridge Gateway, follow signs for Downtown Sacramento. Turn left onto 5th Street, right onto C Street, left at the 1st cross street onto 4th Street. Turn right to Broderick Boat Ramp parking area. From North: Use I-5 South, take Exit 520 for Richards Blvd., turn right on Richards Blvd. Turn right after America's Best Value Inn (on the left). After park kiosk (entrance) continue on Jibboom Street. Right onto I Street Bridge. Slight left onto C Street. Right onto 4th Street. Turn right to Broderick Boat Ramp parking area.		
Latitude: 38.590994 **Longitude:** -121.510186	**Highway Postmile:** SAC 24.25	**Railroad Milepost:** N/A	**Cell Service:** Yes – Verizon tested
Nearest Address: 103 4th Street, West Sacramento, CA, 95605 **Thomas Guide #:** 319/2C			

Overview Street Map

Hazards, Restrictions and Advice for Responders

- Trip and fall hazards, slippery when icy or wet
- Fast moving water at times of high flow
- Downed trees near shore
- Submerged objects
- Area utilized by a large amount of unhoused community
- High use public recreation area
- Pipeline crossing (under the river) just south of the boat launch

Resources-At-Risk

Ecological: Least Bell's Vireo, Western Yellow-billed Cuckoo, Longfin Smelt, Sacramento Splittail, Steelhead – Central Valley DPS, Valley Elderberry Longhorn Beetle

Economic: Riverwalk Park, Sacramento Water Treatment Plant, Matsui Waterfront 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

Site Location/Segment: SAC-SA-A-020	**Site Description and Field Notes:** Large boat launch facility upstream of the I Street Bridge. Large parking area with facilities, suitable staging area. North of Riverwalk Park – trail alongside river right of the Sacramento River. An intake for Sacramento River Water Treatment Plant is just across the river from the boat launch.			
Gradient: Medium	**River Width:** 133 m (436 ft)	**Vehicular Access?** Heavily vegetated shoreline precludes vehicle access	**Recreational Use?** Fishing, boating, walking trails	**Boat Launches:** Boat launch on site
Site Contact/s:	City of Sacramento – Parks & Recreation (916) 617-4620			
ESI Shoreline Type:	9B – vegetated low banks; 8B – man-made structures			

Site Images

Upstream

Downstream

Straight Across

RR = River Right **RL = River Left**

Photo Date: 8/21/2019

Site Objectives: Deflection/Collection

Implementation: Cascade 4 – 400-feet boom lengths across river from north of intake toward boat launch; extend 300 feet of boom from apex of boat dock extending to out; line shoreline with 200 feet of boom.

Staging Area Location and Capabilities/Amenities/Waste Management: On-site staging area.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swiftwater	6 in x 6 in	ft	2,100	
Anchors	Danforth	25	lb	24	
Stakes				6	Use to secure boom to shore
Boat		25	ft	2	Response vessel
Personnel				8	2 people on each vessel, 4 people on the shore

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Lower Sacramento 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 Lower Sacramento 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 Lower Sacramento 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 EU under the Planning Section will utilize reference database and local resource trustee information 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

Resources-At-Risk: Species, Critical Habitat, and Designated Wetlands					
Common Name	**Scientific Name**	**Status^**	**CHWR (General Habitat Description) and USFWS (Critical Habitat Designated) ***	**Micro Habitat Description**	**Seasonal and Special Considerations, Notes~**
Birds					
Bald Eagle	*Haliaeetus leucocephalus*	State: E/FP Fed: -	CWHR: Large old-growth trees or snags in remote, mixed stands near water. USFWS: N/A	Feeds from large bodies of water or free flowing rivers. Perches in large, stoutly limbed trees, on snags or broken-topped trees, or on rocks near water. Roosts communally in dense, sheltered, remote conifer stands. Nests in large, old growth, or dominant live trees with open branch work, especially ponderosa pine.	Breeds February through July, peaks March to June.
Bank Swallow	*Riparia riparia*	State: T Fed: -	CWHR: Banks, burrows, riparian areas. USFWS: N/A	Uses holes dug in cliffs and riverbanks for cover. Feeds primarily over grassland, shrubland, savannah, open riparian areas, brushland, wetlands, and cropland. 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.

Burrowing Owl	*Athene cunicularia*	State: SSC Fed: -	CWHR: Open grasslands and shrublands with perches and burrows. USFWS: N/A	A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Uses rodent or other burrow for roosting and nesting cover. Moves perch to thermoregulate; perches in open sunlight in early morning, and moves to shade, or to burrow, when hot.	Yearlong, circadian activity. Hunts day or night; frequently perches or stands at burrow entrance in daytime. Strong site fidelity is suggested.
Least Bell's Vireo	*Vireo bellii pusillus*	State: E Fed: E	CWHR: Low dense riparian growth. USFWS: N/A	Typically associated with willow, cottonwood, baccharis, wild blackberry, or mesquite in desert localities.	Usually arrives from Mexican wintering areas by end of March and departs by end of August.
Purple Martin	*Progne subis*	State: SSC Fed: -	CWHR: Old-growth, multi-layered, open forest/woodland USFWS: N/A	Prefers habitat with snags in breeding season. Forages over riparian areas, forest, and woodland.	Arrives from South America in late March. Departs by late September.
Song Sparrow (Modesto population)	*Melospiza melodia*	State: SSC Fed: -	CWHR: Riparian, fresh/saline emergent wetland, wet meadows USFWS: N/A	Endemic to California. Resides in the north-central portion of the Central Valley. Breeds in riparian thickets of willows, shrubs, vines, tall herbs, and fresh or saline emergent vegetation. Forages on ground or in low vegetation under cover of dense thickets or wetland vegetation.	Year-round resident. Breeds from mid-March to early August.

Swainson's Hawk	*Buteo swainsoni*	State: T Fed: -	CWHR: Open desert, grassland, or cropland containing scattered large trees or small groves. USFWS: N/A	Breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannah in the Central Valley. Forages in adjacent grasslands or suitable agricultural fields/pastures.	Breeds March to late August. Migrates south through Central/Southern CA September through October, sometimes traveling as far as South America. Returns north March through May.
Tricolored Blackbird	*Agelaius tricolor*	State: T/SSC Fed: -	CWHR: Fresh emergent wetlands. USFWS: N/A	Common in Central Valley and throughout coastal districts. Breeds near fresh water (especially in emergent wetland), and feeds in grassland and cropland habitats.	Usual breeding season is mid-April into late July but has been documented breeding in Sacramento Valley in October and November.
Western Yellow-billed Cuckoo	*Coccyzus americanus occidentalis*	State: E Fed: T	CWHR: Deciduous riparian thickets or forests with dense, low level or understory foliage. USFWS: Proposed critical habitat within GRP boundary.	In Sacramento Valley, utilizes walnut orchards adjacent to slow moving watercourses, backwaters, or seeps. Numbers have declined with decrease in riparian habitat.	In California, most eggs laid mid-June to mid-July.
Yellow Warbler	*Setophaga petechia*	State: SSC Fed: -	CWHR: Sparse to dense woodlands and forest habitats. USFWS: N/A	Prefers heavy brush understory in breeding season. Usually found in riparian deciduous habitats in summer.	Breeds mid-April through early August, with peak activity in June. Migratory- arrives in California in April and is mostly gone by October.

Yellow-breasted Chat	*Icteria virens*	State: SSC Fed: -	CWHR: Dense brushy thickets and tangles near water, thick understory in riparian woodland. USFWS: N/A	Found in coastal California and foothills of the Sierra Nevada. Frequents lower elevations of mountains in riparian habitat during migration.	Breeds from early May into early August with peak activity in June. Migratory-usually arrives in April and departs by late September.
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.
Western Mastiff Bat	*Eumops perotis californicus*	State: SSC Fed: -	CWHR: Extensive open areas with crevices in rock outcrops and buildings as abundant roost locations. USFWS: N/A	Crevices in cliff faces, high buildings, trees, and tunnels required for roosting. Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Goes into daily torpor December through February, but usually resumes nightly activity to feed. This bat has an exceptionally long foraging period up to 6-7 hours per night. Roosts alone or in small colonies. Parturition April through September.

Western Red Bat	*Lasiurus blossevillii*	State: SSC Fed: -	CWHR: Edges, habitat mosaics with trees for roosting and open areas for foraging. USFWS: N/A	Roosts in trees, less often in shrubs, preferably in edge habitats near streams, fields, or urban areas. Roosting occurs in forests and woodlands from sea level up through mixed conifer forests.	Hibernates during the winter with arousals on warm winter days.
Fish					
Chinook Salmon, Spring-run	*Oncorhynchus tshawytscha pop. 6*	State: T Fed: T	CWHR: N/A USFWS: Central Valley spring-run ESU. Critical habitat within GRP boundary.	Adults enter the Sacramento River from late March through September and hold in cool water habitats through the summer. Spring-run juveniles migrate soon after emergence as young-of-the-year or remain in freshwater and migrate as yearlings.	Spawning typically occurs mid-August through early October.
Chinook Salmon, Winter-run	*Oncorhynchus tshawytscha pop. 7*	State: E Fed: E	CWHR: N/A USFWS: Sacramento River winter-run ESU. Critical habitat within GRP boundary.	Adult Sacramento River (SR) winter-run Chinook salmon pass under the Golden Gate Bridge from November through May and pass into the Sacramento River from December through early August. Fry and smolts emigrate downstream from July through March through the Sacramento River, reaching the Delta from September through June.	Spawning typically occurs in the upper mainstem Sacramento River from mid-April through August.

Delta Smelt	*Hypomesus transpacificus*	State: E Fed: T	CWHR: N/A USFWS: Critical habitat within GRP boundary.	The delta smelt is a euryhaline species, able to tolerate a wide salinity range. Fall, winter, and summer months are spent in the low salinity zone of the San Francisco Bay/Delta estuary. Spring months are spent in the fresh water of the delta. Delta smelt tend to stay within the water column regions where planktonic food is also concentrated.	Most spawning happens in tidally influenced backwater sloughs and channel edge-waters during the springtime months.
Green Sturgeon	*Acipenser medirostris*	State: SSC Fed: T	CWHR: N/A USFWS: Southern DPS. Critical habitat within GRP boundary.	A heavily marine oriented sturgeon species that primarily spawns in the upper mainstem of the Sacramento River. Feeds in brackish bays and estuaries in the summer months, and spawns in cool, deep, swift flowing river reaches over gravel and cobble bottoms.	Migrate in March-June from seawater into the freshwater reaches of larger coastal rivers, including the Sacramento, to spawn.

