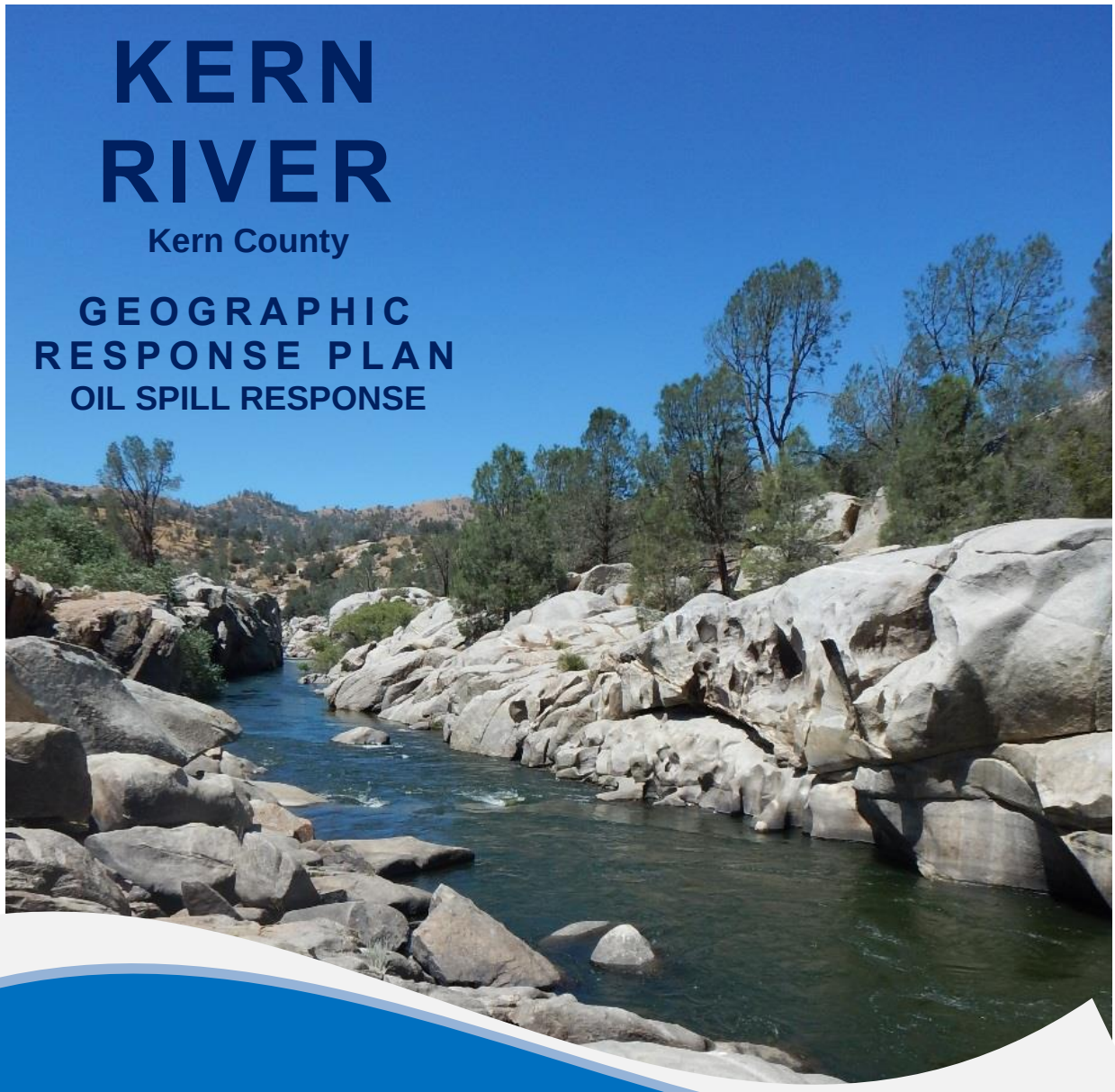
KERN RIVER

Kern County

GEOGRAPHIC RESPONSE PLAN

OIL SPILL RESPONSE



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

OFFICE OF SPILL PREVENTION AND RESPONSE

JUNE 2019

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Spill Response Contact Sheet

*** Staffed 24-Hours/Day**

Immediate Emergency Notifications for Oil Spills Call Upon Discovery of Spill	
Local Emergency Response Agencies	**911***
State Notification - California Office of Emergency Services, State Warning Center (State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES immediately) †See Footnote on oil production 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): **Kern County Environmental Health** **City of Bakersfield Fire Department**	**(661) 549-9927*** **(661) 549-9927*** **(Primary) (661) 549-9885*** **(Secondary)**
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 Facilties	
Union Pacific Railroad Emergency	**(888) UPRRCOP (877-7267)***
BNSF Railroad Emergency	**(800) 832-5452***
San Joaquin Valley Railroad Emergency	**(800) 800-3490***
Amtrak	**(800) 331-0008***
Shell Pipeline	**(832) 337-8404***
Kinder Morgan Pipeline	**(714) 560-4411***
Chevron Pipeline	**(800) 762-3404***
Chevron Kern River, 24-Hour Emergency	**(661) 392-2229***
Plains All American Pipeline	**(800) 708-5071***
Aera Energy LLC	**(800) 247-5977***
Crimson Pipeline	**(866) 351-7473***
Crestwood West Coast LLC	**(866) 234-7473**
California Resources Corporation	**(661) 763-6363***
ExxonMobil	**(800) 537-5200***

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/(661) 827-5400***
California Department of Water Resources (State Water Project Emergencies)	**(916) 574-2714***
City of Bakersfield Water Resources	**(661) 326-3716***

* Staffed 24-Hours/Day

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) UCD-OWCN (877) 823-6926*

Local Fire and Law Enforcement	
Bakersfield City Police Department	(661) 327-7111
Kern County Sheriff's Office (Dispatch)	(661) 861-3110*
City of Bakersfield Fire Department	911*
Kern County Fire Department Dispatch	(661) 861-2521*
	(661) 324-6551*
Kern County Environmental Health	(661) 549-9927*

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

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

Local Government (City and County)	
Kern County Emergency Operations Center (Kern County Fire Department)	(661) 873-2602
Kern County Environmental Health	(661) 549-9927*

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

Utilities, Dams, Hydroelectric, Infrastructure (non-emergency)	
City of Bakersfield Water Resources	(661) 326-3716*
Olcese Water District (Rio Bravo Hydroelectric Project)	(661) 872-4487

Water Districts, Water Intakes and County Water Agencies	
City of Bakersfield Water Resources	(661) 326-3716
California Water Service Company	(661) 343-6705
Buena Vista Water Storage District	(661) 204-1379
Kern Water Bank Authority	(661) 440-4668

Other	
Panorama Vista Preserve Preserve Manager	(661) 872-3569 (661) 319-5805
Kern County Parks and Recreation	
Primary: Carl Brewer	(661) 342-8339
Secondary: Isaac Preston	(661) 432-6550
Secondary: Matt Howard	(661) 345-7175
City of Bakersfield Recreation and Parks	(661) 326-3866

Public Works and Traffic Control	
Kern County Sheriff's Office	(661) 861-3110
Bakersfield Public Works (storm drains, etc.)	(661) 326-3111

*** Staffed 24-Hours/Day**

Additional Contact Information as Appropriate; If In Doubt, Notify

Federal Agencies	
U. S. Department of Agriculture, Forest Service - Forest Spill Coordinator, Belinda Walker, Asst. Regional Environmental Engineer	Cell: (909) 229-5201
U.S. Army Corps of Engineers (Emergency Management)	(916) 557-6911
Bureau Of Reclamation (South-Central CA Area Office)	(559) 262-0300
Bureau of Land Management	(661) 391-6000
U.S. Fish & Wildlife Service	
USFWS Field Response Coordinator, Toby McBride	(916) 414-6603 c: (916) 798-7904
USFWS Field Response Coordinator, John Henderson	(916) 930-5676 c: (916) 799-0588
U.S. Department of the Interior, Office of Environmental Policy & Compliance - Regional Environmental Officer, Janet Whitlock	(916) 978-5677 c: (415) 420-0524
NOAA Scientific Support Coordinator, Jordan Stout	(206) 321-3320*
FEMA Region IX, 24-Hour Duty Officer	(510) 627-7251*
Tribal and Historic Contacts	
Native American Heritage Commission (NAHC)	(916) 373-3710
Katy Sanchez	(916) 373-3710
Steven Quinn	(916) 373-3710
Celeste Thomson, California State University, Bakersfield, Southern San Joaquin Valley Information Center	(661) 654-2289

**** Individual tribal contacts can be found on page XXX**

State Agencies	
Calif. Environmental Protection Agency: Greg Vlasek, Assistant Secretary for CUPA's and Emergency Response	(916) 322-7188
CAL FIRE - Office of the State Fire Marshal, Pipeline Safety	
Sacramento	(916) 263-6300
Lakewood/Southern California	(562) 497-0350
Bakersfield	(661) 665-0107
State Water Resources Control Board (District 12)	(559) 447-3300
Regional Water Quality Control Board	(559) 445-5116
Calif. Department of Water Resources, State Water Project Operations Center	(916) 574-2714*
Division of Oil, Gas & Geothermal Resources	(661) 322-4031
CAL FIRE - Dept. of Forestry and Fire Protection	
Southern Region Operations, Fresno Office	(559) 222-3714
Calif. Dept. of Transportation District 6 (Fresno/Bakersfield)	(559) 444-2518
Calif. Dept. of Parks and Recreation (Central Valley District)	(209) 536-5930
Calif. Dept. Toxic Substance Control, Emergency Response Duty Officer	(800) 260-3972 (800) 852-7550*
Calif. Dept. of Public Health	(916) 328-3605

State and Federally Managed Lands	
Tule Elk State Natural Reserve	(661) 764-6881
CA Department of Fish and Wildlife Lands Program	(916) 373-6613

*** Staffed 24-Hours/Day**

Emergency Response Resources	
Hall Ambulance Service	**(661) 322-8741***
Mercy Hospital Southwest	**(661) 663-6000***
Kern Medical Center	**(661) 326-2000***
Bakersfield Memorial Hospital	**(661) 472-7414***
Meadows Field Airport	**(661) 391-1800**

CHEMTREC 24-Hour Hotline	**(800) 424-9300***
California Poison Control System 24-Hour Hotline	**(800) 222-1222***

CHEMTREC provides emergency information for chemical releases and fire control measures, assistance with chemical identification, and notification of manufacturer and/or shipper**.**
Poison Control Centers provide poison/exposure information to emergency personnel and the public and has regional hospital capabilities for exposed victims. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego.

†Cal OES State Warning Center
State Law requires that ANY discharge or threatened discharge of oil into STATE WATERS must be reported to Cal OES [California Government Code (GC) §8670.25.5; California Water Code (WC) §13272, California State Oil Spill Contingency Plan]. If the release of oil is on land and is not discharged or threatening to discharge into State Waters; and (a) does not cause harm or threaten to cause harm to the public health and safety, the environment, or property; AND (b) is under 42 gallons, then no notification to the Cal OES/Warning Center is required. Field Rule: Reporting Criteria - Within applicable fields or areas, operators must report: i) All spills of five (5) barrels of crude oil, or more, unless the spill is within containment and is less than ten (10) barrels. All spills of ten (10) barrels of crude oil, or more that occur within containment as defined in Section 1773 of Title 14 of the California Code of Regulations (CCR) and is identified in the operator's spill prevention contingency plan, as required in Section 1722(b) of the 14 CCR. This Field Rule applies to any oil or gas field located within Kern, Kings, Tulare, Fresno, Madera, and Merced Counties, and the portion of Midway-Sunset field located within San Luis Obispo County. However, the Temblor Hills field in Kern County is excluded due to its location outside the San Joaquin Valley. The Field Rule is applicable only within existing oil and gas fields, as defined by DOGGR. (for oil production well spills only)

‡National Response Center
All spills of oil or hazardous substance into navigable waters as defined by the Clean Water Act (CWA) and all spills of a reportable quantity of hazardous substances (40 CFR Part 302) must be immediately reported by the spiller to the National Response Center (NRC). The web address for reportable quantities under CERCLA can be found here: https://www.epa.gov/emergency-response/when-are-you-required-report-oil-spill-and-hazardous-substance-release. The NRC will contact appropriate local US Coast Guard (USCG) or Environmental Protection Agency (EPA) offices. Notifying state offices does not relieve the spiller from federal requirements to notify the NRC nor vice versa.

Contingency Plan holders in the State of California must begin notification procedures within 30 minutes of learning of a spill and must complete notifications to CalOES, NRC, QI, OSRO, SMT, and if there is a threat to wildlife, OWCN, within 2 hours from the initiation of making notifications.

Before you print this document:

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

The following pages are provided in "landscape" orientation, 8.5 x 11:

- Chapter 1, Figure 1-2, pages 5-6
- Chapter 4, Table 4-1 on pages 227 – 234

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

- Chapter 3, Figure 3-1 pages 23-24
- Chapter 3, Figure 3-2, pages 25-26
- Chapter 3, Figure 3-3, pages 27-28
- Chapter 3, Table 3-1, pages 31-44
- Chapter 3, Figure 3-4, pages 47-48
- Chapter 3, Figure 3-5, pages 77-78
- Chapter 3, Figure 3-6, pages 113-114
- Chapter 3, Figure 3-7, pages 151-152
- Chapter 3, Figure 3-8, pages 195-196
- Chapter 3, Figure 3-9, pages 209-210

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

- Appendix F, Table F-2, pages 263-264

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

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Kern River
Geographic Response Plan

Purpose and Use of this Plan

This Geographic Response Plan (GRP) has been developed for inland waters of California by the California Department of Fish and Wildlife (CDFW), Office of Spill Prevention and Response (OSPR). This GRP includes response strategies, response methods, and shoreline countermeasures to be used by spill response personnel to rapidly and efficiently address releases or threatened oil spill releases to the Kern 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 any impacts that oil may have on the environment as well as any sensitive resources in the area.

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

After a spill occurs, efforts to control and contain the spill at or near the source should be a top priority. Beyond those efforts, the appropriate booming, damming and notification strategies provided in Chapter 3 of this GRP should be implemented as soon as possible, unless overflight information, spill trajectory models, or circumstances unique to a particular spill situation dictate otherwise. From an operational perspective, this GRP offers guidance to responders during the initial phases of an oil spill by:

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

OSPR is responsible for long-term maintenance of this GRP; it will be updated and maintained periodically to ensure the information contained within remains current and relevant. The first maintenance cycle will be at Year 3 after its original release, and thereafter, every 5 years. Contact information will be updated on an annual basis and provided as an addendum.

Purpose

1. This GRP establishes spill response guidance for oil spill incidents occurring within the Kern River area from where the river exits the Kern River Canyon and continues through the terminus of the river where it meets the California Aqueduct, west of Interstate 5 near Tupman; all within Kern County and Local Emergency Planning Committee (LEPC) Region V.

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

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

Response Strategy Selection

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

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

Guiding Principles for GRPs

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

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

3. Environmental conditions (wind, currents, and tides), together with the physical limitations of existing spill response technology, may preclude the effective protection of some areas.

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

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

Control and Containment of an Oil Spill at the Source is a Higher Priority than the Implementation of GRP Response Strategies

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

Resources-At-Risk

Chapter 4 of this GRP outlines information on the environmental, economic, and tribal, cultural and historic resources-at-risk in the area that could be injured or damaged if impacted by oil, and key contacts for notification. Chapter 4 also provides information on oiled wildlife, wildlife avoidance measures, and the Wildlife Response Plan developed by OSPR.

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

Kern River Geographic Response Plan

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Chapter 1, Introduction

Chapter 2, Emergency Management, Incident Objectives, and Response Considerations

Chapter 3, Response Site Strategies

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Kern 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 a portion of the Kern River within the limits of Kern County (Figure 1-1). The upper extent of the GRP boundary begins where the river exits the Kern River Canyon (Figure 1-2). The lower extent terminates at the California Aqueduct, west side of Interstate 5 near Tupman; this area of the river runs into channel gates and rarely drains beyond this point. The defined boundary encompasses an area of approximately 37 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 Kern River GRP, this includes emergency plans for Kern County, LEPC Region 5 Hazardous Materials Emergency Plan, Chevron North America Exploration & Production Tactical Oil Spill Response Plan for the Kern River, and the State Oil Spill Contingency Plan.

1.1 Authority

State Government

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

Federal Government

The U.S. Environmental Protection Agency (USEPA) shall provide a Federal On-Scene Coordinator (FOSC) for discharges or releases into or threatening the inland zone. The term inland zone, defined as the environment inland of the coastal zone, delineates an area of federal responsibility for response action. The U.S. Coast Guard (USCG) shall provide an FOSC for oil discharges within or threatening the coastal zone. Precise boundaries are determined by USEPA/USCG agreements and identified in federal regional contingency plans. The boundary in California typically follows Highway 1 and includes the San Francisco Bay and Sacramento-San Joaquin Delta, as part of the coastal zone. National Contingency Plan (NCP) – 40 CFR §300.120.

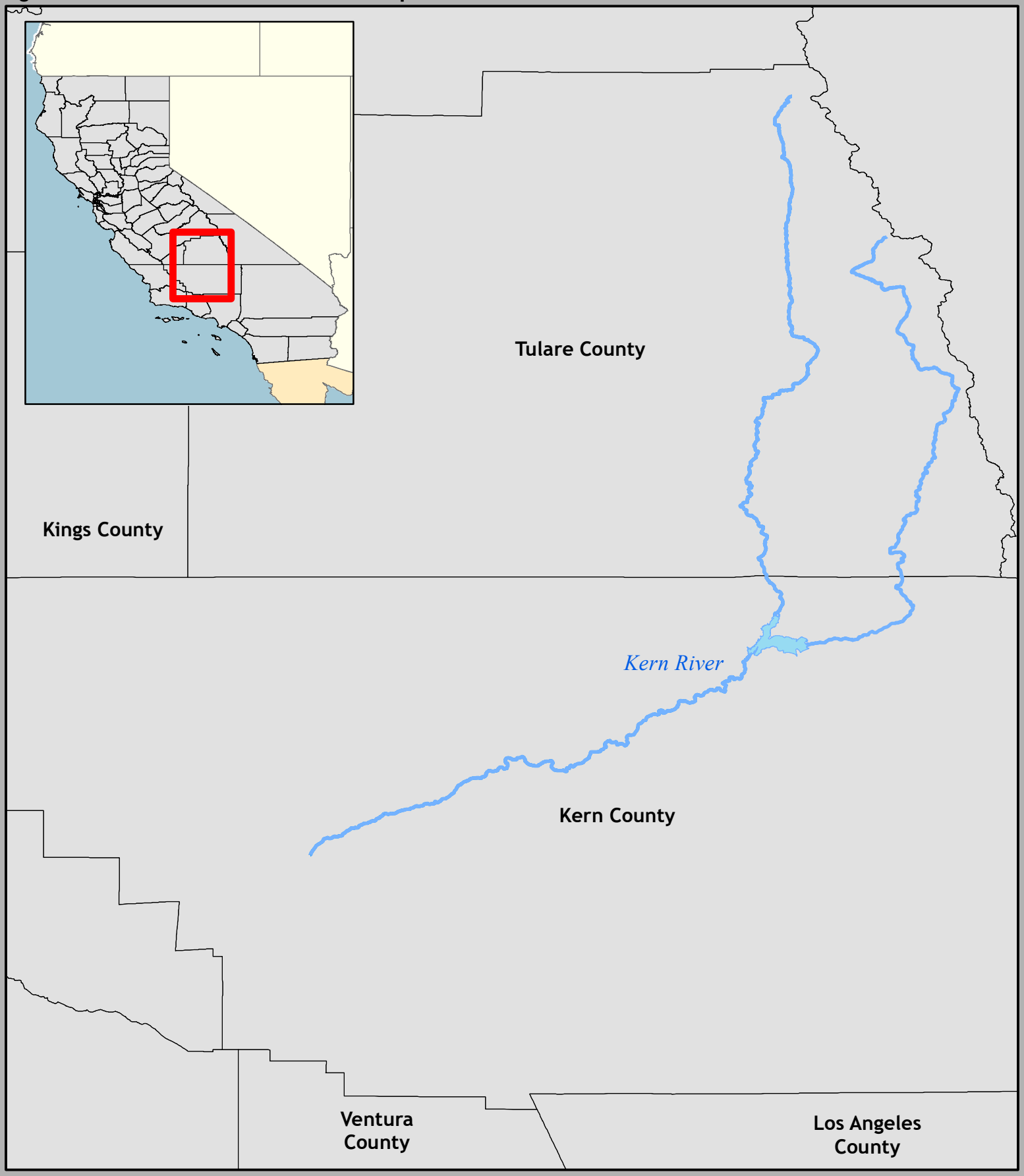
Responsible Party

The Responsible Party (RP) has the primary responsibility to conduct spill cleanup following the procedures listed in their facility (i.e. fixed facility, pipeline, railroad) response plan. The basic framework for the response management structure is a system (e.g., NIMS Incident Command System) that brings together the functions of the federal government, the state government, and the responsible party to achieve an effective and efficient response, where the FOSC maintains authority. The RP will participate in the UC alongside the FOSC and SOSC [and Local Government On-Scene Coordinator (LGOSC) if requested]. National Contingency Plan - 40 CFR §300.105(d), (e)(1) Figure 1a, and §300.135(d).

Local Government

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

Figure 1-1: Kern 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: S. Paine
Date Created: 05/28/2019

Kern River Location

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0 15 30 Km

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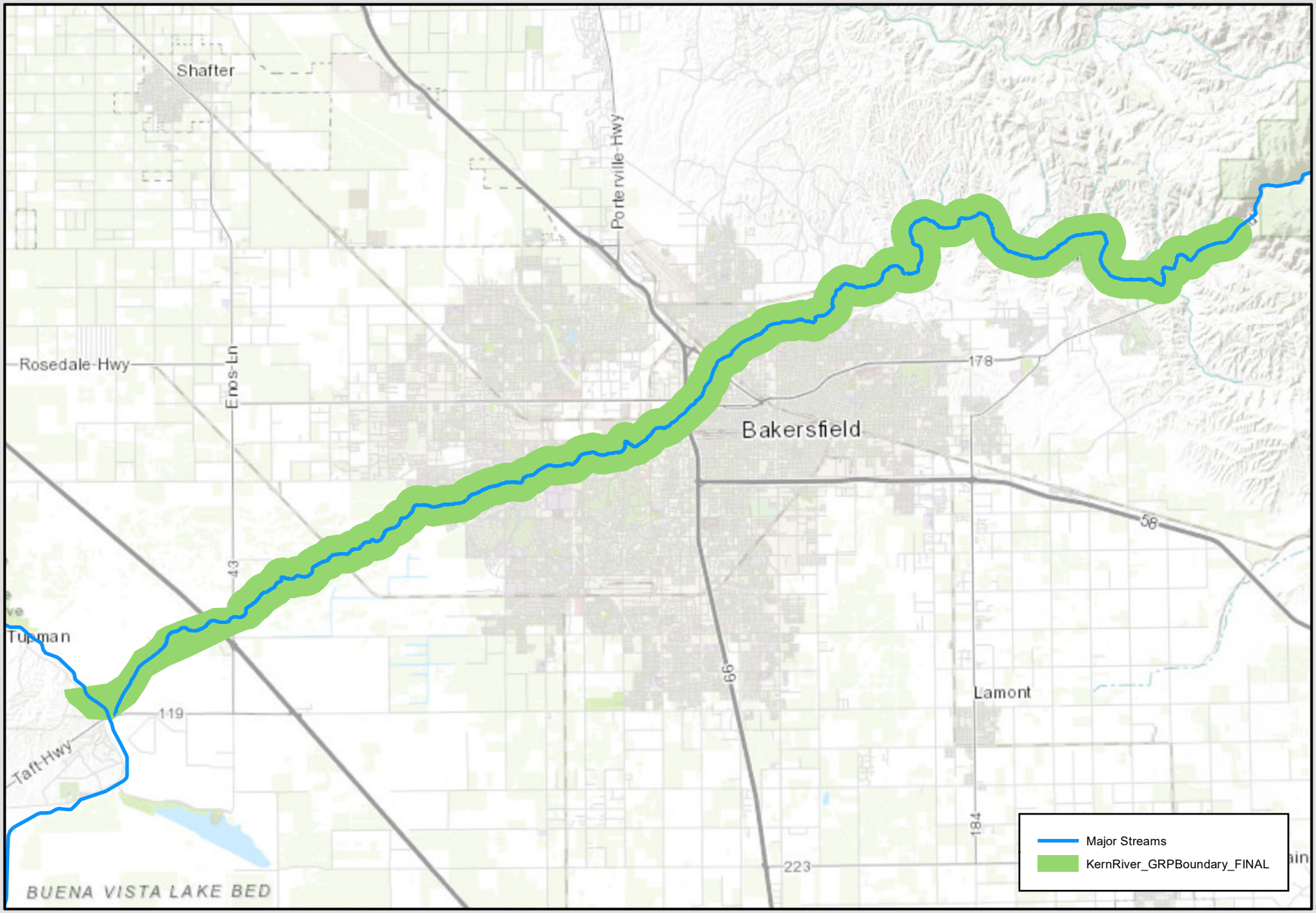
Figure 1-2: Kern River GRP Plan Area Map



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

Data Source: CDFW-OSPR, NHD (USGS). DOC
Requestor: OSPR
Author: S. Paine
Date Created: 05/28/2019

Kern River
Geographic Response Plan Area

0 1 2 4 6 8 Miles
0 5 10 Kilometers

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Kern 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 (CUPA) 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 until relieved by a qualified representative of the responsible agency. The primary responsibility of this first responder is to protect the health and safety of the public (including potential responders) at the scene.

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

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

Incident Objectives

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

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

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

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

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

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

2.1 Safety

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

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

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

Responder Safety

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

- Establish an ICP and lines of communication.
- Continually reassess the situation and modify the response accordingly.
- Consider your own safety first, then the safety of people in the immediate area. Rescue attempts and protecting the environment or property must be weighed against you becoming part of the problem.

Area Assessment

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

Site Safety

- Secure the scene:
    - Isolate the area and protect yourself and others.
- Use the Department of Transportation (DOT) Emergency Response Guidebook (ERG), ERG App or the Wireless Information System for Emergency Responders (WISER) App recommendations for establishing safe distances and safety information. See the GRP CM, Section 5, for Web Links to Information Resources.
- Fire? – Consider a blast radius of 0.6 miles (1 km).
- Gather intelligence from a safe distance before conducting an on-site assessment – understand the problem:
    - Train consist/waybill.
    - Observe placards and types of containers/railcars.
    - Use the appropriate monitoring devices to detect hazardous materials.
    - One product or multiple commodities. If multiple materials are involved, what is the potential outcome of their commingling, will there be reactivity?
- CHEMTREC – Chemical Transportation Emergency Center provides two types of assistance during a hazardous material incident:
    - Relays information in regard to the specific chemical, and
    - Will contact the chemical manufacturer or other expert for additional information or on-site assistance.
    - 24-Hour Hotline: (800) 424-9300.
- If the substance cannot be identified, monitoring and sampling may be needed to determine the substances' physical and chemical properties, concentrations, and its degree of hazard.
- To minimize danger to personnel, this function should be performed by persons who are properly trained and are using the appropriate personal protective equipment (PPE) such as a trained hazardous materials response team following established protocols.

- Position vehicle away from the incident and use binoculars.
- Establish a dedicated Safety Officer.
- Develop an initial Site Safety Plan.
- Verify all information/intelligence.
- Consider all modes of operation:
    - Offensive
    - Defensive
    - Non-Intervention
- Eliminate any ignition sources.
- Consider current and expected weather.
- Consider worst-case scenario.
- Prepare for first responder rescue.
- Establish an accountability system for incident personnel.

Public Safety

- Identify threats to health and safety.
- Keep unauthorized persons away – initiate site access control.
- As an immediate precautionary measure, isolate spill or leak in all directions as recommended by the DOT ERG.
- Establish a Public Information Officer/Joint Information Center.
- Establish a Law Enforcement Branch:
    - Evacuation
        - Establish evacuation groups/divisions as needed.
        - Identify residents, businesses, public buildings and other areas from which occupants and property may need to be evacuated.
        - Locate and identify special needs individuals that require extraordinary care.
        - Provide security for evacuated areas.
    - Shelter-In-Place
        - Create a temporary safe refuge area by using the residence or business place.
        - Ensure, through community outreach, that the public understands what shelter in place means.
        - Limit travel in the affected area, when the process of evacuation puts the public in harm's way.
        - Provide clear information and instruction on the shelter in place process.
- Resource Notifications:
    - Identify resources to assist with shelter in place operations:
        - Local Office of Emergency Services
        - Public health services/offices
        - Local hospitals and disaster control facilities
        - Public Information Officer
        - Utilize mass notification systems:

- Reverse 911
- Television, radio
- Websites, social media
- Local sirens

- Poison Control Centers:
    - Provide poison/exposure information to emergency personnel and the public. For exposed victims, can provide regional hospital capabilities. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego. 24-Hour Hotline: (800) 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 Kern River through the City of Bakersfield Water Resources 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 Kern River based on average velocity from the U.S. Geological Survey (USGS) National Hydrology Dataset is 4.544 feet per second (2.692 knots).

Current river stage for the Kern River is available online from the City of Bakersfield Water Resources at http://kern.icontrolservices.com/BCA_Kern_River_Site1_24hrs.php; Site 1 is located near Hart Park, downstream of Lake Ming and Alternative Site 2 is located 1.5 miles SW of Ming Ave. and Allen Road.

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

2.4 Regional Response Trailer Locations

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

Table 2-1: Regional Response Trailer Locations

Contact Name	Equipment Location	Boom	Phone Number (after hours)
Port San Luis Harbor District (San Luis Obispo County)	3950 Avila Beach Dr. *Trailer is located at Harbor Terrace, Avila Beach, CA	6 x 12, 1000-feet	Harbor Office (805) 595-5400 Chris Munson (805) 595-5431
City of Santa Barbara, Waterfront Dept. and Santa Barbara County Fire	132-A Harbor Way, Santa Barbara, Ca	6 x 12, 1000-feet	(805) 564-5530 (24/7) Daron Mafi, Fire Capt. (805) 319-0189
Ventura Port District	1603 Anchors Way Drive, Ventura, Ca	6 x 6, 1000-feet	(805) 642-8618 (24/7) (805) 947-7900

2.5 Local/Regional Asset Resources

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

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

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

2.6 Unmanned Aircraft System

CDFW has an Unmanned Aircraft System (UAS) Program that manages the use of UAS within the Department. OSPR is currently working to adapt this technology to assist with oil spill response. Opportunities exist to utilize UAS with situation data collection and SCAT whereas constraints for UAS may include restricted airspace near major airports and potential disturbance to biological resources. Additionally, many industry partners and their contractors and/or consultants are testing and utilizing UAS capabilities for spill response.

2.7 Incident Command Post Locations

During initial response, the ICP will likely be near the incident, possibly working from a first responder vehicle. As the incident progresses and responding staff continue to be deployed, the need for an off-site ICP providing space, electricity, and additional amenities and resources becomes apparent.

Table 2-2 provides a list of locations near the Kern 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	Contact Name and Address	Phone Number
Kern County EOC	Bakersfield, CA	(661) 330-0195
Double Tree by Hilton	3100 Camino Del Rio Ct, Bakersfield, CA	(661) 323-7111
Four Points by Sheraton	5101 California Avenue, Bakersfield, CA	(661) 325-9700
Silver Creek Community Center	7011 Harris Road, Bakersfield, CA	(661) 665-8033

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 water intakes along the Kern River; a full list of intakes and respective agencies, along with contact information, can be found in Chapter 4, Resources-At-Risk, Table 4-2: Economic Resources. The agencies include Rio Bravo Ranch, Kern County Parks and Recreation, CA Water Service, Panorama Vista Preserve, and City of Bakersfield Water Resources. Notification of large spills to water agencies tends to be inconsistent in this area and for small spills, notification has occurred after-the-fact. Therefore, making notification to the agencies listed in Table 4-2 is a fundamental step in the early hours of a spill. The City of Bakersfield Water Resources is available for notification 24/7, 365 days a year at 661-326-3716.

Canal Flood and CA Aqueduct Gates

Table 2-3 below lists the contact information for the Canal Flood Gate and CA Aqueduct Gate which are located at the terminus of the Kern River, west of I-5 near the city of Tupman. Water flowing through the canal flood gate is utilized for the Tule Elk Reserve (State Natural Reserve) to the north as well as Lake Webb and Buena Vista Aquatic Recreational Area (Lake Evans) to the south. The California Aqueduct is the major source for carrying water between northern and southern California for drinking and municipal purposes. In addition to the two gates listed below, there are numerous other canals and weirs along the Kern River; most of which the City of Bakersfield Water Resources manages and can be contacted during a spill. Chapter 4, Resources-At-Risk, Table 4-2: Economic Resources has the full list of canals and weirs along with contact information.

Table 2-3: Kern River Canal Flood Gate and CA Aqueduct Gate

Gate	Contact Name	Phone Number
Canal Flood Gate	City of Bakersfield Water Resources	(661) 326-3716
CA Aqueduct Gate	Buena Vista Water Storage District, Andrew Bell	(661) 204-1379
CA Aqueduct Gate	State of California, Department of Water Resources	(661) 858-5711 (916) 574-2714

2.9 Public Health

Local health agencies are responsible for protecting public health and often coordinate emergency medical services. County and city health officers have authority within their jurisdictions to take any preventive measures which may be necessary to protect and preserve public health. Public Health and Environmental Health Officers can provide assistance with health impacts associated with the release, key public health messages, community air monitoring and evacuations/shelter-in-place orders. The Public Health Officer has broad authority to take actions necessary to protect the public's health and may be a key partner in decisions around evacuation and restrictions against public access. For additional information on Public Health Officer authorities see: https://www.cdph.ca.gov/Programs/CCLHO/CDPH%20Document%20Library/HORespInEmergencies1998.pdf.

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

During an oil spill the local Air Pollution Control District can provide valuable support to the UC and be actively involved in situations where public and environmental health are threatened by an oil spill,

particularly with respect to public air monitoring. For a directory of local air pollution control districts, please see the California Air Resources Board website at: https://www.arb.ca.gov/capcoa/roster.htm.

CUPA

All counties and a number of cities within California have been designated to implement the state and federal hazardous materials emergency planning and community right-to-know programs; these program functions are performed by CUPAs and Participating Agencies (PA). A list of CUPAs and PAs has been developed and is maintained by the California Environmental Protection Agency (CalEPA), Unified Program Section (see http://cersapps.calepa.ca.gov/public/directory/). Table 2-4 below lists the CUPAs for Kern County (current as of 10/2018). CUPAs are typically fire departments or environmental health departments that may provide resources and liaison functions during oil spills. Some CUPAs have emergency response capabilities with Health Officer authority.

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

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

Table 2-4: Kern County CUPAs

Agency Name	Address	Phone Number
Bakersfield City Fire Dept.	2101 H Street Bakersfield, CA	(661) 326-3979
Kern County Environmental Health Services Dept.	2700 M Street, Suite 300 Bakersfield, CA	(661) 862-8740

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

2.10 On-Site Considerations

Before Deploying a GRP Strategy (Questions to Ask)

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

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

- How far downstream or out into the river environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?

- Will equipment or vehicles need to be staged on or near a roadway? If so, traffic control may be required. See Contact Sheet for Caltrans and Statewide Traffic Safety & Signs contact information.

During Strategy Implementation (Things to Remember)

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

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

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

After Strategy Implementation (Things to Understand)

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

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

2.11 Transitioning from Initial Response to a Unified Command

Incidents usually occur without warning. The period of Initial Response and Assessment occurs in all incidents. Short-term responses, which are small in scope and/or duration (e.g., a few resources working during one operational period), can often be coordinated using only an Incident Briefing Form (ICS 201).

During the transfer-of-command process from the initial IC to the next IC, or a more formal UC, an Incident Brief utilizing the ICS 201 provides an incoming IC/UC with basic information regarding the current incident situation and resources allotted to the response. Most importantly, the ICS 201 functions as the Incident Action Plan (IAP) for the initial response, remains in force, and continues to be updated until the response ends or the Planning Section generates the incident's first comprehensive IAP. It is also suitable for briefing individuals newly assigned to the Command and General Staff, incoming tactical resources, as well as needed assessment briefings for the Incident Management Team (IMT). Per OPA 90, the UC consists of an FOSC, SOSC, and the RP.

2.12 Mutual Aid

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

For mutual aid coordination purposes, California has been divided into six mutual aid regions. The purpose of a mutual aid region is to provide for the most effective application and coordination of mutual aid and other emergency related activities. Figure 6-1, Mutual Aid Regions, in Section 6 of the GRP CM illustrates the six mutual aid regions, which have the same boundaries as the LEPCs.

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

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

2.13 Volunteers

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

2.14 Natural Resource Damage Assessment

The overall goals of the natural resource damage assessment (NRDA) process are to restore the injured natural resources to pre-spill conditions and to obtain compensation for all documented losses. NRDA is conducted by State and federal trustees, often in cooperation with the responsible party, and is a separate process from the response. Assessment of injuries and damages resulting from spilled oil needs to begin as soon as possible following the initial release of the pollutant. This necessitates that NRDA activities be conducted simultaneously with response efforts and coordinated

through the UC. Portions of the NRDA process should be integrated into the ICS to improve communication, expedite both response and NRDA activities, and make efficient use of personnel and equipment. To avoid potential conflicts in duties, it is recommended that members of the NRDA Team not have responsibilities for the spill cleanup or general response activities. For additional information on the NRDA Process, see GRP CM Section 8.

Kern River
Geographic Response Plan

Chapter 3 – Response Site Strategies

3.0 Chapter Overview

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

3.1 Response Strategy Map Index and Staging Area Map

The following maps (Figure 3-1 and 3-2) provide an index of the response strategy locations for the Kern River GRP. Each block represents the map area for the corresponding response strategy detail sheet. Detailed information for each strategy location can be found in the response strategy summary matrix in Section 3.4 and the response strategy detail sheets in Section 3.5. Figure 3-3 provides an overview of each staging area identified within the bounds of the Kern River GRP and within each operational division. 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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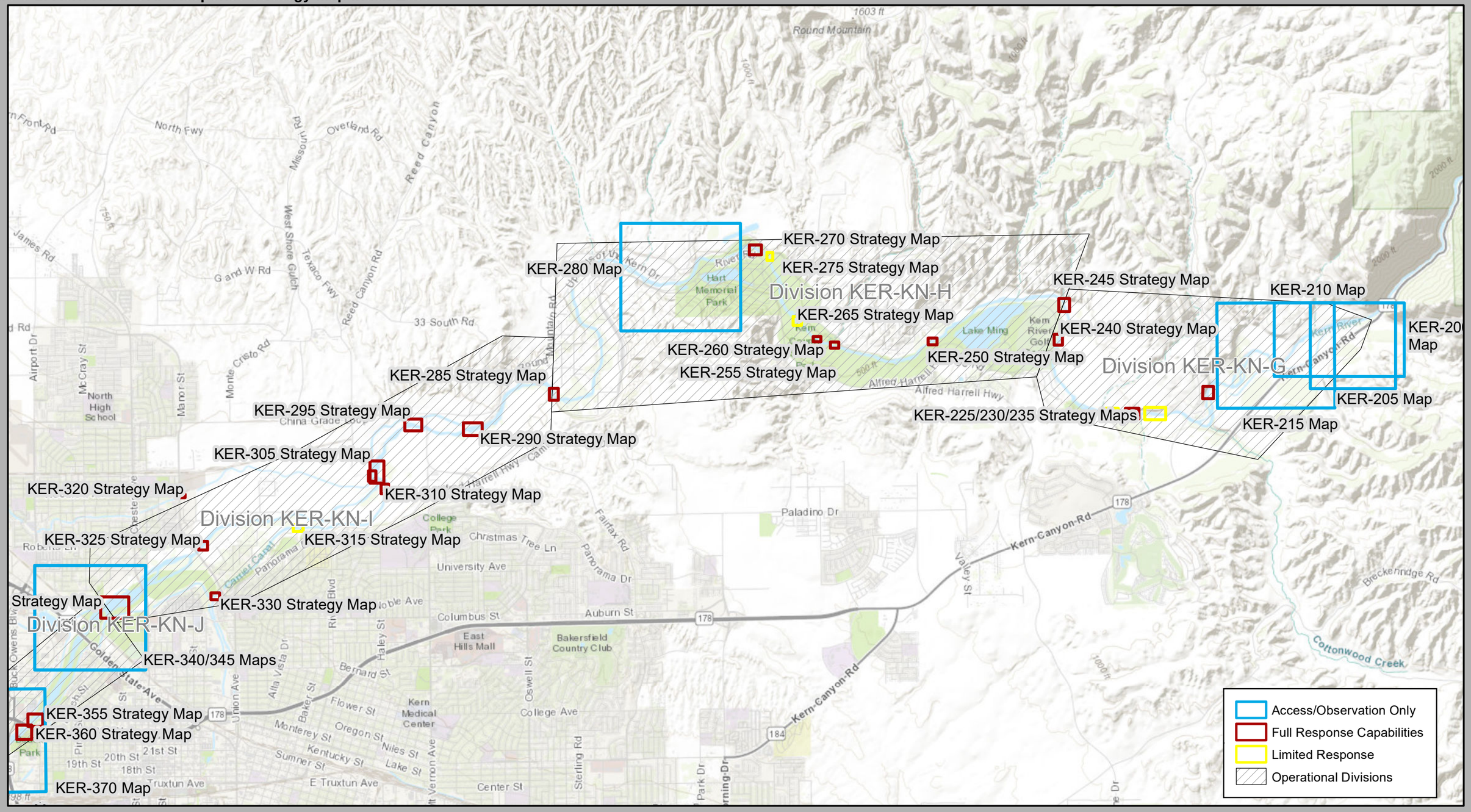
Figure 3-1: Kern River GRP Response Strategy Map Index East



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

Data Source: CDFW-ODPR
Requestor: A. Burkholder
Author: S. Paine
Date Created: 05/28/2019

Kern River
Geographic Response Plan
Strategy Map Index East

0 1 2 3 Miles

0 1 2 3 4 5 Kilometers

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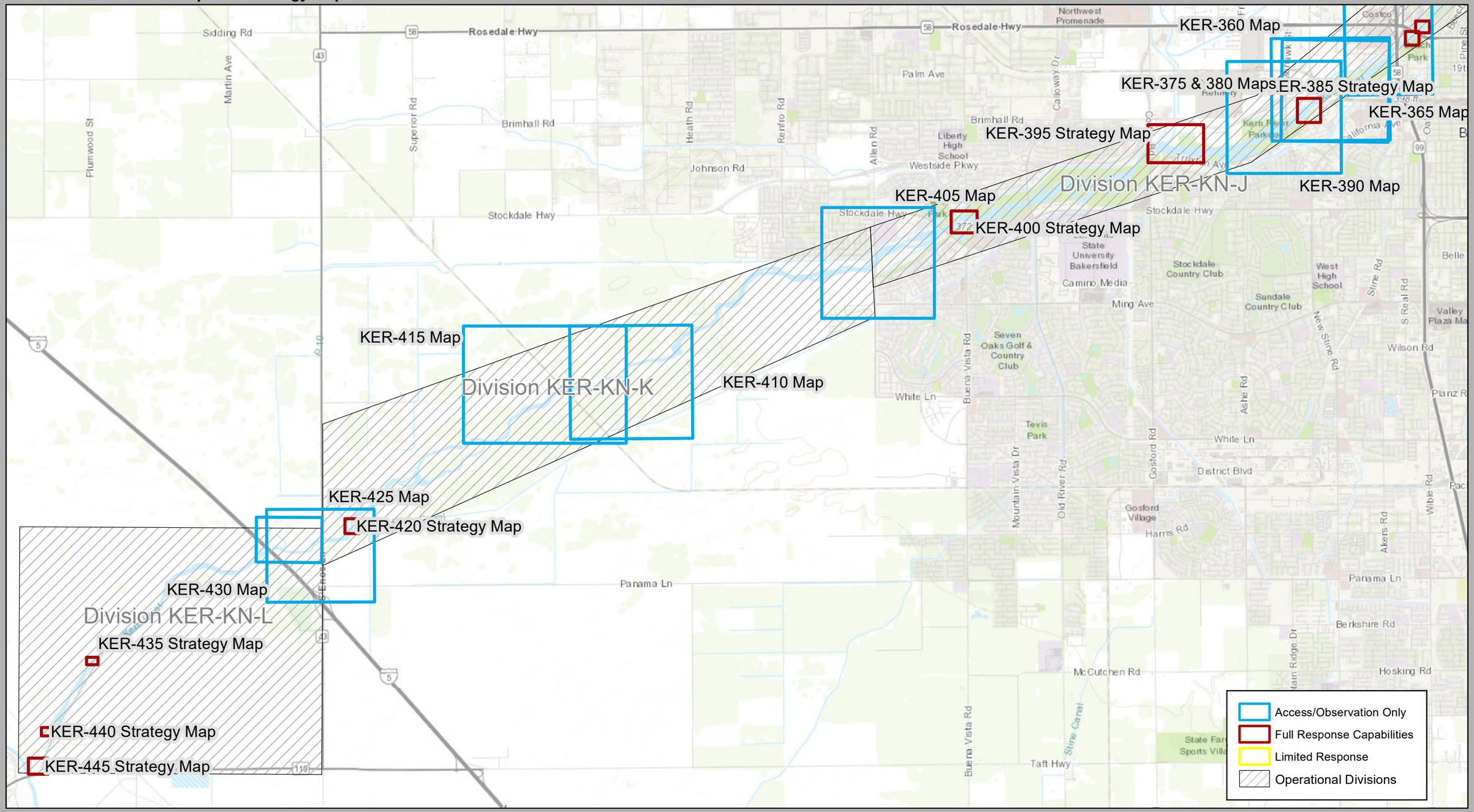
Figure 3-2: Kern River GRP Response Strategy Map Index West



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

Data Source: CDFW-ODPR
Requestor: D. Grosso
Author: S. Paine
Date Created: 3/28/2019

Kern River Geographic Response Plan Map Index West

0 1 2 3 Miles

0 1 2 3 4 5 Kilometers

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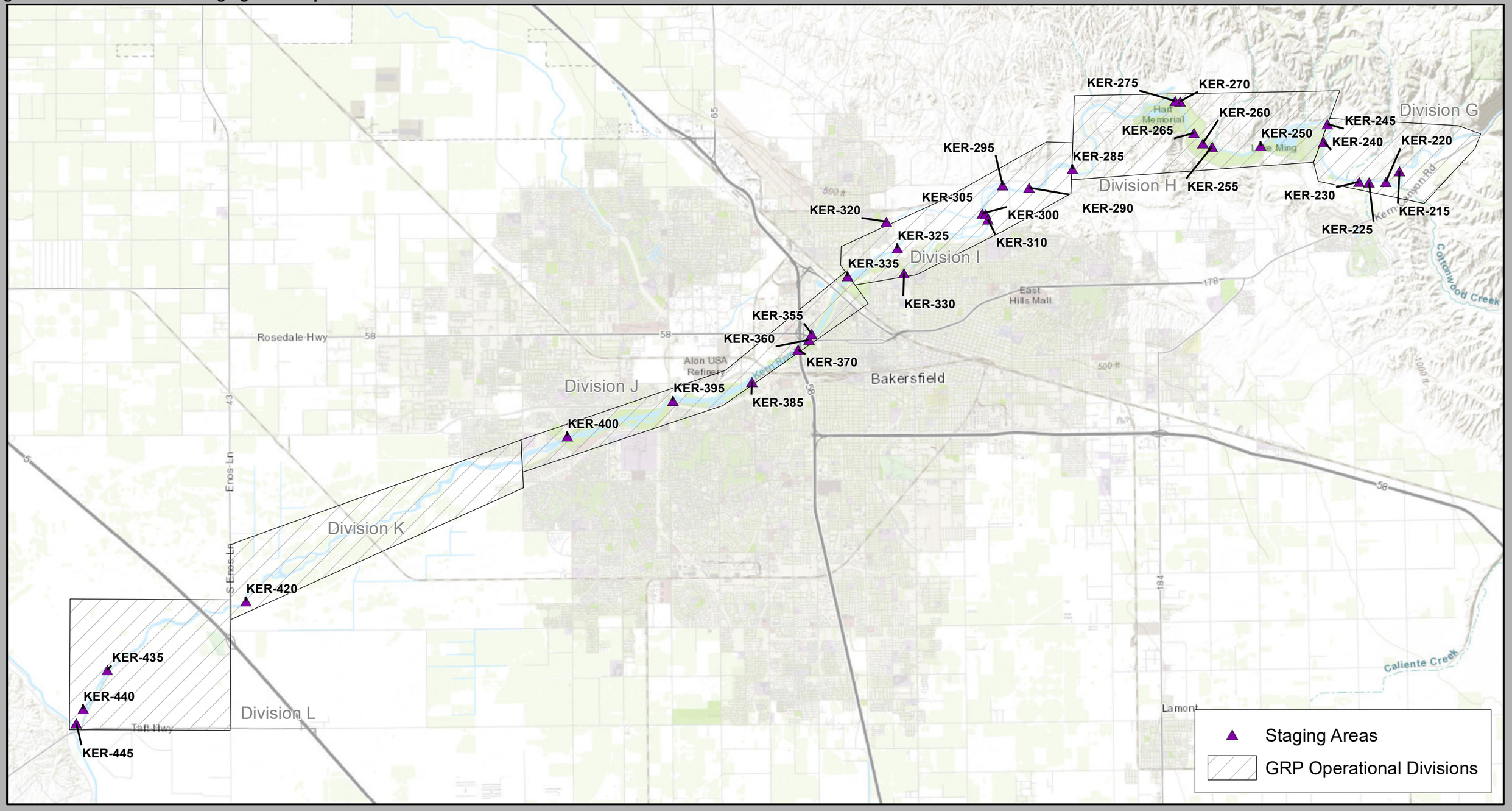
Figure 3-3: Kern River GRP Staging Area Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 05/28/2019

Kern River
Geographic Response Plan
Staging Areas

0 1 2 3 4 5 6 Miles
0 2 4 6 8 10 Km

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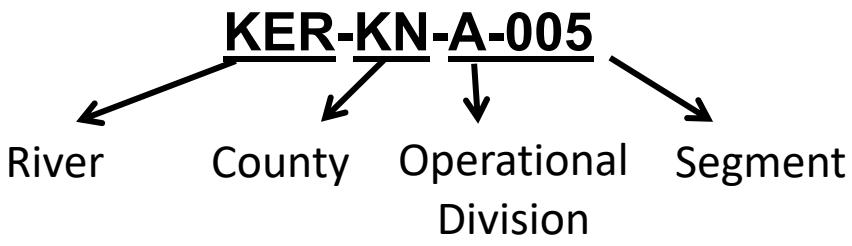
3.2 Naming Conventions – Operational Division and Segments and Site Strategies

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.