White Sturgeon	*Acipenser transmontanus*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	White sturgeon in the Sacramento-San Joaquin system represents the southernmost spawning population of the species. Juveniles move rapidly down-river from their tributary spawning grounds in their first year, taking up residence in the freshwater region of the San Francisco Bay Estuary. As adults, white sturgeon move throughout the estuary, occasionally making forays into coastal waters.	Adults migrate from the estuary into the river in winter, spawn from February to June, and return to the Delta after spawning.
Longfin Smelt	*Spirinchus thaleichthys*	State: T Fed: C	CWHR: N/A USFWS: N/A	Use estuarine wetland and slough habitat as adults before migrating upriver to spawn. Generally, larvae live in the water column and can move up and down within it to stay in the estuarine mixing zone to feed on crustaceans. Adults die after spawning.	Spawning occurs from Nov - May, with a peak from Feb – April in freshwater over sandy, or gravel substrates, rocks and aquatic plants.

Sacramento Splittail	*Pogonichthys macrolepidotus*	State: SSC Fed: -	CWHR: N/A USFWS: N/A	This species depends upon brackish-water rearing habitats in the San Francisco Estuary, and on floodplain and river-edge spawning habitats immediately above the estuary. As flood waters recede in late spring/early summer, juveniles leave flooded areas and move downstream. Juveniles rear in estuarine marshes for 1-2 years before spawning for the first time.	Spawning occurs in March and April.
Steelhead	*Oncorhynchus mykiss irideus pop. 11*	State: - Fed: T	CWHR: N/A USFWS: California Central Valley DPS. Critical habitat within GRP boundary.	Found in the Sacramento and San Joaquin Rivers, and their tributaries. Spawning occurs in places where the streambed is composed of gravelly substrate, usually in riffles or pool tails. Typically, the young Steelhead or parr reside in freshwater for 1-3 years before transitioning to saltwater, where they may stay for 1-2 years before returning to their native streams to spawn.	Peak spawning occurs December through April.

Amphibians					
Foothill Yellow-legged Frog	*Rana boylii*	State: CT Fed: -	CWHR: Rocky streams USFWS: N/A	Found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Egg clusters are attached to gravel or rocks in moving water near stream margins.	Breeding and egg laying usually await the end of spring flooding and may commence any time from mid-March to May, depending on local water conditions.
Reptiles					
Giant Garter Snake	*Thamnophis gigas*	State: T Fed: T	CWHR: Found in marsh and slough habitat, less in slow moving creeks. USFWS: N/A	Extremely aquatic. This species is normally found in the immediate vicinity of permanent or semi-permanent sources of water. Scarce throughout its range in the Central Valley.	Active from mid-March until October. Breeds after spring emergence and gives birth to live young.
Western Pond Turtle	*Emys marmorata*	State: SSC Fed: -	CWHR: Permanent or nearly permanent water. USFWS: N/A	Individuals normally associate with permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams throughout California. Along large slow-moving streams, eggs are deposited in nests constructed in sandy banks. Along foothill streams, females may climb hillsides, sometimes moving considerable distances to find a suitable nest site.	Eggs are laid from March to August, depending on local conditions.

Invertebrates					
Crotch's Bumble Bee	*Bombus crotchii*	State: CE Fed: -	CWHR: N/A USFWS: N/A	Primarily found in grassland and scrub habitats. Nests mainly underground. Generally, bumble bees overwinter in soft, disturbed soil, or under leaf litter or other debris.	The flight period for queens in California is from late February to late October, and the flight period for workers and males in California is from late March through September.
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	State: - Fed: T	CWHR: N/A USFWS: N/A	Found in Central Valley mixed riparian forests and blue elderberry savannah. Reliant on blue elderberry for its survival. Spends most of its life cycle as larvae within the stems. Larval stage may last up to two years before transition to pupal and adult stages.	Adults are active (breeding and mating) March through June.
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	State: - Fed: T	CWHR: N/A USFWS: Critical habitat within GRP boundary.	In California, found in vernal pools, seasonal wetlands, and stagnant ditches from Tulare County north to Shasta County.	Vernal pool fairy shrimp typically hatch when the first rains of the year fill vernal pools.
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	State: - Fed: E	CWHR: N/A USFWS: Critical habitat within GRP boundary.	Occurs in vernal pools in the Central Valley, Delta, and East San Francisco Bay Area.	Vernal pool tadpole shrimp typically hatch when the first rains of the year fill vernal pools.
Plants**					
Ahart's Paronychia	*Paronychia ahartii*	State: - Fed: - Plant Rank: 1.B1	CWHR: N/A USFWS: N/A	Vernal pools	Annual herb with a bloom period of March through June.

Baker's Navarretia	*Navarretia leucocephala ssp. bakeri*	State: - Fed: - Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Meadows, vernal pools	Annual herb with a bloom period of April through July.
Colusa Grass	*Neostapfia colusana*	State: E Fed: T Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Vernal pools	Annual grass with a bloom period of May through August.
Hairy Orcutt Grass	*Orcuttia pilosa*	State: E Fed: E Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Vernal pools	Annual grass with a bloom period of May through September.
Heartscale	*Atriplex cordulata var. cordulata*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Shadscale scrub, valley grassland, wetland-riparian	Annual herb with a bloom period of April through October.
Hoover's Spurge	*Euphorbia hooveri*	State: - Fed: T Plant Rank: 1B.2	CWHR: N/A USFWS: Critical habitat within GRP boundary.	Vernal pools	Annual herb with a bloom period of July through September.
Maverick Clover	*Trifolium piorkowskii*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland (mesic), vernal pools	Annual herb with a bloom period of April through May.
Palmate-bracted Bird's Beak	*Chloropyron palmatum*	State: E Fed: E Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Shadscale scrub, valley grassland, wetland-riparian	Annual herb with a bloom period of May through October.
Red Bluff Dwarf Rush	*Juncus leiospermus var. leiospermus*	State: - Fed: - Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Vernal pools	Annual grass-like herb with a bloom period of March through May.
Sanford's Arrowhead	*Sagittaria sanfordii*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Fresh-water marsh	Perennial herb with a bloom period of May through October.

Silky Cryptantha	*Cryptantha crinita*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Riparian	Annual herb with a bloom period of April through May.
Slender Orcutt Grass	*Orcuttia tenuis*	State: E Fed: T Plant Rank: 1B.1	CWHR: N/A USFWS: Critical habitat within GRP boundary.	Vernal pools	Annual grass with a bloom period of May through September.
Stony Creek Spurge	*Euphorbia ocellata ssp. rattanii*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Valley grassland	Annual herb with a bloom period of May through October.
Suisun Marsh Aster	*Symphyotrichum lentum*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Fresh-water marsh, brackish-marsh	Perennial herb with a bloom period of May through November.
Woolly Rose-mallow	*Hibiscus lasiocarpos var. occidentalis*	State: - Fed: - Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Fresh-water marsh	Perennial herb with a bloom period of June through September.

^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**
Lacustrine: Limnetic Unconsolidated Bottom (Lake)	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 and a vegetative cover less than 30%. Unconsolidated Bottoms are characterized by the lack of large stable surfaces for plant and animal attachment. They are usually found in areas with lower energy than Rock Bottoms and may be very unstable.	Limnetic subsystem includes all deep-water habitats (i.e., depth greater than 2.5m (8.2 ft) at low water. Water covers the substrate throughout the year in all years.

Lacustrine: Littoral Unconsolidated Shore (Lake)	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.	This subsystem 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.

Lacustrine: Littoral Aquatic Bed (Lake)	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 wetlands and deep-water habitats where plants that grow principally on or below the surface of the water (i.e., surface plants or submergents) are the uppermost life form layer with at least 30 percent areal coverage.	This subsystem 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.
Palustrine: Aquatic Bed (Freshwater Pond)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	Includes wetlands and deep-water habitats dominated by plants that grow principally on or below the surface of the water for most of the growing season in most years.	Best developed in relatively permanent water or under conditions of repeated flooding.

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

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

Palustrine: Emergent (Freshwater Emergent Wetland)	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.	In this wetland Class, emergent plants -i.e., erect, rooted, herbaceous hydrophytes, excluding mosses and lichens -are the tallest life form with at least 30% areal coverage.	Vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
Estuarine: Unconsolidated Shore (Estuarine Wetland)	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.

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**	
American Shad	*Alosa sapidissima*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Run in Sacramento begins in April through July.	Recreational fishery
Black Bullhead	*Ameiurus melas*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Black Crappie	*Pomoxis nigromaculatus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Bluegill	*Lepomis macrochirus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** m Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Brown Bullhead	*Ameiurus nebulosus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery

Channel Catfish	*Ictalurus punctatus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Chinook Salmon	*Oncorhynchus tshawytscha*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	All four races of Chinook salmon occur seasonally in the Sacramento River. Fall-run and late-fall-run angling season vary annually (check regulations). Spring and winter-runs closed to angling.	Recreational and commercial fishery: Fall and late fall run fish are caught in very large quantities in the Sacramento River and ocean. Winter and spring-run Chinook salmon are protected.
Common Carp	*Cyprinus carpio*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Crayfish	*Various spp.*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational and commercial fishery.
Green Sturgeon	*Acipenser medirostris*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River seasonally, but potentially all year.	Protected species, no legal angling opportunity. Confused for white sturgeon by some anglers.

Green Sunfish	*Lepomis cyanellus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery (minor)
Largemouth Bass	*Micropterus salmoides*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Rainbow Trout	*Oncorhynchus mykiss*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Migratory *O.mykiss* (steelhead) are in the main stem of the Sacramento River seasonally, but potentially all year. Resident *O.mykiss* (rainbow trout) do not typically occur in the main stem Sacramento River in R2 boundaries.	Recreational fishery with special regulations. Hatchery *O.mykiss* (steelhead) have a daily bag limit. Anglers are not allowed to keep fish with an intact adipose fin.
Sacramento Blackfish	*Orthodon microlepidotus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Occurs year round in the Sacramento River.	Recreational fishery (minor)
Sacramento Pikeminnow	*Ptychocheilus grandis*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Occurs year round in the Sacramento River.	Recreational fishery (minor)

Sacramento Splittail	*Pogonichthys macrolepidotus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Occurs year round in the Sacramento River.	Recreational fishery (minor)
Sacramento Sucker	*Catostomus occidentalis occidentalis*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Occurs year round in the Sacramento River.	Minor recreational fishery
Smallmouth Bass	*Micropterus dolomieu*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Spotted Bass	*Micropterus punctulatus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
Steelhead	*Oncorhynchus mykiss*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	Migratory *O.mykiss* (steelhead) are in the main stem of the Sacramento River seasonally, but potentially all year. Resident *O.mykiss* (rainbow trout) do not typically occur in the main stem Sacramento River in R2 boundaries.	Recreational fishery with special regulations. Hatchery *O. mykiss* (steelhead) have a daily bag limit. Anglers are not allowed to keep fish with an intact adipose fin.