KER = Kern River

KN = Kern

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. BAL-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 Kern River:

- Safety is always the number one priority. Do not implement GRP strategies or take actions that will unduly jeopardize public, worker, or personal safety.

- Make appropriate notifications.

- Control and contain the source of the spill; mobilize resources to the spill location. Source control and containment are always a higher priority than the implementation of GRP strategies.

- Determine the order in which GRP strategies should be implemented based on the location of the spill or affected area.

- Generally, GRP strategies should be simultaneously deployed closer to the spill and downstream, well beyond the furthest extent of the spill, and then continued upstream towards the spill source.

- As response resources become increasingly available, implement the GRP strategies more broadly. As the response proceeds under an organized command structure, GRP strategies and priorities may be modified based on incident-specific conditions.

3.4 Response Strategy Summary Matrix

Table 3-1 lists the response strategy and access/observation sites for the Kern 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 #
KER-200	**Kern Canyon Powerhouse**	N35.44001 W-118.79576	Access/ Observation	N/A	N/A	Observation point only. No river access on river left. Limited access on river right through decomissioned PG&E hydroelectric facility.	N/A	Dangerous swift water. Steep cliffs with falling rocks. Heavy traffic on Highway 178. Rattlesnakes.	KER 13.591	47	49
KER-205	**Rio Bravo Hydroelectric Plant Intake**	N35.43927 W-118.80143	Access/ Observation	N/A	Most likely too hazardous to deploy small water craft at this location.	Observation point only. Private property managed by Rio Bravo Ranch. Gated access.	N/A	Dangerous swift water, intake canal. Rattlesnakes. Site is accessed through a gate. Contact Rio Bravo Ranch to open.	KER 13.256	47	51
KER-210	**Rio Bravo Turnout**	N35.43389 W-118.81162	Access/ Observation	N/A	Depending on river conditions a boat/kayak/ infatable raft may not be advisable.	Observation point only. Private property managed by Rio Bravo Ranch. Gated access.	N/A	Dangerous swift water, slippery when icy or wet. Rattlesnakes. Site is accessed through a gate. Contact Rio Bravo Ranch to open.	N/A	47	53
KER-215	**Rio Bravo Boat Launch** Rio Bravo Ranch off Highway 178, Bakersfield	N35.42919 W-118.82551	Deflection boom and collection. Only effective during medium to low flow.	400	Possible to deploy small skiff from river left. Small boat launch on private property at river right.	Private property belonging to Rio Bravo Ranch. Must follow dirt ranch road to site strategy location. May be a hinderance for large vehicles if muddy. 4X4 may be required. Access on river right limited due to private residence.	Limited space for staging on river left. No restrooms or electricity. More ideal staging area available at Rio Bravo Ranch Headquarters off Highway 178.	Potential for dangerous swift water, slippery when wet. Rattlesnakes. Site is accessed through a gate. Contact Rio Bravo Ranch to open. Narrow dirt road to river access. Steep slopes and falling rocks on river right.	KER 12.048	47	55
KER-220	**Rancheria Road Recreational Access**	N35.42611 W-118.83045	Access/ Observation	N/A	Possible to deploy small skiff from river left.	Access and observation site. Boat launch for light watercraft.	Large space for staging. One portable restroom available with limited capacity.	Potential for dangerous swift water, slippery when icy or wet. Site is accessed through a gate which is locked after hours. Contact Rio Bravo Ranch to open. Potential for public use. Rattlesnakes.	N/A	47	59
KER-225	**Rio Bravo Water Intake #1** Rio Bravo Equestrian Center off Rancheria Road, Bakersfield	N35.42617 W-118.83627	Deflection boom to protect water intake. Oil collection may be possible depending on flow.	600	Possible to deploy small skiff from river left.	Rio Bravo Ranch agricultural intake location. Located at a private equestrian center. Must follow dirt ranch road to site strategy location. Site suitable to launch small skiff.	Good staging area with restrooms and limited electricity. Would need permission from Rio Bravo Ranch. More ideal staging area available at Rio Bravo Ranch Headquarters off Highway 178.	Site is accessed through a gate which is locked after hours. Contact Rio Bravo Ranch to open. Horses on property, ranch roads. Potential for dangerous swift water. Rattlesnakes.	KER R10.963	47	61
KER-230	**Rio Bravo Ranch House** Rio Bravo Equestrian Center off Rancheria Road, Bakersfield	N35.42642 W-118.84045	Deflection boom and collection. Only effective during medium to low flow.	600	Possible to deploy small skiff from river left.	Located at private ranch house. Must follow dirt ranch road to site strategy location. Some shoreline access.	Good staging area with restrooms and electricity. Would need permission from Rio Bravo Ranch. More ideal staging area available at Rio Bravo Ranch Headquarters off Highway 178.	Site is accessed through a gate which is locked after hours. Contact Rio Bravo Ranch to open. Potential for dangerous swift water. Rattlesnakes.	KER R10.963	47	65

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KER-235	**Rio Bravo Water Intake #2** Rio Bravo Equestrian Center off Rancheria Road, Bakersfield	N35.42645 W-118.84369	Deflection boom and collection. Only effective during medium to low flow.	400	Possible to deploy small skiff upstream at Rio Bravo Ranch House.	Rio Bravo Ranch agricultural intake at this site. Must follow dirt ranch road to site strategy location.	Any large equipment not in use should be staged at the Rio Bravo Equestrian Center or Rio Bravo Ranch Headquarters. Restrooms and limited electricity.	Site is accessed through a gate which is locked after hours. Contact Rio Bravo Ranch to open. Limited turnaround space. Potential for dangerous swift water. Rattlesnakes.	KER R10.963	47	69
KER-240	**Lake Ming Overflow Parking** Lake Ming Road, Bakersfield	N35.43815 W-118.85291	Deflection boom and collection. Only effective during medium to low flow.	500	Possible to deploy small skiff from river left.	Some shoreline access. Property belonging to Kern County Parks and Recreation. Access to river right is limited due to thick vegetation.	Large space for staging. Contact Kern County Parks and Rec for use of facilities. No restrooms or electricity.	High public use during spring and summer months. Potential for stinging nettle on riverbanks and dangerous swift water. Rattlesnakes.	N/A	47	73
KER-245	**Rio Bravo Raft Removal Site** Rio Bravo Ranch off Indian Rock Road behind locked gate, Bakersfield	N35.44345 W-118.85157	Deflection boom and collection. Only effective during medium to low flow.	300	Possible to deploy small skiff from river right.	Site used by River's End Rafting Company for raft removal. Must follow dirt ranch road to site strategy location. Keep gate to shoreline closed to contain cattle.	Space for some staging, but not ideal location due to limited space, potential for muddy conditions, and presence of cattle. No restrooms or electricity.	Site is accessed through a gate which is locked after hours. Contact Rio Bravo Ranch to open. Potential 4X4 needed if roads are muddy. Stinging nettle, rattlesnakes, and cattle possibly present.	KER R10.963	77	79
KER-250	**Lake Ming Campground** Off River Road near Lake Ming, Bakersfield	N35.43726 W-118.87588	Deflection boom and collection. Only effective during medium to low flow.	400	Small skiff upriver at Rio Bravo Raft Removal Site. Potential to launch small skiff on river left at campground as well.	Location at county campground. Some shoreline access possible with small beach area. Private property located on river right.	Site ideal for staging; contact Kern County Parks and Rec for use of facilities. Electricity and restrooms available. Adequate space for decon.	No access restrictions. Heavy public use. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes.	N/A	77	83
KER-255	**Camp Okihi** Behind locked gate off Round Mountain Road, Bakersfield	N35.43723 W-118.89365	Deflection boom and collection. Only effective during medium to low flow.	400	Small skiff upriver at Rio Bravo Raft Removal Site. Could launch small skiff on river right at campground as well.	Location at county campground. Some shoreline access possible. Access to river left is possible on the bike path at the CALM Zoo parking lot and following behind the soccer fields.	Site ideal for staging; contact Kern County Parks and Rec for use of facilities. Electricity and portable restrooms available. Adequate space for decon.	Access limited by locked gate. Contact Kern County Parks and Rec to open. Potential for stinging nettle on riverbanks and dangerous swift flows. Rattlesnakes.	N/A	77	87
KER-260	**Kern County Soccer Park** Off Alfred Harrel Highway behind locked gate, Bakersfield	N35.43821 W-118.89702	Deflection boom and collection. Only effective during medium to low flow.	300	Location would require a combination of on-foot survey and survey by boat/kayak/ inflatable raft. Potential to launch small water craft from both sides of shoreline.	There is a locked gate within the soccer fields that is just across from the small water tank at the site. Access to river right is possible by turning right off of the road across from 13146 Round Mountain Road and driving to the river's edge.	Limited room for staging at the river's edge. Would need the County's permission. Electricity, restrooms, PA system, possible command center (headquarters building) available at the Soccer Park with more room for staging and decontamination of equipment.	Access limited by locked gate through soccer fields or along bike path. Contact Kern County Soccer Park to access through soccer fields. Potential for stinging nettle on riverbanks and dangerous swift flows. Rattlesnakes. Heavy public use.	N/A	77	91

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KER-265	**Round Mountain Clearing** Off Round Mountain Road on north side of Kern River, Bakersfield	N35.44124 W-118.90022	Deflection boom and collection. Only effective during medium to low flow.	300	Location would require a combination of on-foot survey and survey by boat/kayak/ inflatable raft. Potential to launch small water craft from both sides of shoreline.	Multiple dirt access roads that reach the river right. Roads are narrow, dirt roads with trash often dumped in the vicinity. Vehicles are often parked along the edge of the river and public use is heavy at times. Recreational gold panning occurs at this location occasionally. Access to river left would be possible via the bike path but limited due to thick vegetation.	Contact Kern County Parks and Rec. Space for some staging, but not ideal location due to limited space. Potential for muddy conditions. No restrooms or electricity. Thick vegetation on river left.	Uneven dirt access roads to river right. Heavy public use. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes.	N/A	77	95
KER-270	**Round Mountain Road** Off Round Mountain Road on north side of Kern River, Bakersfield	N35.45080 W-118.90506	Deflection boom and collection. Only effective during medium to low flow.	300	Location would require a combination of on-foot survey and survey by boat/kayak/ inflatable raft. Potential to launch small water craft from both sides of shoreline.	Multiple dirt access roads that reach the river right. Roads are narrow, dirt roads with trash often dumped in the vicinity. Vehicles are often parked along the edge of the river and public use is heavy at times. Recreational gold panning occurs at this location occasionally. Access to river left would be possible at Hart Park.	Contact Kern County Parks and Rec. Space for some staging, but not ideal location due to limited space. Potential for muddy conditions. No restrooms or electricity. Thick vegetation on river left.	Uneven dirt access roads to river right. Heavy public use. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Heavy public use. Rattlesnakes.	N/A	77	99
KER-275	**Hart Park Staging Area** Hart Park off River Road, Bakersfield	N35.45088 W-118.90689	Deflection boom and collection. Only effective during medium to low flow.	300	Location would require a combination of on-foot survey and survey by boat/kayak/ inflatable raft. Potential to launch small water craft from river left.	There is a dirt access road off River Road that leads down to the river's edge (river left). A small vaccum truck might be able to access the river on this road. If not, oil collection would occur from the dirt parking lot just south of this site. Private property on river right.	Site ideal for staging; contact Kern County Parks and Rec for use of facilities. Electricity and portable restrooms available within the park. Adequate space for decon.	Uneven dirt access road to river left. Heavy public use. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Heavy public use. Rattlesnakes.	N/A	77	103
KER-280	**Hart Park Bridge Crossing**	N35.44658 W-118.92263	Access/ Observation	N/A	Location would require a combination of on-foot survey and survey by boat/kayak/ inflatable raft. Potential to launch small water craft upriver at Hart Park Staging Area.	Should only be used as an observation site. Limited access to shoreline on upstream side of bridge, river-left. Private residences border river on river-right. Would need to contact the Kern County Parks and Rec/City of Bakersfield Water Resources to obtain access through bridge gate.	N/A	Steep bank. Access to river right limited through gate on bridge crossing. Private property river right. Heavy public use. Swift water during winter and spring flows. Rattlesnakes.	N/A	77	107

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KER-285	**Delamater Boat Launch** On gated private residence off Adolphus Avenue, Bakersfield	N35.43100 W-118.94457	Deflection boom and collection. Only effective during medium to low flow.	400	Small boat launch on private property, river right. Diversion weir located 1.15 miles downriver of this location. Small water craft required to access shorelines completely.	This site is located on a private property within a locked gate. Access and permission would need to be obtained from the property owner. River left has a steep bank and only accessible via a small skiff.	Adequate space for staging. Would need the property owner's permission. Adequate space for decontamination. No electricity and no restrooms onsite.	Access limited through locked gate. Need to contact property owner to access gate. Steep banks on river right. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes.	N/A	77	109
KER-290	**Beardsley Weir** Access through Gate 27 at Chevron Kern River Oil Field off China Grade Loop, Bakersfield	N35.42556 W-118.96042	Deflection boom and collection. Only effective during medium to low flow.	600	Small water craft access possible downriver of Beardsley Weir. Shoreline is covered in thick vegetation. Possible to access some parts of shoreline on foot.	This site is located within the Kern River Oil Field (Chevron North American Exploration and Production Company). Access to river left is by taking China Grade Loop south over the river and entering Gate 8 on the left side of the road. Follow the road east to river's edge (river left). Chevron security would need to be contacted to enter property.	Limited space for staging. Larger space for staging available along lease road just south of Round Mountain Road. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Weir with multiple canal gates. Rattlesnakes.	N/A	113	115
KER-295	**China Grade Loop Bridge** Access through Gate 25 at Chevron Kern River Oil Field Off China Grade Loop, Bakersfield	N35.42640 W-118.97011	Deflection boom and collection. Only effective during medium to low flow.	600	Small water craft access possible at this location on both sides of river. Shoreline covered in thick vegetation. Possible to access some parts of shoreline on foot.	This site is located within the Kern River Oil Field (Chevron North American Exploration and Production Company). Access to river left is by taking China Grade Loop south over the river and enter Gate 10. Chevron security would need to be contacted to enter property.	Limited space for staging. Larger space for staging available along west side of China Grade Loop. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Weir with multiple canal gates. Rattlesnakes.	N/A	113	119

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KER-300	**Beardsley Canal** Access through Gate 25 at Chevron Kern River Oil Field Off China Grade Loop, Bakersfield	N35.41801 W- 118.97760	Deflection boom and collection. Only effective during medium to low flow.	200	Shorelines accessible by foot.	This site is located within the Kern River Oil Field (Chevron North American Exploration and Production Company). Access to canal right is off Oilfield Service Road. Chevron security would need to be contacted to enter property.	Limited space for staging. Larger space for staging available along lease roads. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Weir with multiple canal gates. Bike and equestrian trail southeast of site. Rattlesnakes.	N/A	113	123
KER-305	**Rocky Point Weir** Access through Gate 25 at Chevron Kern River Oil Field off China Grade Loop, Bakersfield	N35.41781 W-118.97631	Deflection boom and collection. Only effective during medium to low flow.	1200	Small water craft should only be used here for response strategy deployment, not shoreline surveys. High hazard area due to presence of multiple weirs and canals. Boat launch possible at China Grade Loop Bridge.	This site is located within the Kern River Oil Field (Chevron North American Exploration and Production Company). To access river left, take China Grade Loop south over the river and enter Gate 25. Chevron security would need to be contacted to enter property.	Limited space for staging. Larger space for staging available along lease roads. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes. Weir with multiple canal gates. Bike and equestrian trail southeast of site.	N/A	113	127
KER-310	**Carrier Canal Weir/Panorama Vista Preserve Intake** Access through Gate 25 at Chevron Kern River Oil Field off China Grade Loop, Bakersfield	N35.41627 W-118.97562	Deflection boom and collection. Only effective during medium to low flow.	200	Small water craft should only be used here for response strategy deployment, not shoreline surveys. High hazard area due to presence of multiple weirs and canals. Boat launch possible at China Grade Loop Bridge.	This site is located within the Panorama Vista Preserve, which is adjacent to the Kern River Oil Field (Chevron North American Exploration and Production Company). Multiple dirt access roads are present and often wind around active pumping units. Access to canal left is by taking China Grade Loop south over the river. Turn right to enter Gate 10.	Limited room for staging. Larger room for staging available along lease roads between bike path and river left. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes. Weir with multiple canal gates. Bike and equestrian trails.	N/A	113	131

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KER-315	**Carrier Canal Outflow** Access through Gate 25 at Chevron Kern River Oil Field off China Grade Loop, Bakersfield	N35.41120 W-118.99183	Deflection boom and collection. Only effective during medium to low flow.	450	Shorelines accessible by foot. Small skiff from bank at canal right.	This site is located within the Panorama Vista Preserve, which is adjacent to the Kern River Oil Field (Chevron North American Exploration and Production Company). Multiple dirt access roads are present and often wind around active pumping units. Access to canal left is by taking China Grade Loop south over the river. Turn right to enter Gate 10.	Limited space for staging. Larger space for staging available along lease roads between bike path and river left. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact Chevron Security prior to access. Active oil field operations, watch for equipment operators and vehicles; flame resistant clothing recommended. Multiple dirt access roads are present and often wind around active pumping units. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Rattlesnakes. Weir with multiple canal gates. Bike and equestrian trails.	N/A	113	135
KER-320	**Manor Street Bridge** Manor Street and Ferguson Avenue, adjacent to Tricor Refinery, Bakersfield	N35.41596 W-119.01250	Deflection boom and collection. Only effective during medium to low flow.	200	Shorelines accessible by foot.	This site is located just east of Manor Street and south of Tricor Refinery. Access to the site is through a locked gate just south of the refinery employee parking lot. City of Bakersfield Water Resources would need to be contacted, as well as the refinery, prior to access.	Limited space for staging. Additional staging available at Tricor Refining (Golden Bear) employee parking facility adjacent to site. No electricity and no restrooms onsite.	Access limited through locked gate. Concrete lined channel, slippery when wet. Pedestrian and vehicle traffic on Manor Street. Active refinery adjacent to site; flame resistant clothing recommended. Rattlesnakes.	N/A	113	139
KER-325	**Rancho Rio Equestrian Center** Peacock Park Lane and Manor Street, Bakersfield	N35.40809 W-119.00865	Deflection boom and collection. Only effective during medium to low flow.	400	Small water craft access possible here at both sides of the river. On-foot access also possible depending on river conditions. Thick vegetation on shorelines.	This site is located within the Rancho Rio Equestrian Center. There is a gate to the entrance with keypad access. Contact the site manager for gate code. Access to river right is possible by driving north on Manor Street and taking East Roberts Lane. Turn left at the stop sign and then right onto Angus Lane into the Robertson Stables. Follow dirt road south to the river.	Site ideal for staging; restrooms and electricity available at the Rancho Rio Equestrian Center, would need to get property owner's permission.	Access limited through locked gate. Steep banks heavily vegetated. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Horseback riding along and in river. Rattlesnakes.	N/A	113	143

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KER-330	**Carrier Canal Endpoint** Access by Kern River Parkway Bike Path off Manor Street and Peacock Park Lane, Bakersfield	N35.40065 W-119.00638	Deflection boom and collection. Only effective during medium to low flow.	200	Shorelines accessible by foot.	This site is located where the Carrier Canal branches and the southern canals become the East Side Canal and Kern Island Canal. Carrier Canal heads north and then turns west. Multiple gates are present along the canals access roads. The City of Bakersfield Water Resources would need to be contacted to access the site.	Limited space for staging. Larger space for staging available at bike path parking lot on west side of Manor Street. No electricity and no restrooms onsite.	Access limited through locked gate. Would need to contact City of Bakersfield Water Resources to gain access. Weir with multiple gates. Multiplex residential dwelling adjacent to site. Rattlesnakes.	N/A	113	147
KER-335	**Calloway Weir** Access through Riverview Park off Willow Drive, Bakersfield	N35.39987 W-119.02690	Deflection boom and collection. Only effective during medium to low flow.	1100	Small water craft access possible here at both sides of the river. On-foot access also possible depending on river conditions. Thick vegetation on shorelines. Multiple weirs at this location, small water craft should only be used to deploy response strategies if necessary.	This site is located just south of the Riverview Park. Access to the site is through the parking lot to the river's edge or through a gate on the maintenance road off Oildale Drive. Homeless encampments exist in the park and river area. Horse stables are present and equestrian trails are along the river right. Access river left from the bike trail on southbound Chester Ave and follow west to site.	Limited space for staging. Larger space for staging available at the Riverview Park parking lot. Electricity and restrooms available only at park.	Access limited through locked gate. Steep banks. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Equestrian and bike trails. Weirs with multiple canal gates. Homeless encampments exist in the area. Rattlesnakes.	N/A	151	153
KER-340	**UP Rail Kern River Crossing** Access from Chester Ave and enter bike path	N35.39742 W-119.02964	Access/ Observation	N/A	Small water craft access possible here at both sides of the river. On-foot access also possible depending on river conditions. Thick vegetation on shorelines.	Access and observation point. This is a high risk location due to Union Pacific Railroad crossing over the Kern River. It is also a high public use area due to its location near public parks, residential areas, and the Kern River Parkway Bike Trail. Multiple user created trails parallel the river, but serious caution should be taken if performing surveys along the shorelines for safety reasons.	N/A	Swift water during winter and spring flows. Access on bike path, watch for pedestrians and bikes. Railroad crossing on bridge. Homeless encampments often present under bridge. Rattlesnakes.	UPRR 310.35	151	157

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KER-345	**Highway 204 Crossing** Access from Riverview Park	N35.39742 W-119.02964	Access/ Observation	N/A	Small water craft access possible here at both sides of the river. On-foot access also possible depending on river conditions. Thick vegetation on shorelines.	Access and observation point. Union Pacific Railroad crossing over the Kern River just east of site. It is also a high public use area due to its location near public parks, residential areas, and the Kern River Parkway Bike Trail. Multiple user created trails parallel the river, but serious caution should be taken if performing surveys along the shorelines for safety reasons.	N/A	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Highway 204 crossing on bridge. Homeless encampments often present under bridge. Rattlesnakes.	KER 5.752	151	159
KER-350	**Oak Street Access Point**	N35.38221 W-119.03966	Access/ Observation	N/A	Shorelines accessible by foot.	The Oak Street Access Point is up-river of the Highway 178 river crossing, and across the river from the EZ-8 Motel. The Kern River Parkway Bike Trail provides easy access to the river's edge. A site strategy has been identified across the river at the Riverside Drive location.	N/A	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Homeless encampments often present under bridge. Rattlesnakes.	N/A	151	161
KER-355	**Riverside Drive** Cul-de-sac at the end of Riverside Drive, off Buck Owens Boulevard	N35.38283 W-119.04022	Deflection boom and collection. Only effective during medium to low flow.	500	Shoreline accessible on-foot. Small water craft access possible from bank at river right. Weir dam and canals located approximately 1.5 miles downriver.	This site is located just south of the Starlite Motel (EZ-8). Access to river left is possible by taking Highway 178 East to Oak Street (North) and accessing the bike path at the end of the cul-de-sac. Homeless encampments exist at this location on both sides of the river.	Site ideal for staging. Space on cul-de-sac for staging equipment. Motel could serve as a command center with restrooms and electricity.	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Homeless encampments often present under bridge. Rattlesnakes.	KER 0.09	151	163
KER-360	**Beach Park** 21st Street and Beach Park Loop, Bakersfield	N35.38105 W-119.04104	Deflection boom and collection. Only effective during medium to low flow.	700	Shorelines accessible by foot. Small skiff from bank at river left.	This site is located adjacent to the Beach Park, which is managed by the City of Bakersfield Recreation and Parks Department. Access on river right obtained by taking dirt access road at Riverside Drive and following south under Highway 178 overpass.	Site ideal for staging with restrooms and electricity available at the park. Paved parking lot for staging equipment. Would need permission from City of Bakersfield.	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Homeless encampments often present under bridge. Heavy public use. Rattlesnakes.	KER 0.16	151	167

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KER-365	**River Run RV Access Point**	N35.37893 W-119.04556	Access/ Observation	N/A	Shorelines accessible by foot.	Access and Observation Point. Provides vehicle access to the north side of the Kern River (river-right) between Highway 99 and the BNSF Railroad crossing. Vehicle access ends just before the BNSF Railroad crossing, approximately 1 mile downriver of the River Run RV Access Point gate. Responders must contact River Run RV Park staff to open gate for access to the riverbank. A site strategy has been identified across the river at Beach Park.	N/A	Access limited through locked gate. Swift water during winter and spring flows. Potential for stinging nettle on riverbanks. Homeless encampments often present under bridge. Heavy public use. Rattlesnakes.	N/A	151	171
KER-370	**Yokuts Park** Park access on Empire Drive, off Truxtun Avenue	N35.37818 W-119.04520	Deflection boom and collection. Only effective during medium to low flow.	700	Possible to deploy small skiff from river left.	This site is located by accessing the bike path at Yokuts Park, which is managed by the City of Bakersfield Recreation and Parks Department. Access to the river right is achieved through the River Run RV Park, located off Burr Street.	Site ideal for staging with restrooms and electricity available at the park. Paved parking lot for staging equipment. Would need permission from City of Bakersfield.	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Heavy public use. Highway 99 overpass just east of site. Rattlesnakes.	N/A	151	173
KER-375	**BNSF Rail Crossing (River Right)**	N35.37364 W-119.05689	Access/ Observation	N/A	Shorelines accessible by foot.	This access location and observation point is located river right. Vehicle access under the railroad bridge is restricted as the trail is too narrow and the bridge is too low. Access to the downriver side of the railroad on river right is possible through a gate located on Mohawk Street (see Kern River Bridge Crossing Access/Observation Site page).	N/A	Swift water during winter and spring flows. Active wells just north of location. Highway 178 and Highway 99 crossing upriver. Potential for homeless encampments. Rattlesnakes.	BNSF 889.6	151	177
KER-380	**BNSF Rail Crossing (River Left)**	N35.37269 W-119.05661	Access/ Observation	N/A	Shorelines accessible by foot.	This observation point is located river left and is located adjacent to the Kern River Parkway Bike Path. Use caution when driving along bike path and while surveying due to multiple potential hazards.	N/A	Swift water during winter and spring flows. Private oil leases. Highway 99 upriver, Westside Parkway and Mohawk Street Crossing downriver. The BNSF Railroad crosses the river at this location as well. Bike path along river left. Watch for pedestrians and bikes. Rattlesnakes.	BNSF 889.6	151	179

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 #
KER-385	**Kern River Parkway Park** Truxtun Avenue, just southwest of Westside Parkway	N35.36870 W-119.06211	Deflection boom and collection. Only effective during medium to low flow.	800	Possible to deploy small skiff from river left.	This site is adjacent to Truxtun Ave. Access river right by taking Mohawk Street north and taking a right onto a canal access road just north of the river. City of Bakersfield Water Resources would need to be contacted to unlock gate.	Site ideal for staging with paved parking lot for staging heavy equipment. Would need permission from City of Bakersfield. No restrooms or electricity onsite.	Swift water during winter and spring flows. Bike path along river left. Watch for pedestrians and bikes. Heavy public use. BNSF rail crossing just east of site. Several active wells just northeast of site. Rattlesnakes.	N/A	151	181
KER-390	**Kern River Bridge Crossing**	N35.36887 W-119.06639	Access/ Observation	N/A	Shorelines accessible by foot.	This location provides access to river right between the BNSF Railroad Crossing and the Friant/Kern Canal just before Coffee Road. This section of the river can only be accessed through locked gates off Mohawk Street. If access is necessary, contact the Kern County Sheriff's Department, or the phone number on the sign posted on gates.	N/A	Access limited through locked gate. Swift water during winter and spring flows. Mohawk Street overpass adjacent to site. Kern River Parkway Park across river. Rattlesnakes.	N/A	151	185
KER-395	**Kern River Canal** Coffee Road and Truxtun Avenue, Bakersfield	N35.36333 W-119.09084	Deflection boom and collection. Only effective during medium to low flow.	1600	Possible to deploy small skiff from river left.	This site is located just east of Coffee Road where multiple canals channel water from Kern River. Site access is through a locked gate. The City of Bakersfield Water Resources would need to be contacted to obtain access.	Limited space for staging. Larger space for staging available at the Kern River Parkway Park's parking lot. No restrooms or electricity onsite.	Access limited through locked gate. Bike path on river left. Watch for pedestrians and bikes. Multiple canal gates. Multiple pipelines crossing immediately upstream and downstream from site. Rattlesnakes.	N/A	151	187
KER-400	**Bellevue Weir** Access through Aera Park off Jewetta Avenue, Bakersfield	N35.35309 W-119.12943	Deflection boom only. Site not ideal for collection.	1150	Possible to deploy small skiff from river left or river right.	This site is located just south of the Aera Park sports park. Entrance is through the park's equestrian parking lot and along a canal dirt access road. Site access is through a locked gate. The City of Bakersfield Water Resources would need to be contacted to obtain access.This location is not ideal for oil collection due to limited space and braiding of the river with vegetated sand bars. Access to river left is through the Park at River Walk at 11298 Stockdale Highway.	Limited space for staging. Not ideal for oil collection. Deflect oil and protect water intakes from oiling. Deploy boom and allow for oil collection on river right, if feasible. Larger staging location is at the equestrian parking lot between Aera Park and the river.	Access limited through locked gate. Must enter through parking lot in Aera Park. Bike path on river left. Watch for pedestrians and bikes. Multiple canal gates. Heavy public use. Swift water during winter and spring flows. Rattlesnakes.	N/A	151	191

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 #
KER-405	**Allen Road**	N35.34583 W-119.14590	Access/ Observation	N/A	Shorelines accessible by foot.	This location is ideal for observation and survey access to the shoreline, and is the last access point to the Kern River before the beginning of the Kern Water Bank. There is limited vehicle access downriver of this location, however the Kern River Parkway Bike Path parallels the river's edge continuously until it ends at Highway 43 (Enos Lane).	N/A	Swift water during winter and spring flows. Bike path on river left. Watch for pedestrians and bikes. Heavy vehicle traffic on Allen Road. Waterfowl present in high numbers when waterbanks have water. Rattlesnakes.	N/A	189	191
KER-410	**McClung Weir**	N35.33218 W-119.18399	Access/ Observation	N/A	Shorelines accessible by foot.	The McClung Weir bridge provides vehicle access to the north bank of the Kern River (river right), and flow can be diverted by the city at this location depending on the flow of the river. This section of the river is surrounded by the Kern Water Bank, and provides essential habitat for many riparian species, including overwintering birds.	N/A	Swift water during winter and spring flows. Weirs with multiple gates. Bike path on river left. Watch for pedestrians and bikes. Waterfowl present in high numbers when waterbanks have water. Rattlesnakes.	N/A	189	193
KER-415	**San Joaquin Valley Railroad Crossing**	N35.32584 W-119.20401	Access/ Observation	N/A	Shorelines accessible by foot.	SJV Railroad line crosses the Kern River at this location and serves as both an access and observation site; however vegetation along the river is very thick. The rail does carry crude oil, and vehicle access is limited here. The first site strategy located downriver of this site is at the Kern Water Bank Headworks near the end of the bike path and Highway 43 (Enos Lane).	N/A	Swift water during winter and spring flows. Heavy traffic on Allen Road. Bike path on river left. Watch for pedestrians and bikes. Waterfowl present in high numbers when waterbanks have water. Rattlesnakes.	SJVR 329.2	189	195
KER-420	**Diversion Weir** Highway 43 and the end of the Kern River Parkway Bike Path	N35.30479 W-119.24684	Deflection boom and collection. Only effective during medium to low flow.	700	Possible to deploy small skiff from river left or river right.	This site is located just east of the Kern River Parkway Bike Path parking lot. Access is through the parking lot and onto the bike path. Would need to contact Kern Water Bank for access through gate. River left and river right can be accessed on this bike path. Space is limited and driving the bike path would be limited to one-direction travel.	Limited room for staging. Larger room for staging available at the Kern River Parkway Bike Path parking lot. No restrooms or electricity onsite.	Access limited through locked gate. Multiple water inlets are present. Bike path present. Watch for pedestrians and bikes. Multiple canal gates. Heavy public use. Rattlesnakes.	N/A	189	197

KERN RIVER GRP June 2019
KERN RIVER GRP June 2019

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 #
KER-425	**Kern River Measuring Point**	N35.30328 W-119.25165	Access/ Observation	N/A	Shorelines accessible by foot. Due to thick vegetation and steep slopes, small water craft may be required.	This location is suitable for observation only. There is access to the river bank on either side of the bridge, but the bridge itself is above the high water mark. The bridge is managed by the City of Bakersfield Water Resources, and was historically used to measure the flow of the Kern River. It is out of commission now, but the City of Bakersfield should be contacted for direct access to the bridge.	N/A	Swift water during winter and spring flows. Heavy traffic on Highway 43. High public use area due to bike path and user-created trails. Rattlesnakes.	KER 2.587	195	207
KER-430	**Old Main Canal**	N35.30228 W-119.25952	Access/ Observation	N/A	Shorelines accessible by foot. Due to thick vegetation and steep slopes, small water craft may be required.	This location is suitable for observation only. Access is restricted to a locked gate on the west side of Highway 43, managed by the Kern Water Bank. The Old Main Canal connects the Kern Water Bank to the Kern River, but the canal can be isolated from the river if necessary by Kern Water Bank staff.	N/A	Swift water during winter and spring flows. Access limited through locked gate. Heavy vehicle traffic on Highway 43. Rattlesnakes.	KER 2.604	209	211
KER-435	**Kern River Pipe Crossing** Access through South Coles Levee Compressor Plant at Tupman Road and Arco Road.	N35.28468 W-119.29749	Deflection boom and collection.	200	Possible to deploy small skiff from river left or river right.	This site is located upstream of the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Propane trucks are frequently entering and exiting the road. Multiple water intakes are 1.3 miles downstream. Access to river left is over a narrow bridge crossing approximately 0.8 miles downstream from the site.	Limited space for staging on river right. Larger staging location would need to be closer to the gas plant at an equipment staging lot. No restrooms or electricity onsite.	Access through active gas plant. Must call California Resources Corporation dispatch to access site. Propane trucks entering and exiting plant. Multiple pipeline crossings. Flame resistant clothing and hard hats may be required. Sensitive habitat, drive slow on roads. Rattlesnakes.	N/A	209	213

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 #
KER-440	**Inter-tie Basin** Access through South Coles Levee Compressor Plant at Tupman Road and Arco Road.	N35.27327 W-119.30626	Deflection boom and collection.	700	Possible to deploy small skiff from river left or river right.	This site is located just south of the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Propane trucks are frequently entering and exiting the road. Multiple water intakes are 1/3 mile downstream. Access to river left is over a narrow bridge crossing just upstream from the site.	Limited space for staging on river right. Larger staging location would need to be closer to the gas plant at an equipment staging lot. No restrooms or electricity onsite.	Access through active gas plant. Must call California Resources Corporation dispatch to access site. Propane trucks entering and exiting plant. Multiple pipeline crossings. Flame resistant clothing and hard hats may be required. Sensitive habitat, drive slow on roads. Multiple canal gates. Rattlesnakes.	N/A	209	217
KER-445	**Canal Flood Gate** Access through South Coles Levee Compressor Plant at Tupman Road and Arco Road.	N35.26892 W-119.30886	Deflection boom and collection.	1000	Possible to deploy small skiff from river left or river right.	This site is located at the Kern River terminus. Access to the site is through the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Critical habitat for the Buena Vista Lake ornate shrew is just north of this intake. Access to river left is off an access road just east of the California Aqueduct.	Limited space for staging on river right. Larger staging location would need to be closer to the gas plant at an equipment staging lot. No restrooms or electricity onsite.	Access through active gas plant. Must call California Resources Corporation dispatch to access site. Propane trucks entering and exiting plant. Multiple pipeline crossings. Flame resistant clothing and hard hats may be required. Sensitive habitat, drive slow on roads. Multiple canal gates. Water intakes to the California Aqueduct are just south of the site. Rattlesnakes.	N/A	209	221

Table Legend

RED	**Full Response Capabilites**	Access to site for large equipment and full deployment.
YELLOW	**Limited Response**	Access to site may be limited; have to cross railroad tracks, etc., may not get large equipment to site.
BLUE	**Access/ Observation**	Site provides access to the shoreline or edge of waterbody and/or provides an observation site. Observation site may not be at the waters edge. Both may provide locations for SCAT teams or NRDA to deploy/survey for oil.
PURPLE TRIANGLE	**Staging Areas**	Response Strategy and Access/Observation Sites with a potential staging area are denoted with a purple triangle.

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3.5 Response Strategy Detail Sheets

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

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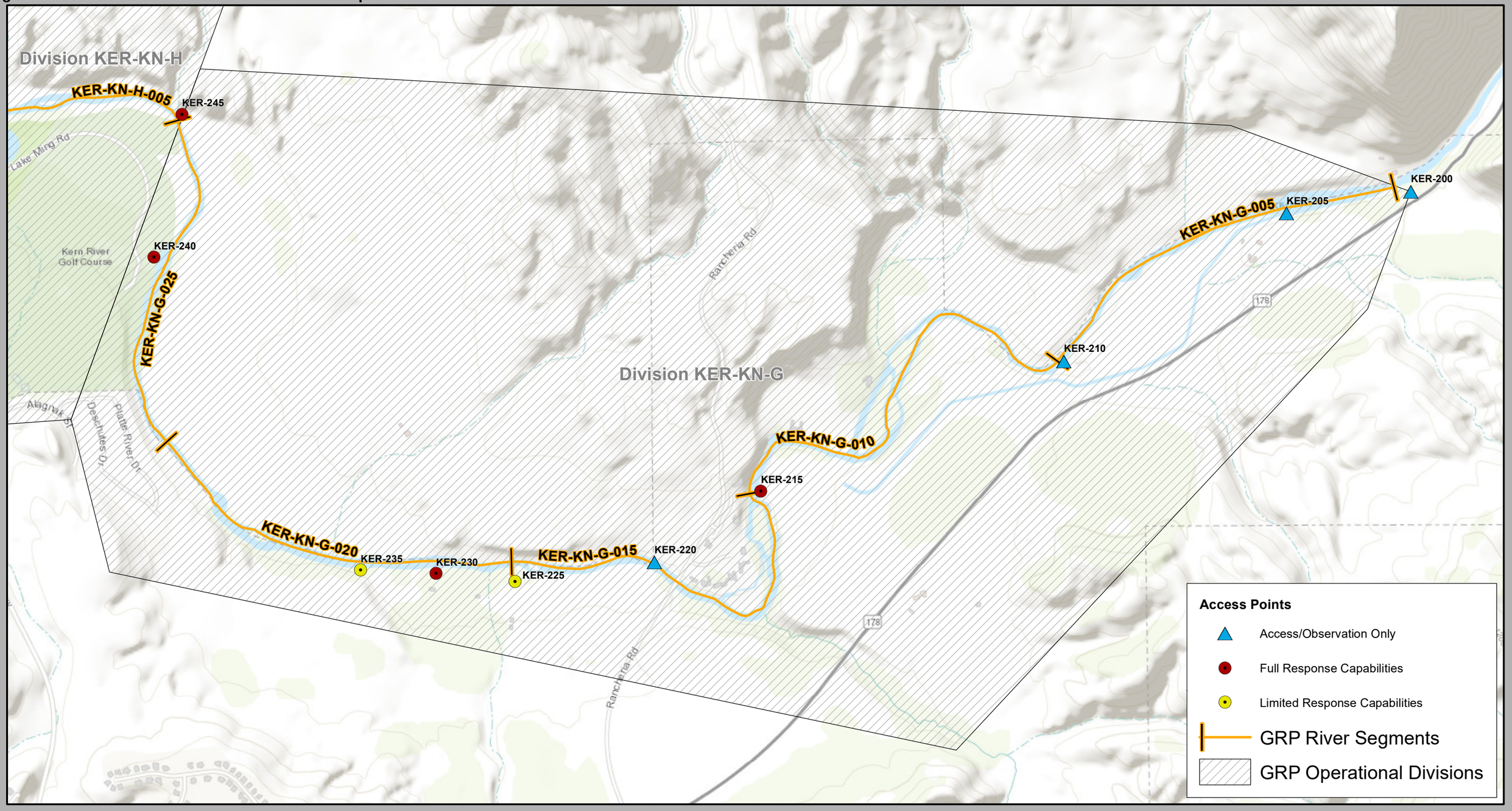
Figure 3-4: Kern River GRP Division KER-KN-G Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 06/12/2019

Kern River
Geographic Response Plan
Division KER-KN-G

0 ¼ ½ Miles
0 ¼ ½ 1 Kilometers

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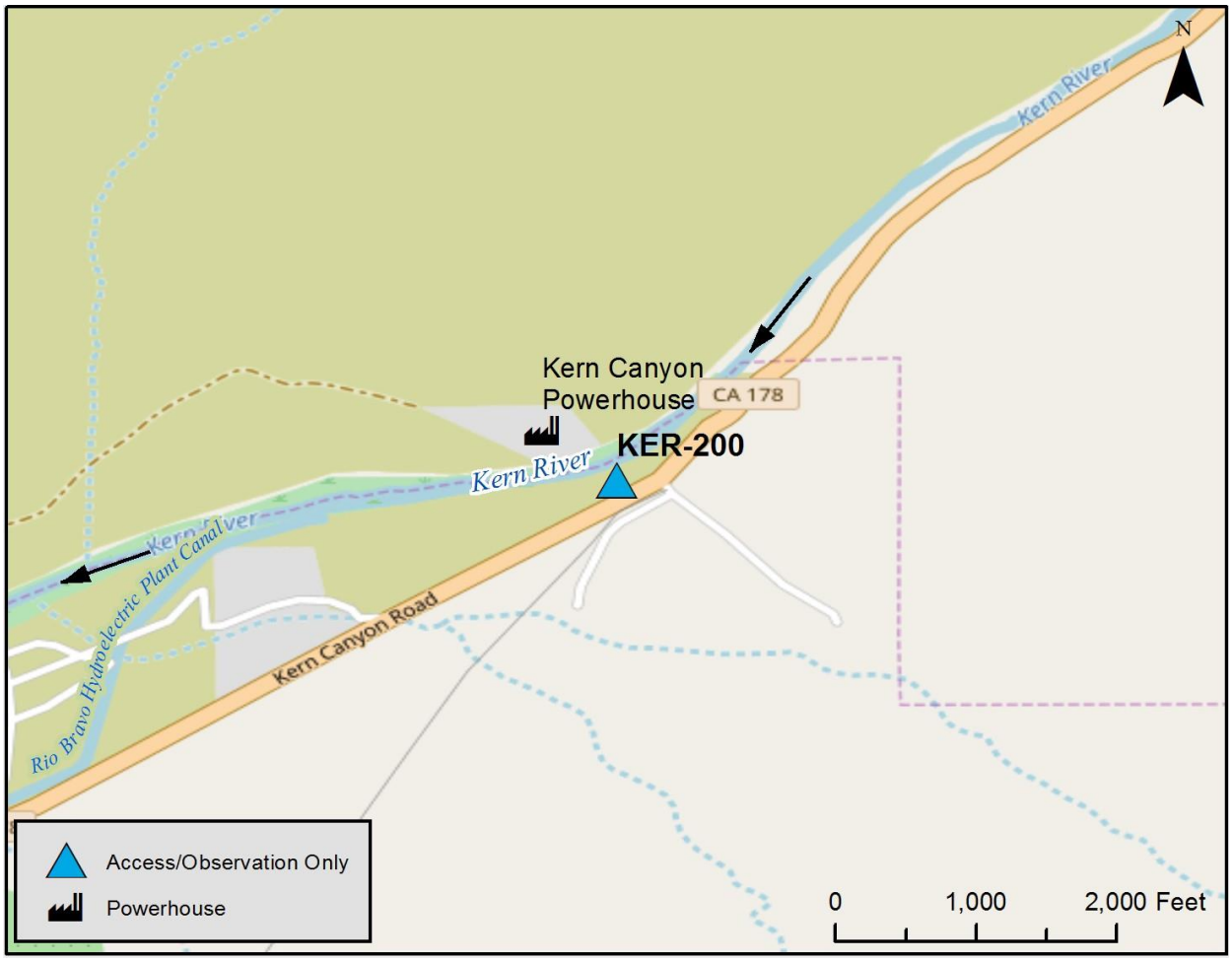
Access/Observation Site: Kern Canyon Powerhouse (KER-200)

Latitude: 35.44001 **Longitude:** -118.79576	**Driving Directions**
Highway Post Mile: KER 13.591	**From the East:** From Lake Isabella, take Highway 178 west. Location is on the north side of the highway directly after exiting the Kern River Canyon. **From the West:** From Bakersfield, take Highway 178 east toward Lake Isabella. Location is on the north side of the highway before entering the Kern River Canyon.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Vehicle traffic
- Swift water during winter and spring flows
- Dangerous swift water after rainfall and/or as a result of heavy outflow from Lake Isabella
- Steep slopes and falling rocks
- Rattlesnakes
- Trip and fall hazards, slippery when icy or wet

Site Description and Field Notes

Site Location/Segment: KER-KN-G-005

Best observation site is located at the lookout point on the north side of Highway 178 (river left). No river access and steep cliffs, but an ideal observation point above the waterway. Restricted access on river right at the PG&E hydroelectric plant, but for emergency entry call the Kern County Sherriff's Department. Hydroelectric plant no longer in use.

Site Contact/s: Kern County Sherriff (661) 861-3110, City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

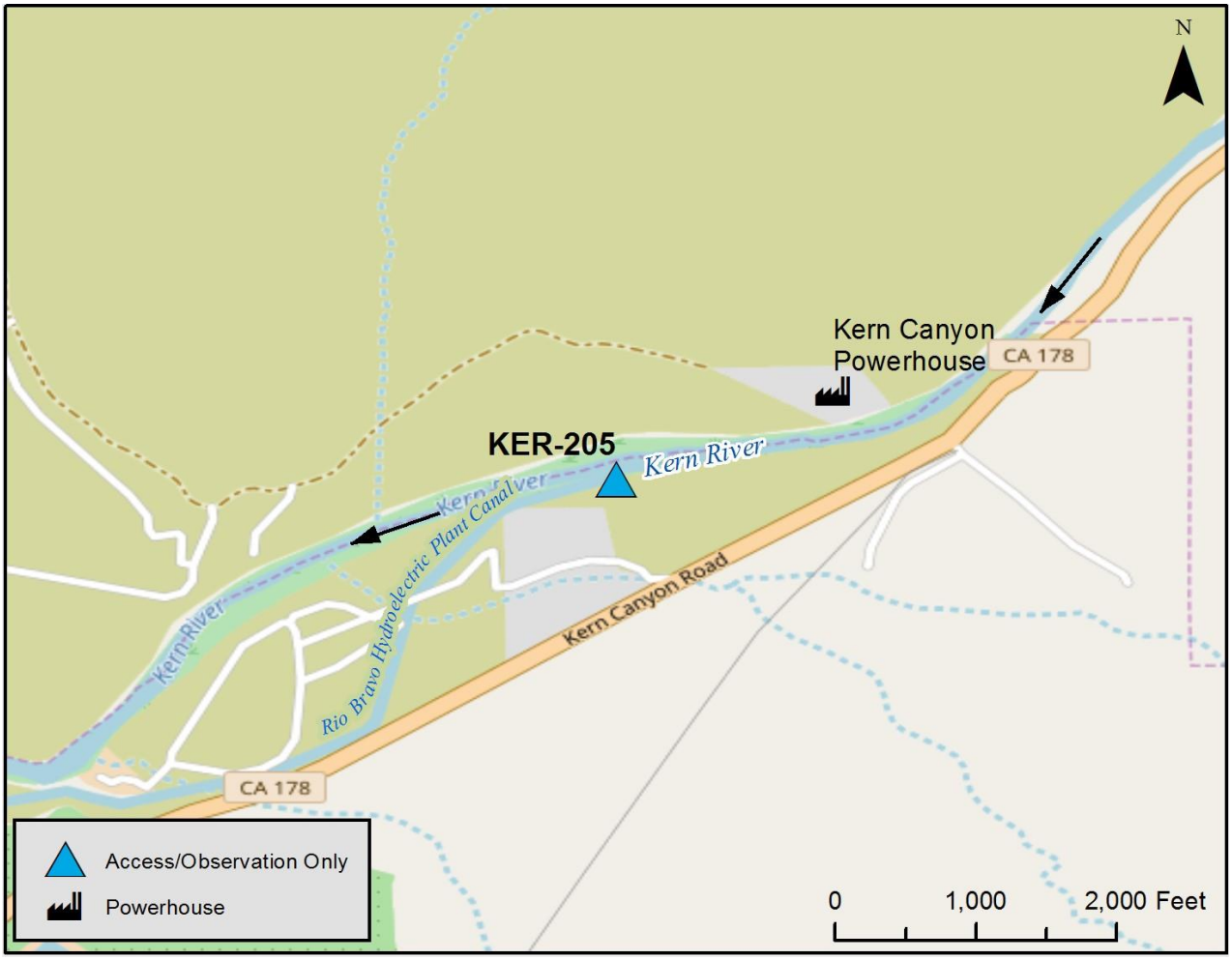
RR = River Right RL = River Left

Photo Date: 02/09/2018

Access/Observation Site: Rio Bravo Hydroelectric Plant Intake (KER-205)

Latitude: 35.43927 **Longitude:** -118.80143	**Driving Directions**
Highway Post Mile: KER 13.256	**From the East:** From Lake Isabella, take Highway 178 west. Exit the Kern River Canyon and take a right into the first Rio Bravo Ranch gate on the north side of the road (located at N35.4350, W-118.8044). Follow canal to water intake. See entrance photograph in site images. **From the West:** From Bakersfield, take Highway 178 east toward Lake Isabella. Location is on the north side of the highway before entering the Kern River Canyon. Take a left into the Rio Bravo Ranch gate on the north side of the road (located at N35.4350, W-118.8044). Follow canal road to water intake. See entrance photograph in site images.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Steep slopes and falling rocks
- Rattlesnakes
- Trip and fall hazards, slippery when icy or wet
- Be aware of ranch employees and traffic on the property, especially on canal road
- Gated access, private property

Site Description and Field Notes

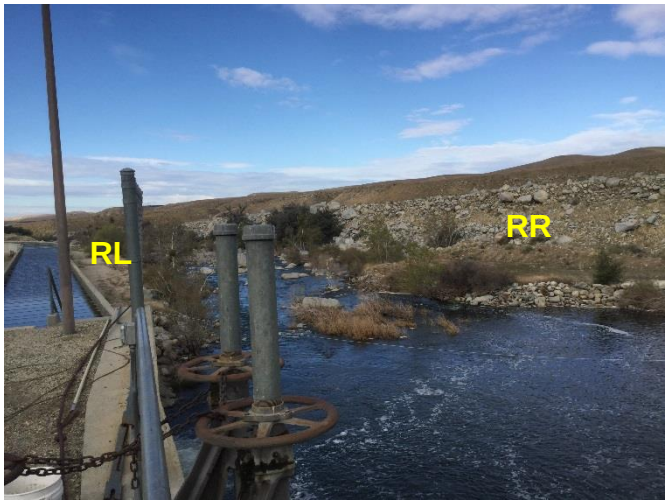
Site Location/Segment: KER-KN-G-005

Use intake platform as lookout point. No river access and steep cliffs, but an ideal observation point above the waterway. Gated access to the water intake platform on river-left (call Rio Bravo Ranch Hydroelectric Facility for access, or Jeff Siemens with Rio Bravo Ranch). Restricted access on river-right through the PG&E hydroelectric facility, but for emergency entry call the Kern County Sherriff's Department.

Site Contact/s: Rio Bravo Ranch Hydroelectric Facility Main Line (661) 872-4487; Rio Bravo Ranch, Jeff Siemens (661) 364-3010**;** Kern County Sherriff (661) 861-3110, City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream



Downstream

Entrance

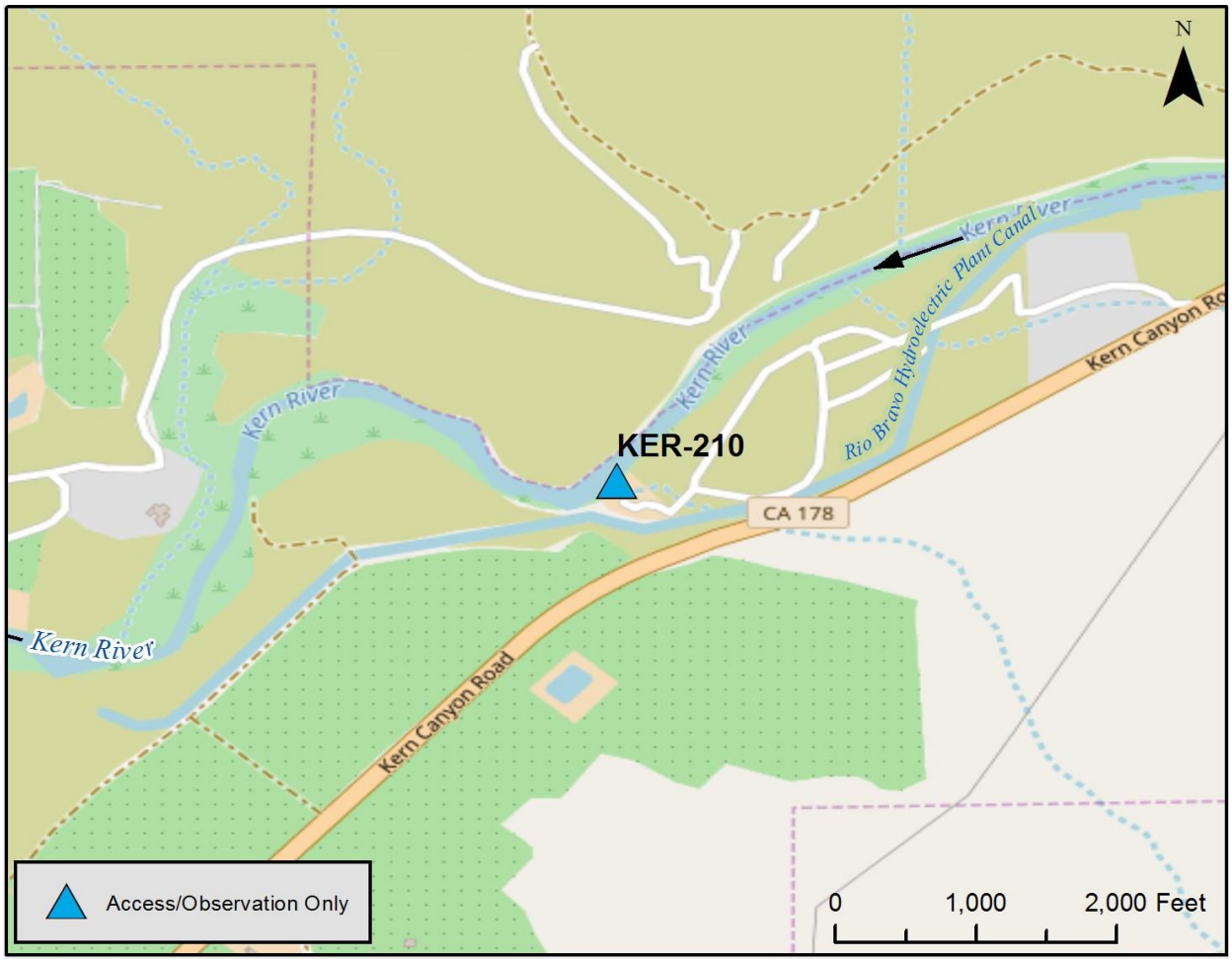
RR = River Right RL = River Left

Photo Date 03/01/2018

Access/Observation Site: Rio Bravo Turnout (KER-210)

Latitude: 35.43389 **Longitude:** -118.81162	**Driving Directions**
Highway Post Mile: N/A	**From the East:** From Lake Isabella, take Highway 178 west. Exit the Kern River Canyon and take a right into the first Rio Bravo Ranch gate on the north side of the road (located at N35.4350, W-118.8044). Cross over Rio Bravo Hydroelectric Facility canal, turn left onto dirt road. Follow dirt road to the river's edge (do not follow the canal road). **From the West:** From Bakersfield, take Highway 178 east toward Lake Isabella. Location is on the north side of the highway before entering the Kern River Canyon. Take a left into the first Rio Bravo Ranch gate on the north side of the road (located at N35.4350, W-118.8044). Cross over Rio Bravo Hydroelectric Facility canal, turn left onto dirt road. Follow dirt road to the river's edge (do not follow the canal road).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Dangerous swift water as a result of heavy outflow from Lake Isabella
- Steep slopes and falling rocks
- Rattlesnakes
- Trip and fall hazards, slippery when icy or wet
- Be aware of ranch employees and traffic on the property, especially on canal road

Access/Observation Site: Rio Bravo Turnout (KER-210)

Site Description and Field Notes

Site Location/Segment: KER-KN-G-010

Observation point only on river's edge. Limited access on both banks, not suitable for staging.

Site Contact/s: Rio Bravo Ranch, Jeff Siemens (661) 364-3010; Kern County Sherriff (661) 861-3110; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

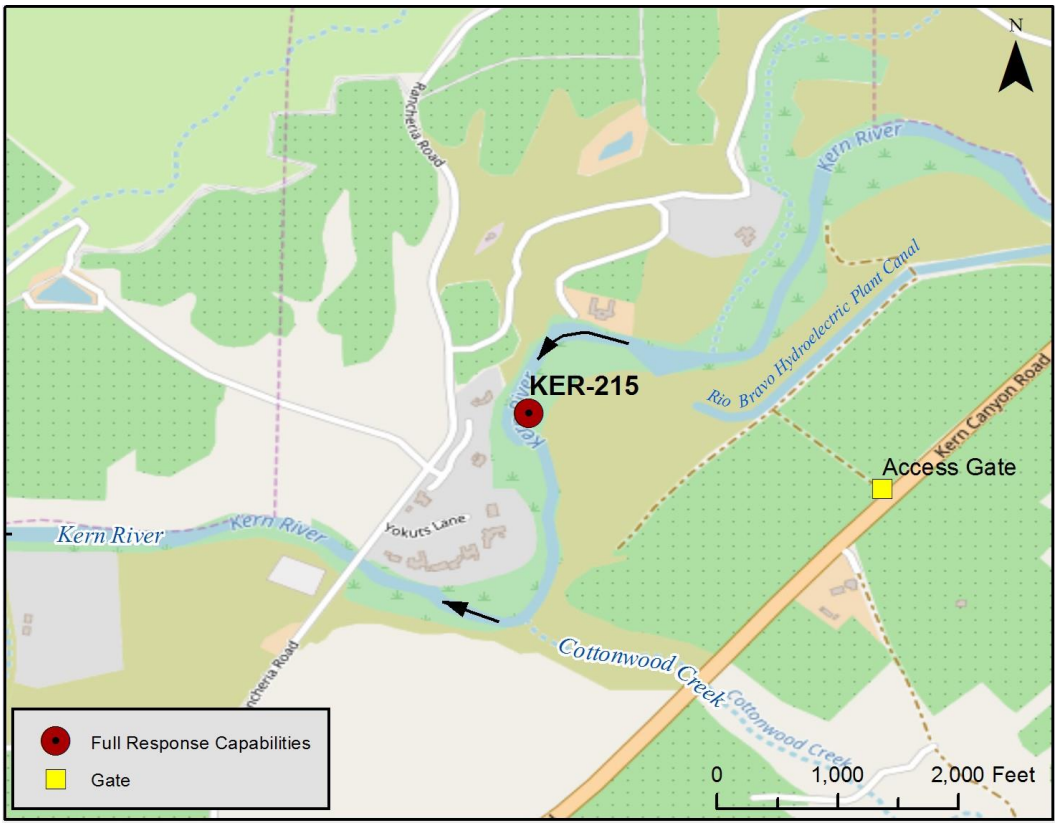
RR = River Right RL = River Left

Photo Date: 02/07/2018

Response Strategy Site: Rio Bravo Boat Launch (KER-215)

Latitude: 35.42919 **Longitude:** -118.82551	**Driving Directions**
Highway Postmile: KER 12.048	**From the North:** Highway 99 South to Highway 178 East for approximately 14 miles, turn left at Rio Bravo Gate 2 (gate lat/long: 35.42740, -118.81738) and follow dirt road between orchards. Turn left at end of orchard and take the middle road. Turn left at "T" and follow dirt road to river shore (river left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 15701 CA Highway 178 Bakersfield, CA 93306	**From the South:** Highway 99 North to Highway 178 East for approximately 14 miles, turn left at Rio Bravo Gate 2 (gate lat/long: 35.42740, -118.81738) and follow dirt road between orchards. Turn left at end of orchard and take the middle road. Turn left at "T" and follow dirt road to river shore (river left).
Cell Service: Weak signal, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Steep slopes and falling rocks
- Private property, must access Rio Bravo ranch gate 2 which may be locked – contact Rio Bravo Ranch
- Private residence on RR with small water intake
- Narrow dirt road to river access
- Be aware of ranch employees and traffic on the property
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

50 meters (164 feet)

Gradient: Low

Site Contact/s:

Jeff Siemens, Rio Bravo Ranch, Nickel Family, LLC
Mobile: (661) 364-3010

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-G-015

Located on Rio Bravo Ranch, Nickel Family, LLC property. There is a gate to access the river that might be locked. Limited room to stage vehicles and equipment. A larger staging area is available at the Rio Bravo Ranch, Nickel Family, LLC headquarters located at 15701 Highway 178 Bakersfield, CA 93306.

Vehicular Access: Passenger vehicles, small trucks, small trailers, small vacuum truck

Recreational Use: Rafting, Human Contact

Boat Launches: Direct river access, shallow boat launch for small skiff (river left). Private residence with river access/boat launch on river right.

ESI Shoreline Type: 1A Exposed rocky bank/shore; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 02/07/2018

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river left. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space, but it is limited. Access on river right limited due to private residence. Could access river right with a small skiff. Large staging location at Rio Bravo Ranch, Nickel Family, LLC headquarters. No restrooms or electricity onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Skimmer	Drum				Number will vary depending on response.
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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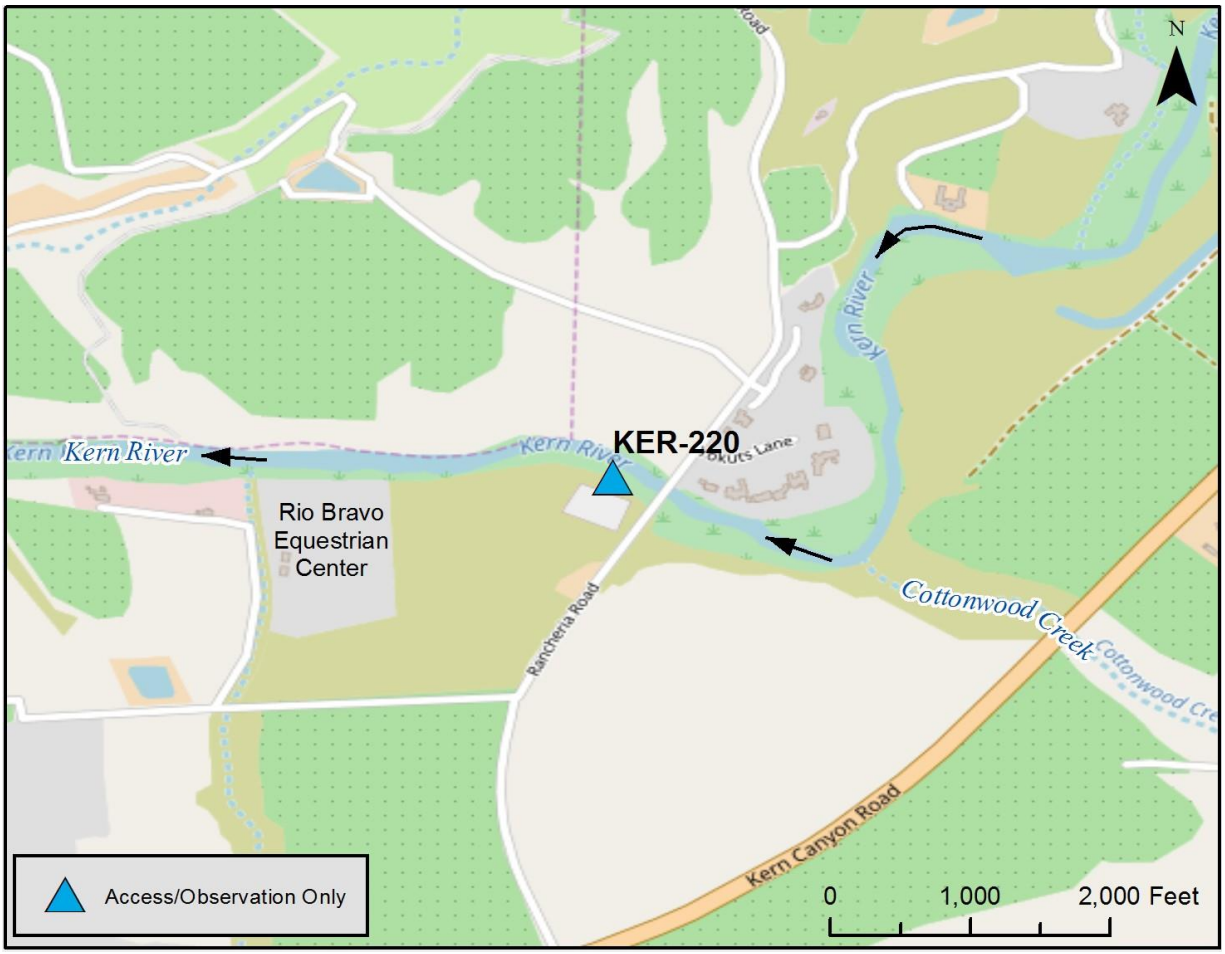
Access/Observation Site: Rancheria Road Recreational Access (KER-220)

Latitude: 35.42611 **Longitude:** -118.83045	**Driving Directions**
Highway Post Mile: N/A	**From the East:** From Lake Isabella, take Highway 178 west to Rancheria Road. Turn right, and river access will be on the left side of the road. **From the West:** From Bakersfield, take Highway 178 east to Rancheria Road. Turn left, and river access will be on the left side of the road. **River-Right Access (limited):** Continue north on Rancheria Road, cross the river, and turn left onto Indian Rock Road (dirt). This is on Rio Bravo Ranch property and may have a locked gate. Call Rio Bravo Ranch for access.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Boulders in waterway
- Swift water during winter and spring flows
- Dangerous swift water after rainfall and/or as a result of heavy outflow from Lake Isabella
- Rattlesnakes
- Trip and fall hazards, slippery when wet
- Heavy public use

Site Description and Field Notes

Site Location/Segment: KER-KN-G-015

Small boat/skiff/raft access at this location. Public portable restrooms on site. Location suitable for limited staging, but location is gated between 5:00pm and 8:00am. Limited access to river-right through Rio Bravo Ranch property, Indian Rock Road. River width approximately 30 meters. Contact Rio Bravo Ranch for 24-hour access to the site.

Site Contact/s: Rio Bravo Ranch, Jeff Siemens (661) 872-5050; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Entrance

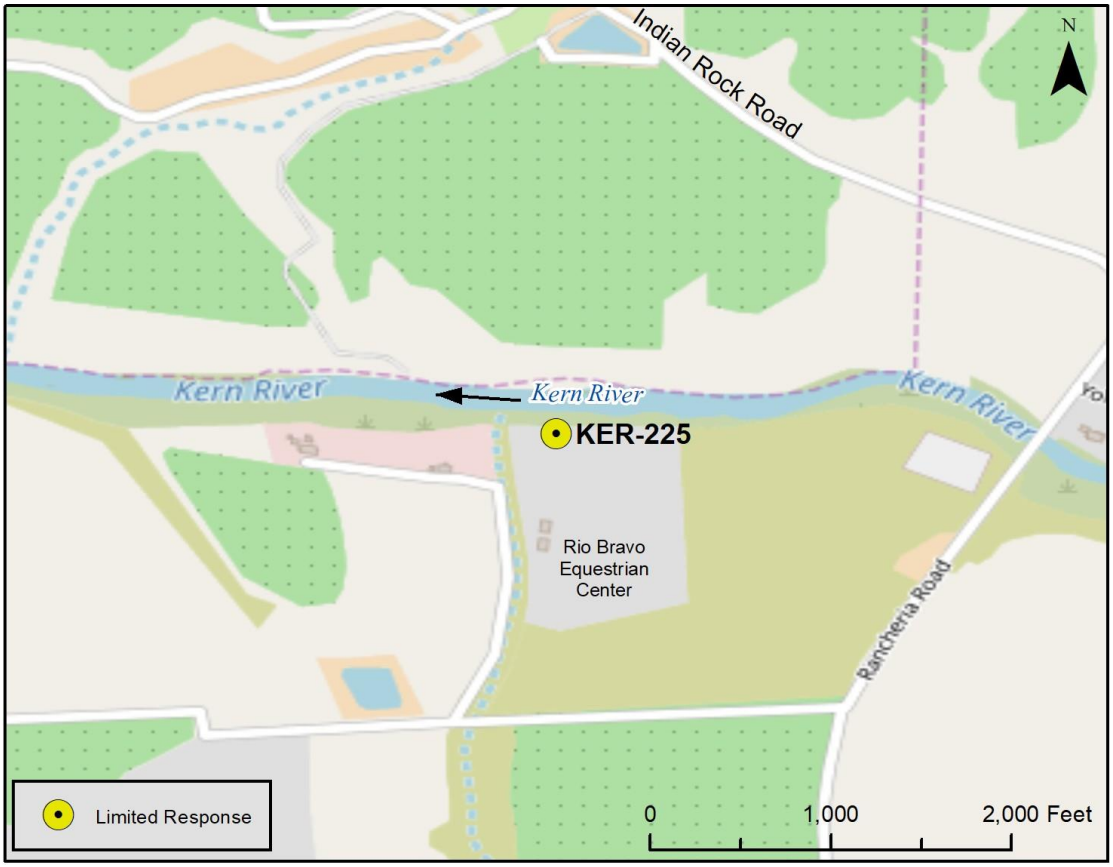
RR = River Right RL = River Left

Photo Date: 02/09/2018

Response Strategy Site: Rio Bravo Water Intake #1 (KER-225)

Latitude: 35.42617 **Longitude:** -118.83627	**Driving Directions**
Highway Postmile: KER R10.963	**From the North:** Highway 99 South to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Enter through gate and continue along road for approximately 1800 feet and turn right onto dirt road. Turn right at the "T" and follow dirt road to river shore (river left). **From the South:** Highway 99 North to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Enter through gate and continue along road for approximately 1800 feet and turn right onto dirt road. Turn right at the "T" and follow dirt road to river shore (river left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 15701 CA Highway 178 Bakersfield, CA 93306	
Cell Service: Weak signal, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property, must access Rio Bravo Equestrian Center with locking gate
- Watch for horses and traffic while on road
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Steep banks and falling rocks
- Water intake for agricultural use

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003, agricultural intake.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Response Strategy Site: Rio Bravo Water Intake #1 (KER-225)

Site Description and Field Notes

River Width:

60 meters (197 feet)

Gradient: Medium

Site Contact/s:

Jeff Siemens, Rio Bravo Ranch, Nickel Family, LLC
Mobile: (661) 364-3010

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-G-020

Located within the Rio Bravo Equestrian Center, which is managed by Rio Bravo Ranch, Nickel Family, LLC. There is a gate to access the river that may be locked after 19:00 hours. Dirt lot for staging equipment available at the equestrian center or the Rio Bravo Ranch, Nickel Family, LLC headquarters located at 15701 Highway 178 Bakersfield, CA 93306. Steep bank on river right, accessible using a small skiff.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Rafting, human contact, tubing

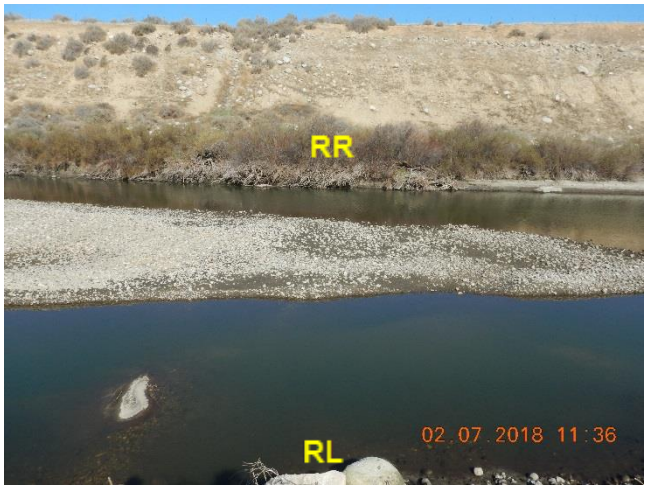
Boat Launches: Direct river access, small skiff only from bank at river left

ESI Shoreline Type: 1A Exposed rocky bank/shore; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 02/07/2018

Response Strategy Site: Rio Bravo Water Intake #1 (KER-225)

Site Objectives: Deploy boom and protect agricultural intake from oiling. Deploy boom to prevent further movement of oil and allow for collection of oil on river left.

Implementation: Boom A: Deploy 500 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Boom B: Deploy 100 ft. of containment boom upstream from water intake to protect from oiling. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river left. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space, but it is limited. Access on river right limited due to private residence. Limited electricity and restrooms at equestrian center. Room for decontamination on river left.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	600 ft.	Booming strategy only effective during medium to low flow. Boom A = 500-feet, Boom B = 100-feet.
Boom	Sorbent	5 or 8	Inch	600 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom A = 500-feet, Boom B = 100-feet.
Stakes	Anchoring			12	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring for Boom A.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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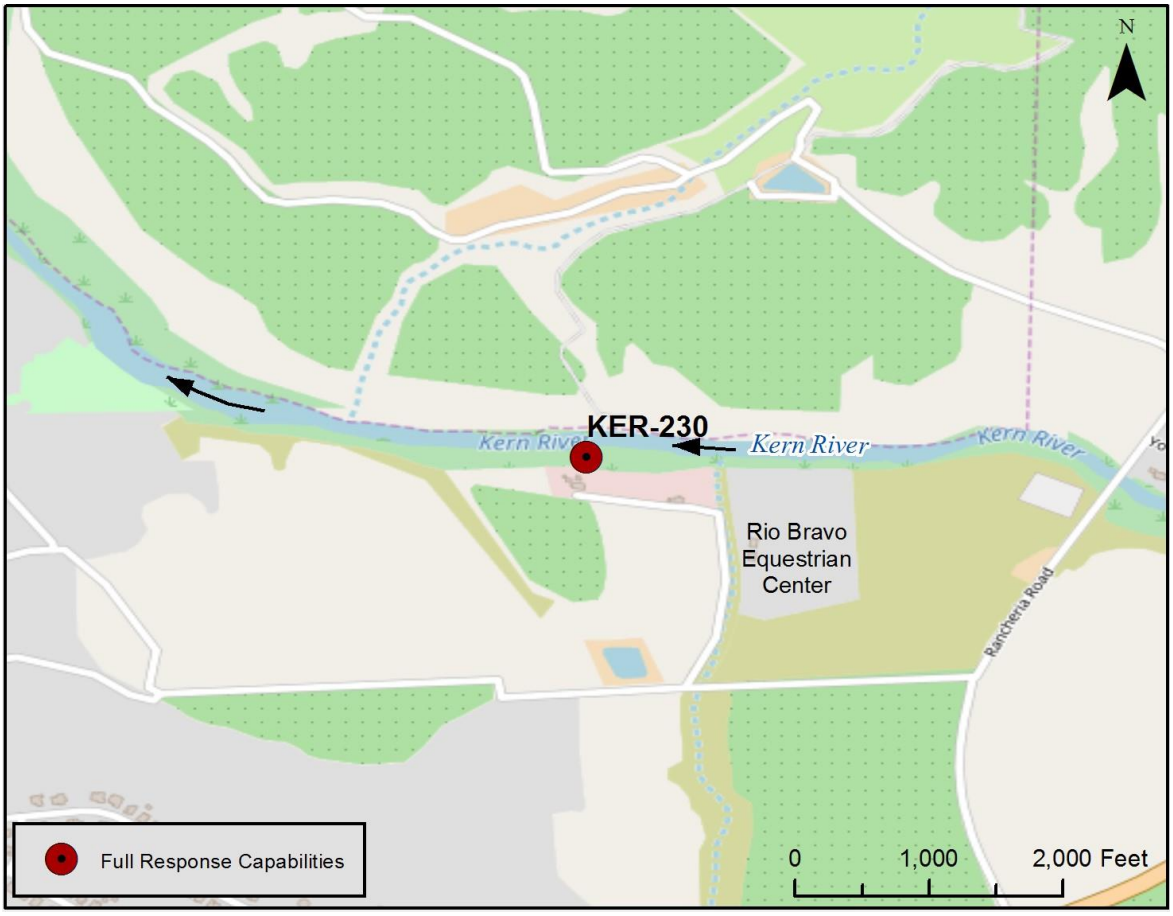
Response Strategy Site: Rio Bravo Ranch House (KER-230)

Latitude: 35.42642 **Longitude:** -118.84045	**Driving Directions**
Highway Postmile: KER R10.963	**From the North:** Highway 99 South to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Continue along road for approximately 1800 feet and turn right onto dirt road. Turn left at the "T" and follow dirt road for approximately 1000 feet. Ranch house is on the right at river shore (river left). **From the South:** Highway 99 North to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Continue along road for approximately 1800 feet and turn right onto dirt road. Turn left at the "T" and follow dirt road for approximately 1000 feet. Ranch house is on the right at river shore (river left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 15701 CA Highway 178 Bakersfield, CA 93306	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property, must access Rio Bravo Equestrian Center
- Watch for horses and traffic while on road
- Rattlesnakes
- Steep bank and falling rocks on river right
- Water intake 0.2 miles downstream of site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

40 meters (131 feet)

Gradient: Medium

Site Contact/s:

Jeff Siemens, Rio Bravo Ranch, Nickel Family, LLC
Mobile: (661) 364-3010

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-G-020

Located just west of the Rio Bravo Equestrian Center, which is managed by Rio Bravo Ranch, Nickel Family, LLC. There is a gate to access the river that may be locked after 19:00 hours. Dirt lot for staging equipment available at the equestrian center or the Rio Bravo Ranch, Nickel Family, LLC headquarters located at 15701 Highway 178 Bakersfield, CA 93306. Steep bank on river right, accessible via a small skiff.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Rafting, human contact, tubing, ranch house rental

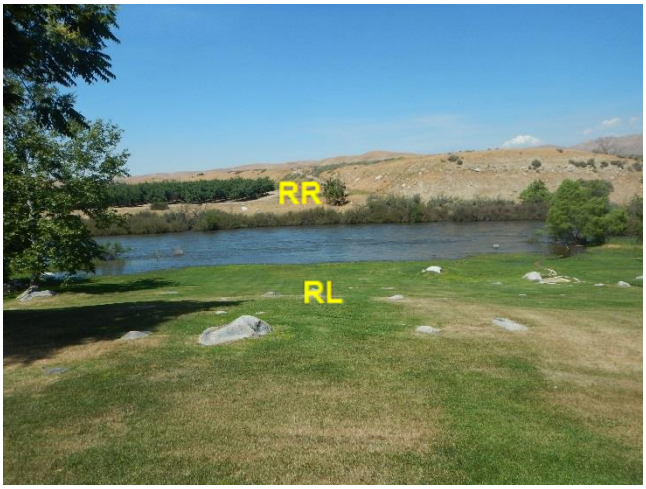
Boat Launches: Direct river access, shallow boat launch for small skiff (river left)

ESI Shoreline Type: 1A Exposed rocky bank/shore; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 02/16/2018

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 600 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Boom trailers, vacuum trucks and temporary storage tanks could use the space, but it is limited. Electricity and restrooms are onsite. The ranch house could be used as a command post but would need special permission from Rio Bravo Ranch, Nickels Family LLC. Decontamination of equipment possible at site.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	600 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	600 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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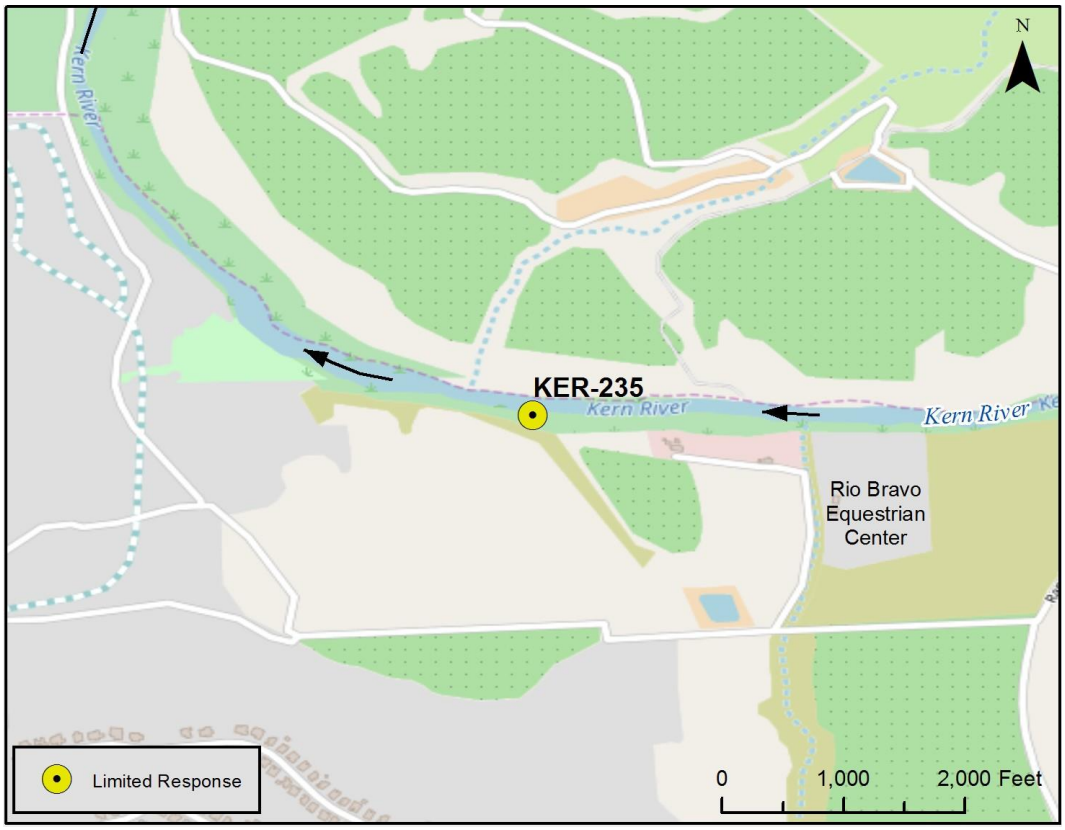
Response Strategy Site: Rio Bravo Water Intake #2 (KER-235)

Latitude: 35.42645 **Longitude:** -118.84369	**Driving Directions**
Highway Postmile: KER R10.963	**From the North:** Highway 99 South to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Continue on road for approximately 1800 feet and turn right onto dirt road. Turn left at the "T" and follow dirt road for approximately 1500 feet. Turn right at the "T" and follow road to dead end (river left). **From the South:** Highway 99 North to Highway 178 East, turn left onto Rancheria Road. Equestrian Center entrance is on left (west) side of Rancheria Road, approximately 2000 feet from Highway 178. Continue on road for approximately 1800 feet and turn right onto dirt road. Turn left at the "T" and follow dirt road for approximately 1500 feet. Turn right at the "T" and follow road to dead end (river left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 15701 CA Highway 178 Bakersfield, CA 93306	
Cell Service: Spotty, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property, must access Rio Bravo Equestrian Center with locking gate
- Watch for horses and traffic while on road
- Potential for stinging nettle to be present along bank
- Rattlesnakes
- Narrow dirt road to access river with small location to turn around
- Water intake for agricultural use

Resources-At-Risk

Ecological: Western Pond Turtle**,** San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003, agricultural intake.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

35 meters (115 feet)

Gradient: Medium

Site Contact/s:

Jeff Siemens, Rio Bravo Ranch, Nickel Family, LLC
Mobile: (661) 364-3010

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-G-020

Located west of the Rio Bravo Equestrian Center, which is managed by Rio Bravo Ranch, Nickel Family, LLC. There is a gate to access the river that may be locked after 19:00 hours. Dirt lot for staging equipment available at the equestrian center or the Rio Bravo Ranch, Nickel Family, LLC headquarters located at 15701 Highway 178 Bakersfield, CA 93306. Thick vegetation on river right but could access through Rio Bravo orchards off Indian Rock Road.

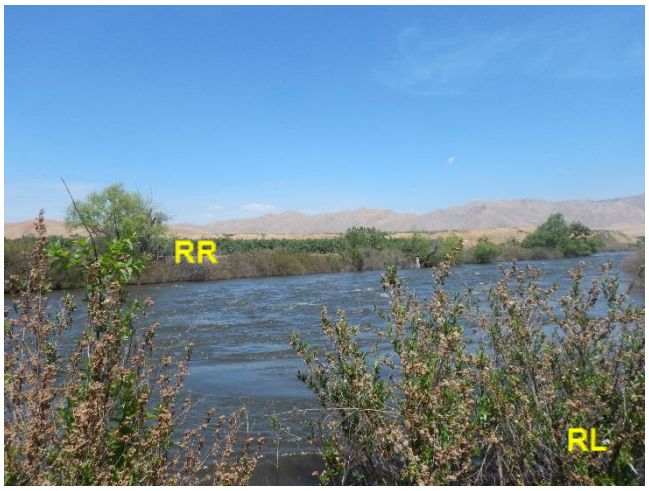
Vehicular Access: Passenger vehicles, small trucks, small vacuum truck

Recreational Use: Rafting, tubing, human contact

Boat Launches: Direct river access, shallow boat launch (river left) for small skiff

ESI Shoreline Type: 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images



Upstream

Downstream

Pump Inlet

RR = River Right RL = River Left

Photo Date: 05/03/2017

Response Strategy Site: Rio Bravo Water Intake #2 (KER-235) Page 3 of 3

Site Objectives: Deploy boom and protect agricultural intake from oiling. Deploy boom to prevent further movement of oil and allow for collection of oil on river left.

Implementation: Boom A: Deploy 500 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Boom B: Deploy 100 ft. of containment boom upstream from water intake to protect from oiling. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river left. Truck with small trailer and small vacuum truck could access river's edge but staging of equipment and vehicles would need to be along the road or at Rancheria Equestrian Center. Limited electricity and restrooms at equestrian center.

Response Strategy Map (overview)

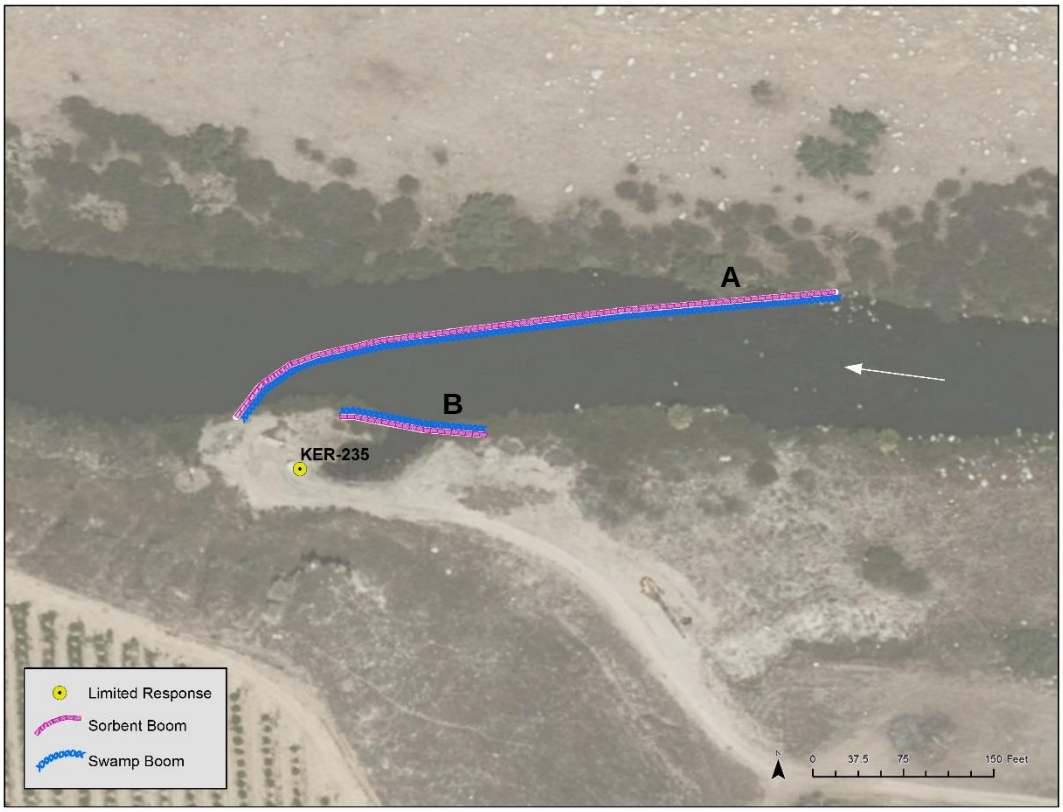


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	600 ft.	Booming strategy only effective during medium to low flow. Boom A = 500-feet, Boom B = 100-feet.
Boom	Sorbent	5 or 8	Inch	600 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom A = 500-feet, Boom B = 100-feet.
Stakes	Anchoring			12	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Lake Ming Overflow Parking (KER-240)

Latitude: 35.43815
Longitude: -118.85291

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
13375 Lake Ming Road
Bakersfield, CA 93306

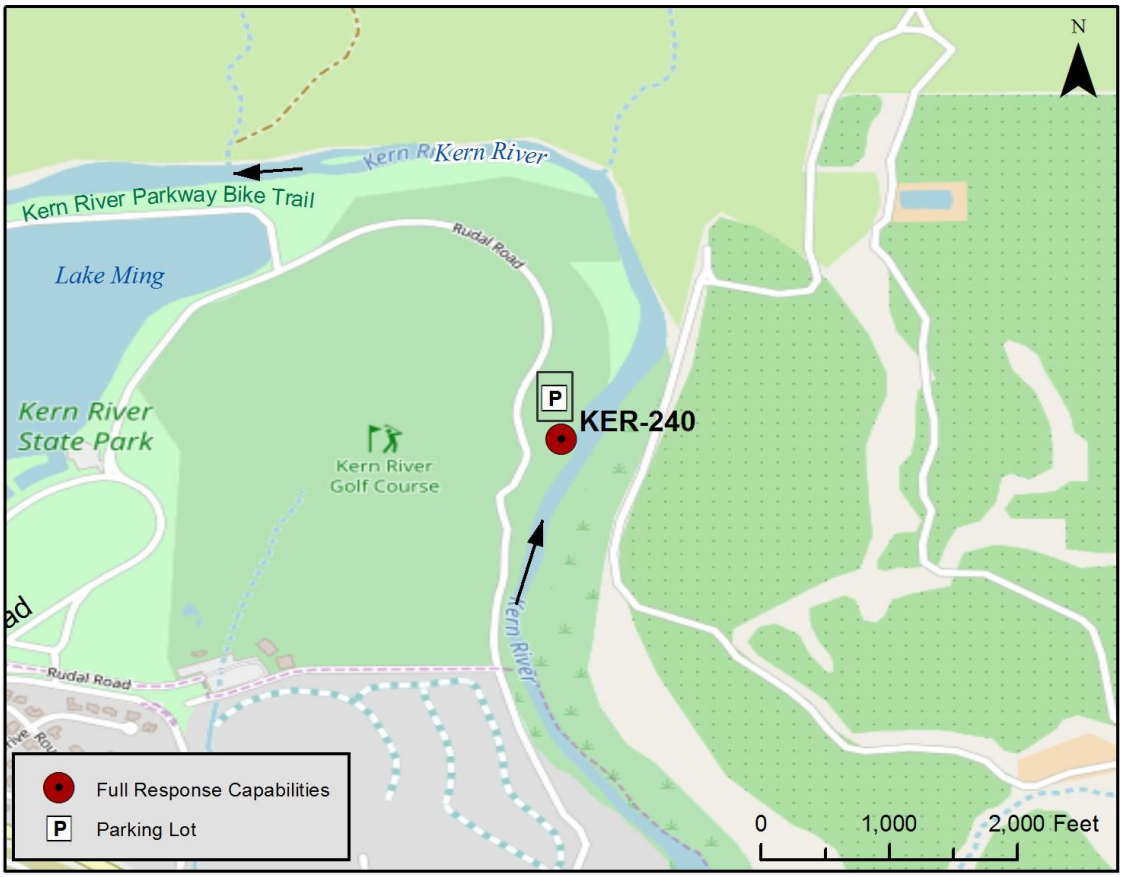
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Highway 178 East, turn left onto Alfred Harrell Highway. Turn right onto Lake Ming Road. Stay right and follow the road along the lake. Circle right and look for sign that states, "Overflow Parking Area." The southeast corner of the parking lot has river access (river left).

From the South: Highway 99 North to Highway 178 East, turn left onto Alfred Harrell Highway. Turn right onto Lake Ming Road. Stay right and follow the road along the lake. Circle right and look for sign that states, "Overflow Parking Area." The southeast corner of the parking lot has river access (river left).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use with heavy traffic during spring and summer months
- Potential for stinging nettle to be present along bank
- Rattlesnakes
- Heavy boating traffic during spring and summer months
- Water intake to Lake Ming 0.9 miles downstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Response Strategy Site: Lake Ming Overflow Parking (KER-240)

Site Description and Field Notes

River Width:
35 meters (115 feet)

Gradient: Medium

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-G-025

This site is located within the Lake Ming Overflow Parking area just north of the Pyles Boys Camp. During events at Lake Ming, this location may be limited for staging vehicles and equipment. Access on river right is not ideal due to thick vegetation. Could access river right using a small skiff.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Rafting, fishing, tubing, human contact

Boat Launches: Direct river access, shallow boat launch (river left) for small skiff

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

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 02/16/2018

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 500 ft. of containment boom upstream at an angle to prevent entrainment; utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Large dirt lot for parking and staging equipment. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space – would need county's permission. Room for decontamination. No electricity or bathrooms.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	500 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	500 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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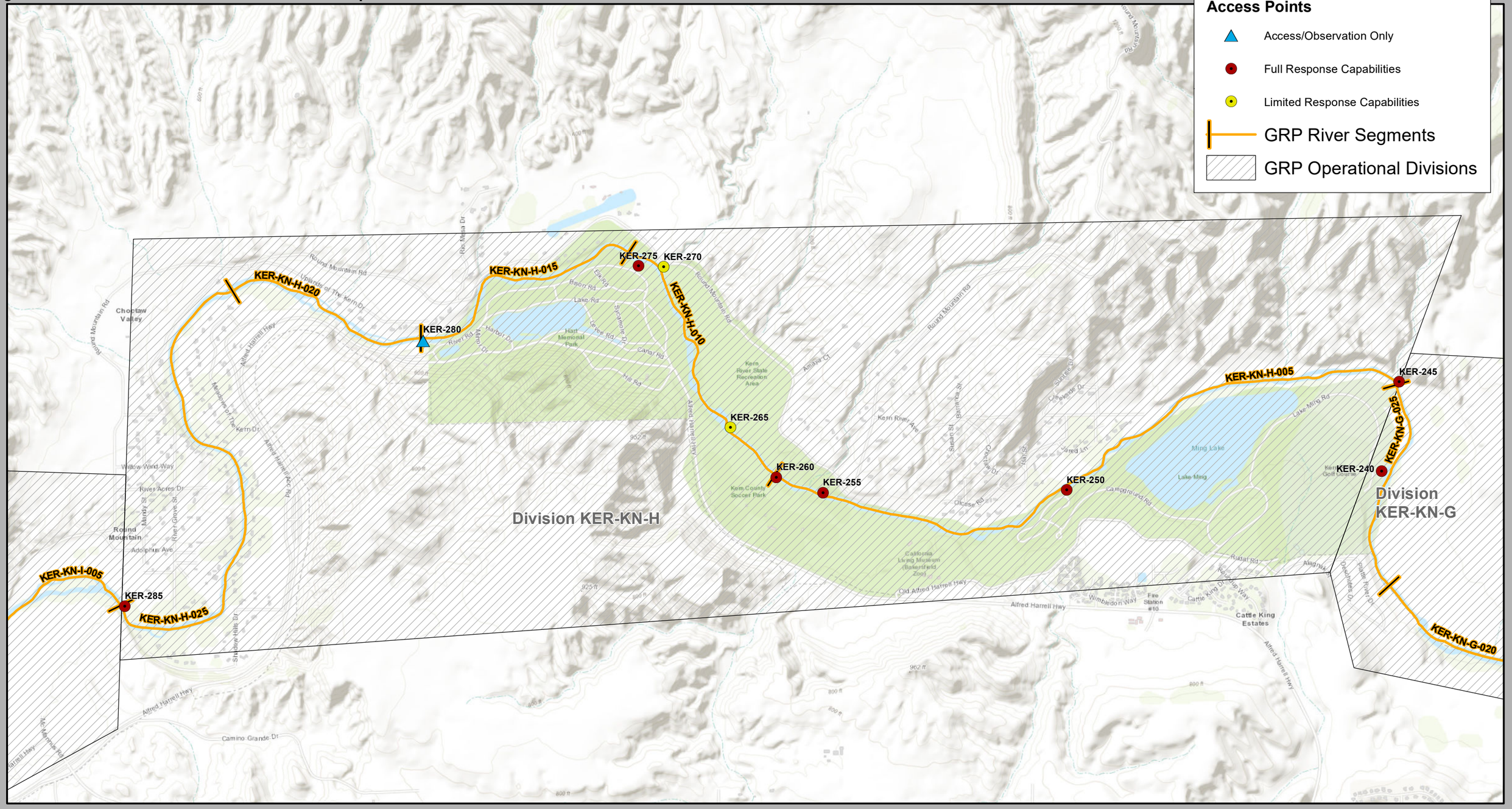
Figure 3-5: Kern River GRP Division KER-KN-H Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 06/12/2019

Kern River
Geographic Response Plan
Division KER-KN-H

0 ¼ ½ 1 Miles

0 ½ 1 2 Kilometers

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Latitude: 35.44345
Longitude: -118.85157

Highway Postmile: KER R10.963

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
15701 CA Highway 178
Bakersfield, CA 93306

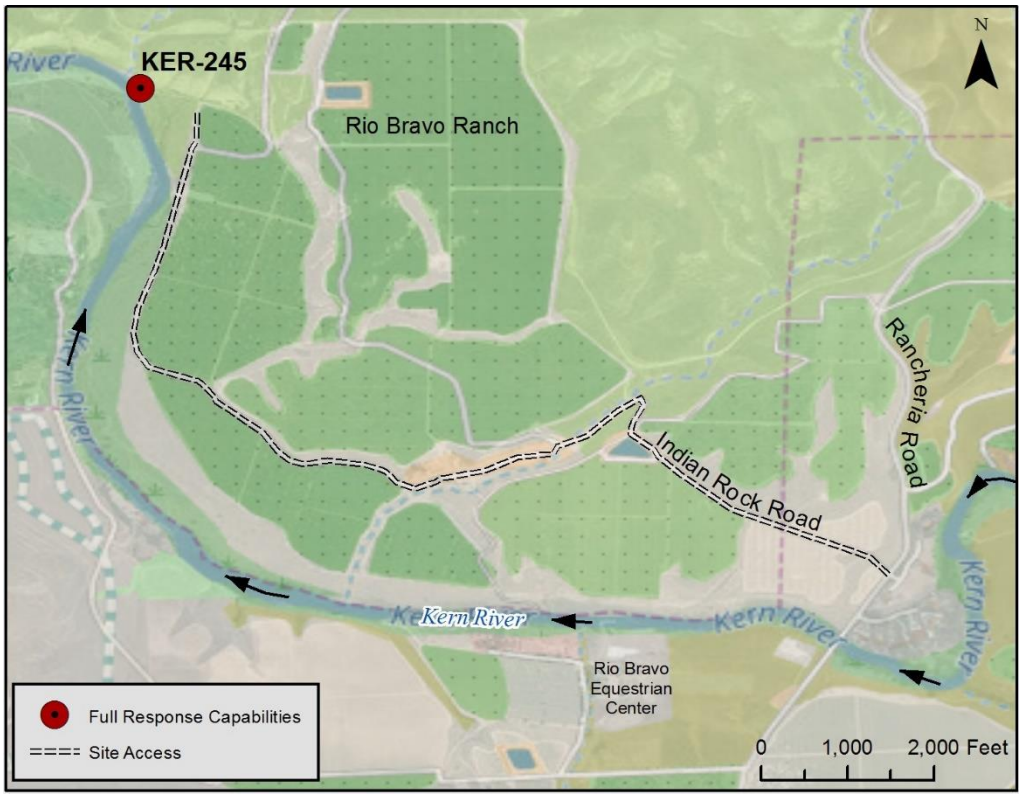
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Highway 178 East, turn left onto Rancheria Road for approximately 8/10s of a mile. Turn left onto Indian Rock Road (dirt) and follow road. Turn right at the agricultural pond and then a sharp left. Continue through equipment yard until you reach the western extent of the orchards. Follow along the western edge of the orchards in a northern direction until you reach a cattle gate on the left side of the road. Access through gate to river's edge (river right).