Striped Bass	*Morone saxatilis*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery with special regulations.
Threadfin Shad	*Dorosoma petenense*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Commercial fishery
Tule Perch	*Hysterocarpus traski*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Some may be kept for table-fare but not likely targeted by anglers.
White Catfish	*Ameiurus catus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
White Crappie	*Pomoxis annularis*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery
White Sturgeon	*Acipenser transmontanus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River seasonally, but potentially all year.	Recreational fishery with special regulations.

Yellowfin Goby	*Acanthogobius flavimanus*	**CDFW Region 1** Redding Office (530) 225-2300 **CDFW Region 2** Rancho Cordova Office (916) 358-2900	In the main stem of the Sacramento River all year.	Recreational fishery

Designated or Protected Lands			
Area Name	**Designation****	**Contact Information**	**Seasonal and Special Considerations, Notes**
Clover Creek Ecological Reserve	State Ecological Reserve	**CDFW Region 1** Redding Office (530) 225-2300	Ecological reserve not currently open to the public.
William B. Ide Adobe State Park	State Historic Park	(530) 529-8599	Historical/cultural site, visitor center, environmental learning, nature and wildlife viewing.
Red Bluff Recreation Area	US Forest Service Recreation Area	(530) 527-2813	Interpretive site, camping, fishing, river access.
Sacramento River National Wildlife Refuge Complex	National Wildlife Refuge	Complex Headquarters (530) 934-2801	Includes Sacramento, Delevan, Colusa, Sutter, and Sacramento River National Wildlife Refuges. Also includes Willow Creek-Lurline, Butte Sink, and Steve Thompson North Central Valley Wildlife Management Areas.
Sacramento River Wildlife Area	State Wildlife Area	**CDFW Region 2** Rancho Cordova Office (916) 358-2900	Most units only accessible by boat.
Merrill's Landing Wildlife Area	State Wildlife Area	**CDFW Region 1** Redding Office (530) 225-2300	Part of Sacramento River Wildlife Area. Boat access only.
Bidwell Sacramento River State Park	State Park	530-342-5185	Fishing and water sports.
Colusa Bypass Wildlife Area	State Wildlife Area	**CDFW Region 2** Rancho Cordova Office (916) 358-2900	Used for local flood control.

Colusa-Sacramento River State Recreation Area	State Recreation Area	(530) 329-9198	Operated by City of Colusa. Popular fishing and camping location.
Sutter Bypass Wildlife Area	State Wildlife Area	**CDFW Region 2** Rancho Cordova Office (916) 358-2900	Fishing, wildlife viewing, hunting. Part of Sacramento Valley Flood Control System.
Fremont Weir Wildlife Area	State Wildlife Area	**CDFW Region 2** Rancho Cordova Office (916) 358-2900	Fishing, wildlife viewing, birdwatching, seasonal hunting. Road/gate closures depending on water levels.
Sacramento Bypass Wildlife Area	State Wildlife Area	**CDFW Region 2** Rancho Cordova Office (916) 358-2900	
Old Sacramento State Historic Park	State Historic Park	(916) 445-7387	Historical/cultural site, visitor center, bike path/trail, guided tours, family programs, etc.

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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 the terrestrial environment. Both Federal and State statutes mandate protection, rescue, and rehabilitation of oiled wildlife.

The WRP for Oil Spills in California, OSPR 2016, details the purposes, goals, objectives, responsibilities, and structure of the Wildlife Branch within the 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 Wildlife Branch Director (WBD) in the Operations Section or Environmental Unit (EU) in the 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 establishing exclusion zones or placing limits on ingress/egress routes

and minimizing unnecessary disturbances of sensitive areas by restricting 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 Human Health and Safety Sites and Economic Resources Susceptible to Oiling

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

Lists of economic resources are not intended to be exhaustive and may include various types of sites and resources depending on the specific features of each GRP. Regardless of inclusion in the List of Economic Resources Susceptible to Oiling, any entity may submit a third-party claim for damages and costs incurred due to specific oil spill impacts to these resources. Additionally, some businesses, as well as local government offices or departments, may have access to privately owned or

contracted response equipment and resources that can be deployed at these locations. It is encouraged that stakeholders with jurisdictional authority over their economic resources arrange for their protection and/or file a third-party claim for impacts.

Human Health and Safety Resources plus Critical Infrastructure

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

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

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

Economic Resources Susceptible to Oiling

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

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

- Aquaculture/fish hatchery facilities
- Tide gates
- Public marinas

- State, county, and city parks and beaches, as appropriate

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

Table 4-2: Resources-At-Risk - Economic Resources Susceptible to Oiling

Drinking Water, Power Plant, Wastewater Treatment Facility Intakes				
Name	**Agency/Company**	**Address**	**Phone**	**Sacramento River drinking water? (Y/N)**
Pump House # 1	City of Redding	777 Cypress Avenue Redding, CA 96001	**Emergency:** (530) 224-6068	Y
Sacramento River Intake	Bella Vista Water District	11368 East Stillwater Way Redding, CA 96003	(530) 241-1085	Y
Corning and Tehama-Colusa Canals	Tehama Colusa Canal Authority	5513 Highway 162 Willows, CA 95988	(530) 934-2125 **Emergency:** (530) 570-8572	N
Glenn-Colusa Canal	Glenn-Colusa Irrigation District	344 East Laurel Street Willows, CA 95988	(530) 934-8881 **Emergency cell number:** (530) 518-7187	N
Sidds Landing Pumping Plant	Princeton-Codora-Glenn Irrigation District	252 Commercial St, Princeton, CA 9597	(530) 439-2248	N
Tisdale Pumping Plant	Sutter Mutual Water Company	15094 Cranmore Road Robbins, CA 95676	(530) 738-4423	N
Wilkins Slough Pumping Plant, and others	Reclamation District 108	975 Wilson Bend Road PO Box 50 Grimes, CA 95950	(530) 437-2221	N
Sankey Pumping Plant	Natomas Mutual Water Company	2601 West Elkhorn Blvd. Rio Linda, CA 95673	(916) 419-5936	N
Prichard Plant 2	Reclamation District 1000	1633 Garden Highway, Sacramento CA 95833	(916) 922-1449	N
Sacramento River Intake	Woodland-Davis Clean Water Agency	855 County Road 102, Woodland, CA 95776	(530) 379-4009	Y
George Kristoff Water Treatment Plant	City of West Sacramento	400 N Harbor Blvd., West Sacramento, CA 95605	(916) 617-4868	Y
Sacramento River Intake, Sacramento Water Treatment Plant	City of Sacramento	1395 35th Ave. Sacramento, CA 95822	(916) 808-4961	Y

Freeport Regional Water Authority/ Sacramento County Dept. of Water Resources	Sacramento County	10151 Florin Road Sacramento, CA 95829	(916) 876-7600	Y
Dams and Hydroelectric Facilities				
Keswick Dam	Bureau of Reclamation	16349 Shasta Dam Boulevard Shasta Lake, CA 96019	(530) 247-8500	
ACID Diversion Dam	Anderson-Cottonwood Irrigation District	2810 Silver St. Anderson, CA 96007	(530) 365-7329	
Red Bluff Diversion Dam	Bureau of Reclamation	16349 Shasta Dam Boulevard Shasta Lake, CA 96019	(530) 247-8500	
Tide Gates, Aquaculture/Fish Hatcheries				
Coleman National Fish Hatchery	US Fish and Wildlife Service	24411 Coleman Fish Hatchery Rd, Anderson, CA 96007	(530) 365-8622	
Public Marinas, City/County/State Parks and Beaches				
Sacramento River Trail	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Lake Redding Park	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Caldwell Park	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Turtle Bay Boat Ramp	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Riverfront Park	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation

John F. Reginator River Access	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Bonnyview Road Fishing Access	CDFW Region 1 Redding Office	601 Locust St., Redding, CA 96001	(530) 225-2300 **Email:** askregion1@wildlife.ca.gov	**Website:** https://wildlife.ca.gov/Regions
Cascade Park	City of Redding Parks Department	777 Cypress Ave. 2nd Floor, Redding CA 96001	(530) 224-6100 **Email:** parksinfo@cityofredding.org	**Website:** https://www.cityofredding.org/departments/parks-and-recreation
Anderson River Park	City of Anderson Parks and Recreation	1887 Howard St, Anderson CA 96007	(530) 378-6656 **Email:** lcottrell@ci.anderson.ca.us	**Website:** https://www.ci.anderson.ca.us/departments/parks_and_recreation.php
Bend Bridge Public Access	CDFW Region 1 Redding Office	601 Locust St., Redding, CA 96001	(530) 225-2300 **Email:** askregion1@wildlife.ca.gov	**Website:** https://wildlife.ca.gov/Regions
Samuel Ayer/Dog Island Park	Red Bluff Parks and Recreation Office	1500 South Jackson Street Red Bluff, CA 96080	(530) 527-8177 **Email:** kshaffer@cityofredbluff.org	**Website:** http://www.redbluffrecreation.org/
River Park	Red Bluff Parks and Recreation Office	1500 South Jackson Street Red Bluff, CA 96080	(530) 527-8177 **Email:** kshaffer@cityofredbluff.org	**Website:** http://www.redbluffrecreation.org/
Red Bluff River Park Fishing Access	Red Bluff Parks and Recreation Office	1500 South Jackson Street Red Bluff, CA 96080	(530) 527-8177 **Email:** kshaffer@cityofredbluff.org	**Website:** http://www.redbluffrecreation.org/
Hidden Harbor Marina and RV Park	Hidden Harbor Marina and RV Park	24680 Hidden Harbor Drive Los Molinos, CA 96055	(530) 586-6129	
Mill Creek Park/Mouth of Mill Creek Fishing Access	Tehama County Parks Department	727 Oak Street Red Bluff, CA 96080	(530) 528-1111	**Website:** http://www.co.tehama.ca.us/dep-parks