From the South: Highway 99 North to Highway 178 East, turn left onto Rancheria Road for approximately 8/10s of a mile. Turn left onto Indian Rock Road (dirt) and follow road. Turn right at the agricultural pond and then a sharp left. Continue through equipment yard until you reach the western extent of the orchards. Follow along the western edge of the orchards in a northern direction until you reach a cattle gate on the left side of the road. Access through gate to river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property, must access Rio Bravo property through locked gate
- Be aware of ranch employees and traffic on the property
- Cattle present
- During spring and summer months, rafting company removes rafts/rafters from this location
- Stinging nettle potentially growing on banks
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: River's End River Rafting (661) 326-7003

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

70 meters (229 feet)

Gradient: Low

Site Contact/s:

Jeff Siemens, Rio Bravo Ranch, Nickel Family, LLC
Mobile: (661) 364-3010

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-H-005

This location is where the River's End Rafting company unloads rafts and rafters during spring and summer months. Access to the river right is along several dirt agricultural roads within the Rio Bravo Ranch, Nickel Family, LLC property. If gate is locked, site contact would need to unlock. Access to river left not ideal with thick vegetation. Could access river left using a small skiff.

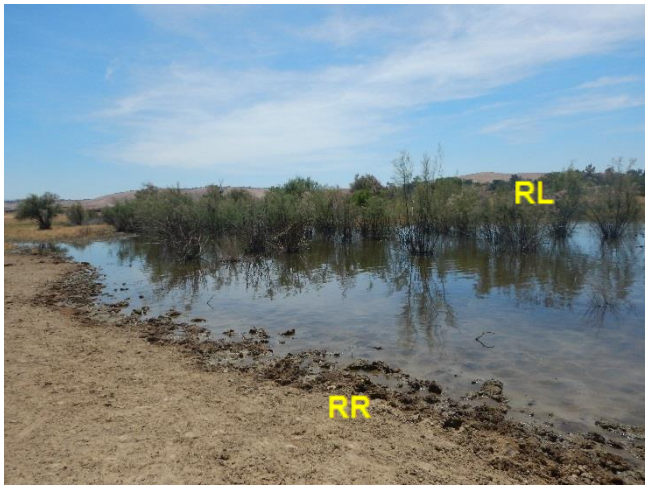
Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Rafting, tubing

Boat Launches: Direct river access, shallow boat launch for small skiff (river right)

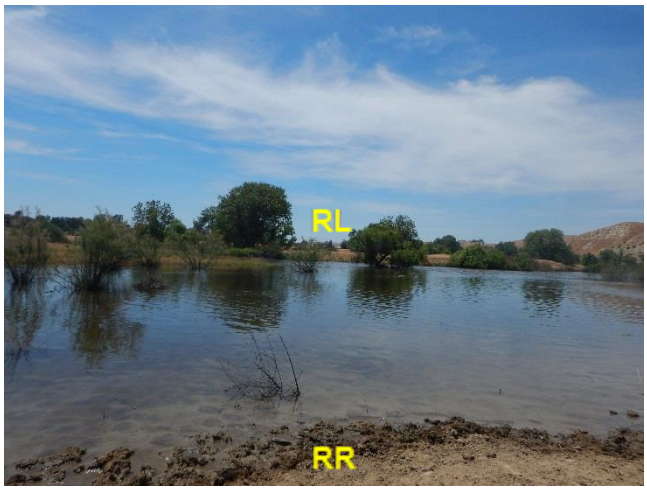
ESI Shoreline Type: 1A Exposed rocky bank/shore; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images



Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 05/03/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space, but it is limited. Access on river left by foot trail near Lake Ming overflow parking. Could access river right with a small skiff. Decontamination possible at site. No electricity or bathrooms available.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Lake Ming Campground (KER-250)

Latitude: 35.43726
Longitude: -118.87588

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
13375 Lake Ming Road
Bakersfield, CA 93306

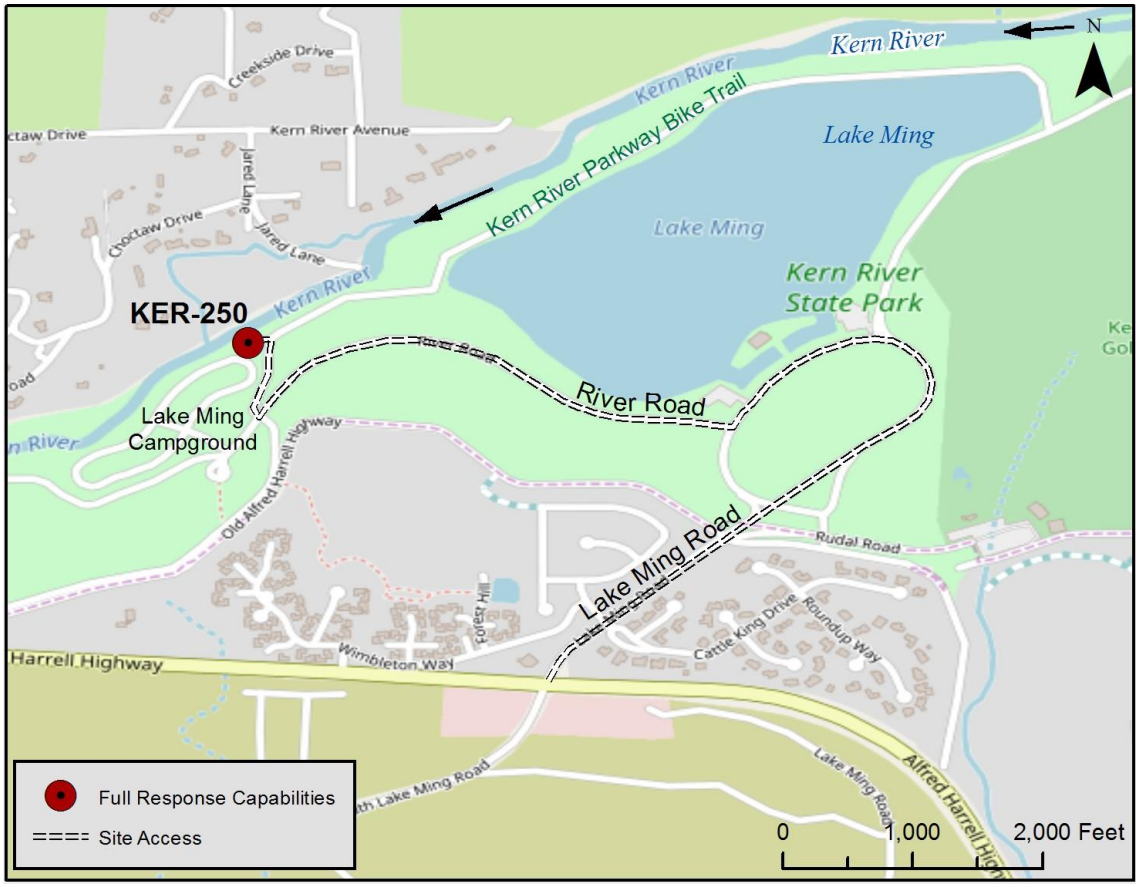
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Highway 178 East, turn left onto Alfred Harrell Highway. Turn right onto Lake Ming Road. Circle around and pass the boat launch site at Lake Ming. Turn right onto River Road and take a right into the campground site. Turn right onto Campground Road. Access to the river (river left) is near campsites 15 and 37.

From the South: Highway 99 North to Highway 178 East, turn left onto Alfred Harrell Highway. Turn right onto Lake Ming Road. Circle around and pass the boat launch site at Lake Ming. Turn right onto River Road and take a right into the campground site. Turn right onto Campground Road. Access to the river (river left) is near campsites 15 and 37.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use with overnight campsites
- Watch for vehicle and foot traffic, speed limit is 5 mph
- Private property on river right
- Cal Water Service Dept. water intake 0.6 miles downstream on river left
- Potential for stinging nettle on riverbanks
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Campground site, water intakes (2); Lake Ming Water Intake and Lake Ming Small Pump at Ming Lake, small intake on river right on private property, drinking water intake 0.6 miles downstream at Cal. Water Service Company

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

42 meters (137 feet)

Gradient: Low

Site Contact/s:
City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-005

This site is located within the Lake Ming Campground that is managed by Kern County Parks and Recreation. Access to the river is near campsites 15 and 37. A small beach area is present where a small skiff could be launched. Private property is on the river right.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Tubing, human contact, recreational fishing, camping

Boat Launches: Direct river access, shallow boat launch (river left) for small skiff

ESI Shoreline Type: 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 02/09/2018

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river left. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space – would need county's permission. Room for decontamination, electricity and bathrooms also available.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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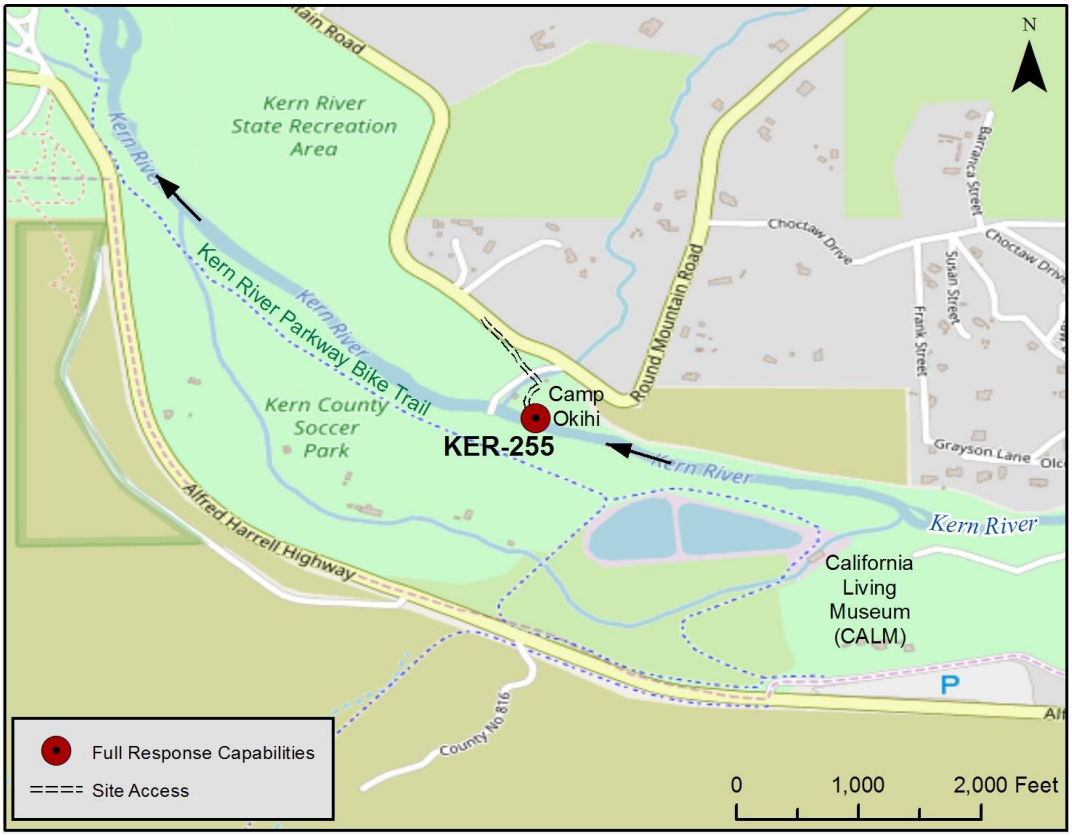
Response Strategy Site: Camp Okihi (KER-255)

Latitude: 35.43723 **Longitude:** -118.89365	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Turn right off the road at 13801 Round Mountain Road and follow the dirt road to the river's edge (river right). **From the South:** Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Turn right off the road at 13801 Round Mountain Road and follow the dirt road to the river's edge (river right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 13801 Round Mountain Road Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use with overnight campsites
- Watch for vehicle and foot traffic, especially during spring and summer months
- Steep banks
- Water intake for soccer fields 0.2 miles downstream on river left
- Potential for stinging nettle to be present along bank
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Campgrounds, water intake for irrigation

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:

31 meters (101 feet)

Gradient: Low

Site Contact/s:
City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-005

This site is located at the Camp Okihi campgrounds, which are managed by Kern County Parks and Recreation. Access to river left is possible on the bike path at the CALM Zoo parking lot and following behind the soccer fields. Banks are slightly steep on both sides with limited access on river left. Follow walking trail off the bike path to access river left.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Human contact, recreational fishing, camping, tubing

Boat Launches: Direct river access, small skiff only from bank at river right

ESI Shoreline Type: 1A Exposed rocky bank/shore; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 11/30/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging for boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the county's permission. Room for decontamination. Electricity and portable restrooms onsite.

Response Strategy Map (overview)

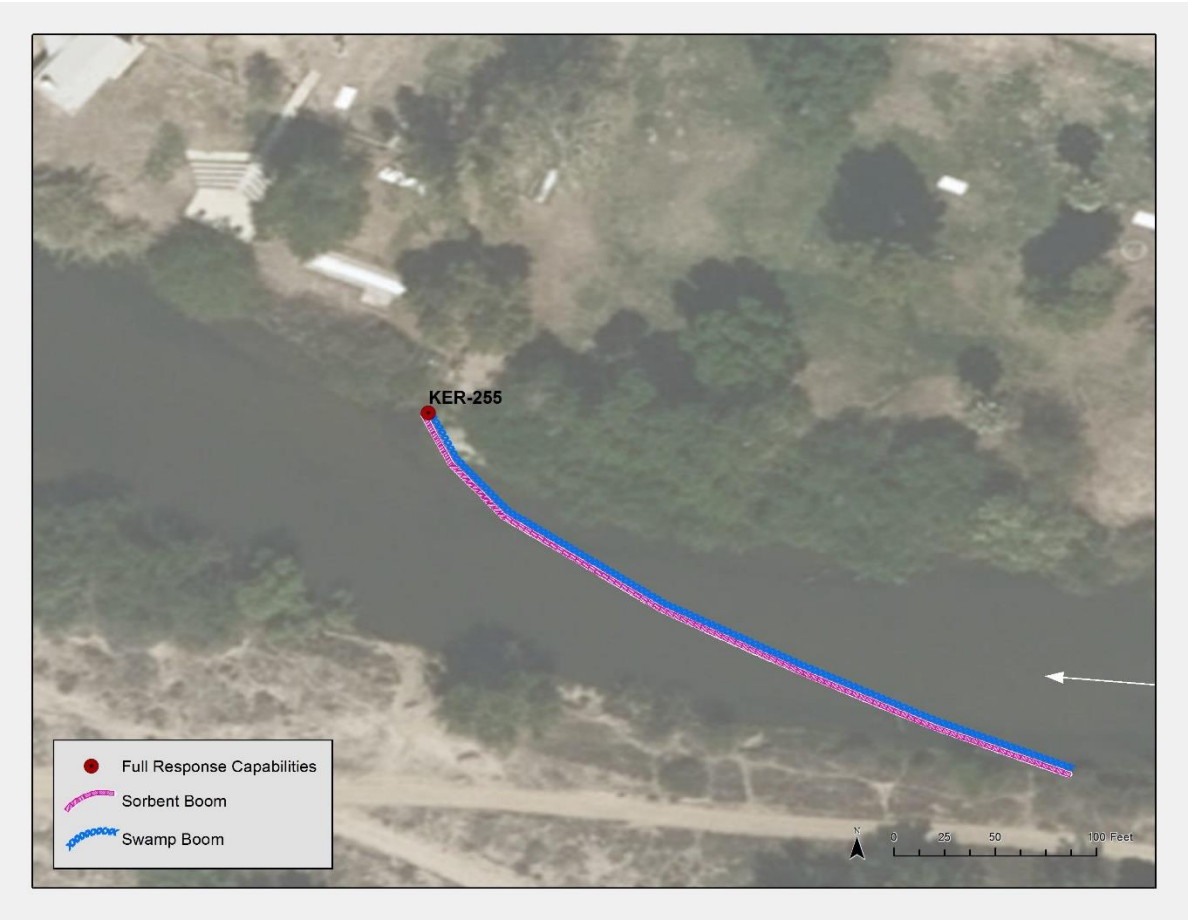


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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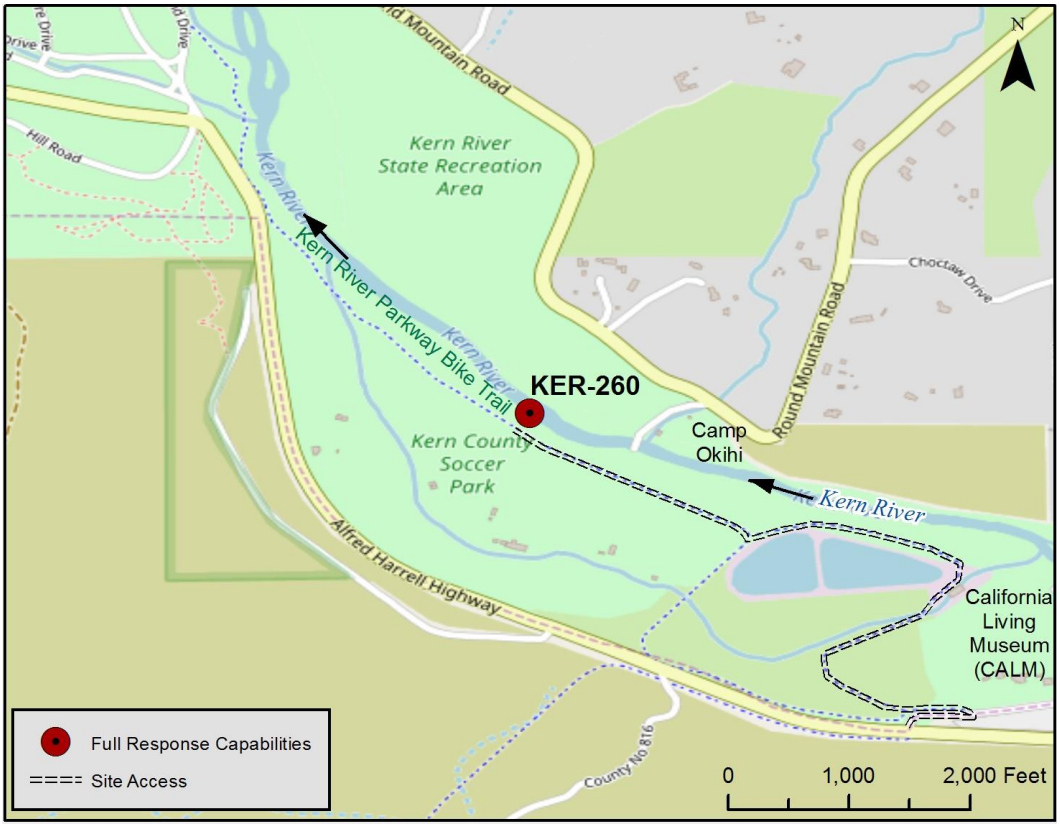
Response Strategy Site: Kern County Soccer Park (KER-260)

Latitude: 35.43821 **Longitude:** -118.89702	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Highway 178 East, turn left onto Alfred Harrell Highway. Turn into the CALM Zoo entrance and access the bike path on the left side of the road. Take the bike path behind the soccer fields and stop at a small water tank. Access to the river is via a short path to the river's edge. **From the South:** Highway 99 North to Highway 178 East, turn left onto Alfred Harrell Highway. Turn into the CALM Zoo entrance and access the bike path on the left side of the road. Take the bike path behind the soccer fields and stop at a small water tank. Access to the river is via a short path to the river's edge.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide # 9400 Alfred Harrell Highway Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Narrow dirt road access
- Watch for bicycles and foot traffic, speed limit is 5 mph while on bike path with hazards on
- Wildlife, Rattlesnakes
- Bike and walking path near site
- Potential for stinging nettle to be present along bank

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Soccer tournaments at soccer field

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Response Strategy Site: Kern County Soccer Park (KER-260)

Site Description and Field Notes

River Width:
27 meters (90 feet)

Gradient: Medium

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-010

This location is just north of the Kern County Soccer Park. The site is accessible via either the bike path or a small dirt access road adjacent to the bike path. There is also a locked gate within the soccer fields that is just across from the small water tank at the site. Access to river right is possible by turning right off of the road across from 13146 Round Mountain Road and driving to the river's edge.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Tubing, human contact, gold panning on river right

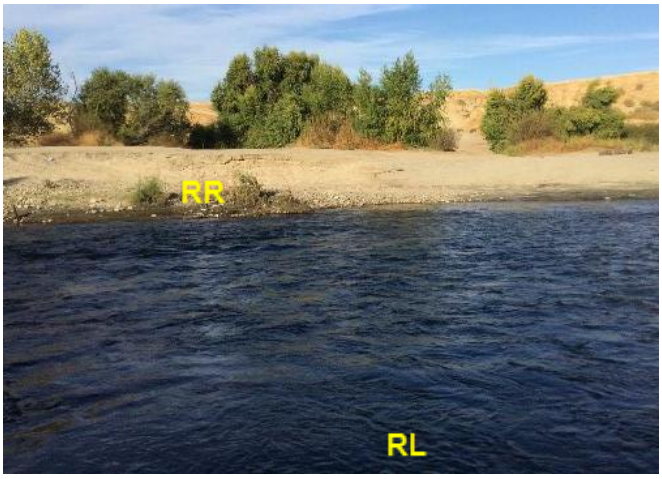
Boat Launches: Direct river access, small skiff only from bank at river left

ESI Shoreline Type: 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 11/8/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 300 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks at the river's edge – would need the county's permission. Electricity, restrooms, PA system, possible command center (headquarters building) available at the Soccer Park with more room for staging and decontamination of equipment. Would need permission from the Kern County Soccer Foundation 661-871-7711.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	300 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	300 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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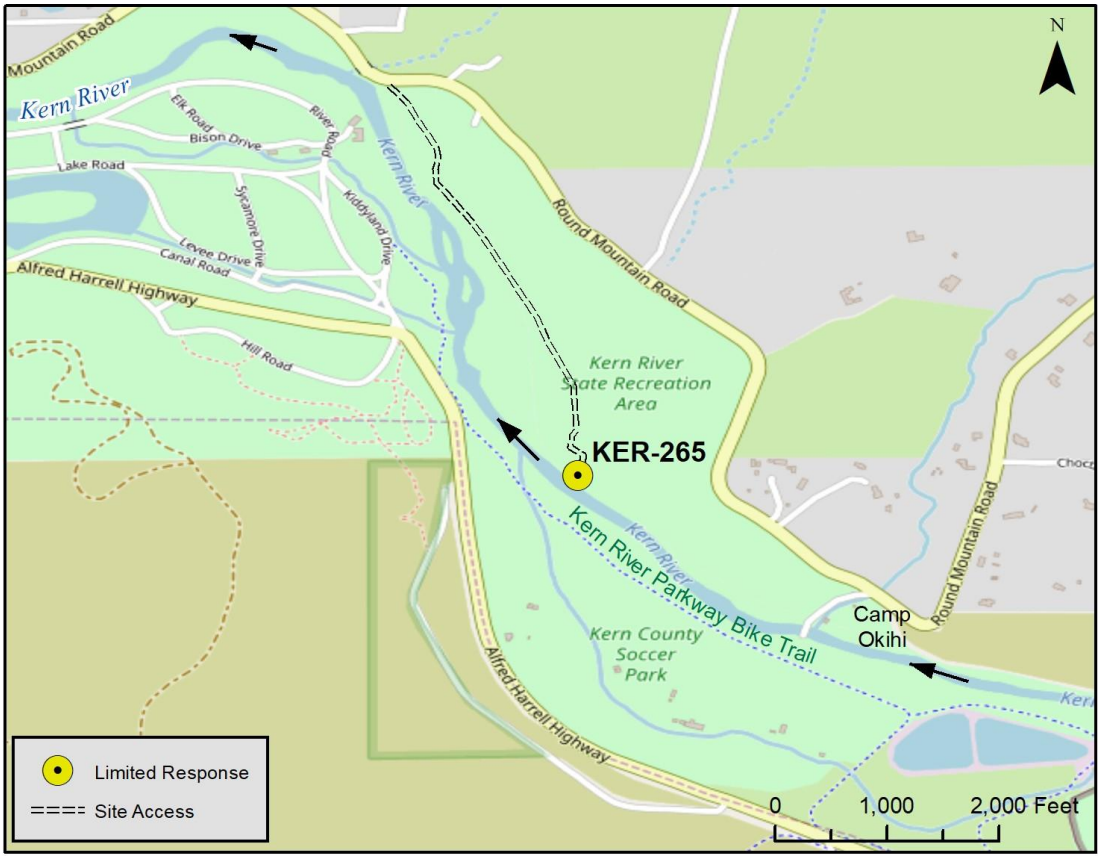
Response Strategy Site: Round Mountain Clearing (KER-265)

Latitude: 35.44124 **Longitude:** -118.90022	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Turn right off the road near 13300 Round Mountain Road and follow the dirt road to the river's edge (river right). **From the South:** Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Turn right off the road near 13300 Round Mountain Road and follow the dirt road to the river's edge (river right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 13300 Round Mountain Road Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use, trash often present
- Watch for vehicle and foot traffic
- Steep banks
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Dirt road(s) to river access

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Hart Park 0.2 miles downstream, private residences downstream

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
38 meters (125 feet)

Gradient: Low

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-010

This location has multiple dirt access roads that reach the river's edge (river right). The roads are narrow, dirt roads with trash often dumped in the vicinity. Vehicles are often parked along the edge of the river and public use is heavy at times. Recreational gold panning occurs at this location occasionally. Access to river left would be possible via the bike path but vegetation is thick on river left.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Human contact, recreational fishing, tubing, gold panning

Boat Launches: Direct river access, small skiff only from bank at river right

ESI Shoreline Type: 1A Exposed rocky banks; 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 03/01/2018

Response Strategy Site: Round Mountain Road Clearing (KER-265)

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 300 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river right. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space – would need county's permission. Room for decontamination. No electricity or bathrooms present.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	300 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	300 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring for Boom A
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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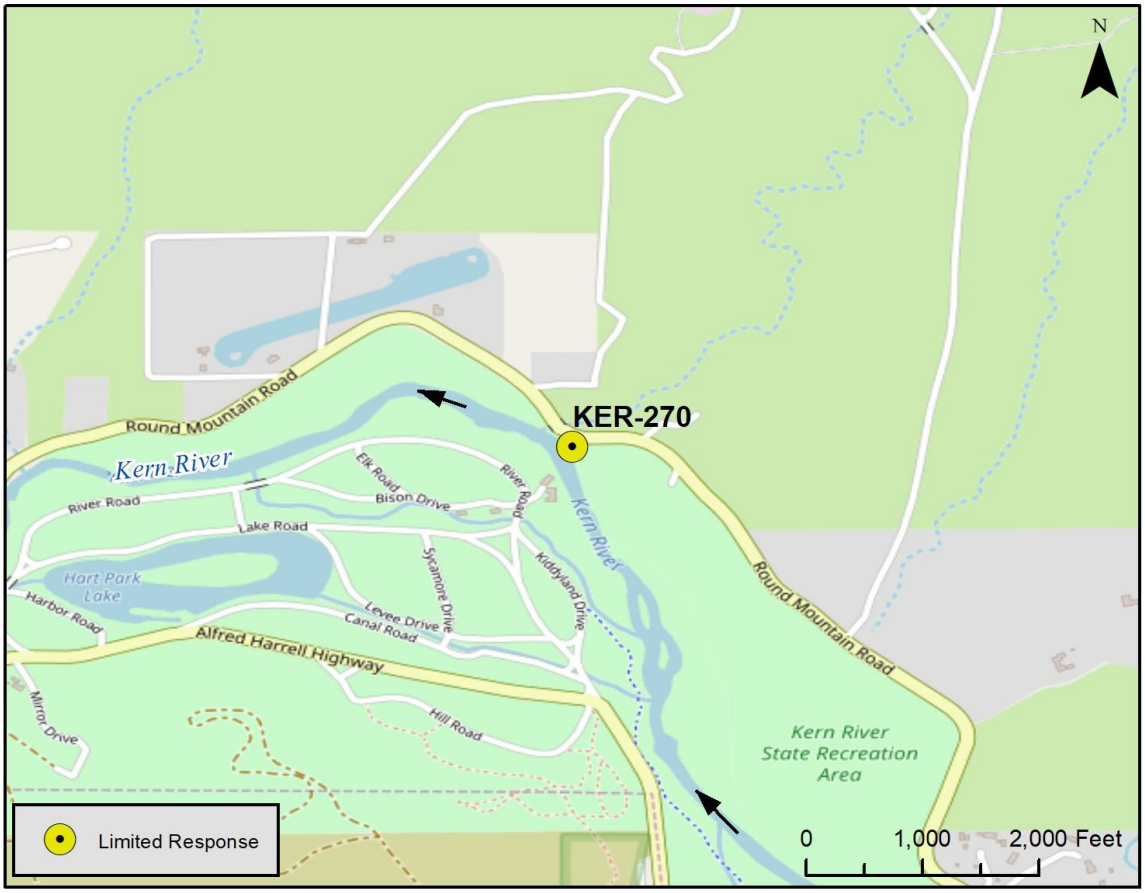
Response Strategy Site: Round Mountain Road (KER-270)

Latitude: 35.45080 **Longitude:** -118.90506	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Approximately 500 feet south from 11322 Round Mountain Road, turn right onto dirt road and follow the dirt road to the river's edge (river right). **From the South:** Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop to become Round Mountain Road. Approximately 500 feet south from 11322 Round Mountain Road, turn right onto dirt road and follow the dirt road to the river's edge (river right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 11322 Round Mountain Rd Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use, trash often present
- Watch for vehicle and foot traffic
- Dirt road(s) to river access
- Potential for stinging nettle to be present along bank
- Rattlesnakes

Resources-At-Risk

Ecological: San Joaquin kit fox, Western Pond Turtle, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Hart Park, private residences downstream on river right, JEH Ranch 0.4 miles downstream on river right

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 50 meters (164 feet)

Gradient: Low

Site Contact/s:
City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-010

This location has multiple dirt access roads that reach the river's edge (river right). The roads are narrow, dirt roads with trash often dumped in the vicinity. Vehicles are often parked along the edge of the river and public use is heavy at times. Recreational gold panning occurs at this location occasionally. Access to river left is at Hart Park off River Road.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Tubing, human contact, gold panning, recreational fishing

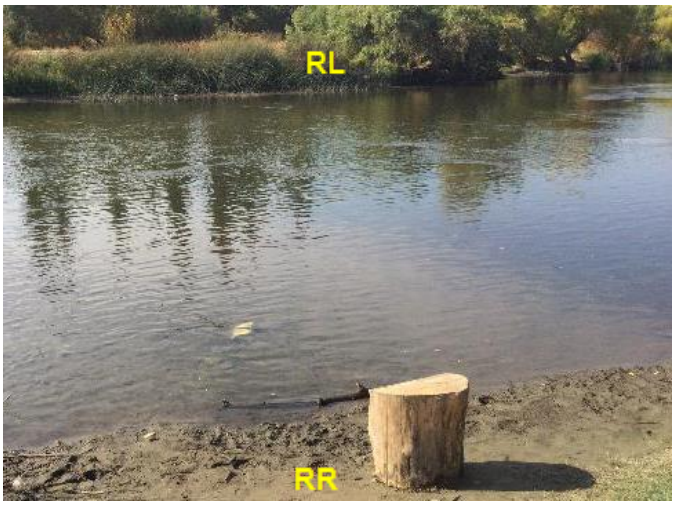
Boat Launches: Direct river access, shallow boat launch (river right) for small skiff

ESI Shoreline Type: 8F vegetated, steeply-sloping bluffs; 9B vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 11/15/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 300 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river right. Boom trucks, trailer, vacuum trucks and temporary storage tanks could use the space – would need county's permission. Room for decontamination. No electricity or bathrooms present.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12		300 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8		300 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Hart Park Staging Area (KER-275)

Latitude: 35.45088
Longitude: -118.90689

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
9400 Alfred Harrell Highway
Bakersfield, CA 93308

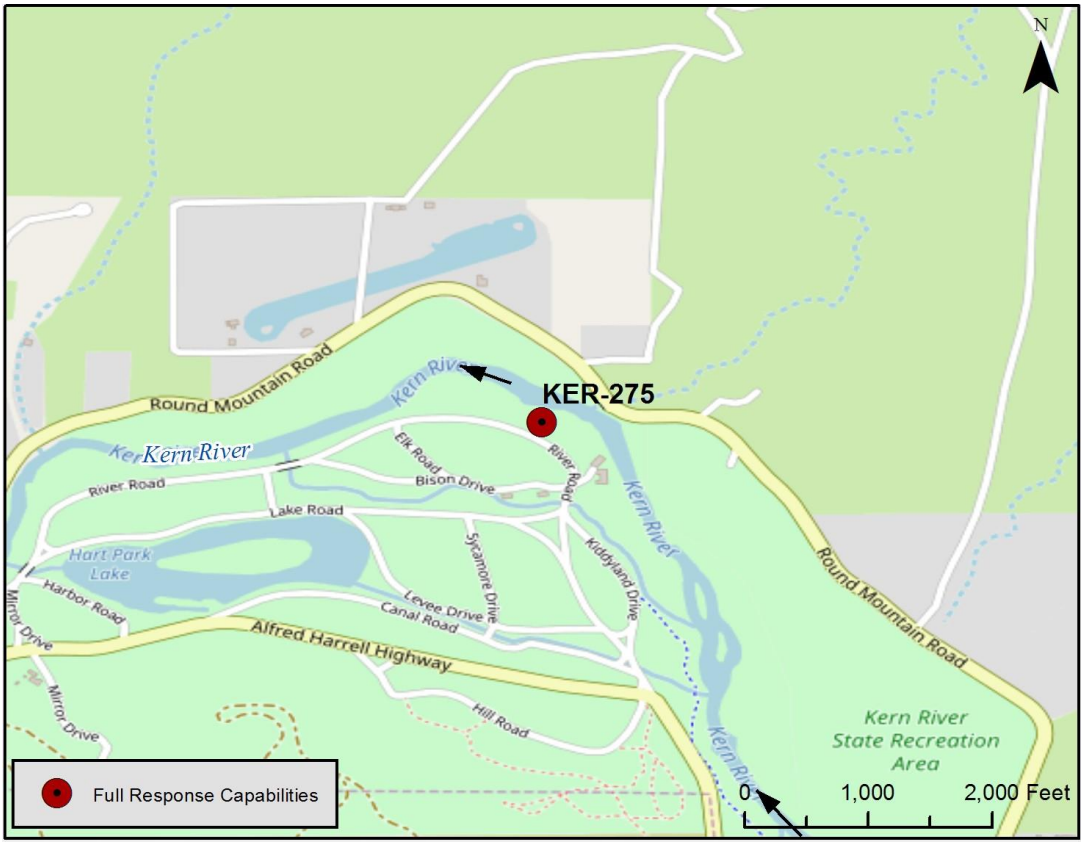
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for 2.5 miles and turn right to stay on China Grade Loop. Merge onto Alfred Harrell and take exit to Hart Park. Once in Hart Park, turn left onto Lily Drive and right onto River Road for approximately 8/10's of a mile until you reach the dirt turn off on the left that leads to the river's edge.

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for 2.5 miles and turn right to stay on China Grade Loop. Merge onto Alfred Harrell and take exit to Hart Park. Once in Hart Park, turn left onto Lily Drive and right onto River Road for approximately 8/10's of a mile until you reach the dirt turn off on the left that leads to the river's edge.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Public use with day use picnic sites
- Watch for vehicle and foot traffic
- Private property on river right
- Steep banks with debris in river
- Potential for stinging nettle to be present along bank
- Rattlesnakes

Resources-At-Risk

Ecological: San Joaquin kit fox, Western Pond Turtle, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Fishing Derby at small lake within Hart Park, private residences downstream on river right, JEH Ranch downstream on river right

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
45 meters (147 feet)

Gradient: Medium

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

After hours contact Sheriff dispatch at
(661) 861 - 3110

Site Location/Segment: KER-KN-H-010

This site is located within Hart Park. There is a dirt access road off River Road that leads down to the river's edge (river left). A small vacuum truck might be able to access the river on this road. If not, oil collection would occur from the dirt parking lot just south of this site. Equipment staging is possible at the dirt parking lot or along the side of the road.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Horseback riding, tubing, human contact, park day use, fishing

Boat Launches: Direct river access, small skiff only from bank at river right

ESI Shoreline Type: 3B Exposed, eroding banks in unconsolidated sediments; 4 Sandy bars and gently sloping banks; 5 Mixed sand and gravel bars and 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: 01/29/2018

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 300 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging for boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the county's permission. Room for decontamination. Electricity and portable restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	300 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	300 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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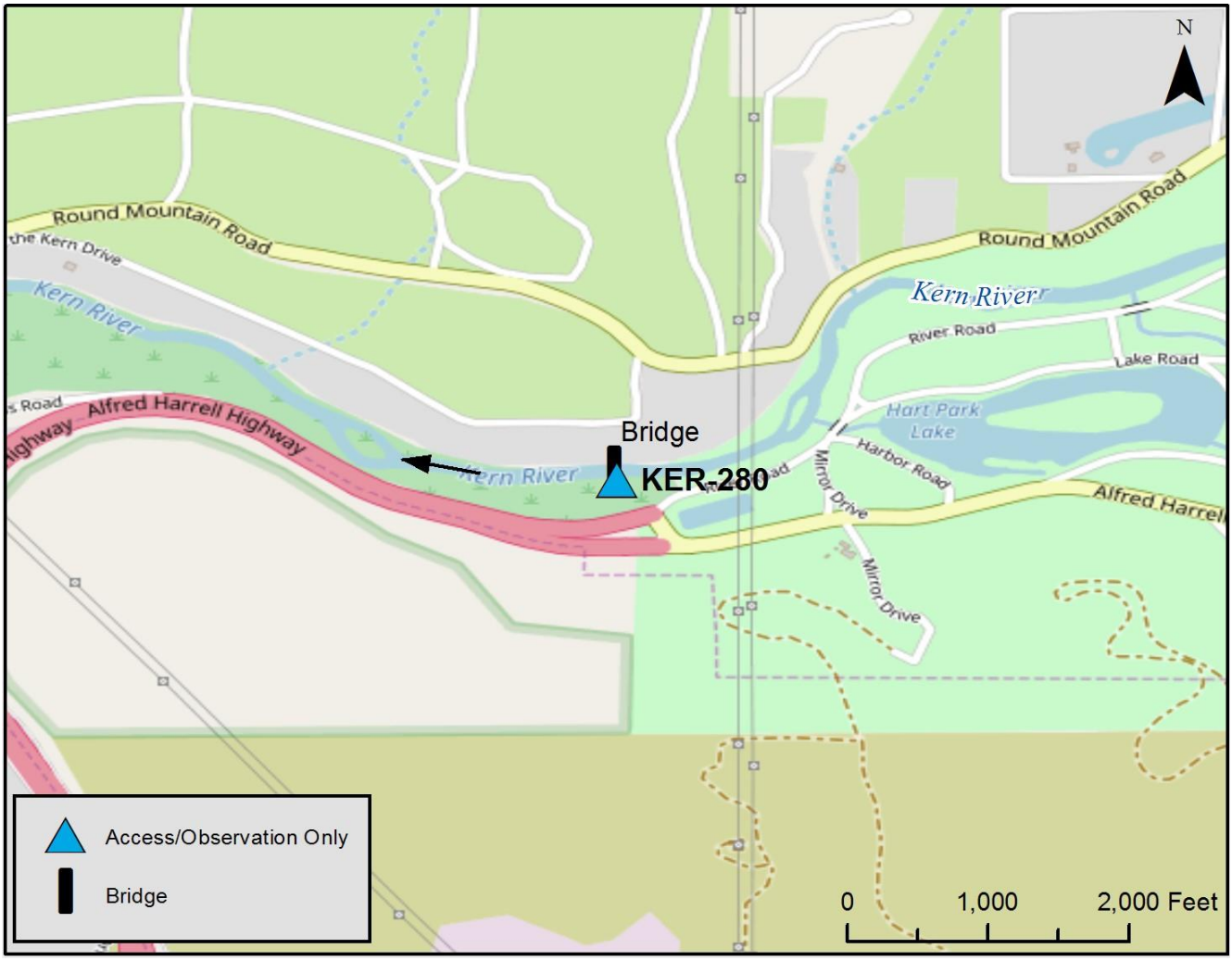
Access/Observation Site: Hart Park Bridge Crossing (KER-280)

Latitude: 35.44658 **Longitude:** -118.92263	**Driving Directions**
Highway Post Mile: N/A	**From the East:** From Lake Isabella, take Highway 178 west toward Bakersfield. Turn right onto Alfred Harrell Highway, and follow until arriving at Hart Park. Proceed to the west entrance of Hart Park, and trail to the bridge will be on the north side of the park entrance. **From the West:** From Bakersfield, take Alfred Harrell Highway to Hart Park. The trail head to the bridge will be on the north side of the park entrance, just inside the entrance gate.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Steep cliffs
- Trip and fall hazards, slippery when wet
- Heavy public use
- Rattlesnakes

Site Description and Field Notes

Site Location/Segment: KER-KN-H-020

Should only be used as an observation site. Limited access to shoreline on upstream side of bridge, river left. Private residences border river on river right.

Site Contact/s: Kern County Parks and Recreation Primary: Carl Brewer, (661) 342-8339, Secondary: Isaac Preston, (661) 432-6550, Secondary: Matt Howard, (661) 345-7175; Kern County Sheriff for after-hours notifications: (661) 861-3110; City of Bakersfield Water Resources (661) 326-3716.

Site Images

Upstream

Downstream

Entrance

RR = River Right RL = River Left

Photo Date: 02/16/2018

Response Strategy Site: Delamater Boat Launch (KER-285)

Latitude: 35.43100
Longitude: -118.94457

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
5437 Adolphus Ave.
Bakersfield, CA

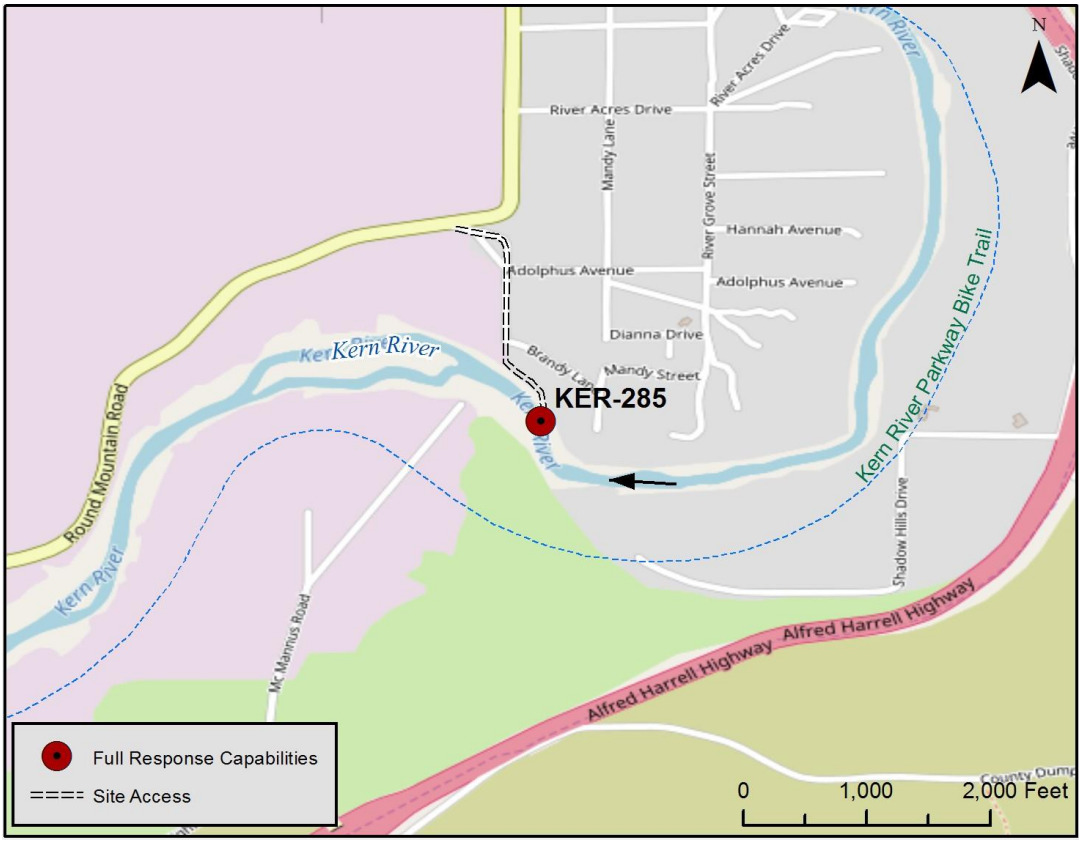
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop and continue on Round Mountain Road. Turn right onto Adolphus Ave. and enter through gate. Follow the road to the river's edge (river right).

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop and continue on Round Mountain Road. Turn right onto Adolphus Ave. and enter through gate. Follow the road to the river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property with locked gate, contact property owner
- Small water intake approximately 60 feet west of boat launch
- Steep bank and falling rocks on river left
- Stinging nettle potentially growing on bank at river left
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Private events at Delamater Ranch, Beardsley Weir 1.2 miles downstream

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
45 meters (147 feet)

Gradient: Low

Site Contact/s:

Terry Delamater
(661) 205-9859

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-I-005

This site is located on a private property within a locked gate. Access and permission would need to be obtained from the property owner. River left has a steep bank and only accessible via a small skiff from the concrete, small boat launch onsite (river right). There is a large gravel parking lot for staging. Property owner mentioned building a recreational center for hosting weddings onsite in the future.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Private boat launch, private events

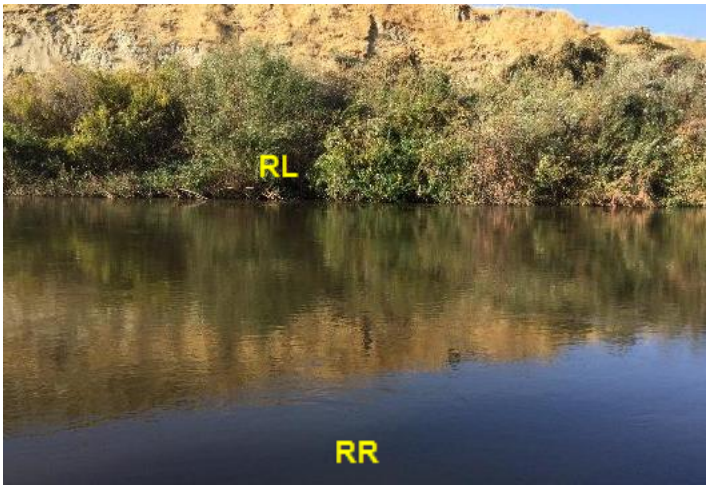
Boat Launches: Small concrete boat launch on river right

ESI Shoreline Type: 4 Sandy bars and gently sloping banks; 8F Vegetated, steeply-sloping bluffs

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 10/25/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Small boat launch and gravel lot for staging boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the property owner's permission. Room for decontamination. No electricity and no restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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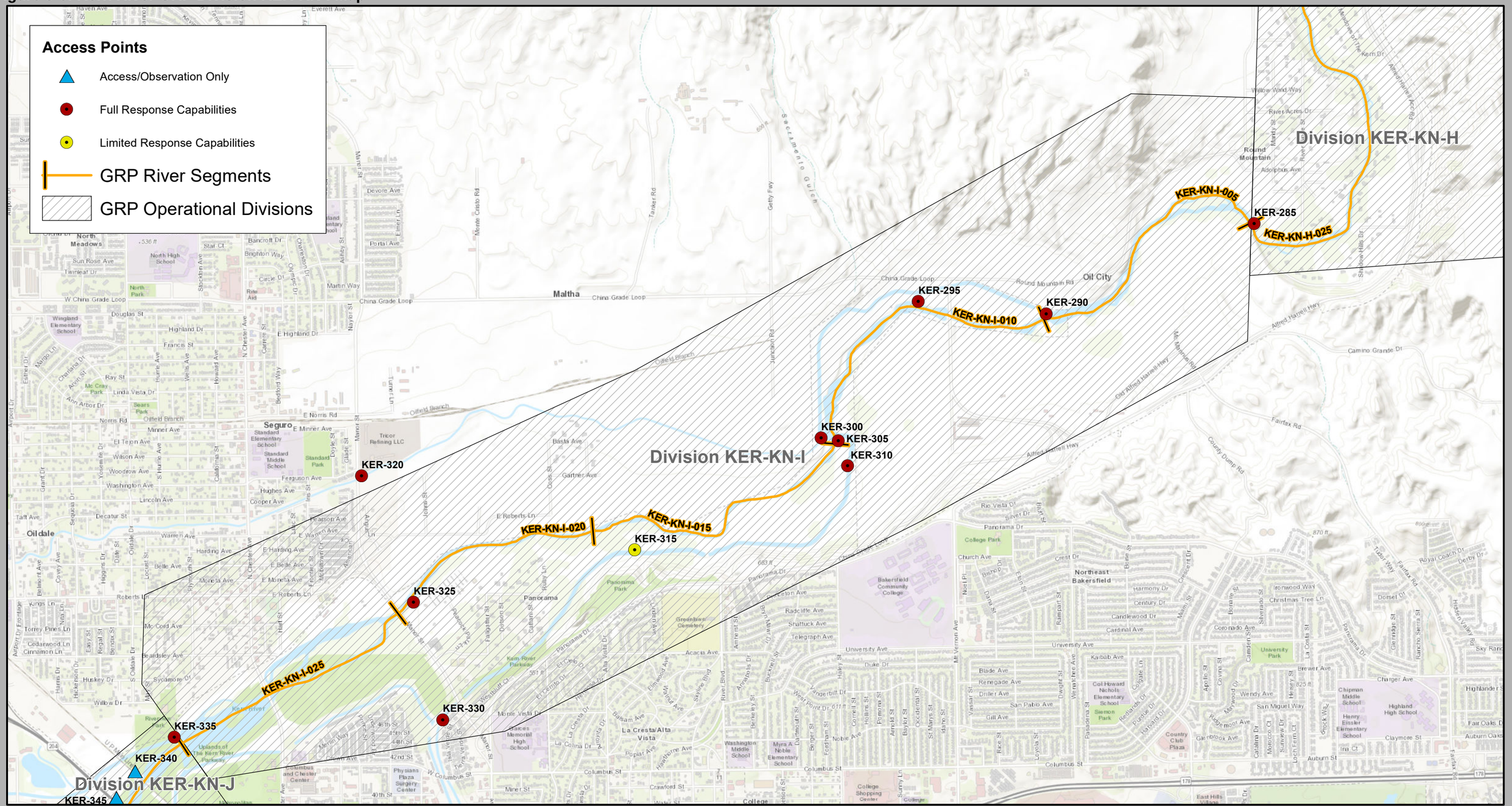
Figure 3-6: Kern River GRP Division KER-KN-I Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 06/12/2019

Kern River
Geographic Response Plan
Division KER-KN-I

0 ½ 1 1½ Miles

0 ½ 1 2 Kilometers

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Response Strategy Site: Beardsley Weir (KER-290)

Latitude: 35.42556
Longitude: -118.96042

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
1607 China Grade Loop
Bakersfield, CA 93308

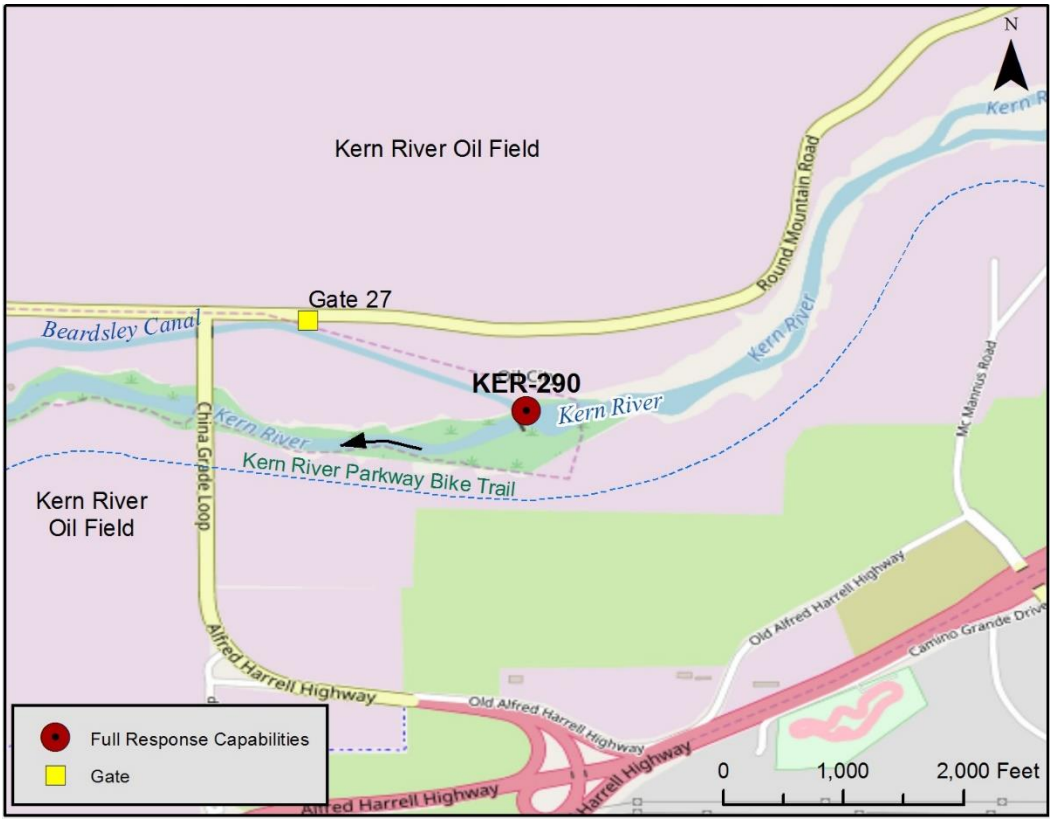
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4.4 miles to Gate 27. Turn right to enter dirt road and drive south towards river's edge (river right).

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4.4 miles to Gate 27. Turn right to enter dirt road and drive south towards river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water intake at Beardsley Canal

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 130 meters (426 feet)

Gradient: Low

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-I-010

This site is located within Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. Access to river left is by taking China Grade Loop south over the river and entering Gate 8 on the left side of the road. Follow the road east to river's edge (river left). Chevron security would need to be contacted to enter property.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: N/A

Boat Launches: Direct river access, small skiff on river left or river right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 3B Exposed, eroding banks in unconsolidated sediments; 6B Riprap; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 06/07/2017

Response Strategy Site: Beardsley Weir (KER-290)

Site Objectives: Boom to prevent oil from entering Beardsley Canal and Weir and allow for collection of oil**.**

Implementation: Deploy 600 ft. of containment boom upstream from the Beardsley Weir at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left.

Staging Area Location and Capabilities/Amenities/Waste Management: Direct river access for small skiff on river left or right. Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Larger staging location available along lease road just south of Round Mountain Road. No electricity and no restrooms onsite.

Response Strategy Map (overview)

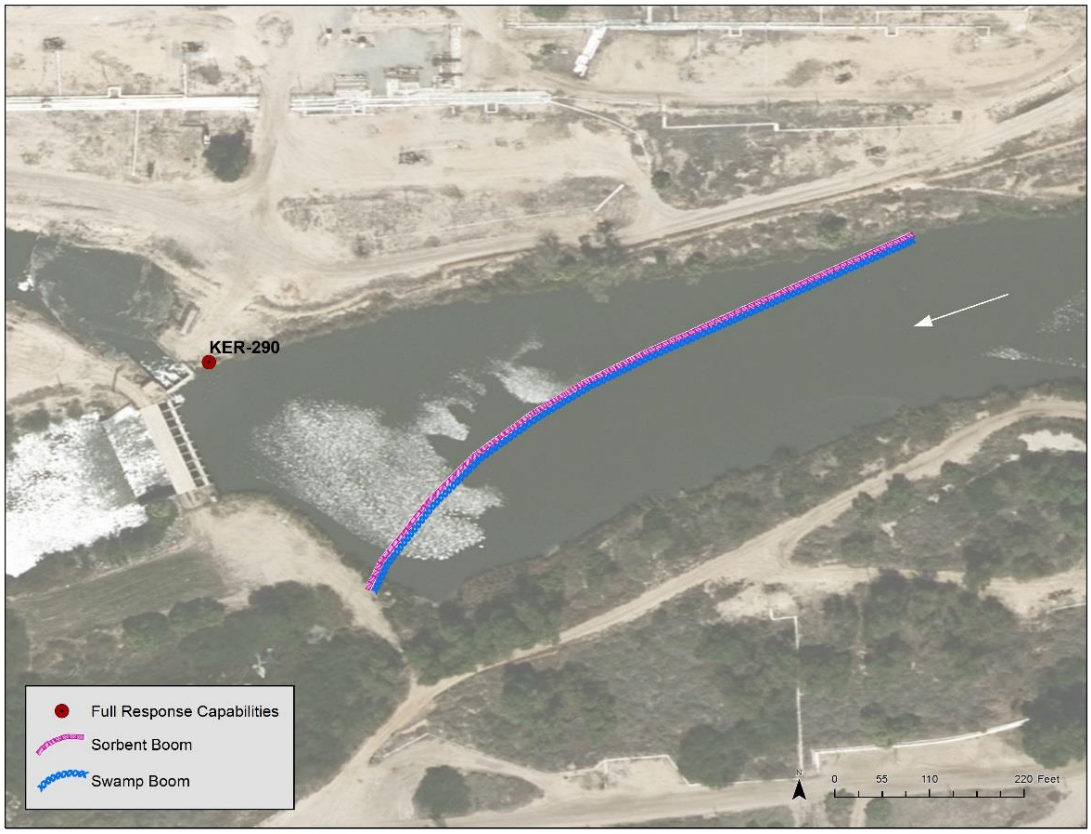


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	600 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	600 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Latitude: 35.42640
Longitude: -118.97011

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
1607 China Grade Loop
Bakersfield, CA 93308

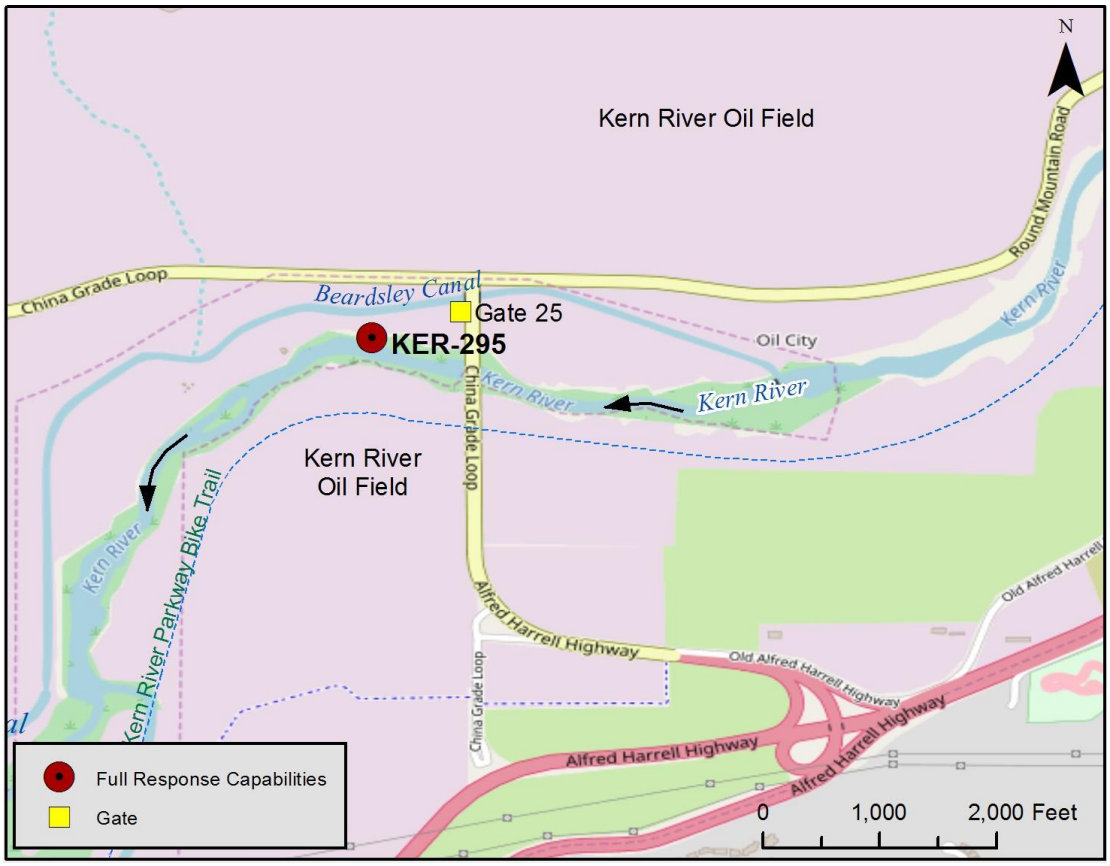
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop then turn right into Gate 25. Drive south towards river's edge (river right).

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop then turn right into Gate 25. Drive south towards river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates
- Multiple pipe crossings 0.3 miles upstream

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus, Panorama Vista Preserve. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Rocky Point Weir water intake and Carrier Canal water intake 0.8 miles downstream

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 85 meters (279 feet)

Gradient: Medium

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-I-010

This site is located within Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. Access river left by taking China Grade Loop south over the river and enter Gate 10. Continue west until you reach access road on the right to reach river's edge (river left). Chevron security would need to be contacted to enter property.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: N/A

Boat Launches: Direct river access, small skiff on river left or river right

ESI Shoreline Type: 3B Exposed, eroding banks in unconsolidated sediments; 6B Riprap; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 06/07/2017

Site Objectives: Boom to prevent oil from entering Rocky Point Weir and Carrier Canal and allow for collection of oil.

Implementation: Deploy 600 ft. of containment boom at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river right upstream from the deployment boom.

Staging Area Location and Capabilities/Amenities/Waste Management: Direct river access for small skiff on river left or right. Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Larger staging locations along west side of China Grade Loop.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	600 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	600 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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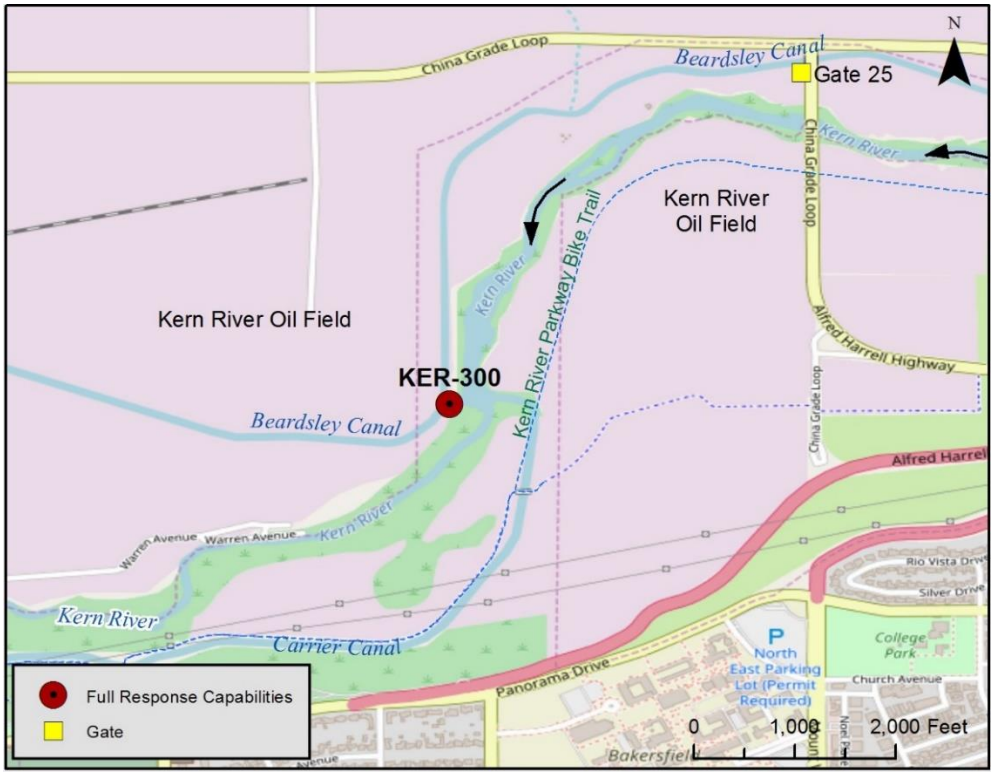
Response Strategy Site: Beardsley Canal (KER-300)

Latitude: 35.41801 **Longitude:** -118.97760	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop. Turn right into Gate 25. Drive south-west along access road between the Beardsley canal and the Kern River to reach canal gate (canal left). **From the South:** Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop. Turn right into Gate 25. Drive south-west along access road between the Beardsley canal and the Kern River to reach canal gate (canal left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 1546 China Grade Loop Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates
- Narrow dirt access road to site
- Equestrian and walking trails, bike path southeast of site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus, Panorama Vista Preserve. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Beardsley Canal Water Intake

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
10 meters (30 feet)

Gradient: High

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-I-015

This canal response site, adjacent to the Kern River, is located within Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. Access to canal right is off Oilfield Service Road. Take Oilfield Service Road south from China Grade Loop and enter Gate 3. Continue south, then turn left to reach the west bank of the canal.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

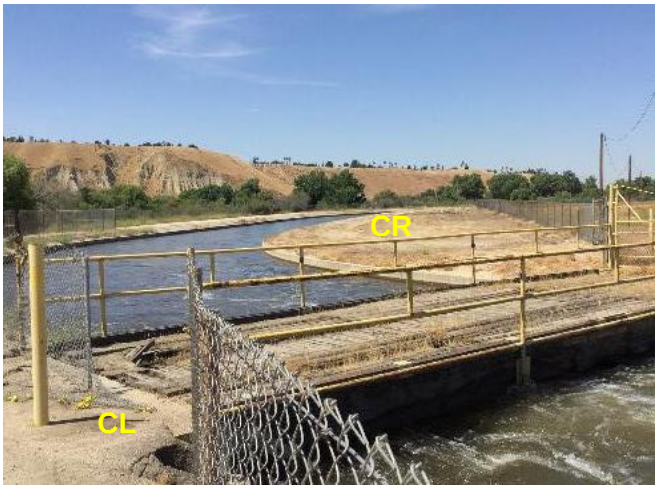
Recreational Use: N/A

Boat Launches: N/A

ESI Shoreline Type: 1B Exposed, solid man-made structures

Site Images

Upstream



Downstream

Straight Across

CR = Canal Right CL = Canal Left

Photo Date: 06/07/2017

Site Objectives: Boom to prevent oil from entering Beardsley Weir and allow for collection of oil**.**

Implementation: Deploy 200 ft. of containment boom upstream from Beardsley Weir at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on canal right. Rope for boom can be carried across weir bridge to canal left.

Staging Area Location and Capabilities/Amenities/Waste Management: Room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks on dirt lot near canal right. Room for decontamination. Additional staging available along lease roads. No electricity and no restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	200 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Rocky Point Weir (KER-305)

Latitude: 35.41781
Longitude: -118.97631

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
1607 China Grade Loop
Bakersfield, CA 93308

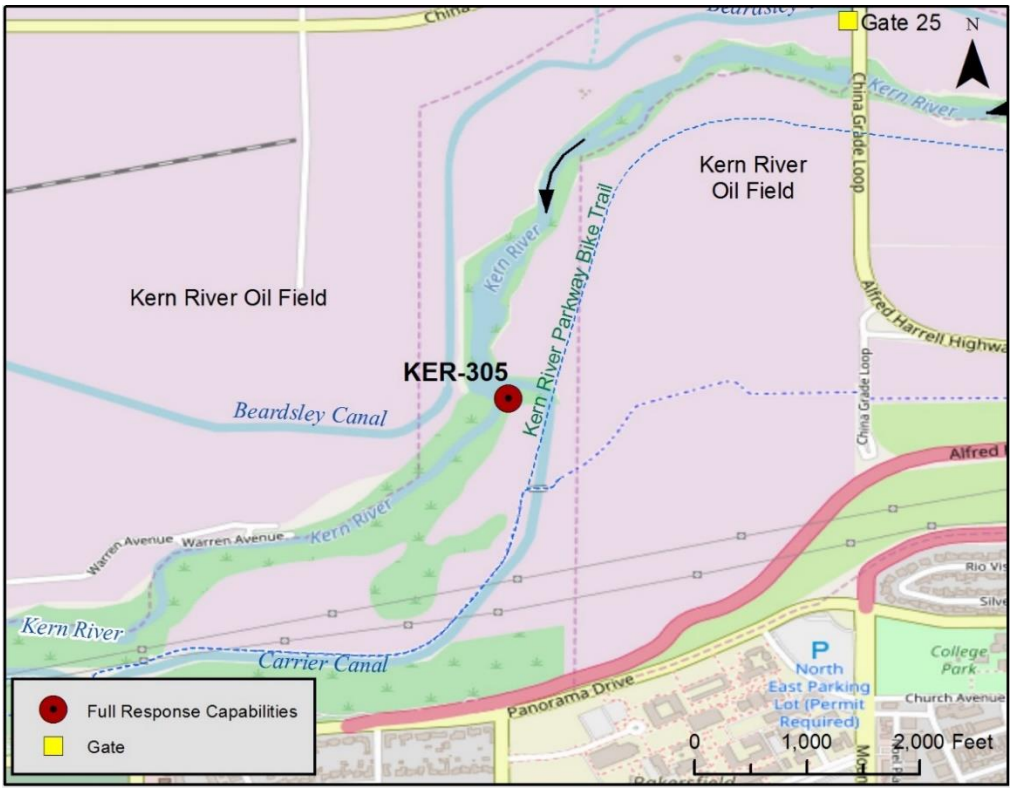
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop. Turn right into Gate 25. Drive south-west along access road between the Beardsley canal and the Kern River to reach Beardsley canal gate. Turn left and drive over Rocky Point Weir bridge to access site (river left).

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop. Turn right into Gate 25. Drive south-west along access road between the Beardsley canal and the Kern River to reach Beardsley canal gate. Turn left and drive over Rocky Point Weir bridge to access site (river left).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates
- Private residences 1.5 miles downstream on river left
- Equestrian and walking trails, bike path southeast of site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus, Panorama Vista Preserve. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Carrier Canal water intake

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
110 meters (360 feet)

Gradient: Medium

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Panorama Vista Preserve
(661) 872-3569

Site Location/Segment: KER-KN-I-015

This site is located within Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. The most feasible location for boom deployment and oil collection is on river left, north of Carrier Canal entrance. To access this location, take China Grade Loop south over the river. Turn right to enter Gate 10 in 0.4 miles. Continue west for 0.3 miles and turn left onto dirt access road. Follow road to river's edge (river left).

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Equestrian and walking trails, bike path southeast of site

Boat Launches: Direct river access, small skiff on river left or river right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 3B Exposed, eroding banks in unconsolidated sediments; 8F Vegetated, steeply sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 02/16/2018

Site Objectives: Boom to prevent oil from entering Carrier Canal and Rocky Point Weir and allow for collection of oil**.**

Implementation: Boom A: Deploy 600 ft. of containment boom upstream from Rocky Point Weir at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left. Boom B: Deploy 400 ft. of containment boom as secondary containment to protect Rocky Point Weir. Boom C: Deploy 200 ft. of containment boom across entrance to Carrier Canal to prevent oil from entering the canal.

Staging Area Location and Capabilities/Amenities/Waste Management: Direct river access for small skiff on river left or right. Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks on river left. Room for decontamination. Larger staging location available along lease roads. No electricity and no restrooms onsite.

Response Strategy Map (overview)

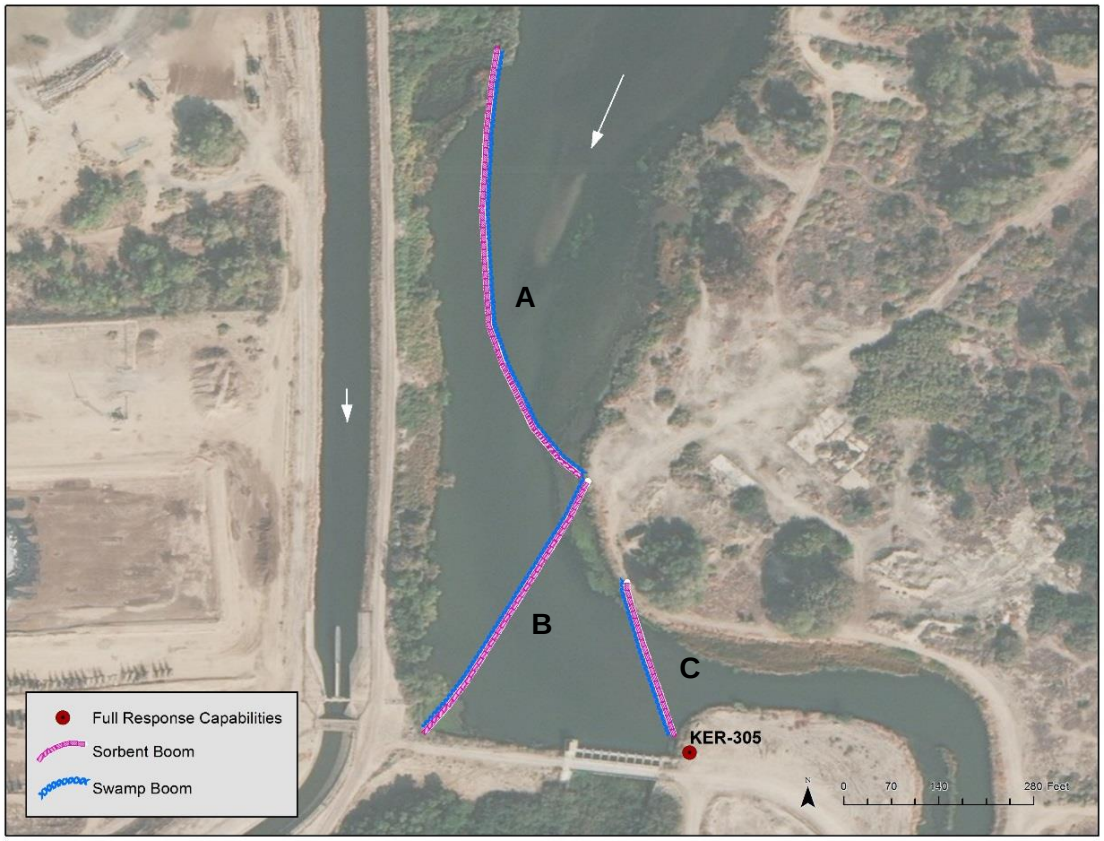


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	1200 ft.	Booming strategy only effective during medium to low flow. Boom A = 600-feet, Boom B = 400-feet, Boom C = 200-feet.
Boom	Sorbent	5 or 8	Inch	1200 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom A = 600-feet, Boom B = 400-feet, Boom C = 200-feet.
Stakes	Anchoring			18	3 stakes for each end of boom. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	4	Midstream anchoring for Boom A, B and C
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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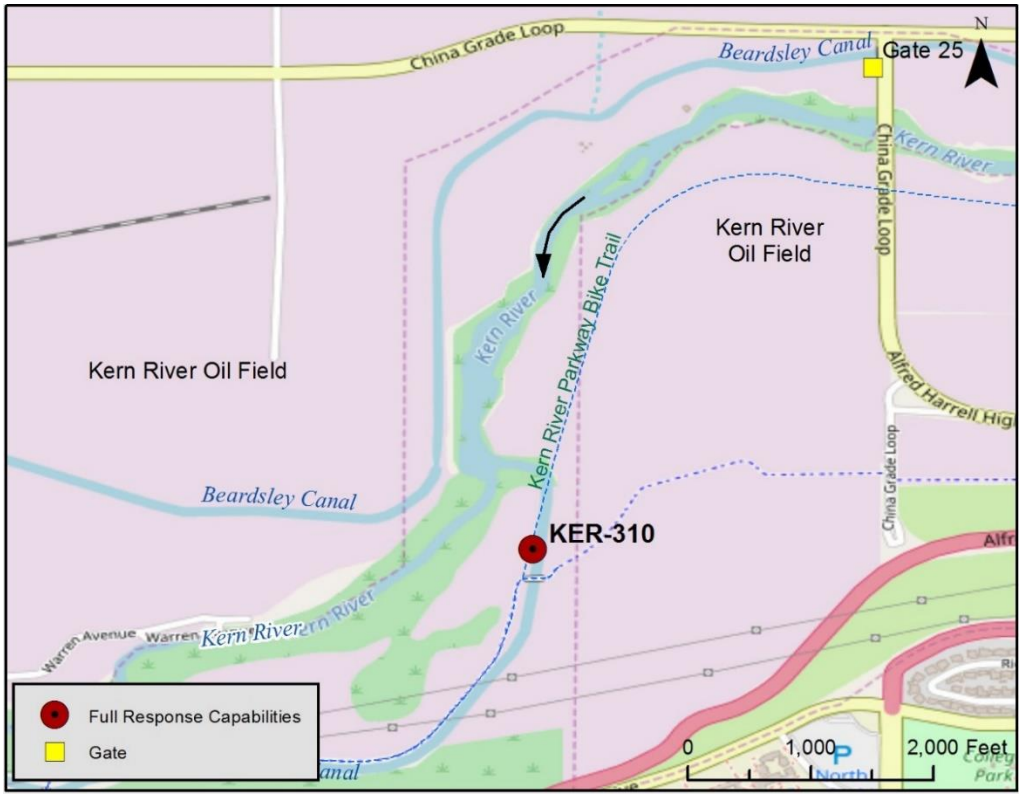
Response Strategy Site: Carrier Canal Weir/Panorama Vista Preserve Intake (KER-310)

Latitude: 35.41627 **Longitude:** -118.97562	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles. Turn right to stay on China Grade Loop and then turn right into Gate 25. Drive south-west along access roads between the Beardsley canal and the Kern River and turn left to drive over Rocky Point Weir. Turn right and follow road along canal to site (canal right). **From the South:** Highway 99 North to Airport Drive exit. Turn right at Roberts Lane. Stay on Roberts Lane for approximately 1.5 miles to Manor Street; turn left to head north on Manor Street. Continue along Manor Street to China Grade Loop and turn right. Drive approximately 2.5 miles on China Grade Loop. Turn right to stay on China Grade Loop and then turn right into Gate 25. Drive south-west along access roads between the Beardsley canal and the Kern River and turn left to drive over Rocky Point Weir. Turn right and follow road along canal to site (canal right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 1607 China Grade Loop Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates
- Canal Outflow back into Kern River 1.1 miles downstream
- Equestrian and walking trails, bike path crosses canal immediately downstream of site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Panorama Vista Preserve. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water Intake for Panorama Vista Preserve

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 30 meters (98 feet)

Gradient: Medium

Site Contact/s:
Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Panorama Vista Preserve
(661) 872-3569

Site Location/Segment: KER-KN-I-015

This canal response site, adjacent to the Kern River, is located within the Panorama Vista Preserve, which is adjacent to the Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. Access to canal left is by taking China Grade Loop south over the river. Turn right to enter Gate 10 in 0.4 miles. Continue west for 0.3 miles and turn left onto dirt access road. Follow road to river's edge (river left). Continue southwest along access road that parallels canal for approximately 1.3 miles to site (canal left).

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Bike trail, equestrian and walking trails

Boat Launches: Direct canal access, small skiff on canal left or canal right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 3B Exposed, eroding banks in unconsolidated sediments; 8F Vegetated, steeply sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Intake Gate

CR = Canal Right, CL = Canal Left

Photo Date: 02/16/2018

Site Objectives: Boom to prevent oil from entering Carrier Canal Weir and Panorama Vista Preserve Intake and allow for collection of oil**.**

Implementation: Deploy 200 ft. of containment boom upstream from Carrier Canal Weir and Panorama Vista Preserve intake at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on canal right.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Additional staging available along dirt access roads between bike path and river left. No electricity and no restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	200 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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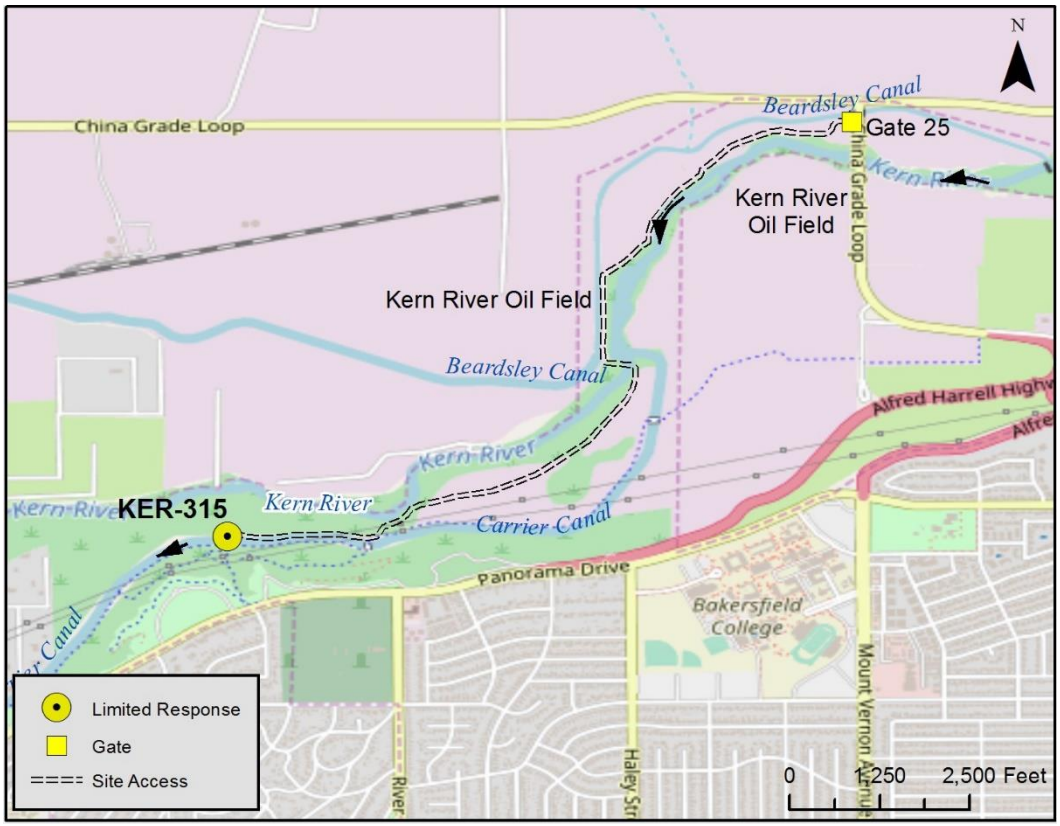
Response Strategy Site: Carrier Canal Outflow (KER-315)

Latitude: 35.41120 **Longitude:** -118.99183	**Driving Directions**
Highway Postmile: N/A	**From the North:** Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles to Gate 25. Turn right to enter and drive south-west along access roads between the Beardsley canal and the Kern River to reach the Rocky Point Weir. Drive over the Rocky Point Weir and turn right. Follow access road along Carrier Canal to site (river right). **From the South:** Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 4 miles to Gate 25. Turn right to enter and drive south-west along access roads between the Beardsley canal and the Kern River to reach the Rocky Point Weir. Drive over the Rocky Point Weir and turn right. Follow access road along Carrier Canal to site (river right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 1607 China Grade Loop Bakersfield, CA 93308	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Active oil field operations, watch for equipment operators and vehicles, flame resistant clothing recommended
- Locked gates
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Weir with multiple canal gates
- Equestrian and walking trails, bike path on part of access road to site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water intake to Kern River

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 30 meters (90 feet)

Gradient: Medium

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Panorama Vista Preserve
(661) 872-3569

Site Location/Segment: KER-KN-I-015

This canal response site, adjacent to the Kern River, is located within the Panorama Vista Preserve, which is adjacent to the Chevron North American Exploration and Production Company's active oil field within the Kern River Oil Field. Multiple dirt access roads are present and often wind around active pumping units. Access to canal left is by taking China Grade Loop south over the river. Turn right to enter Gate 10 in 0.4 miles. Continue west for 0.3 miles and turn left onto dirt access road. Follow road to river's edge (river left). Continue south along access road to follow canal left to site (canal left).

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers. Site considered "Limited Response," due to narrow roads and access constraints.

Recreational Use: Bike trail, equestrian and walking trails

Boat Launches: Direct canal access, small skiff only from bank at canal right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 8F Vegetated, steeply sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

CR = Canal Right CL = Canal Left

Photo Date: 06/07/2017

Response Strategy Site: Carrier Canal Outflow (KER-315)

Site Objectives: Boom to prevent oil from entering Carrier Canal outflow and allow for collection of oil**.**

Implementation: Boom A: Deploy 250 ft. of containment boom upstream from Carrier Canal outflow at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on canal right. Boom B: Deploy 200 ft. of containment boom across the outflow to prevent from oiling.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Additional staging available along dirt access roads between bike path and river left. No electricity and no restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	450 ft.	Booming strategy only effective during medium to low flow. Boom A = 250-feet, Boom B = 200-feet
Boom	Sorbent	5 or 8	Inch	450 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom A = 250-feet, Boom B = 200-feet
Stakes	Anchoring			12	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A and Boom B.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Manor Street Bridge (KER-320)

Latitude: 35.41596
Longitude: -119.01250

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #
1134 Manor Street
Bakersfield, CA 93308

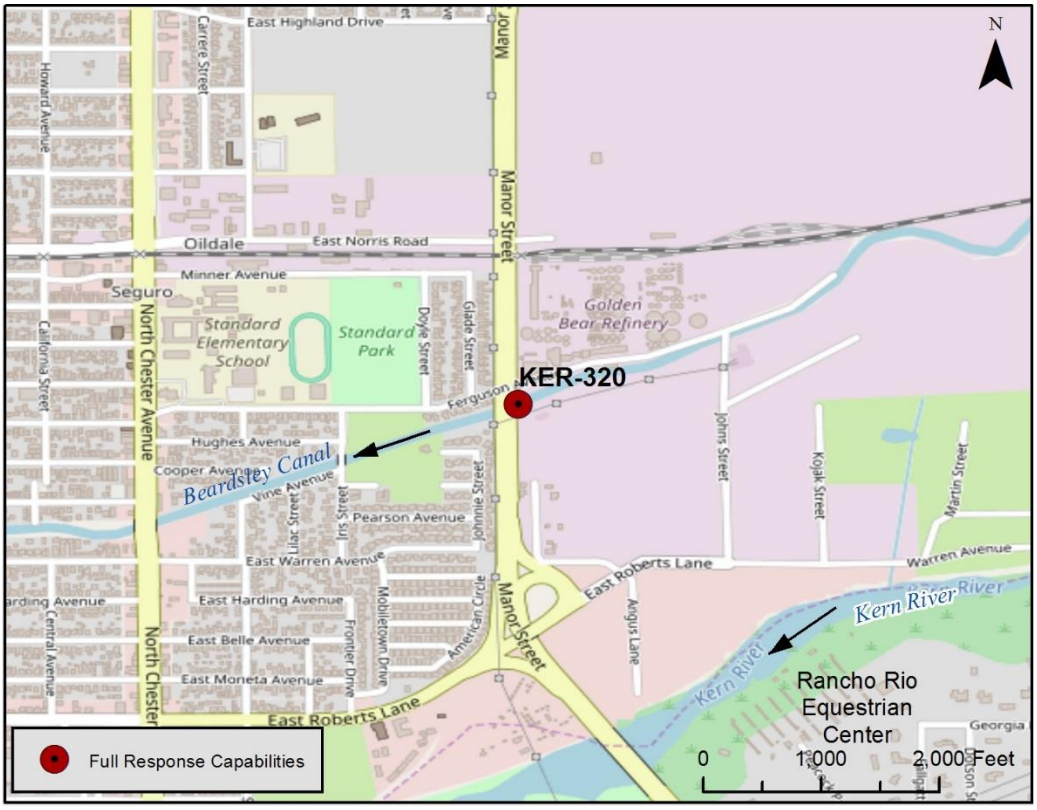
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 1.5 miles to Manor Street, turn right on Manor Street. Site is roughly 0.75 miles south of China Grade Loop, just south of the intersection of Manor and Ferguson Ave. (canal right). Contact Tricor Refinery for access to parking area.

From the South: Highway 99 North to Merle Haggard/7th Standard exit. Turn right and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 1.5 miles to Manor Street, turn right on Manor Street. Site is roughly 0.75 miles south of China Grade Loop, just south of the intersection of Manor and Ferguson Ave. (canal right). Contact Tricor Refinery for access to parking area.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Locked gates
- Proximity to residential area
- Active oil refinery (Tricor) adjacent to site, flame resistant clothing recommended
- SJVR Rail crossing Manor Street just north of site
- Pedestrian and vehicle traffic on Manor Street
- Concrete lined channel, slippery when wet
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus

Economic: Beardsley Canal for agricultural water use

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
10 meters (30 feet)

Gradient: Low

Site Contact/s:

Chevron Security
(661) 392-2425

City of Bakersfield Water Resources
(661) 326-3716

Tricor Refinery
(661) 393-7110

Site Location/Segment: KER-KN-I-020

This canal response site, adjacent to the Kern River, is located just east of Manor Street and south of Tricor Refinery. Access to the site is through a locked gate just south of the refinery employee parking lot. City of Bakersfield Water Resources would need to be contacted, as well as the refinery, prior to access. Watch traffic while turning into refinery or the dirt access road, use vehicle hazard lights.

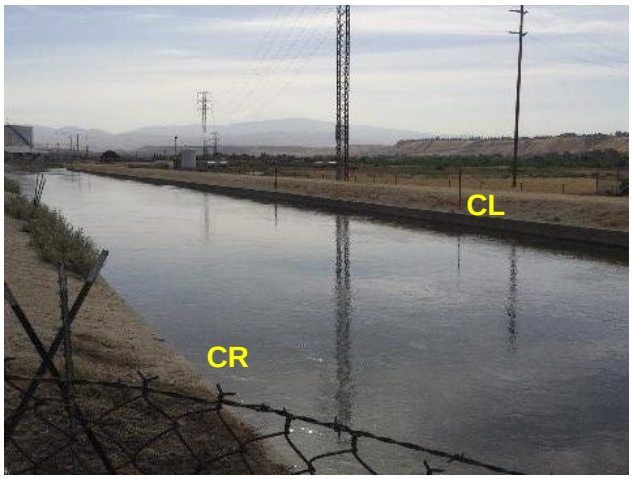
Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: N/A

Boat Launches: N/A

ESI Shoreline Type: 1B Exposed, solid man-made structures

Site Images



Upstream

Downstream

Straight Across

CR = Canal Right CL = Canal Left

Photo Date: 06/08/2017

Site Objectives: Boom to prevent oil from continuing downstream of canal and allow for collection of oil**.**

Implementation: Deploy 200 ft. of containment boom upstream from oil collection point at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on canal right.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Additional staging available at Tricor Refining (Golden Bear) employee parking facility adjacent to site. No electricity and no restrooms onsite.

Response Strategy Map (overview)

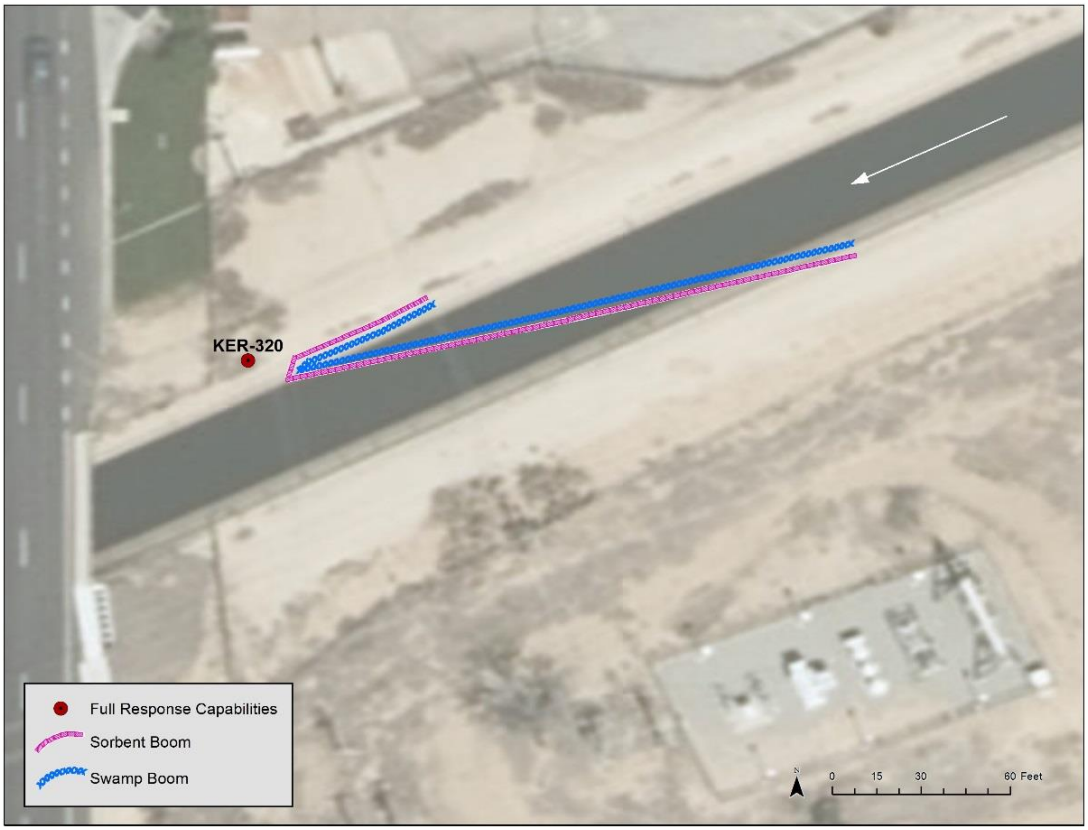


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	200 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Rancho Rio Equestrian Center (KER-325)

Latitude: 35.40809
Longitude: -119.00865

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
5320 Peacock Park Ln.
Bakersfield, CA 93308

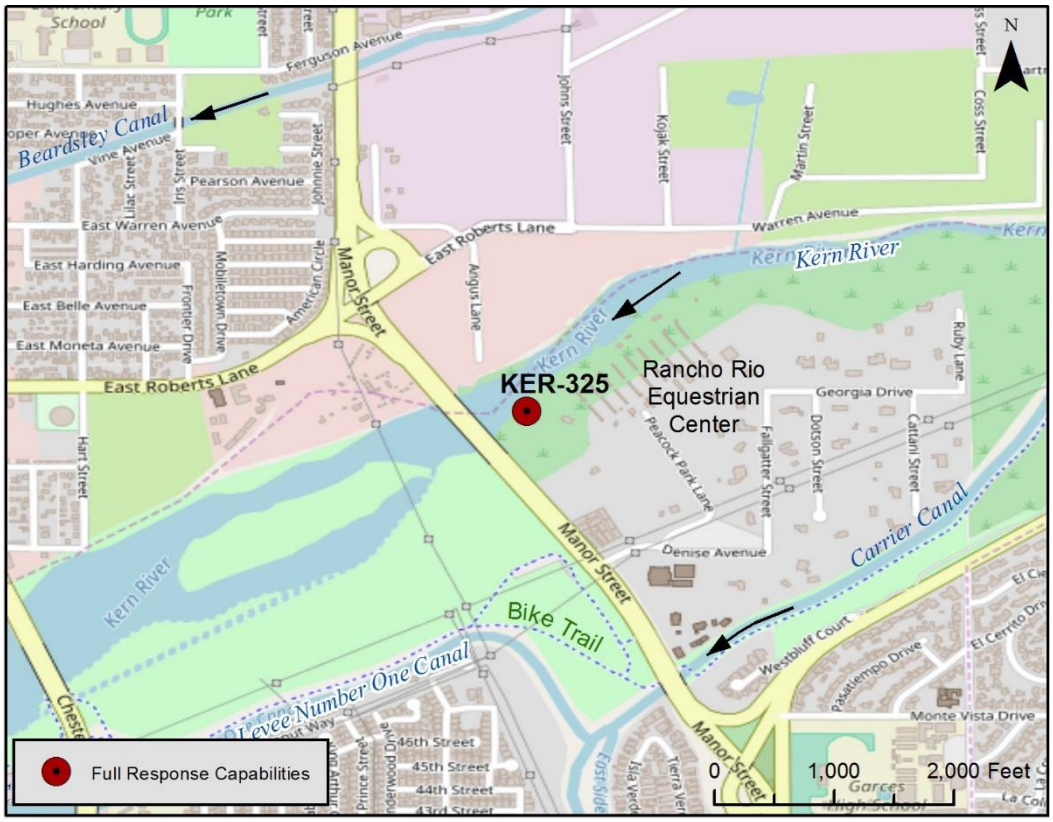
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Norris Exit (Exit 29). Turn left and take Norris east under the highway for approximately 2.9 miles. Turn right onto Manor Street. In 1.2 miles, turn left onto Peacock Park Lane. Turn left to stay on Peacock Park Lane. Gated entrance is at the end of the road. Contact site manager for access.

From the South: Highway 99 North to Airport Drive (Exit 27). Continue on Airport Drive for 0.6 miles. Turn right onto Roberts Lane. In 1.4 miles, turn right onto the Manor Street South ramp and merge onto Manor Street. Turn left onto Peacock Park Lane. Turn left to stay on Peacock Park Lane. Gated entrance is at the end of the road. Contact site manager for access.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Equestrian center with horses accessing river's edge/river
- Watch for horses and foot traffic, speed limit is 5 mph in equestrian center
- Steep banks heavily vegetated
- Stinging nettle potentially growing on bank
- Rattlesnakes
- Manor Street overpass just west of site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Equestrian center with stables for boarding horses

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
44 meters (144 feet)

Gradient: Low

Site Contact/s:

Justine Hurstz
(ranch manager)
Office: (661) 325-4206
Cell: (701) 609-0853

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: **KER-KN-I-020**

This site is located within the Rancho Rio Equestrian Center. There is a gate to the entrance with keypad access. Contact the site manager for gate code. Access to river right is possible by driving north on Manor Street and taking East Roberts Lane. Turn left at the stop sign and then right onto Angus Lane into the Robertson Stables. Follow dirt road south to the river. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Horseback riding, human contact

Boat Launches: Direct river access. Small skiff at either river left or river right, river right is less steep

ESI Shoreline Type: 1B Exposed, solid man-made structures; 4 Sandy bars and 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: 11/15/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 400 ft. of containment boom upstream at an angle to prevent entrainment, utilizing trees as existing anchor points or using anchoring stakes. Oil collection will be on river left. Shallow boat launch location on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river left. Room for boom trucks, trailer, vacuum trucks and temporary storage tanks. Restrooms and electricity available at the Rancho Rio Equestrian Center, would need to get property owner's permission.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	400 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Response Strategy Site: Carrier Canal Endpoint (KER-330)

Latitude: 35.40065
Longitude: -119.00638

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
121 Manor Street
Bakersfield, CA 93308

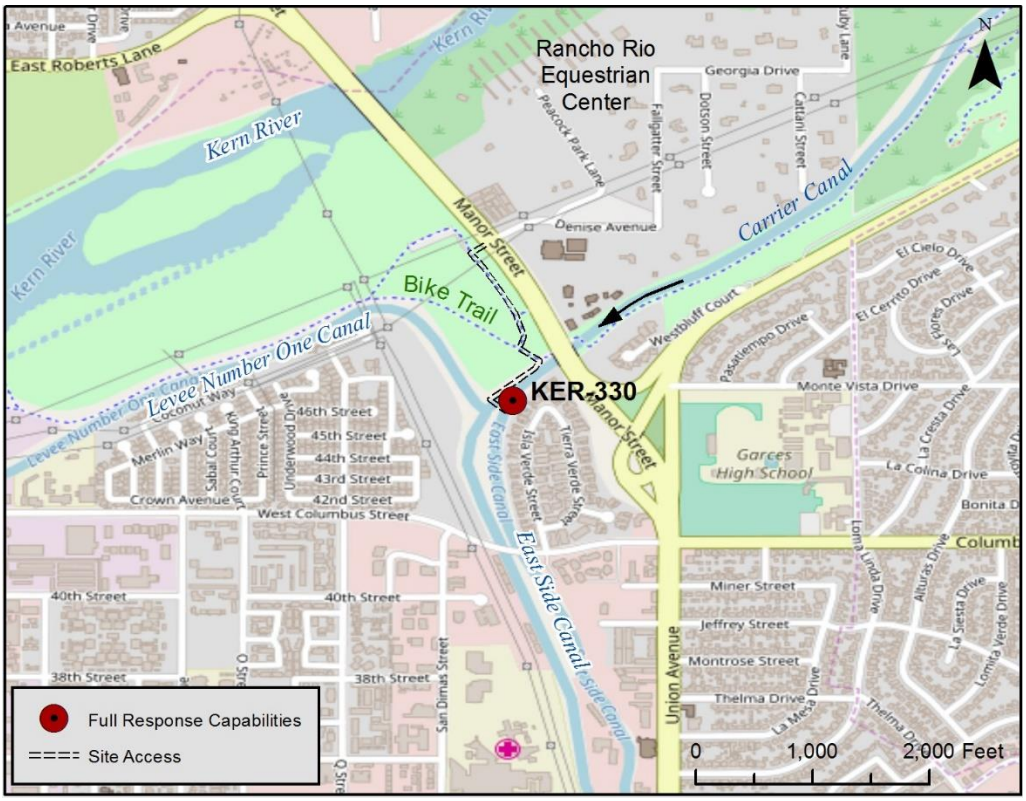
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and then left onto China Grade Loop. Stay on China Grade Loop for approximately 1.5 miles to Manor Street, turn right on Manor St. Continue driving south on Manor Street and turn right at Peacock Park Lane to enter a parking lot for the Kern River Parkway Bike Trail. Drive southeast along the bike trail until you reach the levee road, use that road to access canal right and canal left.