Tehama County River Park at Woodson Bridge	Tehama County Parks Department	727 Oak Street Red Bluff, CA 96080	(530) 528-1111	**Website:** http://www.co.tehama.ca.us/dep-parks
Vina Fishing Access	Tehama County Parks Department	727 Oak Street Red Bluff, CA 96080	(530) 528-1111	**Website:** http://www.co.tehama.ca.us/dep-parks
Bidwell-Sacramento River State Park	CA State Parks	12105 River Rd, Chico, CA 95973	(530) 342-5185 **Email:** info@parks.ca.gov	**Website:** https://www.parks.ca.gov/?page_id=463
Scotty's Boat Landing	Privately Owned	12609 River Rd, Chico, CA 95973	(530) 710-2020	
Ord Bend Park	Glenn County	8300 County Road 32, Ord Bend, CA	(530) 934-6545	**Website:** https://www.countyofglenn.net/dept/county-services/boat-launch-facilities/ord-bend-park-and-boat-launch
Butte City Launching Facility	CA State Parks Boating and Waterways	8300 Hwy 162, Butte City, CA 95988	(530) 934-6545 **Email:** info@parks.ca.gov	**Website:** http://www.dbw.ca.gov/BoatingFacilities/Details/956
Levee Park	Colusa Department of Recreation	425 Webster Street Colusa, CA 95932	(530) 548-5622	**Website:** http://colusa.hosted.civiclive.com/recreation__tourism/city_parks
Colusa-Sacramento River SRA	CA State Parks	Levee St., Colusa, CA 95932	(530) 329-9198 **Email:** info@parks.ca.gov	**Website:** https://www.parks.ca.gov/?page_id=461
Bert's Steelhead Marina	Privately Owned	3249 Butte Slough Rd, Colusa, CA 95932	(530) 458-2944	
Colusa Landing (Marina and Restaurant)	Privately Owned	3244 & 3249 Butte Slough Road Colusa, CA 95932	(530) 458-2118 **Email address:** office@colusalanding.com	**Website:** www.colusalanding.com
Ward's Boat Landing	Privately Owned	2701 Meridian, Butte Slough Road, Colusa, CA 95932	(530) 696-2672	

Lovey's Landing RV Park	Privately Owned	3474 N. Meridian Road Meridian, CA 95957	(530) 696-2449	
Grimes Boat Landing	Privately Owned	1648 Hwy 45 Grimes, CA 95950	(530) 437-2333	
Tisdale Boat Launch	Operated and maintained by Sutter County	Tisdale Weir, north of Knights Landing	(530) 822-7249	
Knights Landing Fishing Access	CDFW Region 2 Rancho Cordova Office/Operated by Yolo Co. Parks Dept	9350 Hwy 45, Colusa, CA 95932	(530) 406-4880 **Email:** R2Info@wildlife.ca.gov	**Website:** http://colusa.hosted.civiclive.com/recreation__tourism/city_parks
Stingrayz Beach Boardwalk & Marina	Privately Owned	23000 Cranmore Road, Knights Landing, California 95645	(530) 735-9600	**Website:** https://www.stingrayzonline.com/contact-us.html
Yolo Sutter Boat Club	Privately Owned	Front St, Knights Landing, CA 95645	(530) 735-6472	
Verona Marina	Privately Owned	6955 Garden Hwy, Nicolaus, CA 95659	(916) 927-8387	**Website:** https://marinas.com/view/marina/g9cgx3_Verona_Marina_Nicolaus_CA_United_States
Verona Village Campground	Privately Owned	6985 Garden Hwy, Nicolaus, CA 95659	(530) 656-2286	**Website:** https://marinas.com/view/marina/jncwd8_Verona_Village_River_Resort_Nicolaus_CA_United_States
Alamar Marina, Restaurant, and Bar	Privately operated, leased from State of California	5999 Garden Highway Sacramento, CA 95837	(916) 922-0200	**Website:** http://www.alamarmarina.net/home.html
Metro Marina Properties	Privately operated, leased from State of California	5871 Garden Highway Sacramento, CA 95837	(916) 925-8847	
Elkhorn Boat Launching Facility	Operated and maintained by Sutter County Regional Parks Department	5820 Garden Highway Sacramento, CA 95837	(530) 822-7410	**Website:** https://regionalparks.saccounty.net/Parks/SacramentoRiverandDelta/Pages/ElkhornBoatLaunch.aspx

Elkhorn Regional Park	Yolo County	18989 Old River Road West Sacramento, CA 95691	(530) 406-4880	**Website:** https://www.yolocounty.org/general-government/general-government-departments/parks/parks-information/elkhorn-regional-park
Sand Cove Park	City of Sacramento	915 I Street, Sacramento CA 95814	**Park Ranger Services Phone:** (916) 808-6093	**Website:** https://www.cityofsacramento.org/ParksandRec/Parks
Rio Ramaza Marina	Privately owned	10000 Garden Highway, Sacramento, CA 95833	(916) 925-5432	
River View Marina	Privately operated, leased from State of California	1801 Garden Highway Sacramento, CA 95833	(916) 925-4100	**Website:** http://www.riverviewmarinasacramento.com/
Virgin Sturgeon Restaurant and Marina	Privately operated, leased from State of California	1577 Garden Highway Sacramento CA 95833	(916) 921-2694	**Website:** https://thevirginsturgeon.com/
Riverbank Marina	Privately operated, leased from State of California	1371 Garden Hwy Sacramento, CA 95833	(916) 922-0720	**Website:** https://riverbank.com/
American River Parkway, Discovery Park	County of Sacramento	1600 Garden Highway Sacramento, CA 95833	**Parks Dispatch:** (916) 875-7275	**Website:** https://regionalparks.saccounty.net/Parks/Pages/DiscoveryPark.aspx
Broderick Boat Ramp	City of West Sacramento	103 4th St. West Sacramento, CA 95605	(916) 617-4620	**Website:** https://www.cityofwestsacramento.org/government/departments/parks-recreation/playgrounds-parks-trails/boating-fishing#Broderick%20Boat%20Ramp
Sherwood Harbor Marina	Privately Owned	3505 S.River Rd, West Sacramento, CA	(916) 371-3471	
Sacramento Yacht Club	Privately Owned	3365 S.River Rd, West Sacramento, CA	(916) 371-5058	
River Walk Park	City of West Sacramento	651 2nd St, West Sacramento, CA	(916) 617-4620	

Sacramento Marina	Privately Owned	Front Street Sacramento, CA 95811	(916) 808-5712	
Freeport Marina	Privately Owned	8250 Freeport Blvd., Sacramento, CA	(916) 665-1555	
Pioneer Landing Park	City of Sacramento	1900 Front St Sacramento, CA 95811	**Park Ranger Services Phone:** (916) 264-5011	**Website:** https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory/Central-City/Pioneer-Landing
First Responder On-Water Facilities, Other Health and Safety Intakes				
Lake California	Lake California Property Owners Associates	19999 Lake California Drive Cottonwood, CA 96022	**Front Gate:** (530) 347-7903 **Email:** askregion1@wildlife.ca.gov	**Website:** https://wildlife.ca.gov/Regions

4.5 Tribal and Cultural Resources and Historic Properties at Risk

Cultural and historic resources are present within this GRP area. Due to the confidential nature of this information, details regarding the location and type of cultural resources present are not included in this document. However, in order to ensure that tactical response strategies do not inadvertently harm cultural and historic sensitive sites, the Northeast Information Center (Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity Counties), 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) and North Central Information Center (Amador, El Dorado, Nevada, Placer, Sacramento, Yuba Counties) under California Historical Resources Information System (CHRIS), should be consulted to determine presence/absence of these resources before disturbing any soil or sediment during a response action or addressing contamination on potentially historic structures. As part of their National Historic Preservation Act, Section 106 responsibilities, the USCG or USEPA FOSC may hire an Historic Properties Specialist (HPS) to help identify the location of these sensitive resources, sign-off that cleanup operations are unlikely to impact these resources, and/or assign resources to monitor cleanup operations if there may be potential impacts. Table 4-3 lists contact information for the appropriate CHRIS Information Center for the GRP area.

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 NAHC for the purposes of Chapter 905 of the Statutes of 2004." A notification call will be placed by the response Liaison Officer to the NAHC. 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 by the response Liaison Officer or incident Tribal Liaison and invited to participate in the response for the purpose of cultural resource protection.

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 to the extent practicable.

After the UC is established, an Historic Properties Specialist will coordinate with the Liaison Officer and 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

Historical and Cultural Resources		
Northeast Information Center: Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity Counties		
Ryan Bradshaw	neinfocntr@csuchico.edu	(530) 898-6256
Website	http://www.csuchico.edu/neic	
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, Coordinator	nwic@sonoma.edu	(707) 588-8455 Cell: (707) 332-1117
Website	ttp://web.sonoma.edu/nwic/	
North Central Information Center: Amador, El Dorado, Nevada, Placer, Sacramento, Yuba Counties		
Paul Rendes	ncic@csus.edu	(916) 278-6217
Website	https://www.csus.edu/center/north-central-information/	

Tribal Resources (State Agency)		
Native American Heritage Commission	1550 Harbor Blvd., Suite 100, West Sacramento, CA nahc@nahc.ca.gov	(916) 373-3710
Andrew Green	Andrew.green@nahc.ca.gov	(916) 373-3710
CDFW OSPR Tribal Liaison		
Peter Barker	Peter.Barker@wildllife.ca.gov	(916) 798-5087
CDFW Headquarters Tribal Liaison	Tribal.Liaison@wildlife.ca.gov	
Sarah Fonseca	Sarah.Fonseca@wildlife.ca.gov	Coming soon