From the South: Highway 99 North to Airport Drive exit. Continue straight on Airport Drive, turn right on to Roberts Lane. Turn right onto the Manor Street South ramp. Continue driving south on Manor Street and turn right at Peacock Park Lane to enter a parking lot for the Kern River Parkway Bike Trail. Drive southeast along the bike trail until you reach the levee road, use that road to access canal right and canal left.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Locked gates
- Weir with multiple canal gates
- Multiplex residential dwelling adjacent to site
- Bicycles and pedestrians on bike path
- Rattlesnakes
- Steep canal banks

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water intakes for East Side Canal, Kern Island Canal and Carrier Canal.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 30 meters (98 feet)

Gradient: Medium

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-I-025

This site is located where the Carrier Canal branches and the southern canals become the East Side Canal and Kern Island Canal. Carrier Canal heads north and then turns west. Multiple gates are present along the canals access roads. The City of Bakersfield Water Resources would need to be contacted to access the site.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Bike and pedestrian trail

Boat Launches: N/A

ESI Shoreline Type: 1B Exposed, solid man-made structures

Site Images

Upstream

Downstream

Straight Across

CR = Canal Right CL = Canal Left

Photo Date: 06/08/2017

Site Objectives: Boom to prevent oil from continuing downstream of canal and allow for collection of oil**.**

Implementation: Deploy 200 ft. of containment boom upstream from oil collection point at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on canal left.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited room for staging boom trucks, trailer, vacuum trucks and temporary storage tanks. Room for decontamination. Additional staging available at bike path parking lot on west side of Manor Street. No restrooms or electricity onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	200 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring for Boom A
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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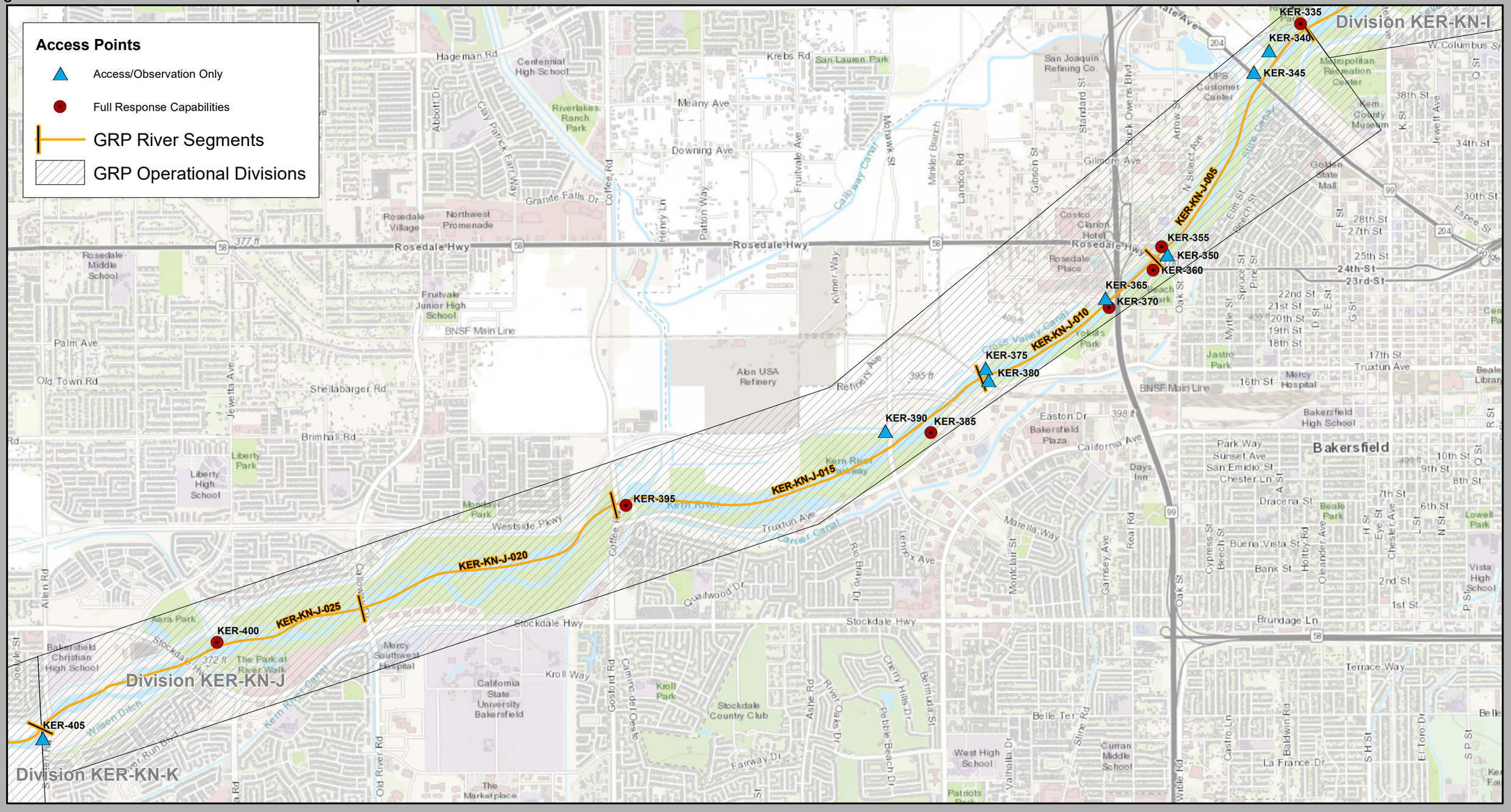
Figure 3-7: Kern River GRP Division KER-KN-J Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 06/18/2019

Kern River
Geographic Response Plan
Division KER-KN-J

0 ½ 1 1½ Miles

0 ½ 1 2 Kilometers

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Response Strategy Site: Calloway Weir (KER-335)

Latitude: 35.39987
Longitude: -119.02690

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
401 Willow Drive
Bakersfield, CA 93308

Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Merle Haggard/7th Standard exit. Turn left and head east on Merle Haggard Drive. Turn right at Airport Drive and head south to Roberts Lane. Turn left on Roberts Lane. Head east on Roberts Lane, turn right on Oildale Drive. Head south on Oildale Drive, turn left at Willow Drive to access Riverview Park. Alternatively, continue south on Oildale Drive to the maintenance road along the north bank of the Calloway canal (river right). Access river left by crossing the weirs and driving along the bike path. City of Bakersfield Water Resources would need to be contacted to unlock gate (661) 326-3716.

From the South: Highway 99 North to Airport Drive exit. Continue straight on Airport Drive, turn right on to Roberts Lane. Head east on Roberts Lane, turn right on Oildale Drive. Head south on Oildale Drive, turn left at Willow Drive to access Riverview Park. Alternatively, continue south on Oildale Drive to the maintenance road along the north bank of the Calloway canal (river right). Access river left by crossing the weirs and driving along the bike path. City of Bakersfield Water Resources would need to be contacted to unlock gate (661) 326-3716.

Overview Street Map

Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Locked gates
- Weirs with multiple canal gates
- Bicycles and pedestrians on bike path
- Rattlesnakes
- Steep sandy banks
- Homeless encampments in the area
- Equestrian riding with stables in the area
- UP rail crossing immediately downstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, Bakersfield Legless Lizard, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water intakes for Calloway Canal and Weir for Kern River, sporting events at Riverview Park.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
230 meters (755 feet)

Gradient: Low

Site Contact/s:

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-J-005

This site is located just south of the Riverview Park. Access to the site is through the parking lot to the river's edge or through a gate on the maintenance road off Oildale Drive. Homeless encampments exist in the park and river areas. Horse stables are present and equestrian trails are along the river right. Access river left from the bike trail on southbound Chester Ave and follow west to site. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Bike and pedestrian trail, equestrian trail, baseball field at park

Boat Launches: Direct river access, small skiff at either river left or river right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 3B Exposed, eroding banks in unconsolidated sediments; 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 06/08/2017

Site Objectives: Boom to prevent oil from entering Calloway Weir and Kern River Weir and allow for collection of oil**.**

Implementation: Boom A: Deploy 400 ft. of containment boom upstream from Calloway Weir at an angle to prevent entrainment, using anchoring stakes. Oil collection will be between Calloway Weir and Kern River Weir. Boom B: Deploy 700 ft. of containment boom to protect Kern River Weir and Carrier Canal Weir at an angle to prevent entrainment, using anchoring stakes.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location is at the Riverview Park parking lot. Electricity and restrooms are available at the park. Room for decontamination.

Response Strategy Map (overview)

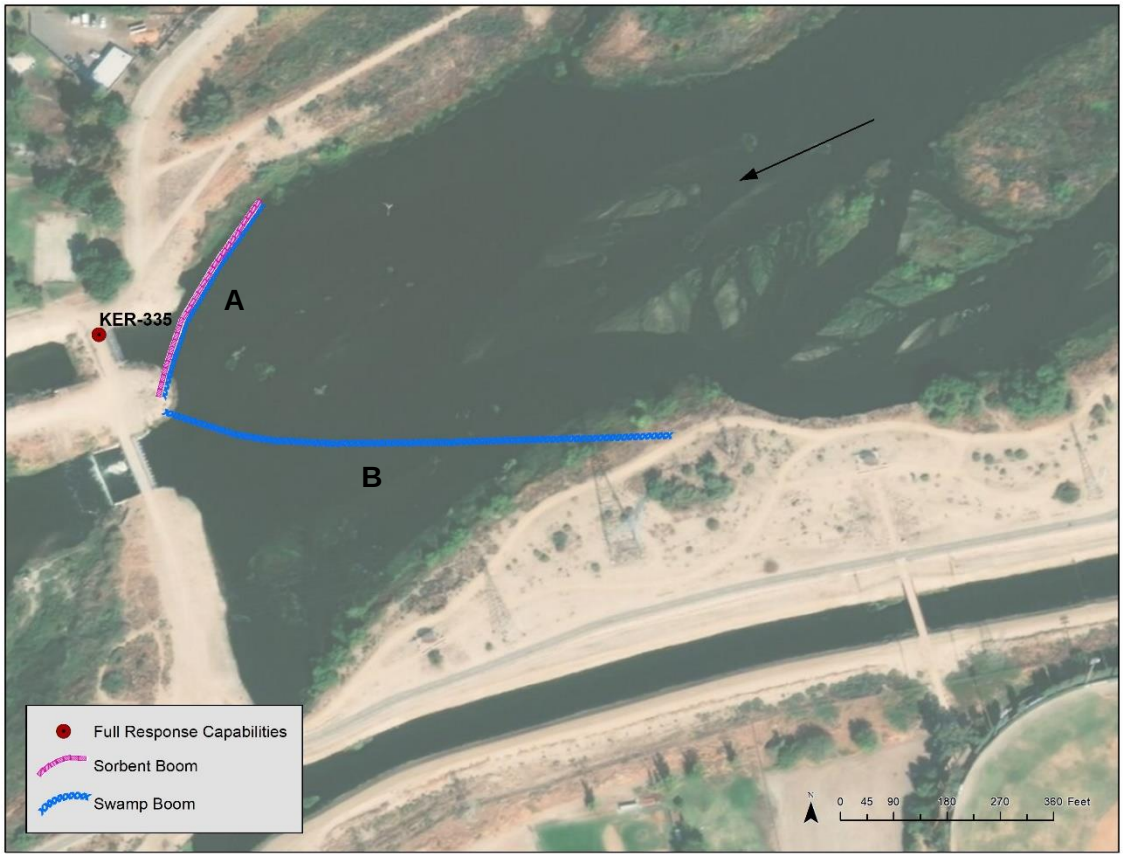

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	1100 ft.	Booming strategy only effective during medium to low flow. Boom A = 400-feet, Boom B = 700-feet.
Boom	Sorbent	5 or 8	Inch	400 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom A = 400-feet
Stakes	Anchoring			12	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	3	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Access/Observation Site: UP Rail Kern River Crossing (KER-340)

Latitude: 35.39742
Longitude: -119.02964

Highway Post Mile: N/A

Railroad Milepost: UPRR 310.35

Nearest Address and Thomas Guide #: N/A

Cell Service: Yes, Verizon

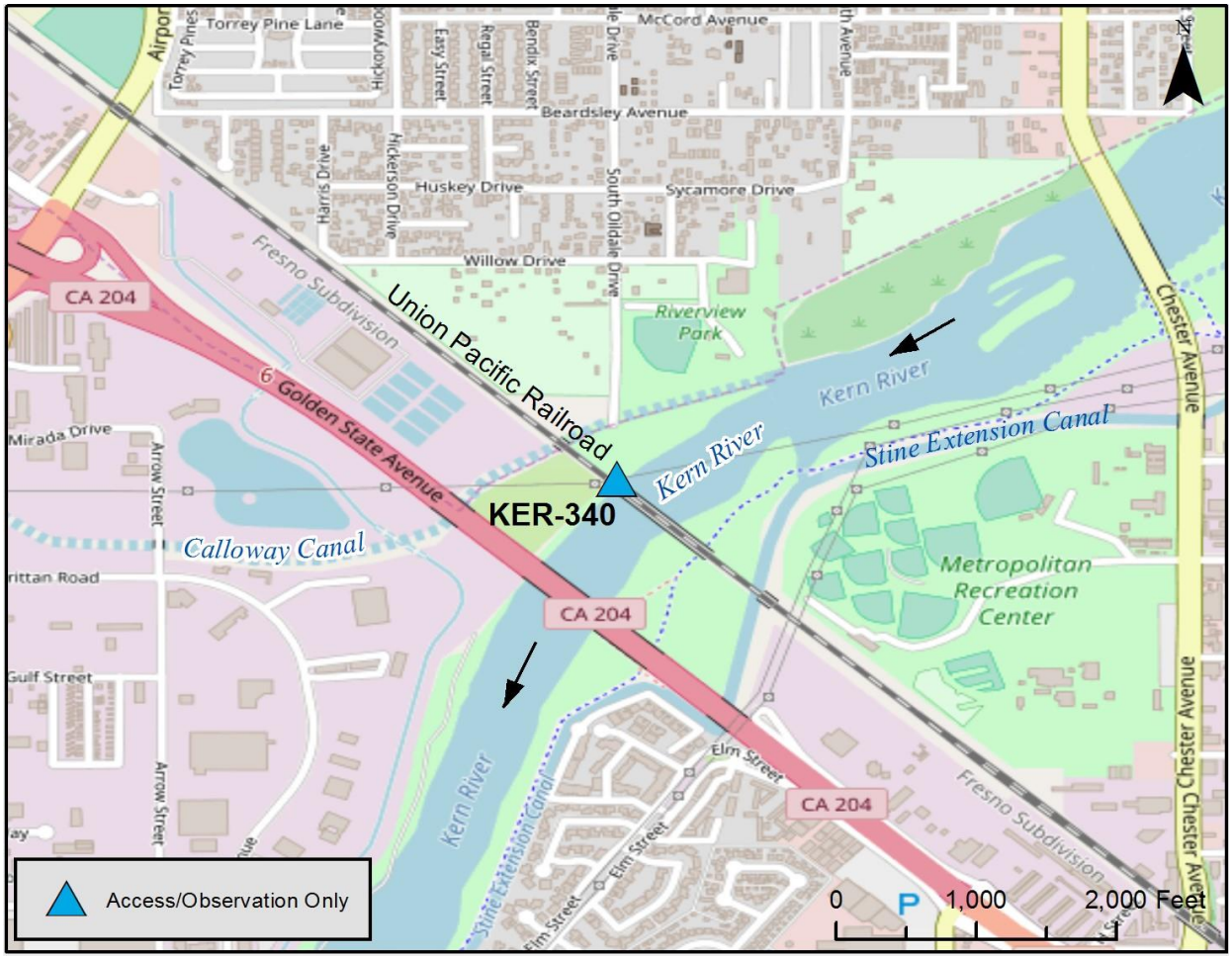
Driving Directions

From the North: Take Highway 99 South to Olive Drive. Exit Olive Drive and turn left. Turn right on Roberts Lane, then right onto Chester Avenue. Turn right onto the Kern River Parkway Bike Path (after river crossing on right hand side). Follow the bike path until the first river crossing (dirt road). Turn right and cross the first bridge, then take an immediate left. Follow this dirt path to the railroad crossing.

From the South: Take Highway 99 North to Airport Drive. Exit Airport Drive toward Oildale, then turn right onto Roberts Lane. Turn right onto Chester Avenue, and turn right onto the Kern River Parkway Bike Path (after river crossing on right hand side). Follow the bike path until the first river crossing (dirt road). Turn right and cross the first bridge, then take an immediate left. Follow this dirt path to the railroad crossing.

River Right Access: Refer to above directions, but instead of crossing the river at the dirt road, continue along the bike path to the railroad crossing.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Railroad bridge crosses river
- Trip and fall hazards, slippery when wet
- Homeless encampment under railroad crossing and adjacent freeway overpass
- Biological hazards (e.g., poison oak, rattlesnakes)

Access/Observation Site: UP Rail Kern River Crossing (KER-340)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-005

This is a high-risk location due to Union Pacific Railroad crossing over the Kern River. It is also a high public use area due to its location near public parks, residential areas, and the Kern River Parkway Bike Trail. Multiple user created trails parallel the river, but serious caution should be taken if performing surveys along the shorelines for safety reasons.

Site Contact/s: City of Bakersfield Water Resources (661) 326-3716, UPPR 1-888-UPRRCOP (877-7267)

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Access/Observation Site: Highway 204 Crossing (KER-345)

Latitude: 35.39742
Longitude: -119.02964

Highway Post Mile: KER 5.752

Railroad Milepost: N/A

Nearest Address and Thomas Guide #: N/A

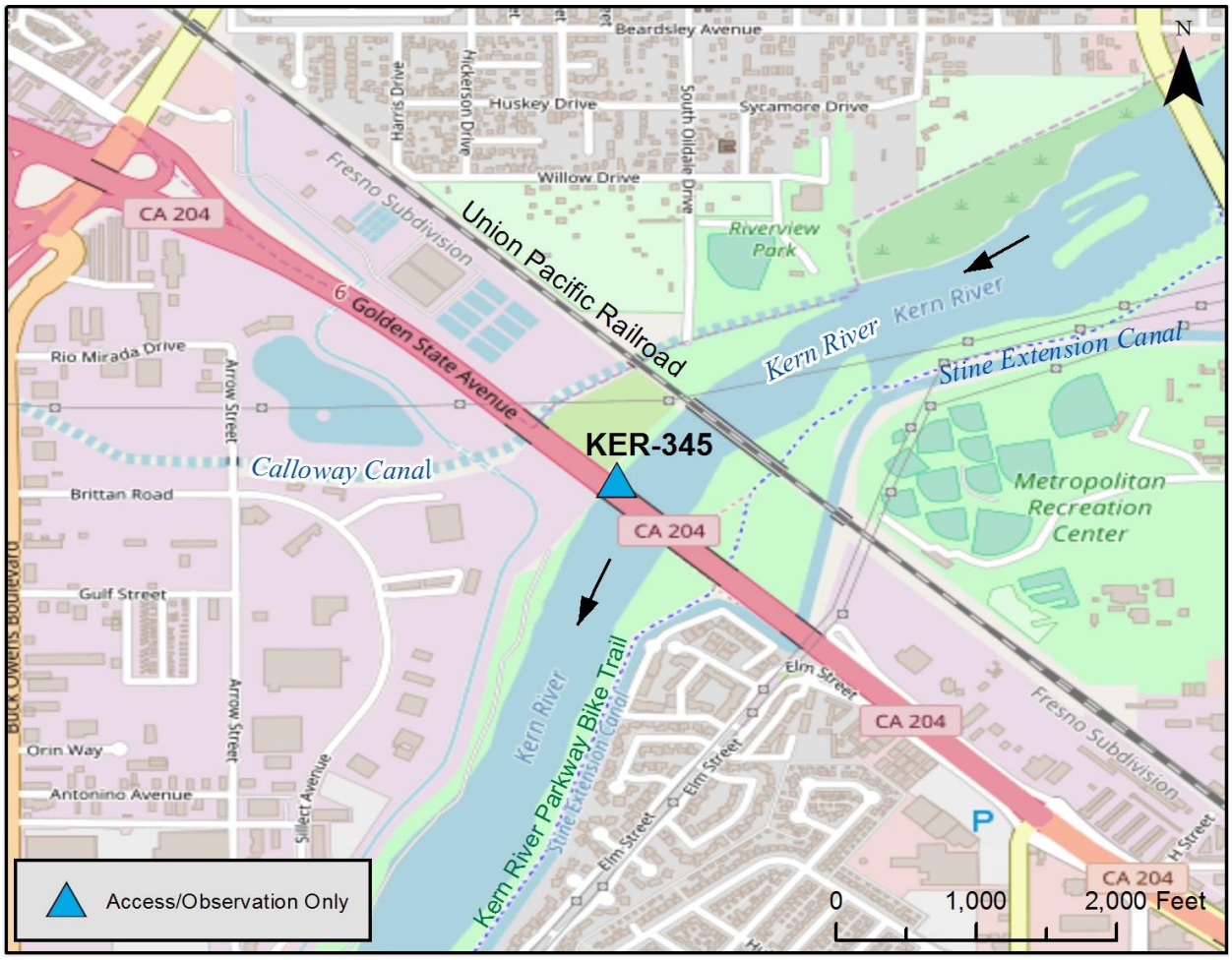
Cell Service: Yes, Verizon

Driving Directions

From the North: Exit Olive Drive from Highway 99 South. Turn left on Olive Drive, then right on Roberts Lane. Turn right on Oildale Drive, then left on Willow Drive. Turn right into Riverview Park and continue to the end of the parking lot roundabout. Cross over the grass toward the canal, and cross the Calloway Weir bridge. Take an immediate right, and follow the dirt road to the Highway 204 crossing. Continue over river crossing to Kern River Bike Trail for south bank access.

From the South: Exit Airport Drive from Highway 99 North. Continue on Airport Drive, then turn right on Roberts Lane. Turn right on Oildale Drive, then left on Willow Drive. Turn right into Riverview Park and continue to the end of the parking lot roundabout. Cross over the grass toward the canal, and cross the Calloway Weir bridge. Take an immediate right, and follow the dirt road to the railroad crossing. Continue over river crossing to Kern River Bike Trail for south bank access.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- UP railroad bridge crossing upriver
- Trip and fall hazards, slippery when wet
- Homeless encampment under railroad crossing and adjacent freeway overpass
- Biological hazards (e.g., poison oak, rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-005

This is a high risk location due to upriver UP railroad crossing and Highway 204 crossing. It is also a high public use area due to its location near public parks, residential areas, and the Kern River Parkway Bike Trail. Multiple user-created trails parallel the river, but serious caution should be taken if performing surveys along the shorelines for safety reasons.

Site Contact/s: City of Bakersfield Water Resources (661) 326-3716, UPPR 1-888-UPRRCOP (877-7267)

Site Images

Upstream

Photo Date: 03/01/2018

Downstream

Photo Date: 03/01/2018

Straight Across

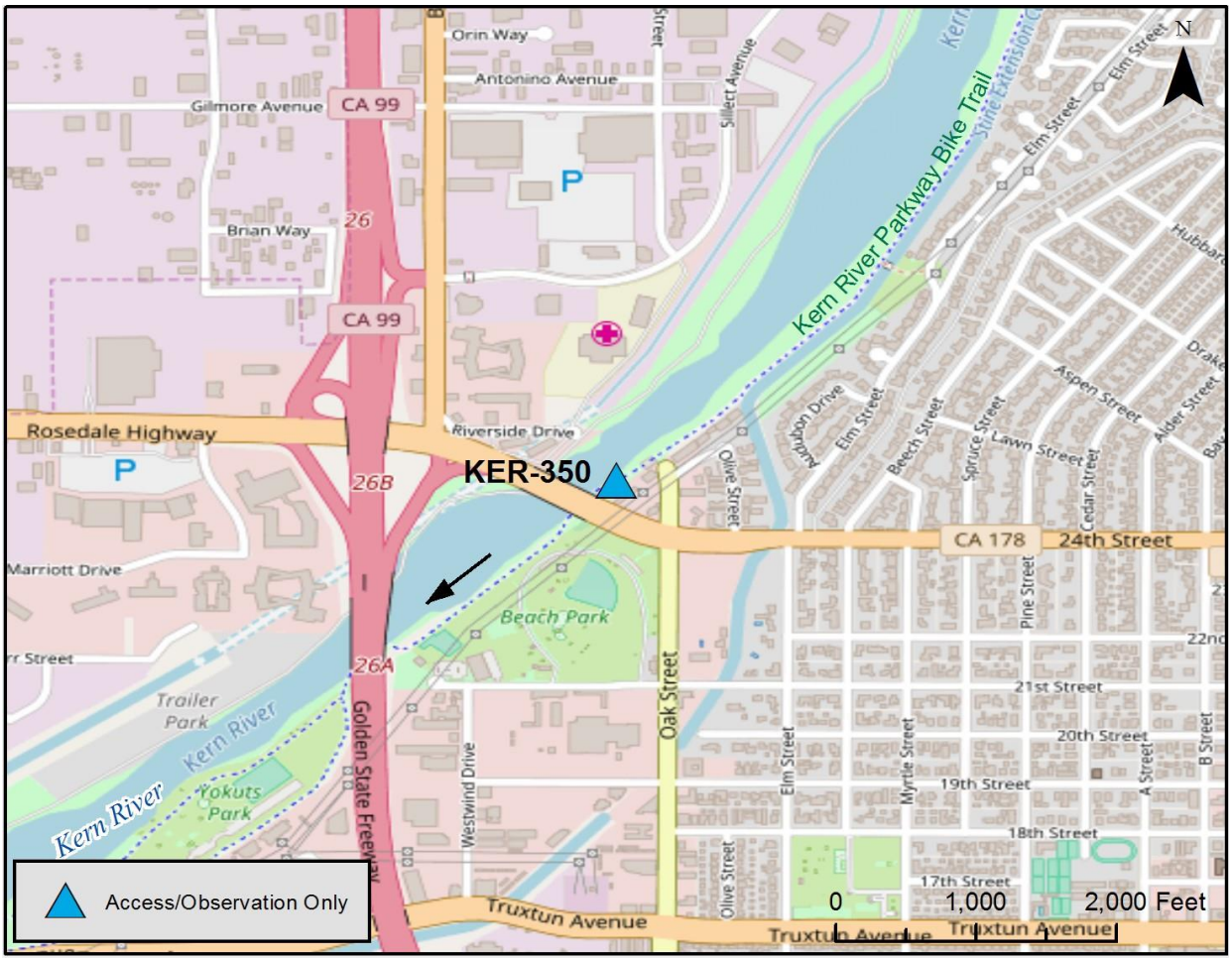
Photo Date: 07/11/2017

RR = River Right RL = River Left

Access/Observation Site: Oak Street Access Point (KER-350)

Latitude: 35.38221 **Longitude:** -119.03966	**Driving Directions**
Highway Post Mile: N/A	**From the North:** From Highway 99 South, take Rosedale Highway Exit toward 24th Street. Turn left on Rosedale Highway, then take a left onto Oak Street. Follow Oak Street until it dead-ends into the Kern River Parkway Bike Trail. Take bike trail downriver to access point. **From the South:** From Highway 99 North, take Rosedale Highway Exit toward 24th Street. Turn right on Rosedale Highway, then make an immediate left on Oak St. Follow Oak Street until it dead-ends into the Kern River Parkway Bike Trail. Take bike trail downriver to access point.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- UP railroad bridge and Highway 99 crossing upriver
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-005

The Oak Street Access Point is up-river of the Highway 178 river crossing, and across the river from the EZ-8 Motel. The Kern River Parkway Bike Trail provides easy access to the river's edge. A site strategy has been identified across the river at the Riverside Drive location. Multiple user-created trails parallel the river, but serious caution should be taken if performing surveys along the shorelines for safety reasons.

Site Contact/s: City of Bakersfield Water Resources (661) 326-3716, Kern County Sherriff (661) 861-3110

Site Images

Upstream

Downstream

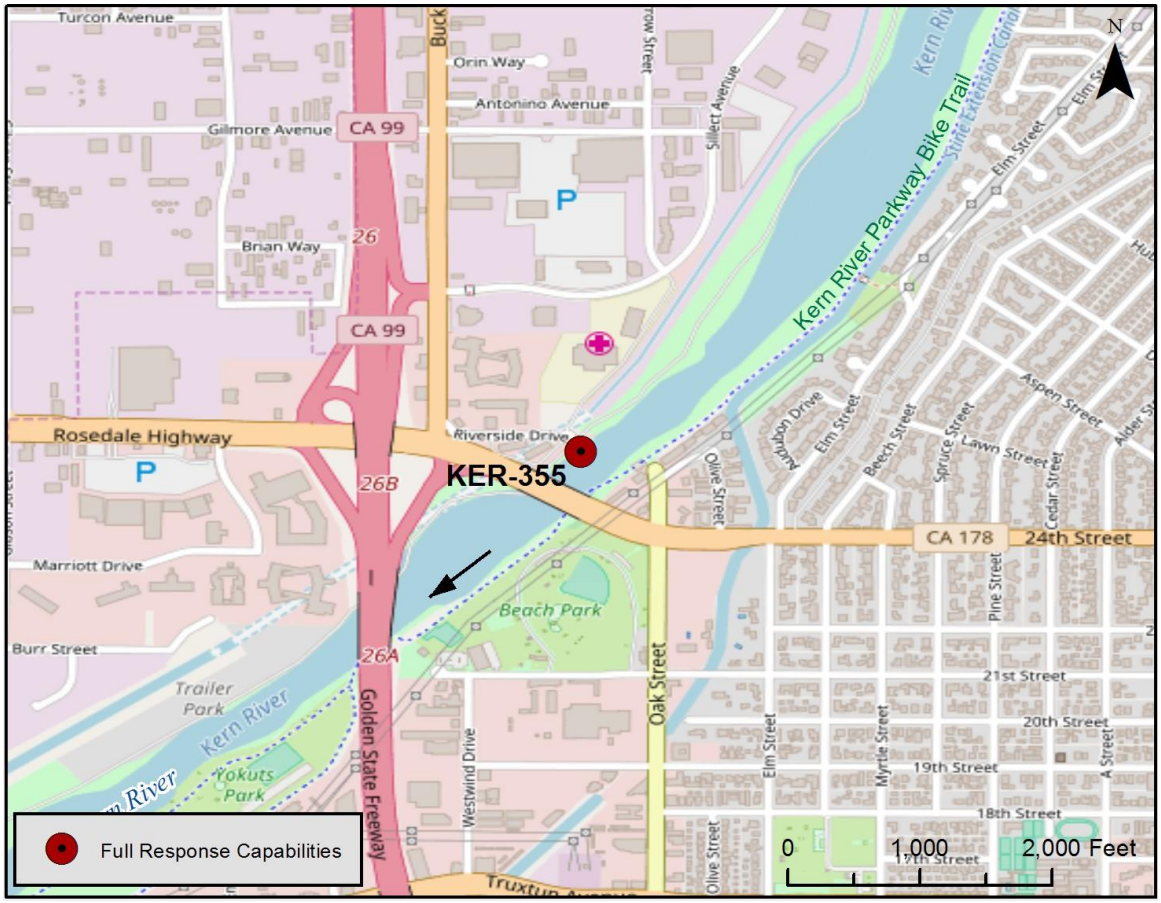
Straight Across

RR = River Right RL = River Left

Photo Date: 03/01/2018

Latitude: 35.38283 **Longitude:** -119.04022	**Driving Directions**
Highway Postmile: KER 0.09	**From the North:** Highway 99 South to Highway 178 East. Drive under freeway and turn left onto Buck Owens Blvd. Make a sharp right turn onto Riverside Drive. Access gate at the end of cul-de-sac and follow the dirt road to the river's edge (river right).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 2609 Buck Owens Blvd Bakersfield, CA 93308	**From the South:** Highway 99 North to Highway 178 East. Drive under freeway and turn left onto Buck Owens Blvd. Make a sharp right turn onto Riverside Drive. Access gate at the end of cul-de-sac and follow the dirt road to the river's edge (river right).
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Homeless encampments in the area, biological hazards including rattlesnakes
- Riprap across river
- Highway 178 overpass just south of site
- Union Pacific rail crossing approximately 1 mile upstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, San Joaquin kit fox, Bakersfield Legless Lizard. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Multiple parks downstream of site.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 76 meters (249 feet)

Gradient: Low

Site Contact/s:

City of Bakersfield Water Resources (661) 326-3716

Kern County Sherriff (661) 861-3110

Site Location/Segment: KER-KN-J-005

This site is located just south of the Starlite Motel. Access to river left is possible by taking Highway 178 East to Oak Street (North) and accessing the bike path at the end of the cul-de-sac. Homeless encampments exist in this location on both sides of the river. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: human contact

Boat Launches: Direct river access, small skiff only from bank at river right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 4 Sandy bars and gently sloping banks; 5 Mixed sand and gravel bars and gently sloping banks; 6B Riprap; 8F Vegetated, steeply-sloping bluffs; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 09/07/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil

Implementation: Deploy 500 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging for boom trucks, trailer, vacuum trucks and temporary storage tanks at cul-de-sac. Room for decontamination. Starlite motel could serve as a command center with restrooms and electricity.

Response Strategy Map (overview)

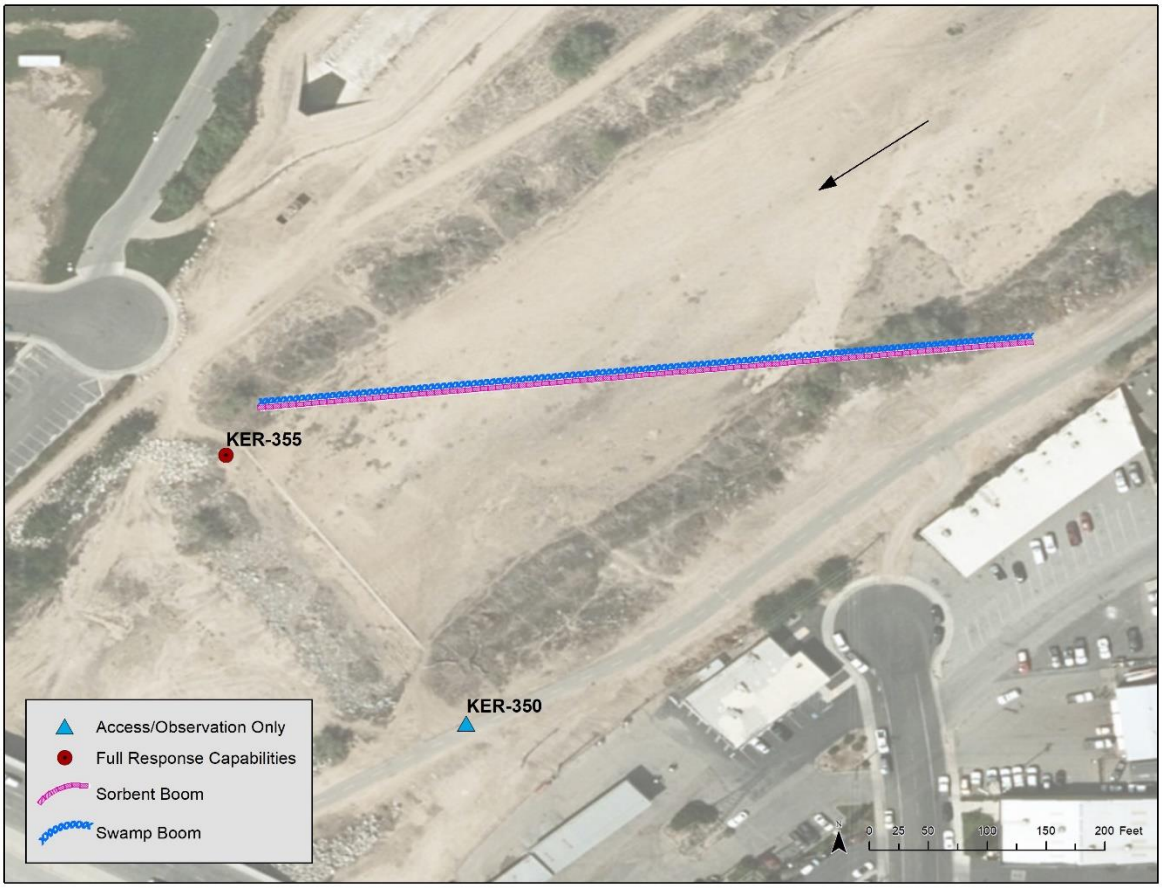


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	500 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	500 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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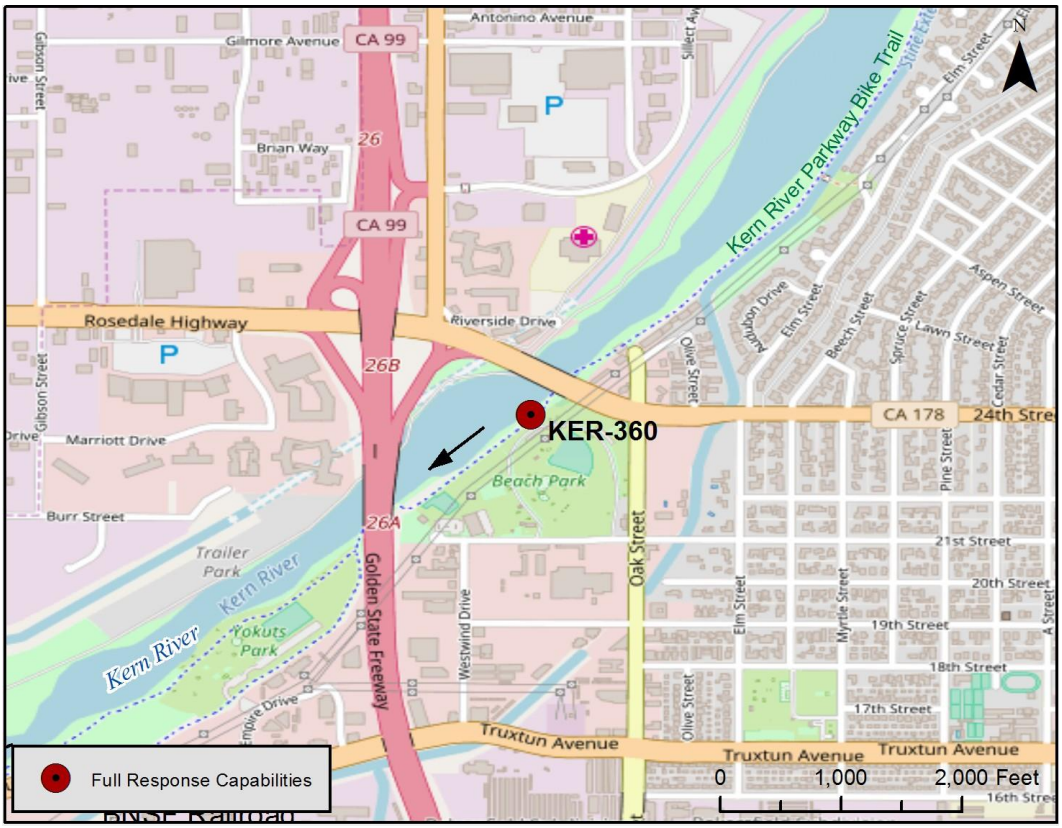
Response Strategy Site: Beach Park (KER-360)

Latitude: 35.38105 **Longitude:** -119.04104	**Driving Directions**
Highway Postmile: KER 0.16	**From the North:** Highway 99 South to Highway 178 East. Turn right onto Oak Street then right onto 21st Street. Take an immediate right into the park entrance (Beach Park Loop) and follow the road north towards the river. Parking spaces are available near the river's edge (river left).
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: 3400 21st Street Bakersfield, CA 93301	**From the South:** Highway 99 North to Highway 178 East. Turn right onto Oak Street then right onto 21st Street. Take an immediate right into the park entrance (Beach Park Loop) and follow the road north towards the river. Parking spaces are available near the river's edge (river left).
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Homeless encampments are common this location
- Heavy vehicle and pedestrian traffic in park and along river's edge, speed limit 5 mph in park
- Bike and jogging path
- Rattlesnakes
- Sandy banks erode easily
- Highway 178 overpass just northeast of site
- Union Pacific rail crossing approximately 1.3 miles upstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, Bakersfield Legless Lizard, Swainson's hawk, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Sporting events and picnic day use at park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 91 meters (298 feet)

Gradient: Low

Site Contact/s:

Kern County Parks and Recreation -
Primary: Carl Brewer,
(661) 342-8339

Secondary: Isaac Preston,
(661) 432-6550

Secondary: Matt Howard,
(661) 345-7175

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-J-010

This site is located adjacent to the Beach Park, which is managed by the City of Bakersfield Recreation and Parks Department. Access on river right obtained by taking dirt access road at Riverside Drive and following south under Highway 178 overpass. Heavy vehicle and pedestrian traffic are present. A bike path is also located between the parking lot and the river. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Human contact, sports and picnicking at park, bike path along river

Boat Launches: Direct river access, small skiff only from bank at river left

ESI Shoreline Type: 1B Exposed, solid man-made structures; 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 700 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river left along bike path.

Staging Area Location and Capabilities/Amenities/Waste Management: Beach Park has staging for boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the city's permission. Room for decontamination. Electricity and restrooms onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	700 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	700 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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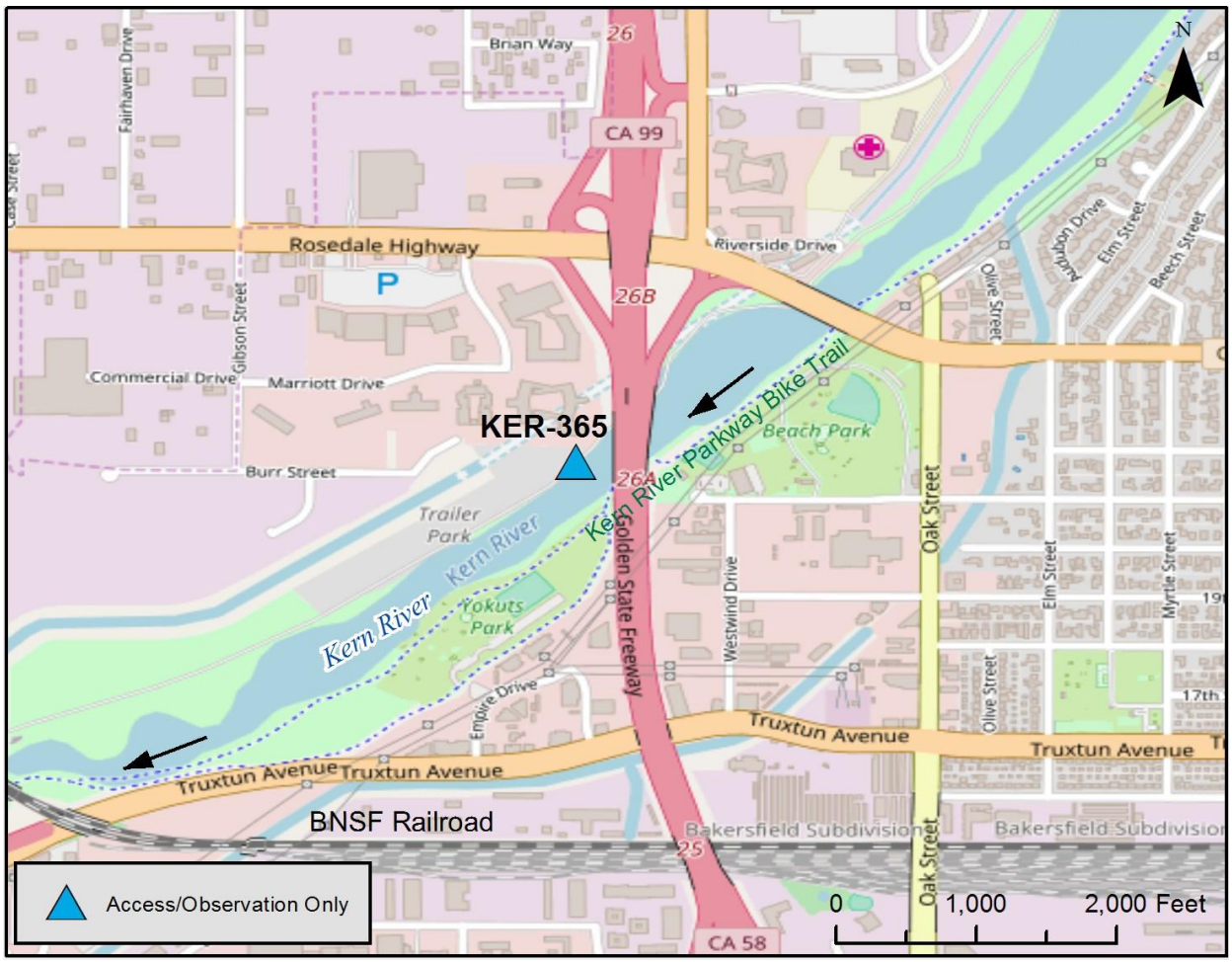
Access/Observation Site: River Run RV Access Point (KER-365)

Latitude: 35.37893 **Longitude:** -119.04556	**Driving Directions**
Highway Post Mile: N/A	**From the North:** From Highway 99 South, at exit 26A take ramp on the right to CA-178E/CA-58W/Rosedale Hwy toward 24th Street/ Buttonwillow. Turn right onto Rosedale Highway. Turn left on Gibson Street, and take another left on Burr Street. Enter the River Run RV Park and drive to the southeast side until you see an access gate to the river on your right side. **From the South:** From Highway 99 North, at exit 26A take ramp on the right to Rosedale Highway toward 24th Street (CA-58W) / Buttonwillow. Turn left toward Buttonwillow, then left on Rosedale Highway. Turn left on Gibson Street, and take another left on Burr Street. Enter the River Run RV Park and drive to the southeast side until you see an access gate to the river on your right side.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Highway 178 and Highway 99 crossing upriver
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-010

Provides vehicle access to the north side of the Kern River (river right) between Highway 99 and the BNSF Railroad crossing. Vehicle access ends just before the BNSF Railroad crossing, approximately 1 mile down-river of the River Run RV Access Point gate. Responders must contact River Run RV Park staff to open gate for access to the riverbank, however in the event of an emergency call the Kern County Sherriff's Department for emergency access.

Site Contact/s: River Run RV Park (661) 377-3600, City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 09/07/2017

Response Strategy Site: Yokuts Park (KER-370)

Latitude: 35.37818
Longitude: -119.04520

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
4000 Empire Drive
Bakersfield, CA 93309

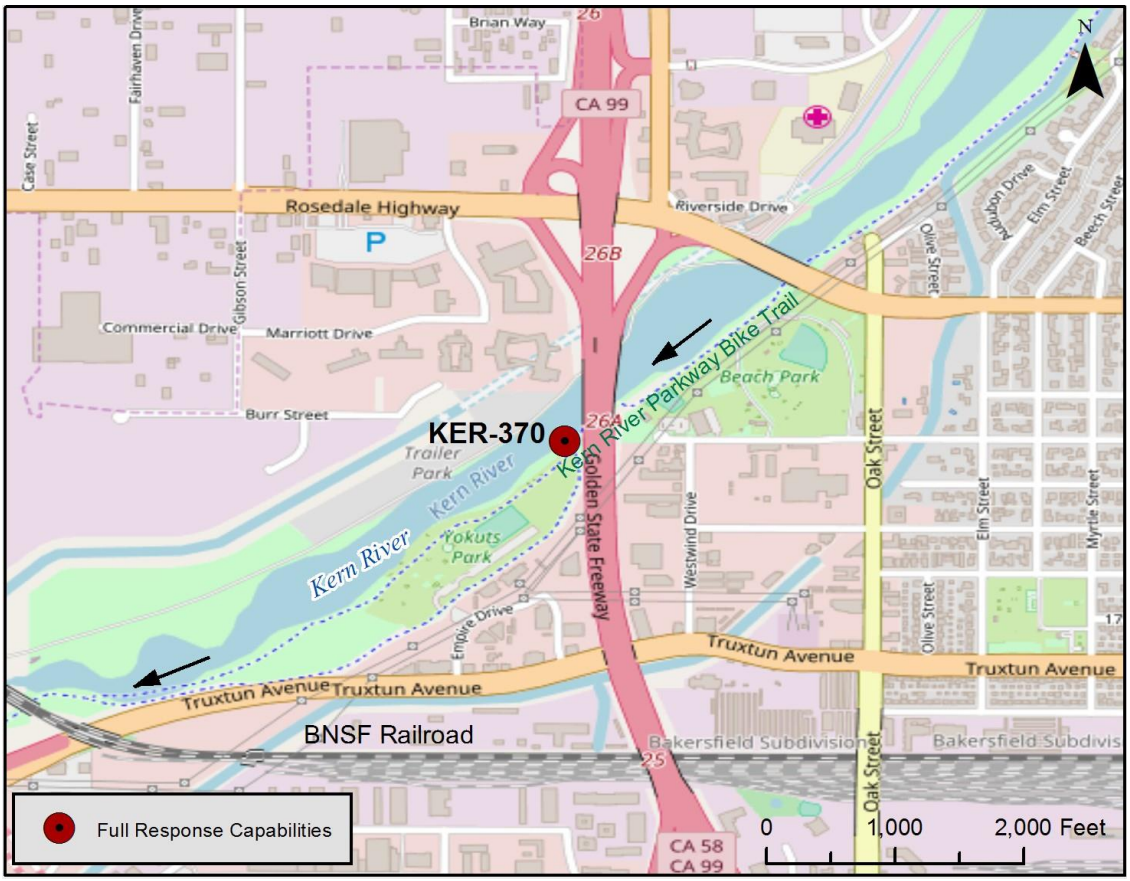
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Highway 178 East. Turn right onto Oak Street. In 0.5 miles, turn right onto Truxtun Ave. In 0.5 miles, turn right onto Empire Drive. Turn left to enter Yokuts Park. Take a right at the stop sign to access the bike path and follow it northeast until you reach a dirt access path to the left of the bike path that reaches the river's edge (river left).

From the South: Highway 99 North to Highway 178 East. Merge onto Highway 178 and stay in the right lane to turn right onto Oak Street. In 0.5 miles, turn right onto Truxtun Ave. In 0.5 miles, turn right onto Empire Drive. Turn left to enter Yokuts Park. Take a right at the stop sign to access the bike path and follow it northeast until you reach a dirt access path to the left of the bike path that reaches the river's edge (river left).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Bike and jogging path
- Heavy vehicle and pedestrian traffic in park and along river's edge, speed limit 5 mph in park
- Rattlesnakes
- Highway 99 overpass just east of site
- Union Pacific rail crossing approximately 1.6 miles upstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, Bakersfield Legless Lizard, Swainson's hawk, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Sporting events and picnic day use at park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
67 meters (220 feet)

Gradient: Low

Site Contact/s:
Kern County Parks and Recreation
Primary: Carl Brewer,
(661) 342-8339

Secondary: Isaac Preston,
(661) 432-6550

Secondary: Matt Howard,
(661) 345-7175

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-J-010

This site is located by accessing the bike path at Yokuts Park, which is managed by the City of Bakersfield Recreation and Parks Department. Access to the river right is achieved through the River Run RV Park, located off Burr Street. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Human contact, sports and picnicking at park, bike path along river

Boat Launches: Direct river access, small skiff from bank at river left

ESI Shoreline Type: 1A Exposed rocky banks; 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 700 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river left along river's edge.

Staging Area Location and Capabilities/Amenities/Waste Management: Yokuts Park has staging for boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the city's permission. Room for decontamination. Electricity and restrooms onsite.

Response Strategy Map (overview)

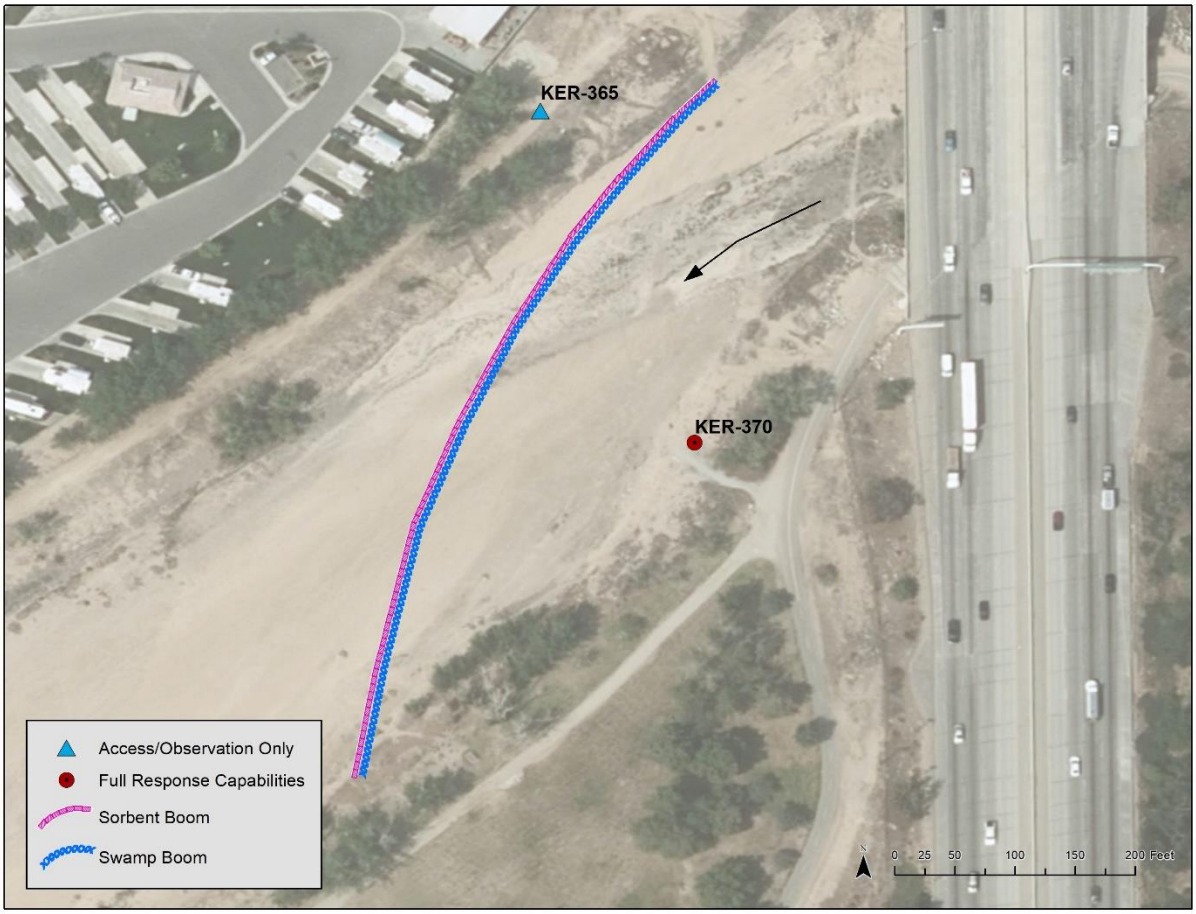


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	700 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	700 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Access/Observation Site: BNSF Railroad Crossing (River Right) (KER-375)

Latitude: 35.37364
Longitude: -119.05689

Highway Post Mile: N/A

Railroad Milepost: BNSF 889.6

Nearest Address and Thomas Guide #: N/A

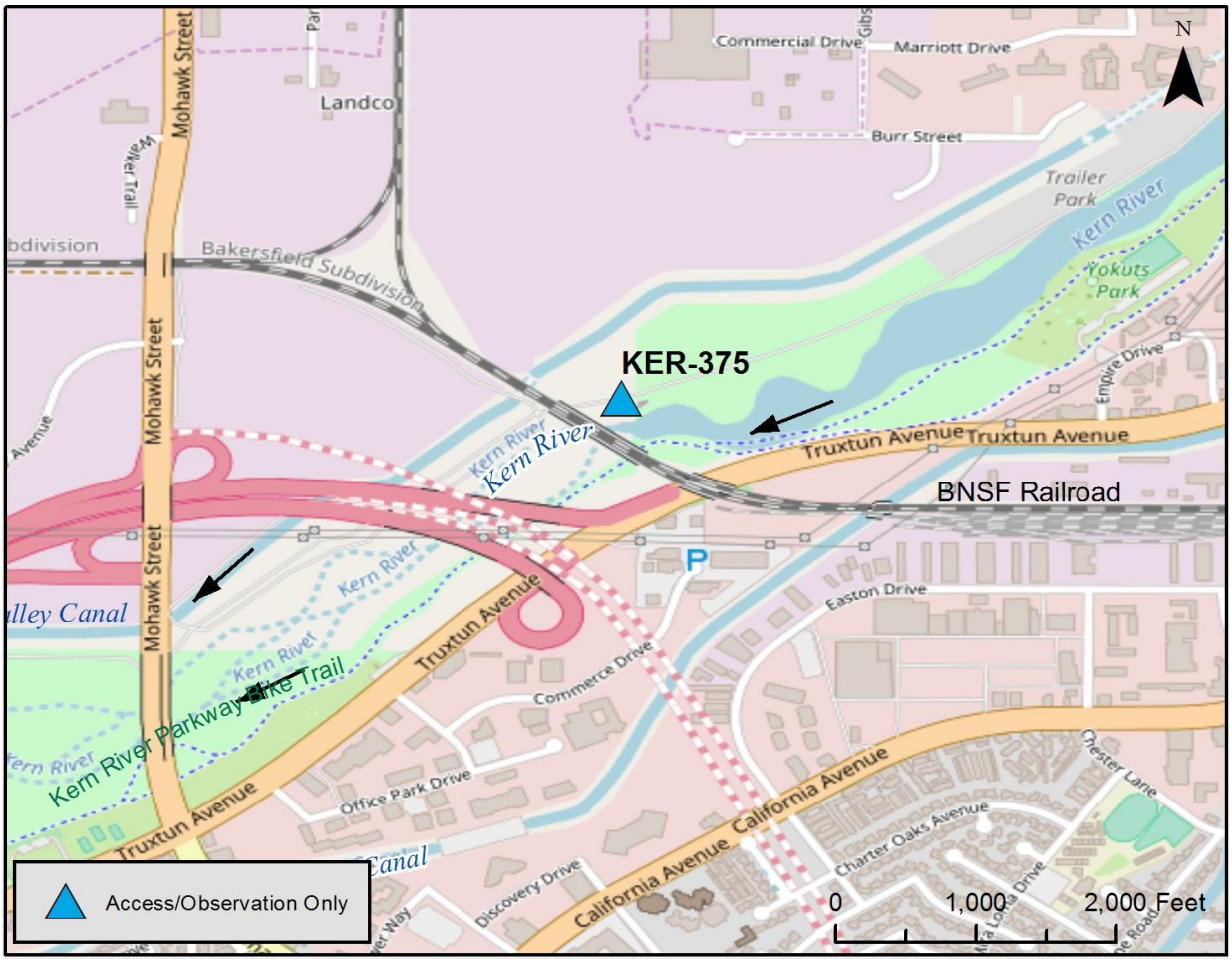
Cell Service: Yes, Verizon

Driving Directions

From the North: From Highway 99 South, at exit 26A take ramp on the right to CA-178E/CA-58W/Rosedale Hwy toward 24th Street/ Buttonwillow. Turn right onto Rosedale Highway. Turn left on Gibson Street, and take another left on Burr Street. Enter the River Run RV Park and drive to the southeast side until you see an access gate to the river on your right side. Continue through the gate, and drive downriver until you reach the observation location.

From the South: From Highway 99 North, at exit 26A take ramp on the right to Rosedale Highway toward 24th Street (CA-58W) / Buttonwillow. Turn left toward Buttonwillow, then left onto Rosedale Highway. Turn left on Gibson Street, and take another left on Burr Street. Enter the River Run RV Park and drive to the southeast side until you see an access gate to the river on your right side. Continue through the gate, and drive downriver until you reach the observation location.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Highway 178 and Highway 99 crossing upriver
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-010

This access location and observation point is located river right. Vehicle access under the railroad bridge is restricted as the trail is too narrow and the bridge is too low. Access to the down-river side of the railroad on river right is possible through a gate located on Mohawk Street (see Mohawk Street Access/Observation Site page). This location is ideal for observation and access for SCAT teams.

Site Contact/s: BNSF Railway 1-(800) 832-5452; River Run RV Park (661) 377-3600; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

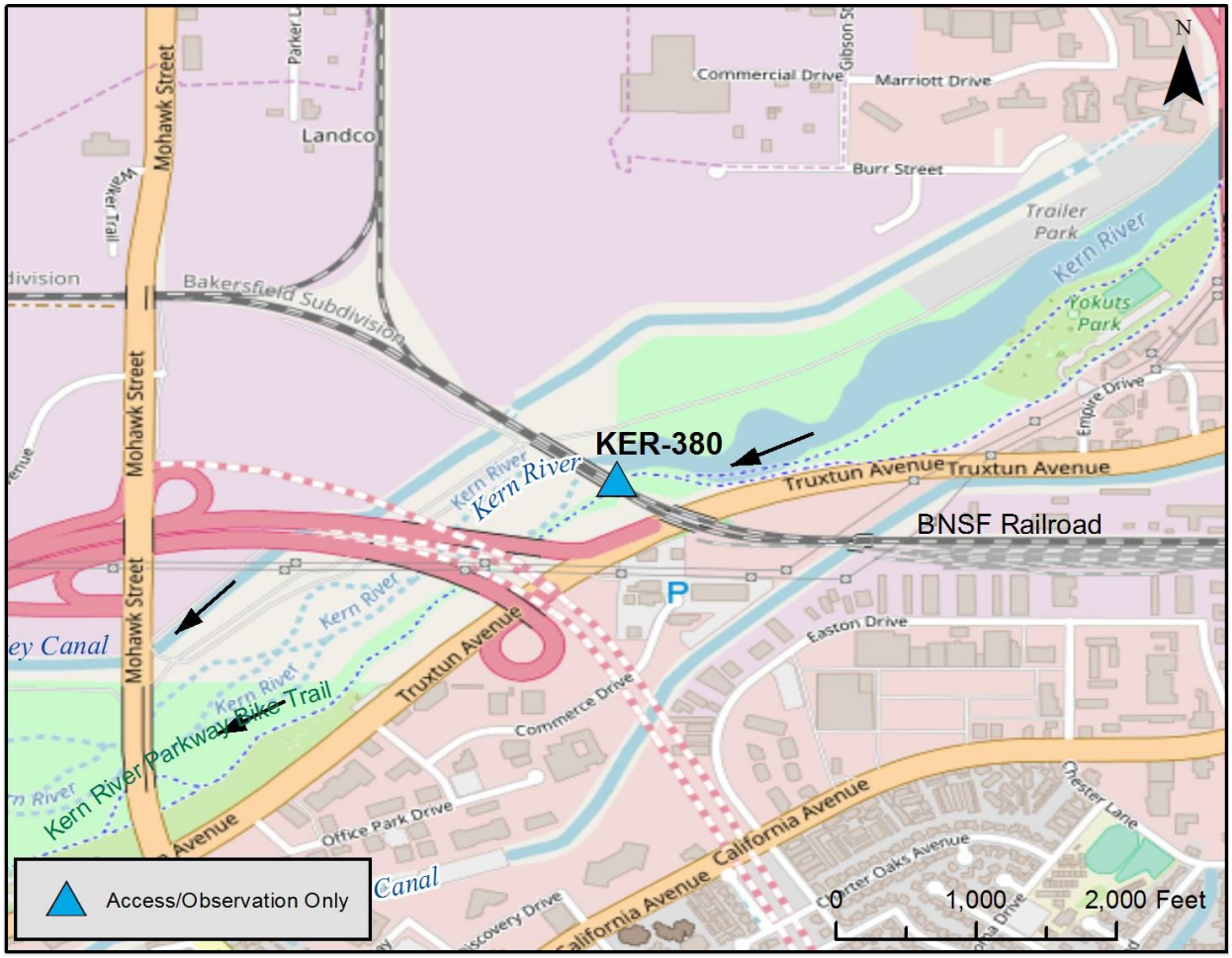
RR = River Right RL = River Left

Photo Date: 09/07/2017

Access/Observation Site: BNSF Railroad Crossing (River Left) (KER-380)

Latitude: 35.37269 **Longitude:** -119.05661	**Driving Directions**
Highway Post Mile: N/A	**From the North:** Take Highway 99 South, and exit CA-178E, Rosedale Highway toward 24th Street. Turn left onto Rosedale Highway toward Bakersfield, Lake Isabella. Turn right onto Oak Street, then right onto Truxtun Ave. Turn right onto Empire Drive, and turn left into Yokuts Park. Follow the Kern River Parkway Bike Trail downriver to the access location. **From the South:** Take Highway 99 North and exit California Ave toward Civic Center. Turn right onto California Ave, then left on Oak Street. Turn left on Truxtun Ave, and then right on Empire Drive. Turn left into Yokuts Park and follow the Kern River Parkway Bike Trail downriver to the access location.
Railroad Milepost: BNSF 889.6	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Highway 178 and Highway 99 crossing upriver
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Access/Observation Site: BNSF Railroad Crossing (River Left) (KER-380)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-010

This observation point is located river left and is located adjacent to the Kern River Parkway Bike Path. There are multiple hazards located in the immediate vicinity, including private oil leases, Highway 99 upriver, and Westside Parkway and Mohawk Street Crossing downriver. The BNSF Railroad crosses the river at this location as well. Use caution when driving along bike path and while surveying due to multiple potential hazards.

Site Contact/s: BNSF Railway (800) 832-5452; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Response Strategy Site: Kern River Parkway Park (KER-385)

Latitude: 35.36870
Longitude: -119.06211

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
1500 Commercial Way
Bakersfield, CA 93309

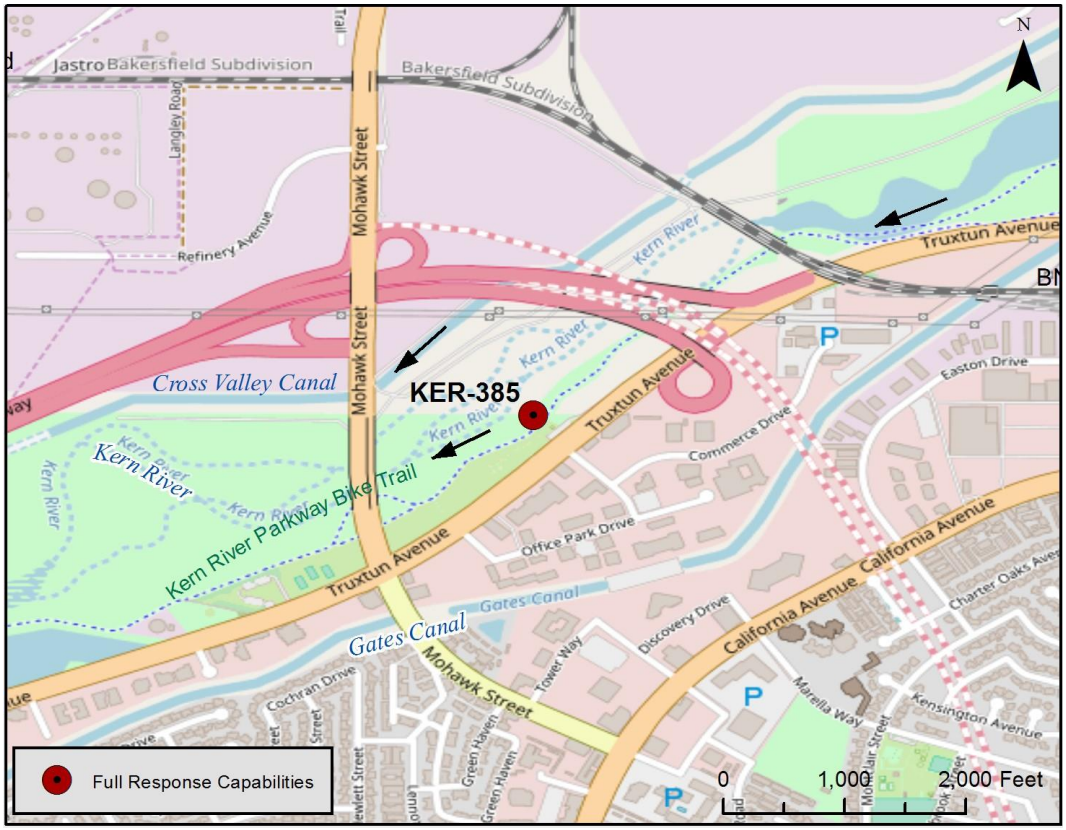
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to California Ave. toward Civic Center (Exit 25). Turn right onto California Ave and continue for approximately 1 mile. Turn right onto Mohawk Street and then right onto Truxtun Ave. In approximately 0.4 miles, enter left turn lane to access park. After reaching parking lot, turn right onto dirt access road, crossing bike path, to river's edge (river's left).

From the South: Highway 99 North to California Ave. toward Civic Center (Exit 25). Turn left onto California Ave and continue for approximately 1 mile. Turn right onto Mohawk Street and then right onto Truxtun Ave. In approximately 0.4 miles, enter left turn lane to access park. After reaching parking lot, turn right onto dirt access road, crossing bike path, to river's edge (river's left).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Bike and jogging path
- Heavy vehicle and pedestrian traffic in park and along river's edge, speed limit 5 mph in park
- Rattlesnakes
- Highway 99 overpass 1.3 miles upstream for site
- BNSF rail crossing approximately 0.4 miles upstream from site
- Bakersfield refinery (idle) 0.5 miles northwest of site
- Several oil well pads just northeast of site

Resources-At-Risk

Ecological: Western Pond Turtle, Bakersfield Legless Lizard, Swainson's Hawk, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Picnic day use at park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
190 meters (625 feet)

Gradient: Low

Site Contact/s:

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-J-015

This site is adjacent to Truxtun Ave. The Westside Parkway is just north of the site. Access river right by taking Mohawk Street north and taking a right onto a canal access road just north of the river. City of Bakersfield Water Resources would need to be contacted to unlock gate. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: Human contact, picnicking at park, bike path along river

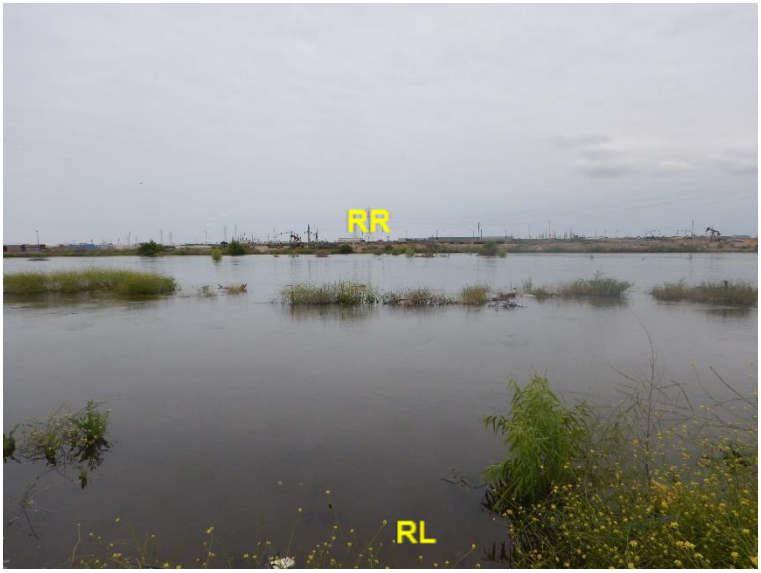
Boat Launches: Direct river access, small skiff only from bank at river left

ESI Shoreline Type: 3B Exposed, eroding banks in unconsolidated sediments; 4 Sandy bars and gently sloping banks; 6B Riprap; 9B Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 05/28/2019

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 800 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river left along bike path.

Staging Area Location and Capabilities/Amenities/Waste Management: Kern River Parkway Park has staging for boom trucks, trailer, vacuum trucks and temporary storage tanks – would need the city's permission. Room for decontamination. No restrooms or electricity onsite.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	800 ft.	Booming strategy only effective during medium to low flow.
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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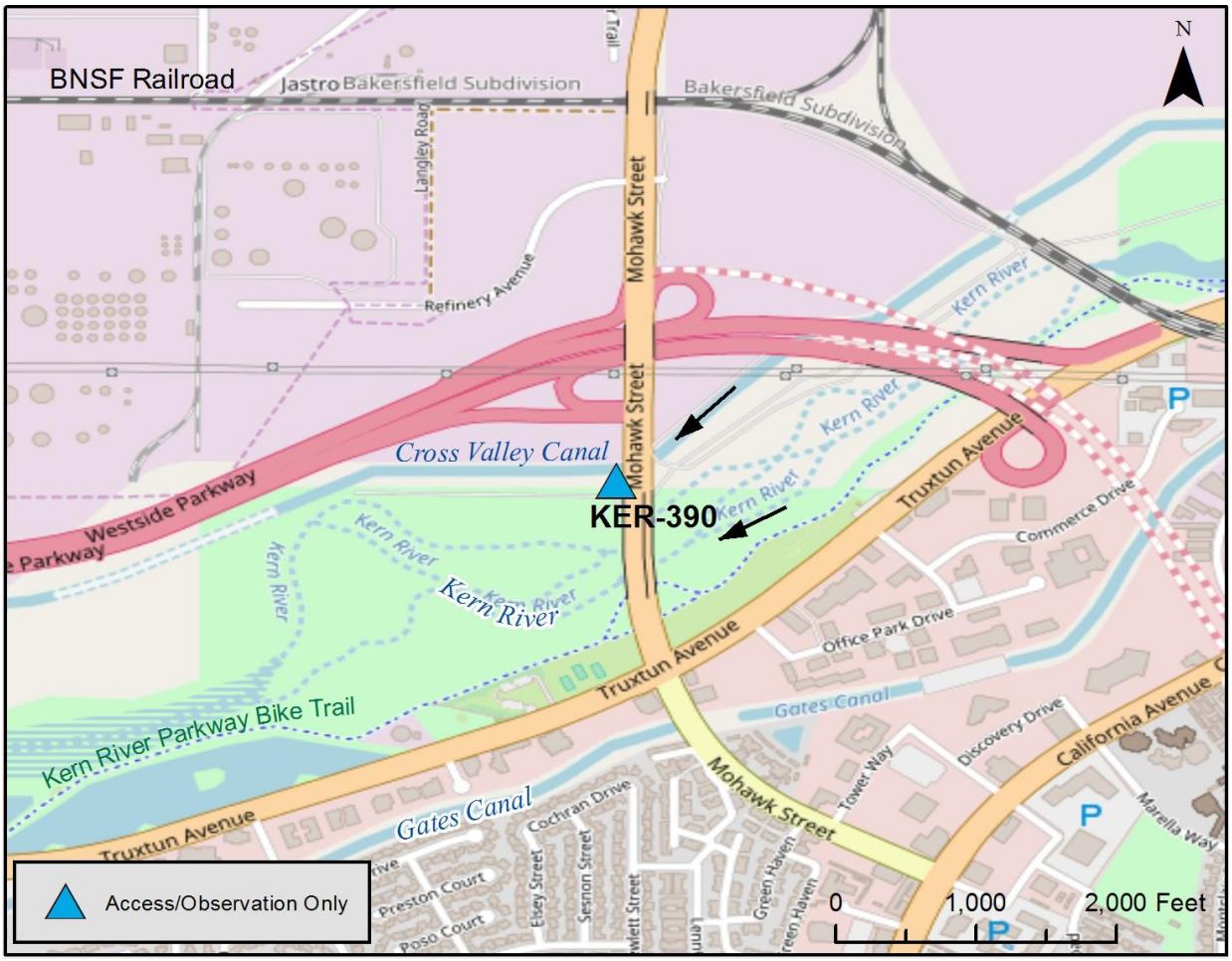
Access/Observation Site: Kern River Bridge Crossing (KER-390)

Latitude: 35.36887 **Longitude:** -119.06639	**Driving Directions**
Highway Post Mile: N/A	**From the North:** Take Highway 99 South, and at exit 26 take the ramp to CA-178E/CA 58-W/Rosedale Highway toward 24th Street/Buttonwillow. Turn right onto Rosedale Highway CA 58-W, then left on Mohawk Street. The gate entrance will be on either side of the Kern River Bridge. **From the South:** Take Highway 99 North, and at exit 26A take ramp to Rosedale Highway toward 24th Street (CA-58W)/Buttonwillow. Turn left toward Buttonwillow, then left on Rosedale Highway. Turn left on Mohawk Street. The gate entrance will be on either side of the Kern River Bridge.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Weir dams located just downriver
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-J-015

This location provides access to the north side of the river (river right) between the BNSF Railroad Crossing and the Friant/Kern Canal just before Coffee Road. This section of the river can only be accessed through locked gates off Mohawk Street. If access is necessary, contact the Kern County Sherriff's Department, or the phone number on the sign posted on gates.

Site Contact/s: Kern County Sherriff (661) 861-3110; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Entrance

RR = River Right RL = River Left

Photo Date: 03/01/2018

Response Strategy Site: Kern River Canal (KER-395)

Latitude: 35.36333
Longitude: -119.09084

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
600 Coffee Road
Bakersfield, CA 93309

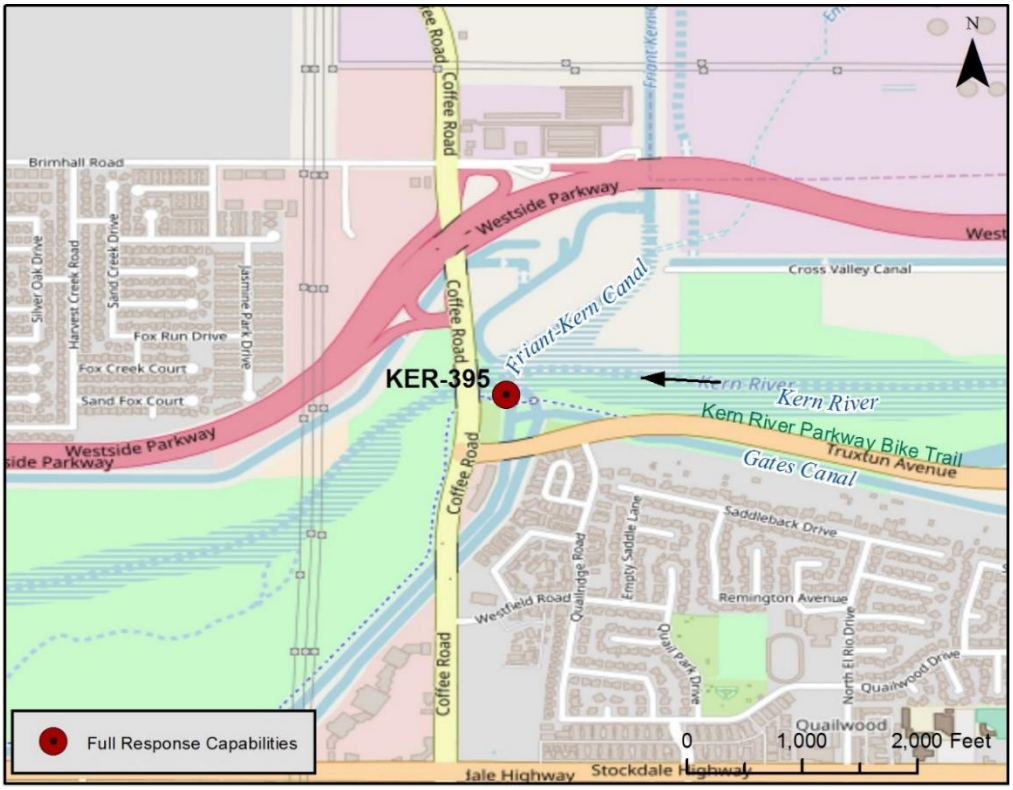
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to CA-178E/CA 58-W/Rosedale Highway toward 24th Street/Buttonwillow (Exit 26). Turn right onto Rosedale Highway CA 58-W. In approximately 2.6 miles, turn left onto Coffee Road. In approximately 2.4 miles turn left onto Truxtun Ave. Look for a chain link gate on the north side of Truxtun Ave., approximately 1/10 of a mile east of Coffee Road. If gate is locked, contact City of Bakersfield Water Resources (661) 326-3716.

From the South: Highway 99 North, to Rosedale Highway toward 24th Street (CA-58W)/Buttonwillow. Turn left toward Buttonwillow (Exit 26A), then left on Rosedale Highway. In approximately 2.6 miles, turn left onto Coffee Road. In approximately 2.4 miles turn left onto Truxtun Ave. Look for a chain link gate on the north side of Truxtun Ave., approximately 1/10 of a mile east of Coffee Road. If gate is locked, contact City of Bakersfield Water Resources (661) 326-3716.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Bike and jogging path
- Locked gate with dirt access road to river's edge
- Rattlesnakes
- Coffee Road overpass just west of site
- Multiple canal gates at this location
- BNSF rail crossing approximately 2 miles upstream from site
- Heavy traffic on Truxtun Avenue
- Multiple pipelines crossing immediately upstream and downstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, Bakersfield Legless Lizard, San Joaquin kit fox, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Friant-Kern Canal entrance and Kern River Weir.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 182 meters (597 feet)

Gradient: Low

Site Contact/s:

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-J-015

This site is located just east of Coffee Road where multiple canals channel water from Kern River. Site access is through a locked gate. The City of Bakersfield Water Resources would need to be contacted (661) 326-3716 to obtain access. There is limited space for equipment and staging. Access to river right is limited but could be reached using a small skiff. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, small trailers, small vacuum truck

Recreational Use: Bike path runs adjacent to the river (river left)

Boat Launches: Direct river access, small skiff from river's edge (river left)

ESI Shoreline Type: 1B Exposed, solid man-made structures; 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Site Objectives: Prevent oil from entering Friant-Kern Canal and Kern River Weir, deploy boom for oil collection on river left.

Implementation: Boom A and Boom B: Deploy two 700 ft. of cascading containment booms upstream from Friant-Kern Canal and Kern River Weir intakes at an angle to prevent entrainment, using anchoring stakes. Oil collection will be on river left. Boom C: Deploy 200 ft. of containment boom across entrance to Friant-Kern and Kern River Weir as secondary containment.

Staging Area Location and Capabilities/Amenities/Waste Management: Staging on river left. Truck with small trailer and small vacuum truck could access river's edge but staging of equipment and vehicles would need to be 1.8 miles east at the Kern River Parkway Park on Truxtun Ave. Room for decontamination but no electricity or bathrooms onsite.

Response Strategy Map (overview)

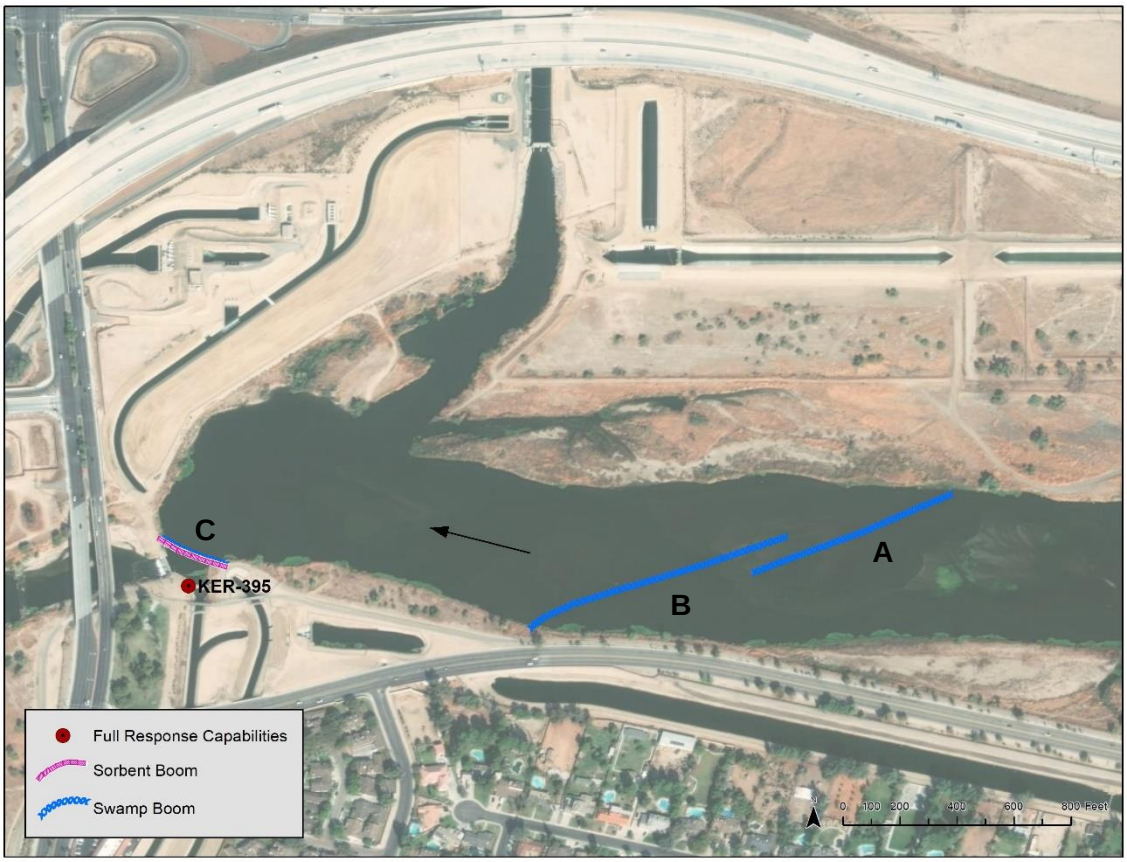


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	1600 ft.	Booming strategy only effective during medium to low flow. Boom A = 700-feet, Boom B = 700-feet. Boom C = 200-feet.
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom C = 200-feet.
Stakes	Anchoring			12	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A and Boom B.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Latitude: 35.35309
Longitude: -119.12943

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:

100 Jewetta Avenue
Bakersfield, CA 93314

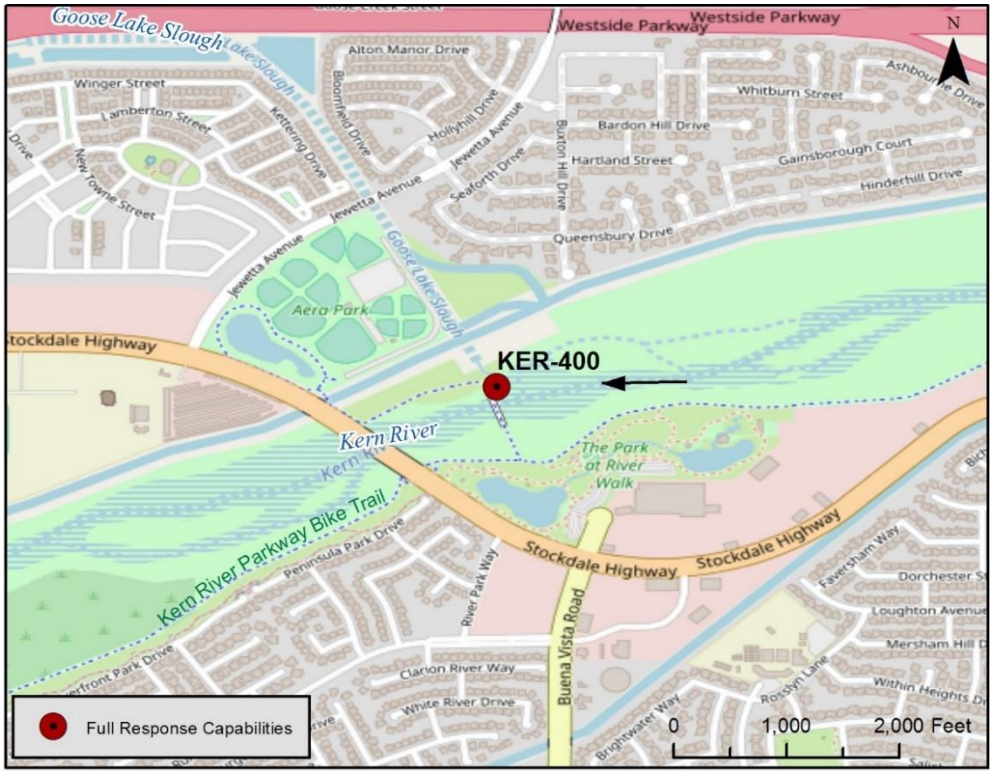
Cell Service: Yes, Verizon

Driving Directions

From the North: Highway 99 South to Stockdale Hwy exit toward Brundage Ln/Cal State Univ. Turn right and continue on Stockdale Highway for approximately 5.7 miles. Turn right onto Jewetta Ave. and then right into Wincanton Drive to enter Aera Park. Turn left into large parking lot and drive to the end of the lot. Turn right to access equestrian parking lot until you reach a gate. Access to river right is through gate. Need to contact City of Bakersfield Water Resources (661) 326-3716.

From the South: Highway 99 North to Stockdale Hwy., exit toward Brudage Ln/Cal State Univ. Turn left onto Wible Road then left onto Stockdale Highway for approximately 5.7 miles. Turn right onto Jewetta Ave. and then right into Wincanton Drive to enter Aera Park. Turn left into large parking lot and drive to the end of the lot. Turn right to access equestrian parking lot until you reach a gate. Access to river right is through gate. Need to contact City of Bakersfield Water Resources (661) 326-3716.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Bike and jogging path
- Heavy vehicle and pedestrian traffic in park and along river's edge, speed limit 5 mph in park
- Stockdale Highway overpass just east of site
- BNSF rail crossing approximately 4.3 miles upstream from site
- Steep sandy banks
- Stinging nettle potentially growing on bank
- Rattlesnakes

Resources-At-Risk

Ecological: Western Pond Turtle, California Glossy Snake, Bakersfield Legless Lizard, Western Spadefoot, San Joaquin kit fox, American badger, Tulare grasshopper mouse, Swainson's Hawk, White-tailed Kite, Tricolored Blackbird, Burrowing Owl, San Joaquin woollythreads, Kern mallow, Horn's milk-vetch, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Multiple water intakes north of river's edge, sporting events and picnic day use at park

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width: 105 meters (345 feet)

Gradient: Low

Site Contact/s:

Kern County Parks and Recreation
Primary: Carl Brewer, (661) 342-8339

Secondary: Isaac Preston, (661) 432-6550

Secondary: Matt Howard, (661) 345-7175

City of Bakersfield Water Resources
(661) 326-3716

Site Location/Segment: KER-KN-J-025

This site is located just south of the Aera Park sports park. Entrance is through the park's equestrian parking lot and along a canal dirt access road. This location is not ideal for oil collection due to limited space and braiding of the river with vegetated sand bars. Access to river left is through the Park at River Walk at 11298 Stockdale Highway. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, small trailers, small vacuum truck

Recreational Use: Human contact, bike path runs adjacent to the river (river left), Sporting events and picnic day use at park, horseback riding

Boat Launches: Direct river access, small skiff at either river left or river right

ESI Shoreline Type: 1B Exposed, solid man-made structures; 4 Sandy bars and gently sloping banks; 8B Sheltered, solid man-made structures; 8C Sheltered riprap; 9B Vegetated low banks

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 09/07/2017

Site Objectives: Not ideal for oil collection. Deflect oil and protect water intakes from oiling. Deploy boom and allow for oil collection on river right, if feasible.

Implementation: Boom A: Deploy 700 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river right along river's edge. Boom B: Deploy 350 ft. of containment boom across entrance to inlet to protect water intakes. Boom C: Deploy 100 ft. of containment boom across northern outflow from Kern River to protect habitat.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location is at the equestrian parking lot between Aera Park and the river. Electricity and restrooms are available at Aera Park. Access on river right is through the Park at River Walk.

Response Strategy Map (overview)

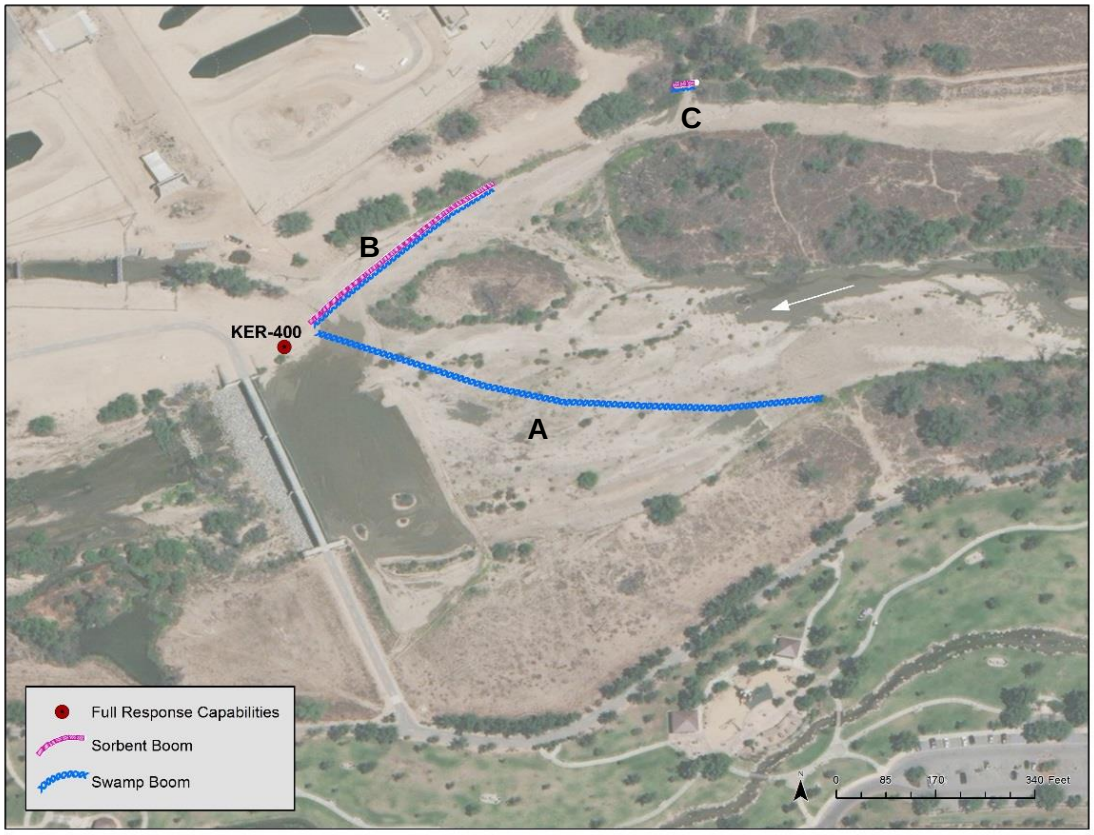


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	1150 ft.	Booming strategy only effective during medium to low flow. Boom A = 700-feet, Boom B = 350-feet, Boom C = 100-feet.
Boom	Sorbent	5 or 8	Inch	450 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom B = 350-feet, Boom C = 100-feet.
Stakes	Anchoring			18	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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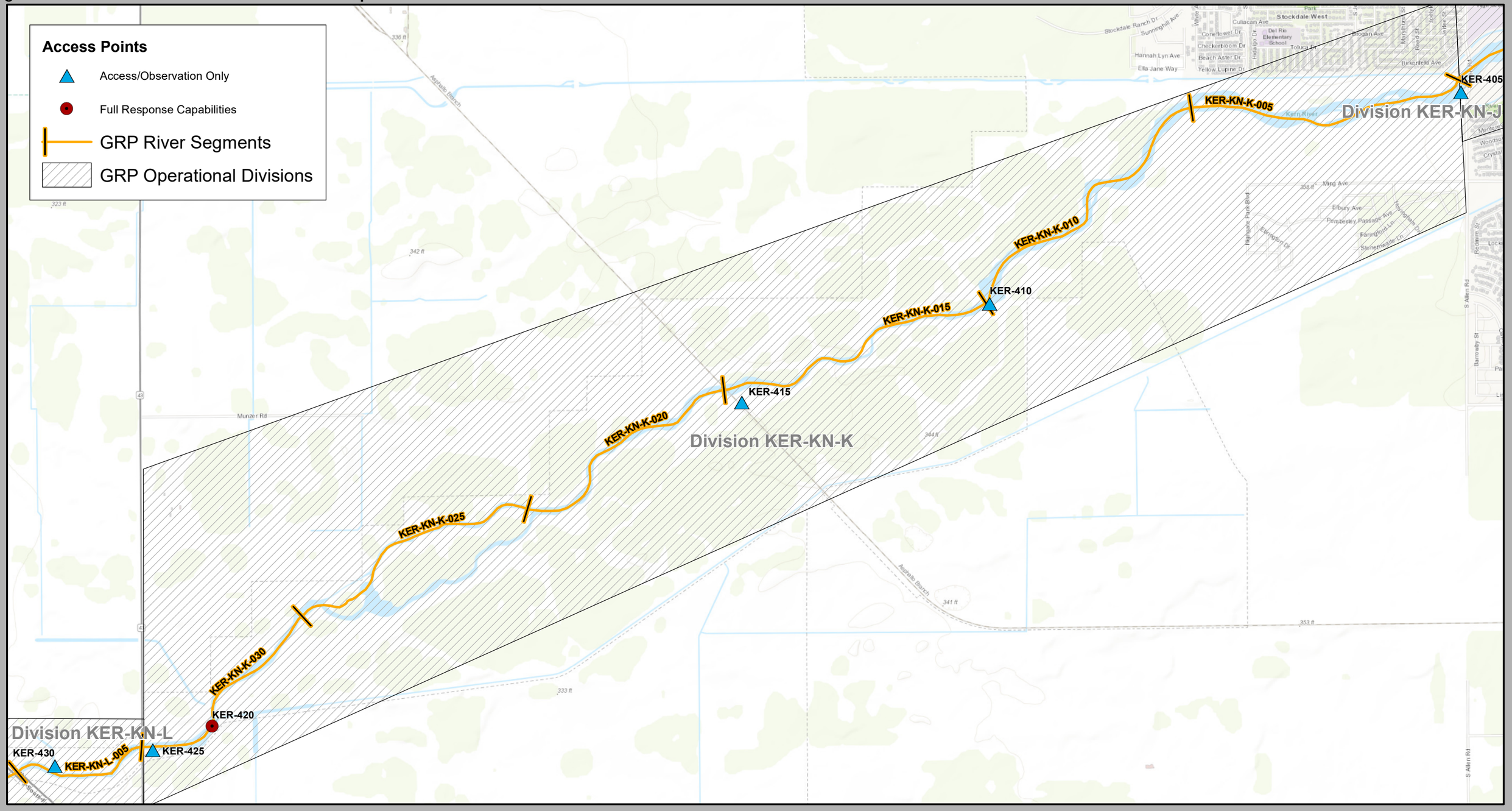
Figure 3-8: Kern River GRP Division KER-KN-K Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 06/12/2019

Kern River
Geographic Response Plan
Division KER-KN-K

0 ½ 1 1½ Miles
0 ½ 1 2 Kilometers

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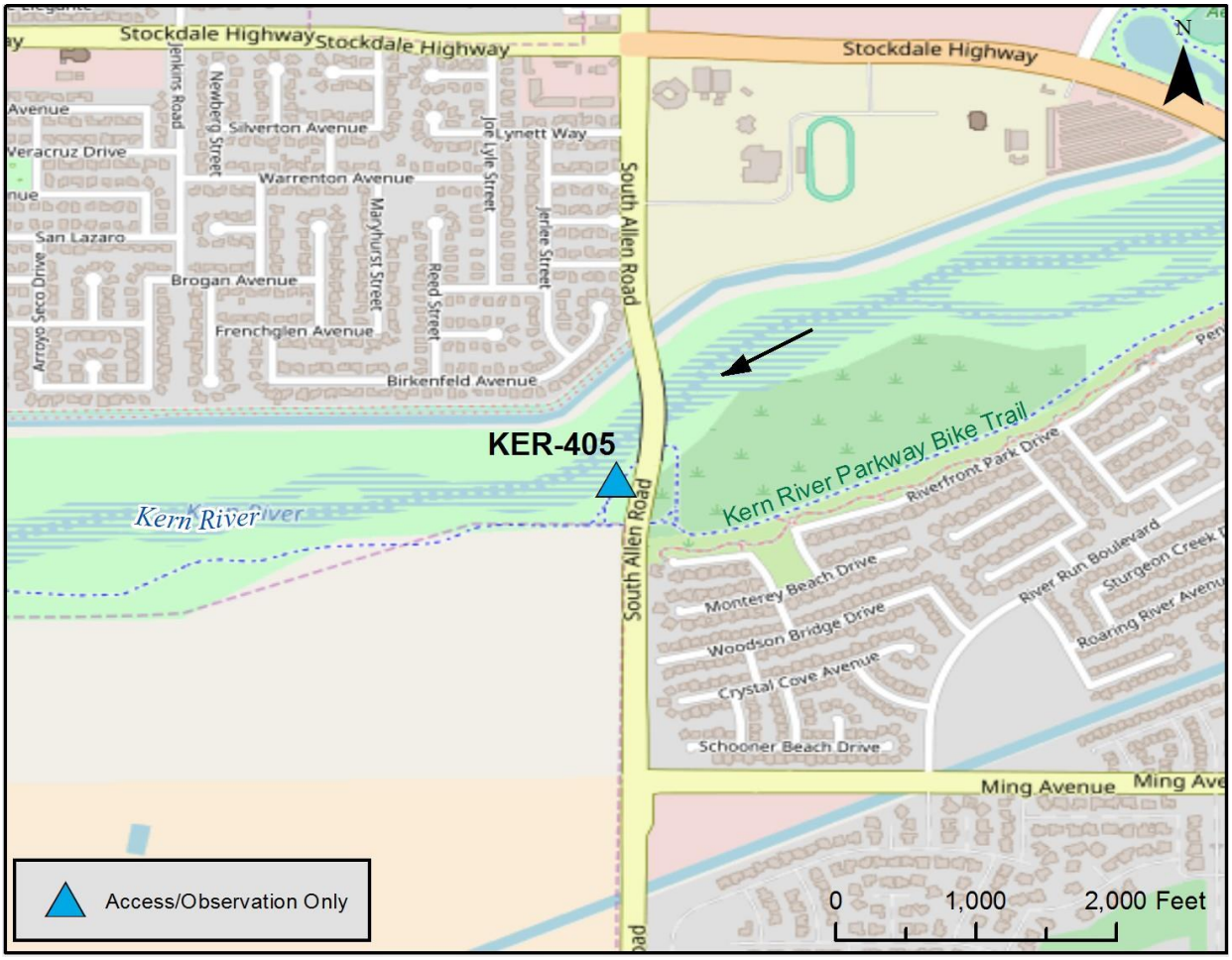
Access/Observation Site: Allen Road (KER-405)

Latitude: 35.34583 **Longitude:** -119.14590	**Driving Directions**
Highway Post Mile: N/A	**From the North:** Take Highway 99 South and take exit 26 toward CA-178 E/CA-58 W/Rosedale Hwy toward 24th St/ Buttonwillow. Turn right onto Rosedale Highway, then left on Mohawk Street. Bear right onto the Westside Parkway West ramp, exit Allen Road, and turn left. Continue on S Allen Road, and the access to the Kern River Parkway Bike Path will be on the right side as you cross the Kern River.
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	**From the South:** Take Highway 99 North and exit California Ave toward University of Phoenix. Turn right onto California Ave, then left onto Oak St. Turn left on Truxtun Ave, and take the ramp on the right toward Westside Parkway West. Exit at Allen Road and turn left. Continue on S Allen Road, and the access to the Kern River Parkway Bike Path will be on the right side as you cross the Kern River.
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Heavy vehicle traffic on Allen Road
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-K-005

This location is ideal for observation and survey access to the shoreline and is the last access point to the Kern River before the beginning of the Kern Water Bank. There is limited vehicle access downriver of this location, however the Kern River Parkway Bike Path parallels the river's edge continuously until it ends at Highway 43 (Enos Lane).