Local Tribal Contact Information			
Contact Name	**County**	**Address**	**Phone**
Kyle Self, Chairperson Greenville Rancheria kself@greenvillerancheria.com	Shasta, Tehama, Butte	P.O. Box 279 Greenville, Ca 95947	(530) 284-7990
John Hayward, Chairperson Nor-Rel-Muk Nation norermuk@com-pair.net	Shasta	P.O. Box 1967 Weaverville, Ca 96093	(530) 410-1125
Agnes Gonzalez, Chairperson Pit River Tribe of California 1010@gmail.com	Shasta	36970 Park Ave. Burney, Ca 96013	(916) 372-9720
Frieda Bennett, Chairwoman Quartz Valley Indian Community frieda.bennett@qvir-nsn.gov	Shasta	13601 Quartz Valley Road Fort Jones, Ca 96032	(530) 468-5907
Jack Potter, Jr., Chairperson Redding Rancheria melodieh@redding-rancheria.com	Shasta, Tehama	2000 Redding Rancheria Road Redding, Ca 96001	(530) 225-8979
James Hayward Sr., Cultural Resources Program Manager Redding Rancheria jamesh@redding-rancheria.com	Shasta	2000 Redding Rancheria Road Redding, Ca 96001	(530) 242-4543 (530) 410-2873, Cell
Roy V. Hall, Jr, Chairperson Shasta Nation	Shasta, Tehama	10808 Quartz Valley Road Fort Jones, Ca 96032	(530) 468-2314
Caleen Sisk, Chief Winnemem Wintu Tribe caleenwintu@gmail.com	Shasta	14840 Bear Mountain Road Redding, Ca 96003	(530) 229-4096
Mark Miyoshi, THPO Winnemem Wintu Tribe markmwinnemem@gmail.com	Shasta	P. O. Box 774 Mount Shasta, Ca 06067	(530) 229-4096
Wade McMaster, Chairperson Wintu Tribe of Northern California wintu.tribe@gmail.com	Shasta, Tehama	P.O. Box 995 Shasta Lake, Ca 96019	(530) 605-1726

Local Tribal Contact Information (continued)			
Glenda Nelson, Chairperson Estom Yumeka Maidu Tribe of the Enterprise Rancheria info@enterpriserancheria.org	Tehama, Glenn, Butte, Sutter, Colusa	2133 Monte Vista Avenue Oroville, CA, 95966	(530) 532-9214
Andrew Alejandre, Chairperson Paskenta Band of Nomlaki Indians office@paskenta.org	Tehama, Glenn, Colusa	P.O. Box 709 Corning, Ca 96021	(530) 528-3538
Ronald Kirk, Chairperson Grindstone Indian Rancheria of Wintun-Wailaki	Glenn, Colusa	P.O. Box 63 Elk Creek, Ca 95939	(530) 968-5365
Dennis E. Ramirez Chairperson, Mechoopda Indian Tribe dramirez@mechoopda-nsn.gov	Glenn, Butte, Sutter	125 Mission Ranch Blvd Chico, Ca 95926	(530) 899-8922
Francis Steele Jr., Chairperson Berry Creek Rancheria of Maidu Indians fsteele@berrycreekrancheria.com	Butte	5 Tyme Way Oroville, Ca 95966	(530) 534-3859
Jessica Lopez, Chairperson KonKow Valley Band of Maidu jessica@konkowmaidu.org	Butte	2086 N. Villa St. Palermo, Ca 95968	(707) 357-2415
Benjamin Clark, Chairperson Mooretown Rancheria of Maidu Indians frontdesk@mooretown.org	Butte, Sutter	#1 Alverda Drive Oroville, Ca 95966	(530) 533-3625
Guy Taylor, Cultural Resources Mooretown Rancheria of Maidu Indians	Butte, Sutter	#1 Alverda Drive Oroville, Ca 95966	(530) 533-3625
Grayson Coney, Cultural Director, Tsi Akim Maidu tsi-akim-maidu@att.net	Butte, Sacramento	P.O. Box 510 Browns Valley, Ca 95918	(530) 274-7497
Don Ryberg, Chairperson Tsi Akim Maidu tsi-akim-maidu@att.net	Butte	P.O. Box 510 Browns Valley, Ca 95918	(530) 383-7234
Gene Whitehouse, Chairperson United Auburn Indian Community of the Auburn Rancheria bguth@auburnrancheria.com	Butte, Sutter, Yolo, Sacramento	10720 Indian Hill Road Auburn, Ca 95603	(530) 883-2390
Tina Goodwin, Pakan'yani Maidu of Strawberry Valley Rancheria tinagoodwin@washoetanf.org	Sutter	P.O. Box 984 Marysville, Ca 95901	(916) 501-2482 (617) 417-2166

Local Tribal Contact Information (continued)			
Anthony Roberts, Chairperson Yocha Dehe Wintun Nation aroberts@yochadehe-nsn.gov	Sutter, Colusa, Yolo, Sacramento	P.O. Box 18 Brooks, Ca 95606	(530) 796-3400
Daniel Gomez, Chairman Cachil Dehe Band of Wintun Indians of the Colusa Indian Community dgomez@colusa-nsn.gov	Colusa	3730 Highway 45 Colusa, Ca 95932	(530) 458-8231
Clifford Mota, Tribal Preservation Liaison Cachil Dehe Band of Wintun Indians of the Colusa Indian Community cmota@colusa-nsn.gov	Colusa	3730 Highway 45 Colusa, Ca 95932	(530) 458 - 8231
Charlie Wright, Chairperson Cortina Rancheria - Kletsel Dehe Band of Wintun Indians	Colusa, Yolo	P.O. Box 1630 Williams, Ca 95987	(530) 473-3274
Rhonda Morningstar Pope Chairperson, Buena Vista Rancheria of MeWuk Indians rhonda@buenavistatribe.com	Sacramento	1418 20th Street, Suite 200 Sacramento, Ca 95811	(916) 491-0011
Sara Setchwaelo, Chairperson Ione Band of Miwok Indians sara@ionemiwok.net	Sacramento	9252 Bush Street, Suite 2 Plymouth, Ca 95669	(209) 245-5800
Cosme Valdez, Chairperson Nashville Enterprise Miwok-Maidu-Nishinam Tribe valdezcome@comcast.net	Sacramento	P.O. Box 580986 Elk Grove, Ca 95758-0017	(916) 429-8047
Regina Cuellar, Chairperson Shingle Springs Band of Miwok Indians rcuellar@ssband.org	Sacramento	P.O. Box 1340 Shingle Springs, Ca 95682	(530) 387-4970
Antonio Ruiz, Cultural Resources Officer Wilton Rancheria aruiz@wiltonrancheria-nsn.gov	Sacramento	9728 Kent Street Elk Grove, Ca 95624	(916) 683 - 6000
Ralph Hatch, Cultural Preservation Department Wilton Rancheria rhatch@wiltonrancheria-nsn.gov	Sacramento	9415 Rancheria Drive Wilton, Ca 95693	N/A
Raymond Hitchcock Chairperson, Wilton Rancheria rhitchcock@wiltonrancherians n.gov	Sacramento	9728 Kent Street Elk Grove, Ca 95624	(916) 683-6000

Local Tribal Contact Information (continued)			
Pamela Cubbler, Treasurer Colfax-Todds Valley Consolidated Tribe pcubbler@colfaxrancheria.com	Sacramento	Auburn, Ca 95604	(530) 320-3943
Clyde Prout, Chairperson Colfax-Todds Valley Consolidated Tribe miwokmaidu@yahoo.com	Sacramento	P.O. Box 4884 Auburn, Ca 95604	(530) 577-3558

Appendix A
GRP Development and Contributors

The Lower Sacramento 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.D.A. Forest Service
U.S. Department of the Interior

State Representatives
Calif. Department of Fish and Wildlife, Office of Spill Prevention and Response
Calif. Environmental Protection Agency
Calif. Office of Emergency Services
Calif. Department of Fish and Wildlife, Region I
Calif. Department of Fish and Wildlife, Region II
CALFIRE State Fire Marshal's Office, Pipeline Safety Division
Native American Heritage Commission

Local Representatives
Santa Barbara County Public Health
Butte County Sheriff's Office
Colusa County Environmental Health
Glenn County Sheriff's Department
Tehama County Sheriff's Office
City of Sacramento

Tribal Representatives
Yocha Dehe Wintun Nation

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
NRC, US Ecology
Starr Consulting

Environmental Non-Governmental Organizations
Trout Unlimited

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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 Sacramento River and includes an overview of the oil spill risks in the region. The Sacramento River is the largest river in California, originating near Mt. Eddy in the Klamath Mountains of northern California and flowing 400 miles south before reaching the Sacramento-San Joaquin River Delta and San Francisco Bay. The Sacramento River watershed drains approximately 26,500+ square miles of land in 19 California counties (North State Resources, June 2010). The river provides critical habitat for numerous plant and animal species, including large runs of Chinook salmon. The Lower Sacramento River GRP begins at the base of Keswick Dam in Redding, California and travels through eight counties as it continues south to downtown Sacramento, California where it meets the Sacramento-San Joaquin River Delta.

1.1 Physical Features

The Sacramento River watershed began to form as magma pushed up by the Pacific Plate collided with the North American Plate, which caused the formation of the Sierra Nevada. The northern part of the Sacramento River watershed was formed by intense volcanic activity over 25 million years ago, resulting in lava flows that covered and created the Modoc Plateau. Mount Shasta and Lassen Peak are among the numerous Cascade Range volcanoes that still stand in the area (Michaelsen, J., 2010; Resendes, M.A., 2010). About 3 million years ago, plate tectonics resulted in the uplift of the California Coast Ranges and enclosed the Sacramento Valley, forcing the streams within to flow south instead of west, forming the ancestral Sacramento River (Covington, S., 2004).

The Sacramento River watershed has been intensely developed for drinking water and agricultural water supplies in addition to hydroelectric power generation. Numerous types of water infrastructure (e.g., wells, diversions, etc.) have been constructed and altered its physical features. The two largest, Shasta Dam and Box Canyon Dam, have had the greatest impact on the landscape, water supply, water quality, power supply, agricultural economy, and recreation opportunities for the State (North State Resources, June 2010). Shasta Dam, completed in 1945, is the eighth-largest dam in the United States, measuring 602 feet in height and is 3,460 feet across. Feeding the Shasta power plant, the dam's spillway is the largest man-made waterfall in the world (North State Resources, June 2010). The dams have significantly affected processes controlling channel morphology and water quality. While the Sacramento River above Lake Siskiyou remains unregulated and subject to seasonal fluctuations, the reservoirs and dams have completely cut off the supply of sediments and bedload (i.e., the sand, gravel, boulders, or other debris transported by rolling or sliding along the bottom of a stream) to the Sacramento River immediately below them (North State Resources, June 2010).

Hydrology

The Bureau of Reclamation's Central Valley Project (CVP) controls the hydrology of the Sacramento River (Northstate Resources, June 2010); Keswick and Shasta dams together regulate the flow of the Sacramento River (USBR Projects and Facilities, retrieved 09/07/21). In addition to altering flood flows, the Shasta Dam has changed the seasonal hydrology of the river by storing water during the wet season and releasing water later in the year (Northstate Resources, June 2010). Prior to Shasta Dam, monthly flows in the river reflected runoff patterns associated with winter precipitation and spring snowmelt, with peak flows generally occurring in February, March, and April. Now, flows downstream of the dam are regulated and typically are lower in the winter season (when releases from the dam are reduced for flood protection) and higher in the summer (when water is being released for downstream irrigation needs). Agricultural production in the Central Valley heavily relies on water supplied by this watershed system. The Sacramento Valley can be broadly characterized as a flow-through system, in that most of the water not consumed for irrigation or other purposes eventually returns to the river via various tributaries or percolates to groundwater that recharges local aquifers (Sacramento River Watershed Program, retrieved 09/07/21).

Land use activities have reduced floodplains and created less-permeable ground surfaces, like urban development and road construction, which alters the rainfall-runoff balance. Cumulatively, land management activities measurably change the magnitude, frequency, duration, and timing of storm runoff (North State Resources, June 2010). Storm water runs quickly off the steep mountains flanking the Sacramento Valley, but with few exceptions, the alluvial valley floor is strikingly flat, slowing down the runoff and causing it to overflow the riverbanks. Before flood control works were built, the winter floods frequently transformed the valley into an inland sea (SAFCA, 2008). From Butte City downstream, flooding in the Sacramento River is controlled by an elaborate system of levees and bypasses. When river flows reach a certain height, water spills into the Colusa, Sutter, and Yolo Bypass channels in order to minimize risk of flooding to adjacent agricultural lands and major urban centers (including the city of Sacramento) (Sacramento River Watershed Program, retrieved 09/07/21). Due to the reduction of the floodplain area, the speed of flood flow in the Sacramento River has increased, creating a significant hazard for the urban and agricultural developments along its course. By the early 20th century, engineers had realized not all the floodplains could be safely reclaimed, leading to the intentional creation of flood bypasses where development is limited to annual crops and recreational uses (SAFCA, 2008; DWR, 2010).

Climate and Winds

California's Mediterranean climate is typified by long, dry summers and cool, wet winters. The eastern Klamath Mountains are the first major mountain range encountered by southwesterly flowing winds moving northeast across the Sacramento Valley. Orographic uplift (the upward lift of an air mass over mountainous terrain) of moist air masses over the eastern Klamath Mountains produces high levels of precipitation, falling mostly as snow in the higher elevations. Steep elevation gradients have a further effect on temperature and the spatial pattern of precipitation, with most precipitation falling between October and April**.** A west-to-east precipitation and temperature gradient creates wetter and warmer

conditions on the west side of the southern Cascades Range south of Mount Shasta (North State Resource, June 2010).

Flows and Tidal Influence

Annual outflow in the Sacramento River averages 22 million acre-feet, nearly one-third of California's total natural surface water runoff. Typical summer season flows in the Sacramento River are about 8,000 cfs at Red Bluff and 12,000 cfs at Verona just north of Sacramento (Sacramento River Watershed Program, retrieved 09/07/21). On the Sacramento River, tidal influence has been observed as far north as Verona, at the mouth of the Feather River (Jackson, W., Paterson, A., 1977).

1.2 Risk Assessment

The Sacramento River is a critical hydrological resource in northern California with natural, cultural, and historical resources, all at risk of injury from oil spills. The natural and beneficial uses of the river, adjacent remaining floodplains, and flood bypasses include municipal and domestic water supply, agricultural irrigation and stock watering, industrial service supply and hydroelectric power generation, recreation, cold freshwater habitat, spawning, reproduction, and/or early development habitat, wildlife habitat, and groundwater recharge (CVRWQCB, July 2016). The potential risks to these resources include rail transportation, vehicles and roads, recreational vessels and marinas, and other factors. Prevention of and preparation for oil spills impacting this river is essential.

Rail Transportation

The UPRR BNSF rail line between Redding and Sacramento runs north to south, generally following the I-5 corridor until it reaches Los Molinos where it crosses the Sacramento River and then generally follows the Highway 99 corridor traveling south and into the City of Sacramento. Other branches of the rail line intersect in Yuba City and Roseville. The are three main crossings of the Sacramento River by crude-by-rail routes; City of Redding at Caldwell Park; between the towns of Tehama and Los Molinos; and in downtown Sacramento at the I Street Bridge. There are numerous additional stream intersections between Redding and the town of Vina (south of Los Molinos) that connect to the Sacramento River (ERMA Southwest, retrieved 09/07/2021).

Road Systems

The Sacramento River is vulnerable to hazardous materials spills from vehicle accidents along Interstate 5, which runs parallel to the Sacramento River between Redding and Red Bluff, including two river crossings. Highway 99 intersects Highway 5 in the city of Red Bluff and parallels the Sacramento River southward until the town of Vina (east of Corning) where the highway veers off to the east. Interstates 5 and 99 are primary north-south routes for both intra- and interstate travel. Numerous other road and highway crossings along the Sacramento River between Redding and Sacramento increase the threat of a spill from a vehicle accident.

Recreational Boating

Accidents involving recreational watercrafts and/or fuel docks have the potential to result in spills on the Sacramento River. Examples of such accidents include collisions, vessel groundings, and mechanical failures. Recreational boating along the Sacramento River between Redding and Sacramento is very accessible with numerous with boat launch facilities and marinas. There are fueling docks at Steelhead Lodge Bar and Grill, Lovey's Landing RV Park and Marina, Grimes Boat Landing, and Alamar Restaurant and Marina. Each of these marinas store gasoline and releases from these facilities are an additional risk to 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.

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 Wildlife
Office of Spill Prevention and Response
1010 Riverside Parkway
West Sacramento, Ca 95605
Attn: Geographic Response Plans

The form below can be used to submit comments by mail. Contact information is requested so that we can give you a call if more information or comment clarification is needed. Additional information on 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
Other Relevant Emergency Response Plans

Shasta County Emergency Operations Plan

The Shasta County Emergency Operations Plan (EOP) is an all-hazard plan that describes how Shasta County will organize and respond to emergencies and disasters in the community. Its is based on, and is compatible with, federal, State of California, and other applicable laws, regulations, plans, and policies, including Presidential Policy Directive 8, the National Response Framework, and California Governor's Office of Emergency Services plans. This EOP is based on the functions and principles of Standardized Emergency Management System (SEMS) and identifies how the county fits into the overall SEMS structure.

Consisting of a basic plan, emergency function annexes, and incident annexes, this EOP provides a framework for coordinated response and recovery activities during a large-scale emergency. The plan describes how various agencies and organizations in the County will coordinate resources and activities with other federal, State, local, tribal, community organizations, faith-based organizations, and private-sector partners (Shasta County, September 2014).

Emergency Operations Plan Tehama County

This Emergency Operations Plan (EOP) establishes a local emergency management program that complies with local, state and federal emergency management and homeland security program requirements. The EOP specifies policies, roles, resources, and activities necessary to manage a local emergency. It also adopts the National Incident Management System (NIMS) and Standardized Emergency Management System (SEMS) and facilitates collaboration among organizations involved in emergency management.

This plan was designed to be a simple yet comprehensive emergency management plan. It addresses multiple hazards; activities necessary before, during, and after disaster to reduce hazard risks and impacts; and the multi-agency collaboration and coordination necessary to accomplish most activities (Tehama County, April 2017).

Operational Area Emergency Operations Plan Glenn County

This plan is based on the authority of the local government(s) for emergency response and contains specific emergency support functions to be provided during an emergency, disaster. This plan applies to all jurisdictions and agencies that operate within Glenn County. This plan delegates Glenn County Sheriff's Office – Office of Emergency Services the authority and responsibility for the coordination and administration of emergency operations for the Operational Area of Glenn County. Any agency and jurisdiction within the Operational Area has the responsibility to develop and maintain plans, policies, and procedures pertaining to emergency and disaster response operations of their agencies and/or jurisdiction.

The Basic Plan provides the structure and organization of the Glenn County Operational Area emergency management, identifies individual roles and responsibilities, describes the concept of operations, and identifies how the County and OA integrate SEMS and NIMS into emergency management operations (Glenn County, September 2019).

Colusa County Hazardous Materials Area Plan

The Colusa County Hazardous Materials Area Plan (Area Plan) was developed to protect the public, environment and property from accidental releases involving chemicals. The Area Plan fulfills the Certified Unified Program Agency (CUPA) regulatory program requirements per state law. The Area Plan is located in the Emergency Operations Center (EOC) and in the Environmental Health office. The Area Plan can be used as a resource document in conjunction with the Colusa County Emergency Operations Plan and other local and state plans.

The Area Plan describes the county's pre-incident planning and preparedness for hazardous materials releases. It clarifies the roles and responsibilities of federal, state and local agencies during a hazardous materials incident. It describes the county's hazardous materials incident response program, training, communications and post-incident recovery procedures (Colusa County, September 2018).

Sutter County Hazardous Materials Area Plan

The Sutter County Hazardous Materials Area Plan (Area Plan) establishes the emergency response organization for hazardous materials incidents occurring within Sutter County. This Plan documents the operational and general response procedures for the Yuba-Sutter Hazardous Materials Response Team, which is the primary hazardous materials response group for Sutter County.

The Area Plan is the principal guide for agencies of Sutter County, its incorporated cities, and other local entities in mitigating hazardous materials emergencies. This Area Plan is consistent with the National Incident Management System (NIMS); a unified framework for incident management within the government and private entities at all levels can work together effectively. The Area Plan is an operational plan as well as a reference document; it may be used for pre-emergency planning as well as a resource for emergency response (Sutter County, June 2016).

County of Yolo Emergency Operations Plan

The purpose of the County of Yolo Emergency Operations Plan (EOP) is to provide the basis for a coordinated response before, during and after a disaster incident affecting Yolo County.

The EOP is intended to: facilitate multi-jurisdictional and interagency coordination n emergency operations, particularly between local government, private sector, operational area, State response levels and appropriate Federal agencies; serve as a County plan, a reference document, and when possible, may be used for pre-emergency planning in addition to emergency operations; to be utilized in coordination with applicable local, State and Federal contingency plans; identify the

components of an Emergency Management Organization (EMO) and establish associated protocols required to effectively respond to, manage and recover from major emergencies and/or disasters; establish the operational concepts and procedures associated with field response to emergencies and EOC activities; establish the organizational framework of the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) within the County of Yolo (Yolo County, December 2013).

Emergency Operations Plan, Sacramento County Office of Emergency Services

The purpose of the County of Sacramento Emergency Operations Plan (EOP) is to provide the basis for a coordinated response before, during and after a disaster incident affecting the County of Sacramento.

The EOP is intended to: Facilitate multi-jurisdictional and interagency coordination in emergency operations, particularly between local government, private sector, operational area (geographic county boundary), and state response levels, and appropriate federal agencies; serve as a county plan, a reference document, and when possible, may be used for pre-emergency planning in addition to emergency operations; to be utilized in coordination with applicable local, state and federal contingency plans; identify the components of an Emergency Management Organization (EMO), and establish associated protocols required to effectively respond to, manage and recover from major emergencies and/or disasters; establish the operational concepts and procedures associated with field response to emergencies, and EOC activities; establish the organizational framework of the California Standardized Emergency Management System (SEMS), and the National Incident Management System (NIMS), within the County of Sacramento (Sacramento County, April 2017).

Local Emergency Planning Committee Hazardous Materials Emergency Plan's

There are six California Governor's Office of Emergency Services (CalOES) mutual aid regions in California that have the same boundaries as the Local Emergency Planning Committees (LEPCs). The LEPCs are designated as emergency planning districts to prepare Hazardous Materials Emergency Plans pursuant to the Superfund Amendments and Reauthorization Act (SARA), Title III (Emergency Planning and Community Right to Know) found in Title 42, United States Code §110003(a).

Region III, Comprehensive Regional Hazardous Materials Emergency Plan

LEPC Region III is comprised of the thirteen inland California counties of Butte, Colusa, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, and Yuba.

The Local Emergency Planning Committee for Region III has developed this Regional Hazardous Materials Emergency Plan. The information provided in the plan identifies the populated and environmentally sensitive areas at risk, the potential for a hazardous materials exposure from fixed facilities and along transportation routes (highways and rails), and other

sources including aircraft, pipelines, industry, agriculture, and illegitimate businesses within the LEPC III Region. (LEPC III, September 2015)

Region IV, Hazardous Materials Emergency Plan

LEPC Region IV is comprised of the eleven inland California counties of Amador, Alpine, Calaveras, El Dorado, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Tuolumne, and Yolo.

This regional Hazardous Materials Emergency Plan builds on the county Hazardous Materials Area Plans and facility Hazardous Materials Business Plans located in the region's counties. It includes the identity, location and emergency contacts for facilities that handle threshold quantities of extremely hazardous substances. It also contains chemical release response procedures, public protective action notification information, county government emergency coordinators and plans for exercising the Hazardous Materials Emergency Plan. (LEPC IV, 2011)

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) (CDFW, USCG, 2014).

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**
- **Figure F-2: State Water Resources Control Board, Division of Drinking Water District Offices Map**
- **ICP Facility Assessment Check Sheet**

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Table F-1: Local/Regional Asset Resources Table

Local/Regional Assets		
Resource	**Home Base/Owner**	**Contact Information/Comments**
Resonse Trailers (in addition to those granted by OSPR)		
Sorbent boom, pads	Shasta County Department of Public Works	Two trailers, call Shasta Area Safety Communications Agency to access resources, (530) 245-6500
Public Health emergency preparedness decontamination trailer	Glenn County	Glenn County Sheriff/Office of Emergency Services 543 W Oak Street, Willows, CA 95988 Office (530) 934-6441 After Hours Emergency (530) 934-6431
Response trailer (containment, diversion materials, PPE, decon stations)	Colusa County Sheriff/Office of Emergency Services	Colusa County Sheriff/Office of Emergency Services 929 Bridge Street Colusa, CA 95932 24hr Office Number (530) 458-0200
Water Supplies for Firefighting		
Lake Shasta		
Whiskeytown Lake		
Lake Oroville		
Sacramento River		
Folsom Lake		
Foaming Operations		
Two Foam Units	Butte County Fire Department	Emergency Command Center (ECC) (530) 538-6841

Air Monitoring Equipment		
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases	Shasta-Cascade Hazardous Materials Response Team (SCHMRT)	Contact Cal OES State Warning Center to request SCHMRT (800) 852-7550. All SCHMRT equipment is stored in one unit: HazMat 24 at Redding Fire Station 5 on Hartnell Ave. Alternate contact is SCHMRT Program Manager - CalFire (SHU) Battalion Chief, Andy Reiling (530) 623-4226
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases	Butte County Interagency Team	Emergency Command Center (ECC) (530) 538-6841
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases	Yuba City Fire	Yuba City Fire Department (530) 822-4686
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases, WMD, CBRN	Roseville Fire	Fire Marshal/CUPA Program Manager, Jason Rizzi (916) 774-5802 Placer County Dispatch Center (530) 886-5375
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases, WMD, CBRN	Sacramento City Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases, WMD, CBRN	Sacramento City Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693
Combustible gas, carbon monoxide, hydrogen sulfide, specialty gases, WMD, CBRN	Sac Metro Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693

Communication Equipment: Portable Radio/Mobile Repeaters		
Mobile command van with a JS 23412 gateway	Tehama County Sheriff/Office of Emergency Services	Tehama County Sheriff/Office of Emergency Services 22840 Antelope Boulevard Red Bluff, CA 96080
Raytheon JPS ACU-T gateway with Yamaha Rhino (for mountaintop deployments)	Colusa County Sheriff/Office of Emergency Services	Colusa County Sheriff/Office of Emergency Services 929 Bridge Street Colusa, CA 95932 24hr Office Number (530) 458-0202
Mobile command post satellite phone	Sutter County Sheriff's Department	Sutter County Sheriff 1077 Civic Center Blvd Yuba City, CA 95993 (530) 822-7307
Unmanned Aerial System Equipment and Pilots		
(3) DJI Mavic Pro 2 drones (2) Mavic 3 drones (3) licensed pilots	Patriot Environmental Services **Note:** Assets would be coming from southern California, travel time would be needed.	Kevin Pawson, Senior PM (562) 244-2392 kpawson@patriotenvironmental.com Marc Ruffner, Director (562) 244-2265 mruffner@patriotenvironmental.com
(1) DJI Enterprise drone (1) licensed pilot	MSRC	Jeremy Hurd T&IS Remote Surveillance Manager Pacific Region, Everett, WA Office (562) 572-5787

HazMat Teams		
HazMat Team - Type 2	Shasta-Cascade Hazardous Materials Response Team (SCHMRT)- includes Lassen, Modoc, Siskiyou, Shasta, Tehama, and Trinity Counties	Contact Cal OES State Warning Center to request SCHMRT (800) 852-7550. All SCHMRT equipment is stored in one unit: HazMat 24 at Redding Fire Station 5 on Hartnell Ave. Alternate contact is SCHMRT Program Manager - CalFire (SHU) Battalion Chief, Andy Reiling (530) 623-4226
HazMat Team - Type 2	Butte County Interagency Team	Emergency Command Center (ECC) (530) 538-6841
HazMat Team - Type 2	Yuba City Fire	Yuba City Fire Department (530) 822-4802
HazMat Team - Type 1	Roseville Fire	Fire Marshal/CUPA Program Manager Jason Rizzi (916) 774-5802 Placer County Dispatch Center (530) 886-5375
HazMat Team - Type 1	Sacramento City Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693
HazMat Team - Type 1	Sacramento City Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693
HazMat Team - Type 1	Sac Metro Fire	Sacramento Fire Department, HazMat & Rescue (916) 808-1693
Multi-Agency Emergency Response Team	Yolo County Environmental Health Department, Hazardous Materials Unit	Yolo County OES Dispatch (530) 666-8920

Swift Water Rescue Teams		
Shasta County Specialty Teams- Dive Team	Shasta County Sheriff's Office 300 Park Marina Circle Redding, CA	On-Duty Deputy (530) 245-6540 In an emergency call 911
Tehama County Sheriff's Search and Rescue Team (Swift Water/Dive Teams)	Tehama County Sheriff's Office	Tehama County Sheriff's Office/Dispatch (530) 529-7900 Ext. 1 for Dispatch
Butte County Technical Rescue Team (Swift Water Rescue)	Butte County Fire Department	Emergency Command Center (ECC) (530) 538-6841
Glenn County Search and Rescue- Volunteer Swift Water Rescue Team	Glenn County Sheriff's Office 543 West Oak Street Willows, CA 95988	Phone (530) 934-6441 In an emergency call 911
Sutter County Dive Recovery and Swift Water Rescue Teams	Sutter County Sheriff 1077 Civic Center Blvd. Yuba City, CA 95993	Dispatch (530) 822-7307
Yuba City Fire Advanced Technical Rescue Team	Yuba City Fire Department 824 Clark Avenue Yuba City, California 95991	Phone (530) 822-4686 In an emergency call 911
Sacramento Drowning Accident Rescue Team (Swift Water Rescue and Recovery, etc.)	Non-profit volunteer organization	Sacramento Regional Radio Communications System (SRRCS) (916) 875-6900

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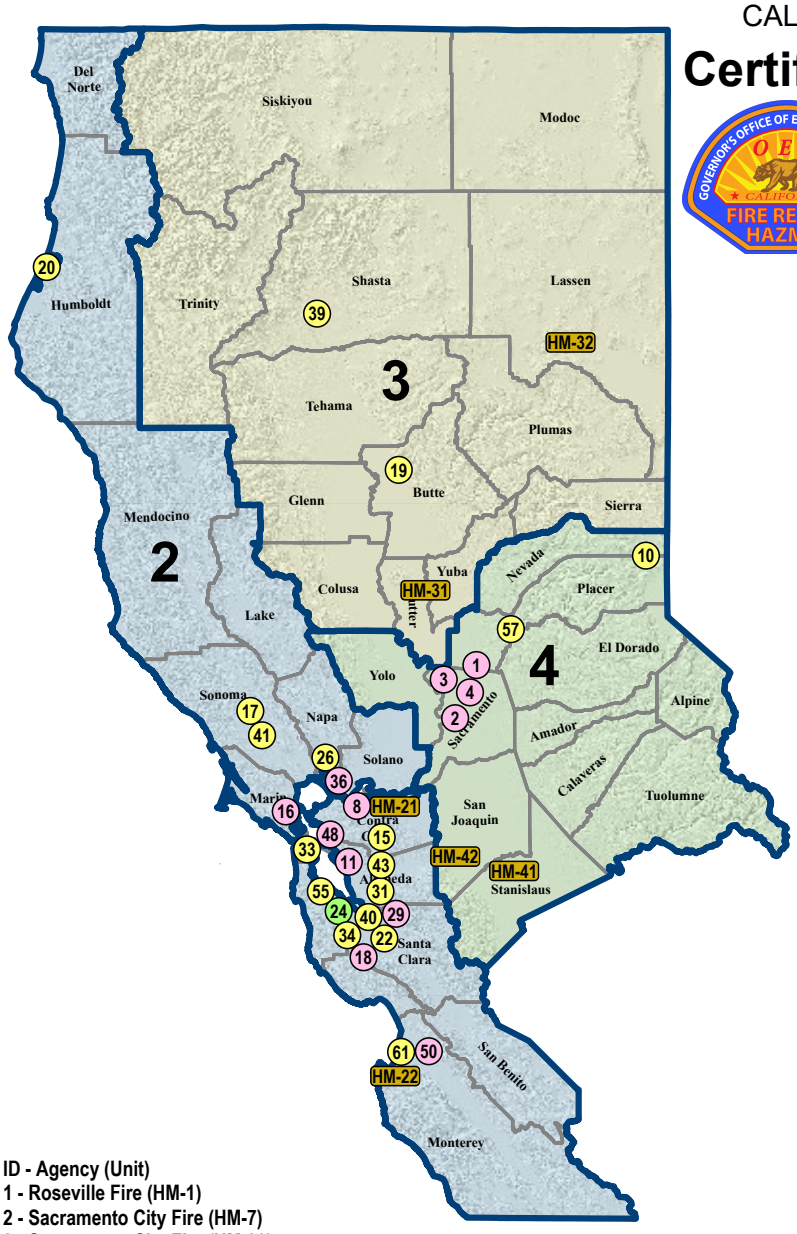
Figure F-1: Cal OES NorCal Certified HazMat Material Teams Map

State of California
CALIFORNIA OFFICE OF EMERGENCY SERVICES

Certified Hazardous Material Teams

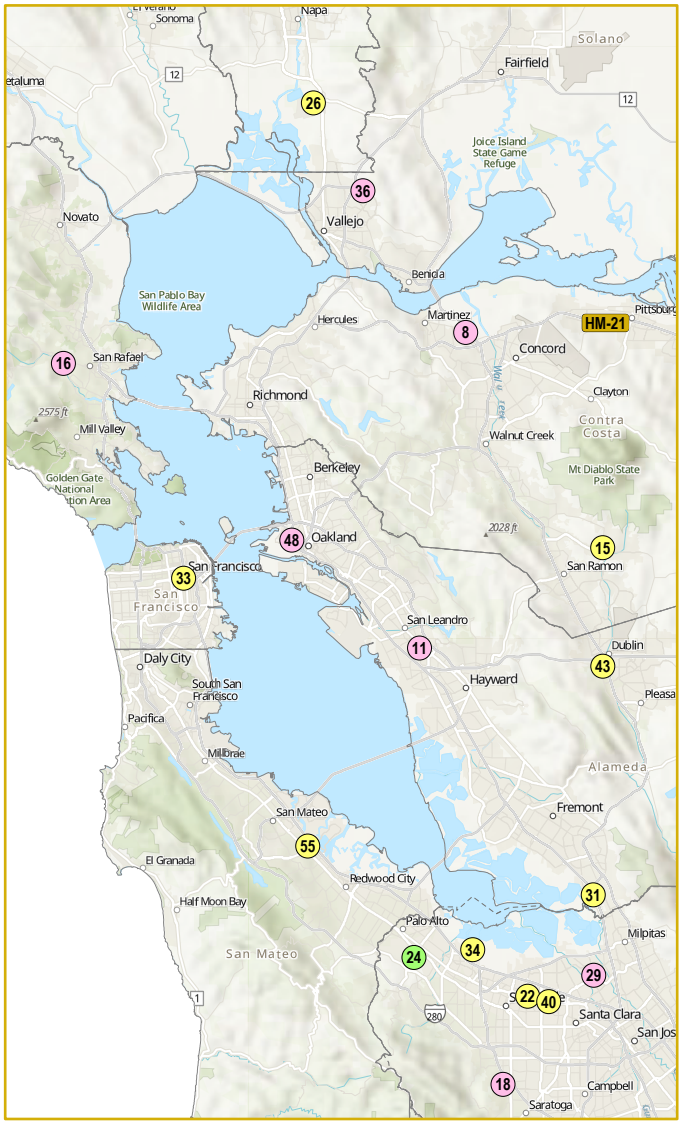
By Type as of April, 2018



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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N W E S

May 3, 2018
Produced by: Cal OES GIS
Source: Cal OES Hazardous Materials Div
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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) – 11/8/18									
	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-6	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-1	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	HM-7	12/01/2016	95823
	3	3	3	Sacramento City Fire	XSA-SCR	4	HM-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	5/10/2018	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-73	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
	64	65	51	Riverside County Fire (Old HM-81)	XRI-RRU	6	HM-34	7/19/2018	92956
				TYPE 1 TOTAL:			37		
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-61	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-55	3/08/2017	94043
	35	32	29	Napa Interagency Hazardous Incident Team	XNA-NPA	2	HM-27	10/25/2018	94558
	73	75	64	Presidio of Monterey	XMY-POM	2	H2MT61	9/20/2017	93955
	44	39	35	San Francisco Fire	XSF-SFR	2	HM-1	10/02/2018	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-99	5/16/2018	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	7/20/2012	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
	65	64	53	Riverside County Fire (Old HM-34)	XRI-RRU	6	HM-234	7/19/2018	92596
				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			62		

THIS CHART IS ALWAYS AVAILABLE ON OUR WEB SITE:
http://www.caloes.ca.gov/FireRescueSite/Pages/Team-Typing-Information.aspx

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Figure F-2: State Water Resources Control Board, Division of Drinking Water District Offices Map

CALIFORNIA Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER DISTRICT OFFICES

Headquarters Office • (916) 449-5577 • 1001 I St, 24th Floor • Sacramento CA 95814

Northern California FOB
Dan Newton (Sacramento)
- Section I - Kim Hanagan (Sacramento)
- Section II -Stefan Cajina (Richmond)

Southern California FOB
Kurt Souza - (Carpinteria)
- Section III - Tricia Wathen (Fresno)
- Section IV - Jeff O'Keefe (Glendale)
- Section V - Sean McCarthy (San Bernardino)

District 01 - Klamath
BARRY SUTTER
District 02 - Lassen
STEVE WATSON
District 21 - Valley
REESE CRENSHAW
364 Knollcrest Dr., Ste 101
Redding CA 96002
(530) 224-4800

District 03 - Mendocino
ZACH ROUNDS
District 18 - Sonoma
VACANT
District 25 - Marin
ELENA JOY M. PELEN
50 D St., Ste 200
Santa Rosa CA 95404
(707) 576-2145

District 04 - San Francisco
MARCO PACHECO
District 17 - Santa Clara
ERIC LACY
850 Marina Bay Parkway
Bldg. P, Second Floor
Richmond CA 94804-6403
(510) 620-3474

District 05 - Monterey
JONATHAN WEININGER
1 Lower Ragsdale Dr.
Bldg.1, Ste 120
Monterey CA 93940
(831) 655-6939

District 06 - Santa Barbara
JEFF DENSMORE
1180 Eugenia Place, Ste 200
Carpinteria, CA 93013
(805) 566-1326

District 07 - Hollywood
DMITRIY GINZBURG
District 15 - Metropolitan
CHI P. DIEP
District 16 - Central
SUTIDA BERGQUIST
District 22 - Angeles
SHU-FANG ORR
500 North Central Ave.
Ste. 500, Glendale, CA 91203
(818) 551-2004

District 08 - Santa Ana
OLIVER PACIFICO
2 MacArthur Pl, Suite 150
Santa Ana, CA 92707
(714) 558-4410

District 13 - San Bernardino
WEI CHANG
464 W. 4th St., Rm 437
San Bernardino, CA 92401
(909) 383-4328

District 14 - San Diego
SEAN STERCHI
District 20 - Riverside
CHUN HUANG
District 26 - Imperial
ASHLEY DUMMER
1350 Front St., Rm 2050
San Diego CA 92101
(619) 525-4159

District 09 - Sacramento
ALI REZVANI
1001 I St, 19th Floor
Sacramento, CA 95814
(916) 449-5681

District 10 - Stockton
BHUPINDER SAHOTA
31 E. Channel St., Rm 270
Stockton, CA 95202
(209) 948-7696

District 11 - Merced
VACANT
District 12 - Visalia
ADAM T. FORBES
District 23 - Fresno
JOSE ROBLEDO
District 24 - Tulare
KRISTIN WILLET
265 West Bullard Ave, Ste 101
Fresno, CA 93704
(559) 447-3300

District 19 - Tehachapi
JESSE DHALIWAL
4925 Commerce Dr . Ste 120
Bakersfield, CA 93309
(661) 335-7315

Updated July 2022

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ICP Facility Assessment Checksheet	
Facility Name:	**Facility Address/phone number:**
Rental/lease cost:	**Maximum Occupancy:**
General Impressions:	
Limitations/Constraints:	

Proximity to services	
Type/Name	Approximate Distances
Interstates-	
State Routes-	
Restaurants-	
Hotels-	
Airport-	
Emergency Services-	
Copy Centers (i.e. Kinko's)-	
Other-	

Cell phone coverage	
Nearest cell tower:	
Signal strength within the ICP (on your cell phone/list provider):	

Parking	**Site Security**
Adequate?	Public access controls:
Secure?	
Number of spaces:	On-site security:
Comments:	Security needs/comments:

ICP physical characteristics

Facility floor plan available? (Attach to checksheet/scan to ICP e-folder)				
Photo documentation? (Photograph each room and attach to checksheet/save to ICP e-folder)				
Number of rooms available:				
Square foot per room				
	Main space:	Meeting room:	Multi-purpose room:	Other:
Wall space per room				
	Main space:	Meeting room:	Multi-purpose room:	Other:
Tables				
Chairs				
Telephone outlets				
Telephones				
Power outlets				
Internet outlets				
Can the facility accommodate a JIC?				

Overall Impressions (comment on placement of Command/General Staff work locations/spaces, placement of Situation and Resource unit displays, capability/capacity of location, and other impressions):

Appendix 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

MSL Mean Seal Level

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

THPO Tribal Historic Preservation Officer

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

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