Site Contact/s: City of Bakersfield Water Resources (661) 326-3716; Kern Water Bank, Nick Torres (661) 440-4668

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/11/2017

Access/Observation Site: McClung Weir (KER-410)

Latitude: 35.33218
Longitude: -119.18399

Highway Post Mile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #: N/A

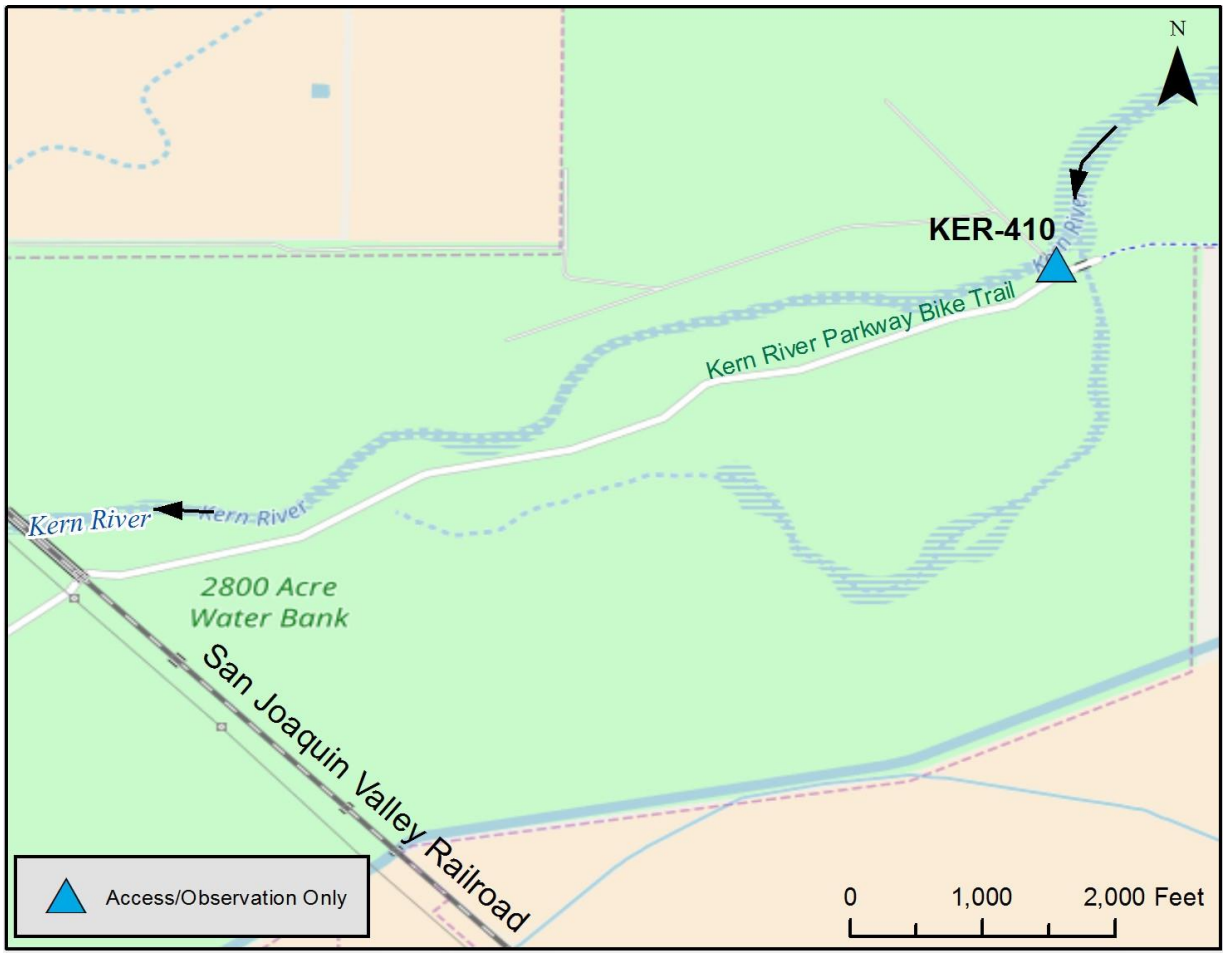
Cell Service: Yes, Verizon

Driving Directions

From the North: Take Highway 99 South and take exit 26 toward CA-178 E/CA-58 W/Rosedale Hwy toward 24th St/ Buttonwillow. Turn right onto Rosedale Highway, then left on Mohawk Street. Bear right onto the Westside Parkway West ramp, exit Allen Road, and turn left. Continue on S Allen Road, and the access to the Kern River Parkway Bike Path will be on the right side as you cross the Kern River. Follow the bike path until you reach the weir.

From the South: Take Highway 99 North and exit California Ave toward University of Phoenix. Turn right onto California Ave, then left onto Oak St. Turn left on Truxtun Ave, and take the ramp on the right toward Westside Parkway West. Exit at Allen Road and turn left. Continue on S Allen Road, and the access to the Kern River Parkway Bike Path will be on the right side as you cross the Kern River. Follow the bike path until you reach the weir.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Heavy vehicle traffic on Allen Road
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-K-015

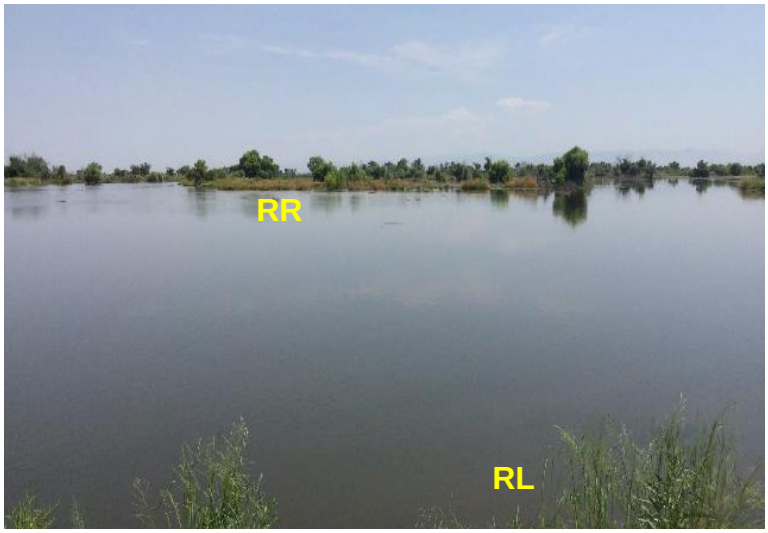
There are two weir dams (McClung Weir and Basin 2 Turnout Weir) located at this observation point, both controlled by the City of Bakersfield Water Resources (see below for contact information). The McClung Weir bridge provides vehicle access to the north bank of the Kern River (river right), and flow can be diverted by the city at this location depending on the flow of the river. This section of the river is surrounded by the Kern Water Bank, and provides essential habitat for many riparian species, including overwintering birds.

Site Contact/s: City of Bakersfield Water Resources (661) 326-3716; Kern Water Bank, Nick Torres (661) 440-4668

Site Images

Upstream

Downstream



Straight Across

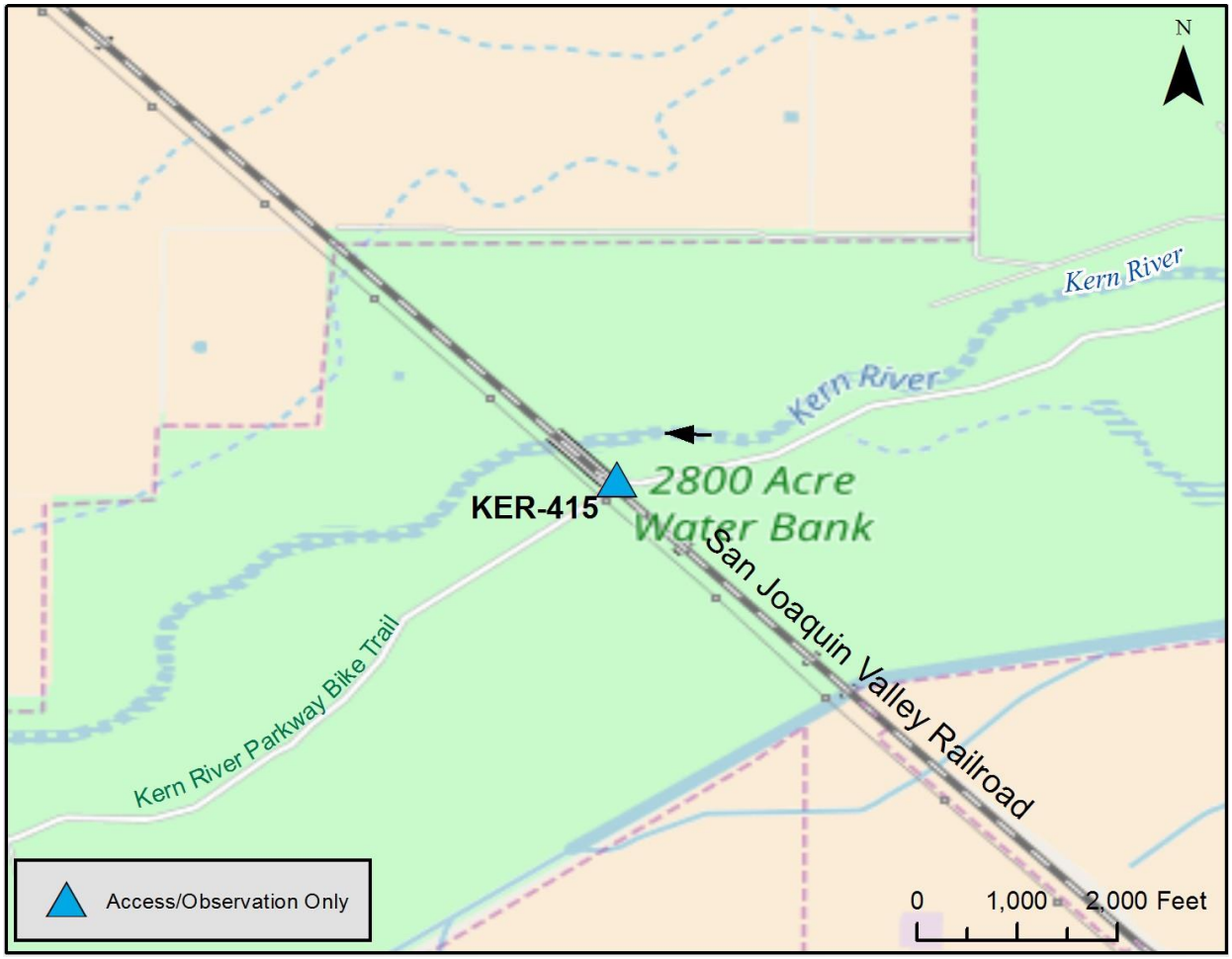
RR = River Right RL = River Left

Photo Date: 07/11/2017

Access/Observation Site: San Joaquin Valley Railroad Crossing (KER-415)

Latitude: 35.32584 **Longitude:** -119.20401	**Driving Directions**
Highway Post Mile: N/A	**From the East:** From Bakersfield, take Stockdale Highway west to Allen Road. Turn south and continue on Allen Road for approximately .65 miles. Turn right onto the Kern River Parkway Bike Path. Follow the bike path west for approximately 3.5 miles until you reach the railroad crossing. **From Interstate 5:** Exit CA-43 and turn north. Continue approximately 1 mile to the Kern River Parkway Bike Path parking lot on the right side of the highway. Enter the parking lot and follow the bike path east approximately 3.3 miles to the railroad crossing.
Railroad Milepost: SJVR 329.2	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Railroad crossing
- Heavy vehicle traffic on Allen Road
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes, stinging nettle)

Site Description and Field Notes

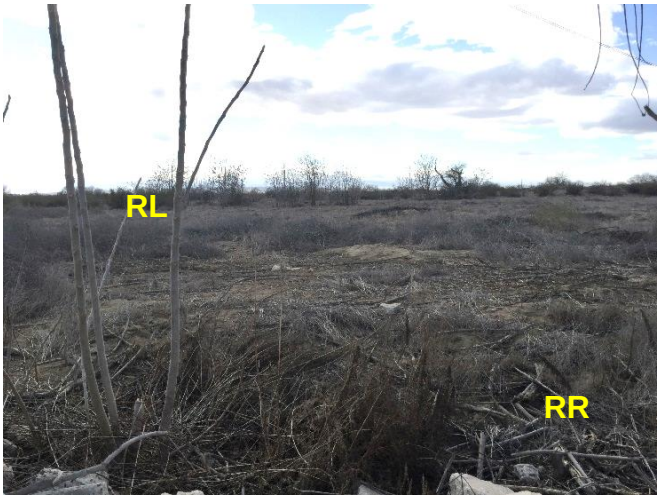
Site Location/Segment: KER-KN-K-015

The San Joaquin Valley Railroad line crosses the Kern River at this location and serves as both an access and observation site; however, vegetation along the river is very thick. The rail does carry crude oil, and vehicle access is limited here. The flow of the river varies from no flow to high flow at this location, depending on the season. The first site strategy located downriver of this site is at the Kern Water Bank Headworks near the end of the bike path and Highway 43 (Enos Lane).

Site Contact/s: Kern Water Bank, Nick Torres (661) 440-4668**;** City of Bakersfield Water Resources (661) 326-3716; San Joaquin Valley Railroad 1(800) 800-3490

Site Images

Upstream
Photo Date: 03/01/2018



Downstream
Photo Date: 03/01/2018

Straight Across
Photo Date: 07/11/2017

RR = River Right RL = River Left

Latitude: 35.30479
Longitude: -119.24684

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #: 13500 Raceway Blvd Interstate 5 and Enos Lane, Bakersfield, CA 93311

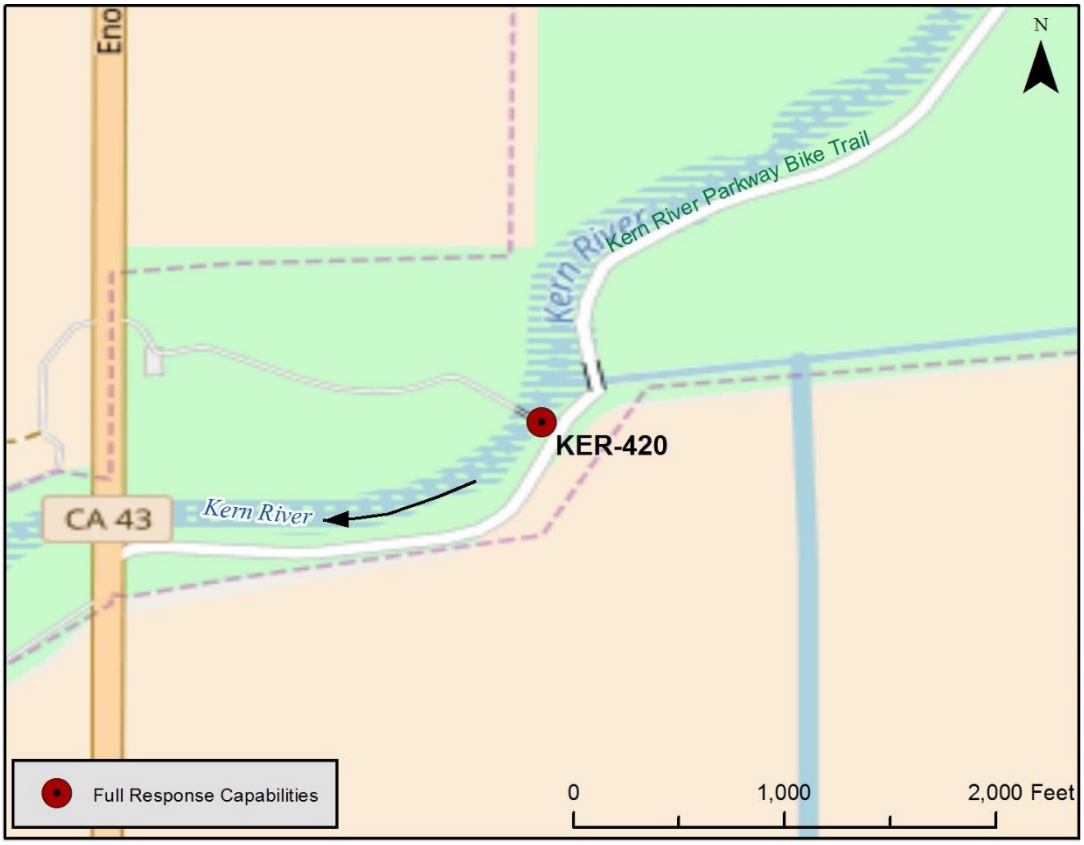
Cell Service: Yes, Verizon

Driving Directions

From the East: From Bakersfield, take Stockdale Highway west to Highway 43. Turn left on Highway 43 (Enos Lane) for approximately 3.3 miles. Turn left into the Kern River Parkway Bike Path parking lot. Enter the parking lot and follow the bike path east to Diversion Weir gate. Cross over gate and access river left.

From Interstate 5: Exit CA-43 and turn north. Continue approximately 1 mile to the Kern River Parkway Bike Path parking lot on the right side of the highway. Enter the parking lot and follow the bike path east to Diversion Weir gate. Cross over gate and access river left.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property with locked gate, must contact Kern Water Bank (661) 440-4668
- Watch for bicycles and foot traffic, speed limit is 5 mph on bike path, heavy public use
- Biological hazards (e.g., wildlife including rattlesnakes)
- Canal intake gates
- San Joaquin Valley Railroad rail crossing approximately 2.8 miles upstream from site

Resources-At-Risk

Ecological: Western Pond Turtle, Blunt-nosed Leopard Lizard, California Glossy Snake, Bakersfield Legless Lizard, San Joaquin Coachwhip, San Joaquin kit fox, American badger, Tipton kangaroo rat, Buena Vista Lake ornate shrew, San Joaquin antelope squirrel, Tulare grasshopper mouse, Tricolored Blackbird, Loggerhead Shrike, LeConte's Thrasher, Burrowing Owl, Swainson's Hawk, Horn's milk-vetch, Kern mallow, recurved larkspur, San Joaquin woollythreads, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Water intakes for Kern Water Bank Canal, Diversion Weir across river, water outlet from Kern River Canal.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
86 meters (282 feet)

Gradient: Low

Site Contact/s:

Kern Water Bank: Nick Torres (661) 440-4668

City of Bakersfield Water Resources (661) 326-3716

Buena Vista WSD: Andrew Bell (661) 204-1379

Site Location/Segment: KER-KN-K-030

This site is located just east of the Kern River Parkway Bike Path parking lot. Access is through the parking lot and onto the bike path. River left and river right can be accessed on this bike path. Multiple water inlets are present. Space is limited and driving the bike path would be limited to one-direction travel. Dirt access roads are present for vehicle parking and staging. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, small trailers, small vacuum truck

Recreational Use: Human contact, bike path runs adjacent to the river (river left and river right)

Boat Launches: Direct river access, small skiff on river left or river right

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: 07/07/2017

Site Objectives: Deflect oil and protect water intakes from oiling. Deploy boom and allow for oil collection on river left.

Implementation: Boom A: Deploy 350 ft. of containment boom upstream of the Kern Water Bank Canal gate at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river left along river's edge. Boom B: Deploy 250 ft. of containment boom in front of the Kern River Weir to protect water intake. Boom C: Deploy 100 ft. of containment boom across Kern River Terminus to protect gate.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river left. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location is at the Kern River Parkway Bike Path parking lot. No restrooms or electricity onsite.

Response Strategy Map (overview)

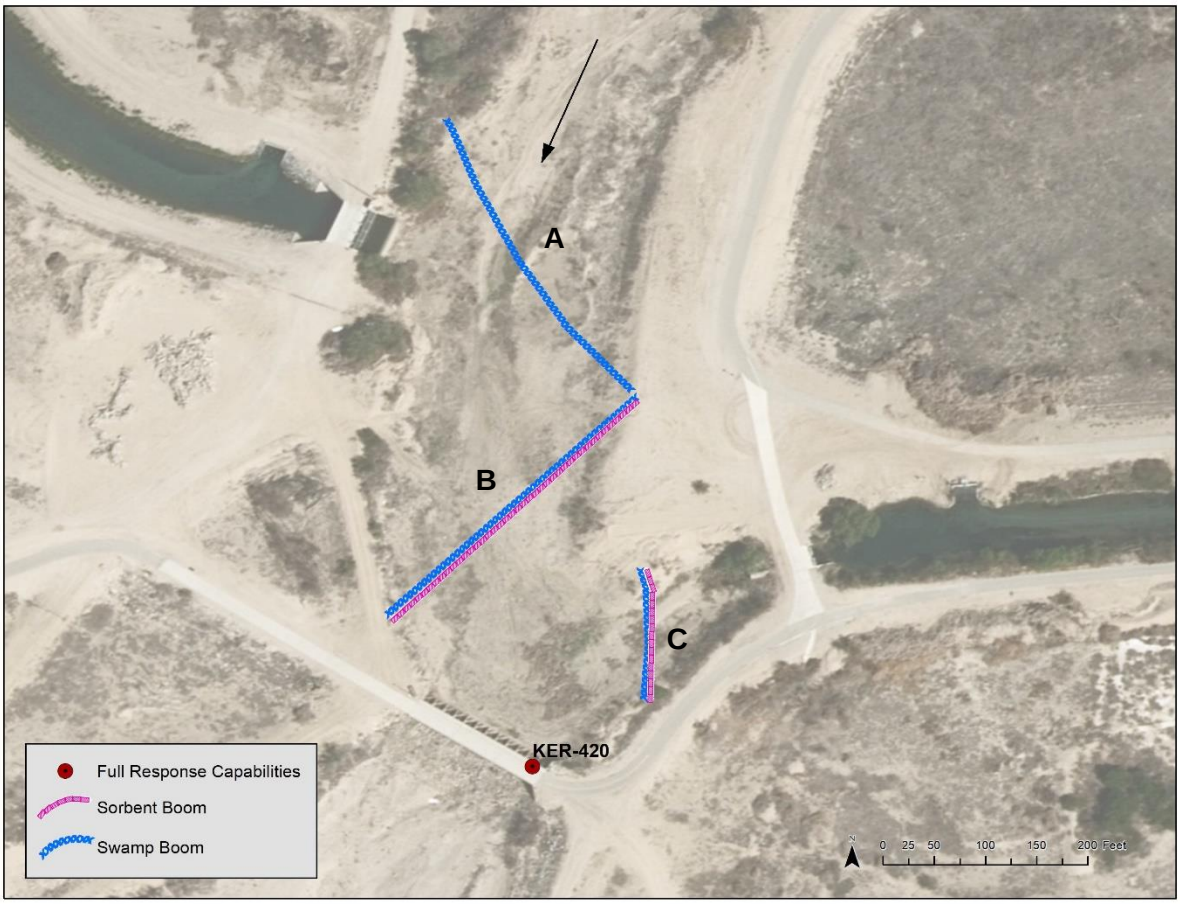


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	inch	700 ft.	Booming strategy only effective during medium to low flow. Boom A = 350-feet, Boom B = 250-feet, Boom C = 100-feet
Boom	Sorbent	5 or 8	inch	350 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom B = 250-feet, Boom C = 100-feet
Stakes	Anchoring			18	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A and Boom B.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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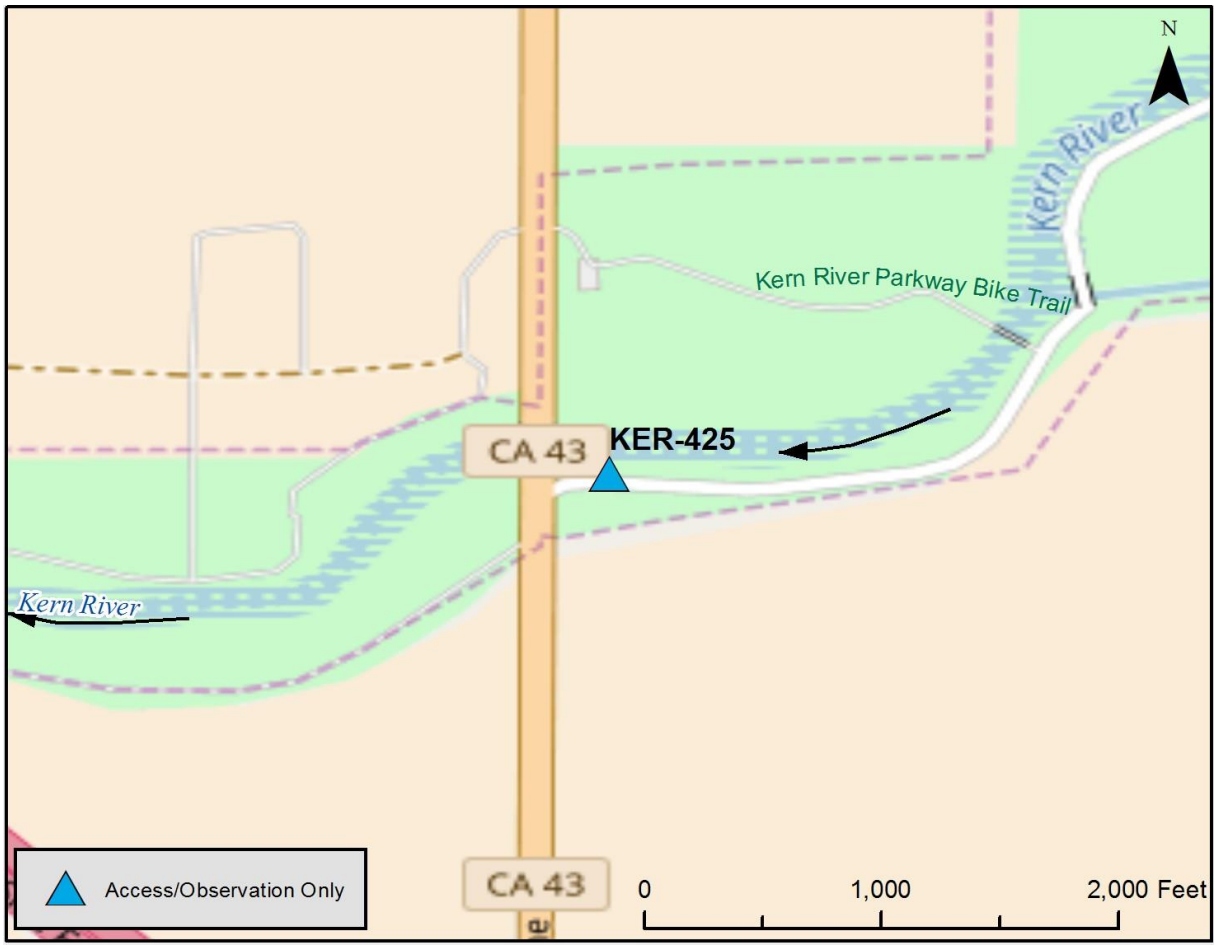
Access/Observation Site: Kern River Measuring Point (KER-425)

Latitude: 35.30328 **Longitude:** -119.25165	**Driving Directions**
Highway Post Mile: KER 2.587	**From the East:** From Bakersfield, take Stockdale Highway west to Highway 43. Turn left on Highway 43 and follow to the Kern River Parkway Bike Path parking lot on the left. Enter the parking lot and follow the bike path east across the river. After crossing the river, turn right on the first dirt road and follow it downriver to the bridge entrance. **From Interstate 5:** Exit CA-43 and turn north. Continue approximately 1 mile to the Kern River Parkway Bike Path parking lot on the right side of the highway. Enter the parking lot and follow the bike path east across the river. After crossing the river, turn right on the first dirt road and follow it downriver to the bridge entrance. *Note: The bridge can be accessed on either side of the river from the Kern River Parkway Bike Path
Railroad Milepost: N/A	
Nearest Address and Thomas Guide #: N/A	
Cell Service: Yes, Verizon	

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Heavy vehicle traffic on Highway 43
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- High public use area due to bike path and user-created trails
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-K-030

This location is suitable for observation only. There is access to the river bank on either side of the bridge, but the bridge itself is above the high-water mark. The bridge is managed by the City of Bakersfield Water Resources and was historically used to measure the flow of the Kern River. It is out of commission now, but the City of Bakersfield should be contacted for direct access to the bridge.

Site Contact/s: Kern Water Bank, Nick Torres (661) 440-4668**;** City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

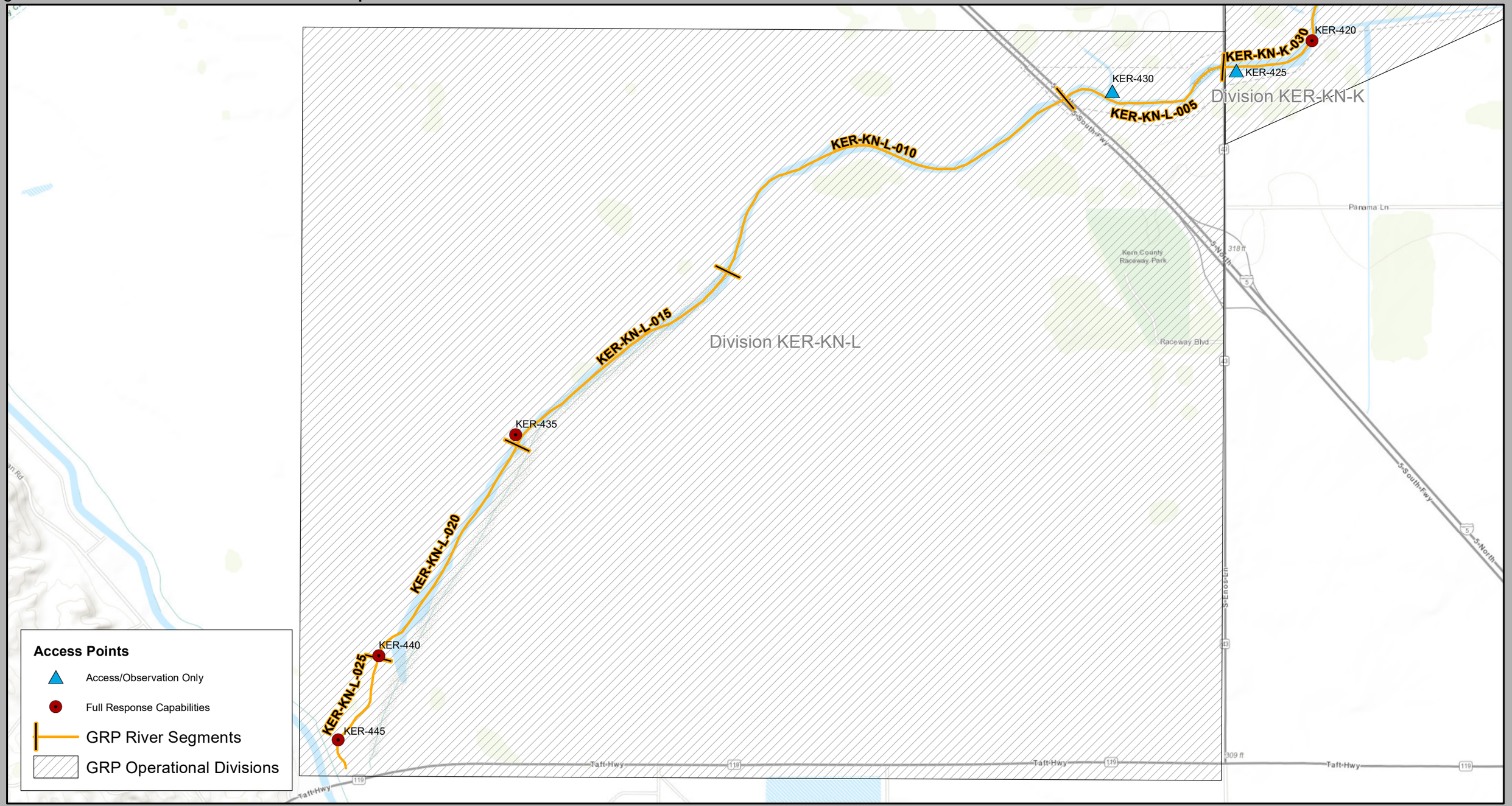
Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 07/07/2017

Figure 3-9: Kern River GRP Division KER-KN-L Map



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

Data Source: CDFW-OSPR
Requestor: Central FRT
Author: S. Paine
Date Created: 6/12/2019

Kern River
Geographic Response Plan
Division KER-KN-L

0 ¼ ½ 1 Miles

0 ¼ ½ 1 1½ Kilometers

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Access/Observation Site: Old Main Canal (KER-430)

Latitude: 35.30228
Longitude: -119.25952

Highway Post Mile: KER 2.604

Railroad Milepost: N/A

Nearest Address and Thomas Guide #: N/A

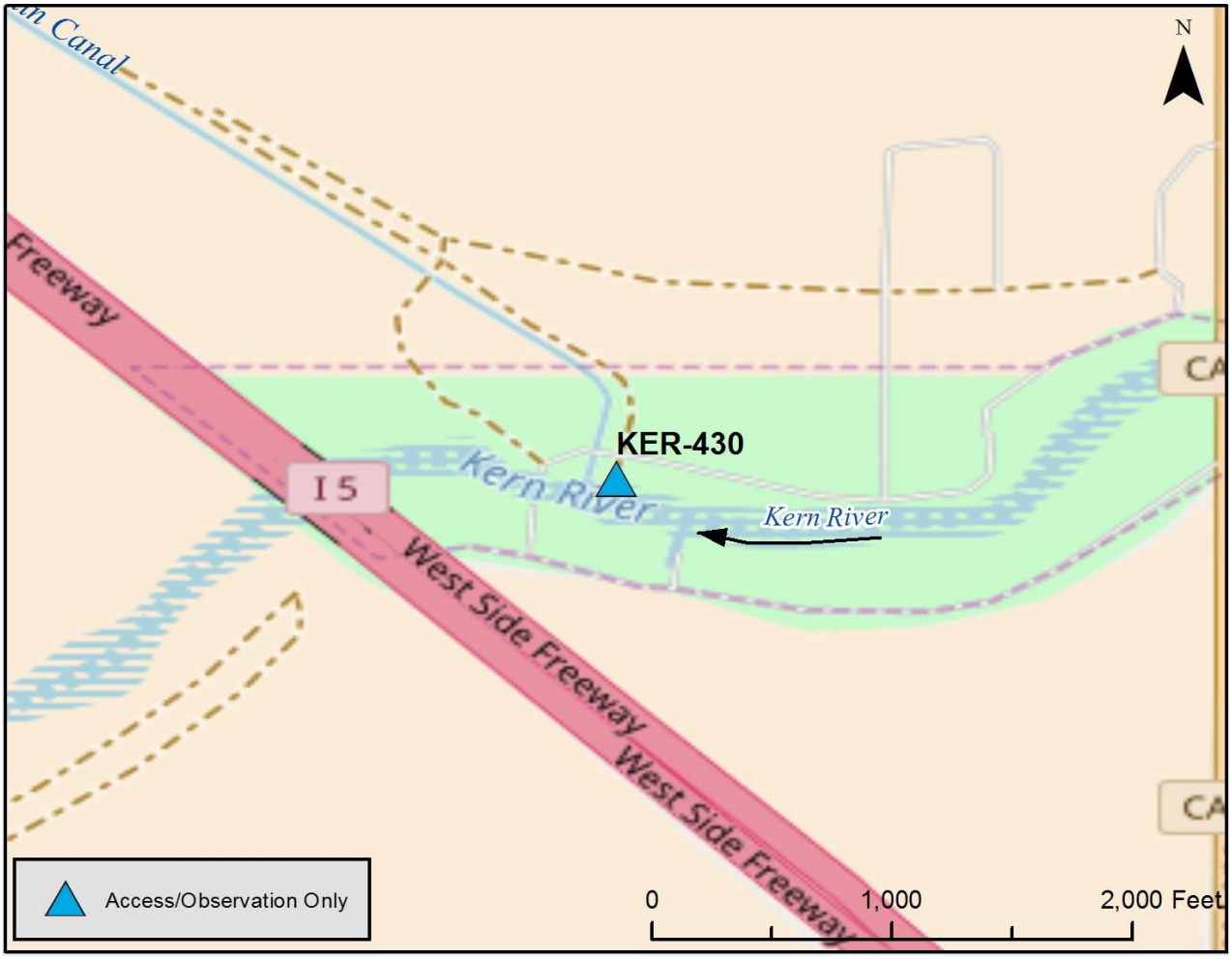
Cell Service: Yes, Verizon

Driving Directions

From the East: From Bakersfield, take Stockdale Highway west to Highway 43. Turn left on Highway 43 and continue for approximately 3 miles to a gated entrance on the west side of highway, adjacent to the Kern Water Bank Canal. Enter gate and follow any of the dirt access roads south toward river and canal entrance. Call Kern Water Bank contact for access.

From Highway 5: Exit CA-43 and turn north. Continue approximately 1.2 miles to the gated entrance on the west side of highway, adjacent to the Kern Water Bank Canal. Enter gate and follow any of the dirt access roads south toward river and canal entrance. Call Kern Water Bank contact for access.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Private property, locked gate
- Heavy vehicle traffic on Highway 43
- Swift water during winter and spring flows
- Trip and fall hazards, slippery when wet
- Potential for homeless encampments
- Biological hazards (e.g., wildlife including rattlesnakes)

Site Description and Field Notes

Site Location/Segment: KER-KN-L-005

This location is suitable for observation only. Access is restricted to a locked gate on the west side of Highway 43, managed by the Kern Water Bank. The Old Main Canal connects the Kern Water Bank to the Kern River, but the canal can be isolated from the river if necessary by Kern Water Bank staff.

Site Contact/s: Kern Water Bank, Nick Torres (661) 440-4668; City of Bakersfield Water Resources (661) 326-3716

Site Images

Upstream

Downstream

Straight Across

RR = River Right RL = River Left

Photo Date: 03/23/2018

Response Strategy Site: Kern River Pipe Crossing (KER-435)

Latitude: 35.28468
Longitude: -119.29749

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:

25761 Highway 119
Tupman, CA 93276

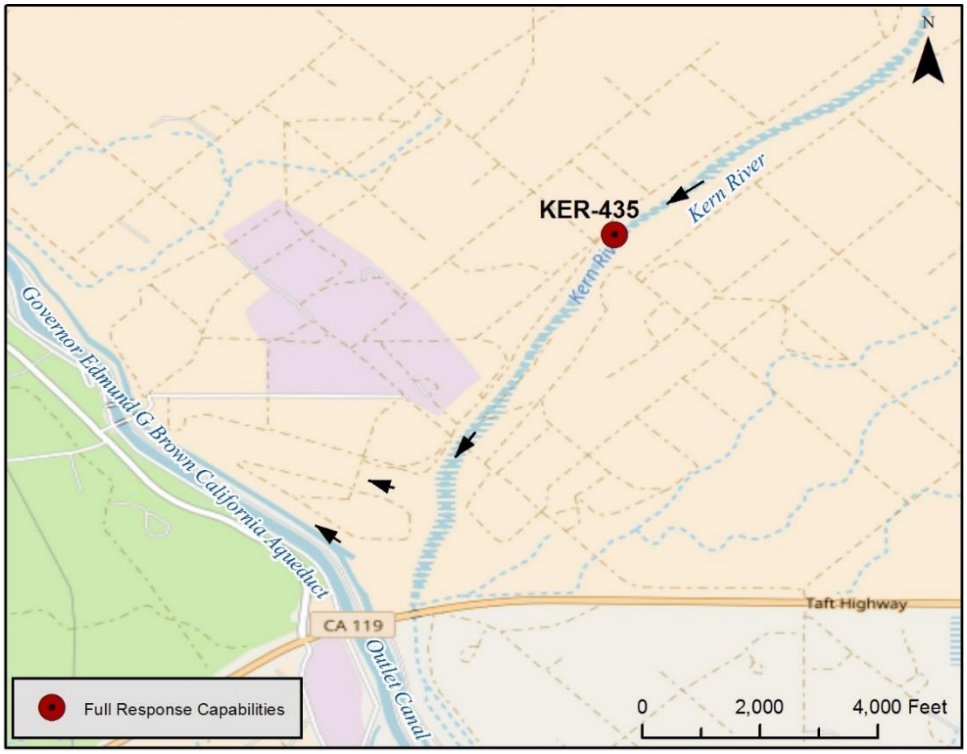
Cell Service: Yes, Verizon

Driving Directions

From the East: From Bakersfield, take Highway 119 west towards Taft. Turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and take a right at the "T" to access river's edge (river right). Near the edge of the river, turn left on the dirt road for approximately 0.3 miles. Turn left and then a quick right onto the dirt access road. Follow dirt access road for 0.5 miles to river's edge (river right).

From Interstate 5: Exit CA-43 South (Exit 246) and continue to Highway 119. Turn right onto Highway 119 towards Taft. In approximately 3.3 miles, turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and take a right at the "T" to access river's edge (river right). Near the edge of the river, turn left on the dirt road for approximately 0.3 miles. Turn left and then a quick right onto the dirt access road. Follow dirt access road for 0.5 miles to river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property (gas compressor plant), call CRC dispatch prior to entering gas plant (661) 763-6363
- Watch for propane trucks while accessing compressor plant, speed limit is 5 mph
- Flame resistant clothing and hard hats may be required
- Biological hazards (e.g., wildlife including rattlesnakes)
- San Joaquin Valley Railroad rail crossing approximately 7 miles upstream from site
- Multiple pipeline crossings

Resources-At-Risk

Ecological: Western Pond Turtle, Blunt-nosed Leopard Lizard, California Glossy Snake, Bakersfield Legless Lizard, San Joaquin Coachwhip, San Joaquin kit fox, American badger, Tipton kangaroo rat, Buena Vista Lake ornate shrew, San Joaquin antelope squirrel, Tulare grasshopper mouse, Tricolored Blackbird, Loggerhead Shrike, LeConte's Thrasher, Burrowing Owl, Swainson's Hawk, Horn's milk-vetch, Kern mallow, recurved larkspur, San Joaquin woollythreads, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Multiple water intakes downstream, inlet to California Aqueduct approximately 1.5 miles downstream

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
29 meters (95 feet)

Gradient: Low

Site Contact/s:

CRC Dispatch
661-763-6363

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-L-015

This site is located upstream of the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Propane trucks are frequently entering and exiting the road. Multiple water intakes are 1.3 miles downstream. Access to river left is over a narrow bridge crossing approximately 0.8 miles downstream from the site. Water flow at this location can vary seasonally from high to no flow.

Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: N/A

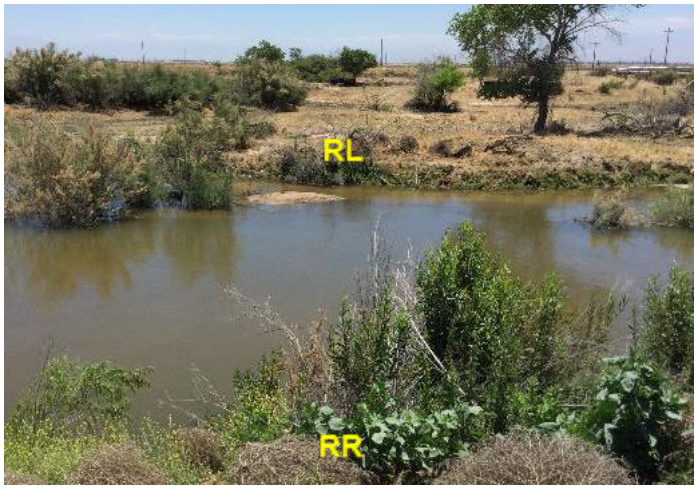
Boat Launches: Direct river access, shallow boat launch (river left or river right)

ESI Shoreline Type: 4 Sandy bars and gently sloping banks; 9B Vegetated low banks

Site Images

Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 06/09/2017

Site Objectives: Boom to prevent further movement of oil and allow for collection of oil.

Implementation: Deploy 200 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river right.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location would need to be closer to the gas plant at an equipment staging lot. Restrooms and electricity onsite at the plant office.

Response Strategy Map (overview)

Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	200 ft.	Booming strategy only effective during medium to low flow.
Boom	Sorbent	5 or 8	Inch	200 ft.	5 inches for light oiling, 8 inches for heavier oiling.
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a “J” in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Latitude: 35.27327
Longitude: -119.30626

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
25761 Highway 119
Tupman, CA 93276

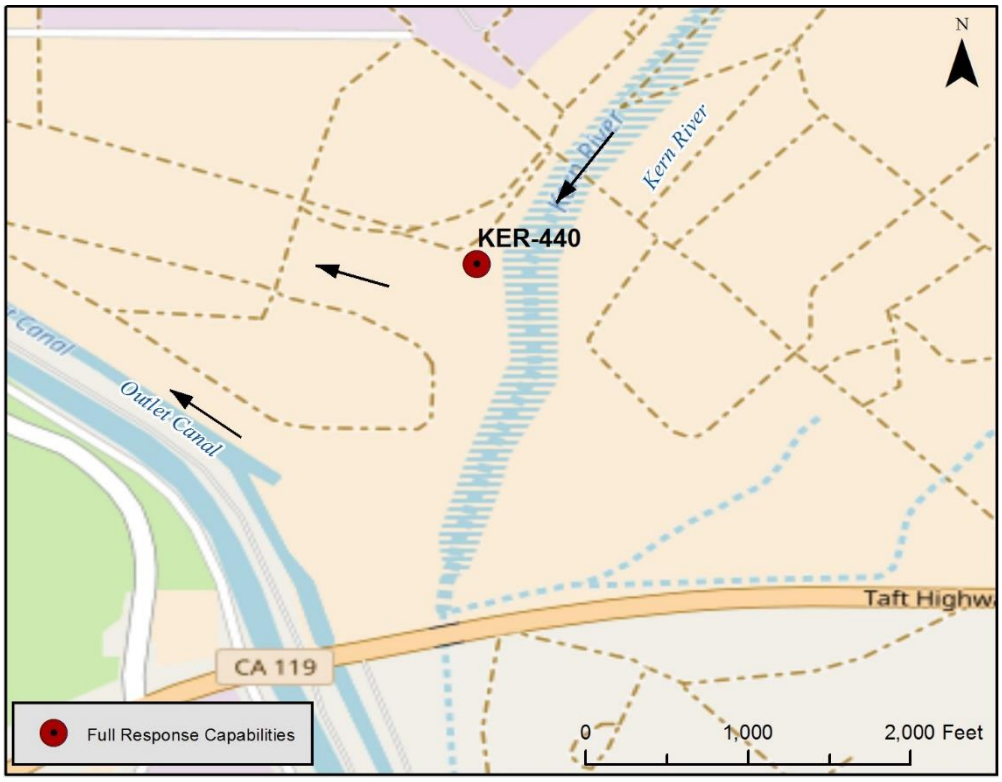
Cell Service: Yes, Verizon

Driving Directions

From the East: From Bakersfield, take Highway 119 west towards Taft. Turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and take a right at the "T" to access river's edge (river right). At the edge of the river, turn right on the dirt road and access location will be 1/10 mile south.

From Interstate 5: Exit CA-43 South (Exit 246) and continue to Highway 119. Turn right onto Highway 119 towards Taft. In approximately 3.3 miles, turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and take a right at the "T" to access river's edge (river right). At the edge of the river, turn right on the dirt road and access location will be 1/10 mile south.

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property (gas compressor plant), call CRC dispatch prior to entering gas plant (661) 763-6363
- Watch for propane trucks while accessing compressor plant, speed limit is 5 mph
- Flame resistant clothing and hard hats may be required
- Biological hazards (e.g., wildlife including rattlesnakes)
- San Joaquin Valley Railroad rail crossing approximately 8 miles upstream from site
- Multiple pipeline crossings

Resources-At-Risk

Ecological: Western Pond Turtle, Blunt-nosed Leopard Lizard, California Glossy Snake, Bakersfield Legless Lizard, San Joaquin Coachwhip, San Joaquin kit fox, American badger, Tipton kangaroo rat, Buena Vista Lake ornate shrew, San Joaquin antelope squirrel, Tulare grasshopper mouse, Tricolored Blackbird, Loggerhead Shrike, LeConte's Thrasher, Burrowing Owl, Swainson's Hawk, Horn's milk-vetch, Kern mallow, recurved larkspur, San Joaquin woollythreads, Bakersfield cactus. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Multiple water intakes downstream, inlet to California Aqueduct approximately 500 feet downstream.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
165 meters (542 feet)

Gradient: Low

Site Contact/s:

CRC Dispatch
661-763-6363

City of Bakersfield Water Resources (661) 326-3716

Site Location/Segment: KER-KN-L-025

This site is located just south of the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Propane trucks are frequently entering and exiting the road. Multiple water intakes are 500 feet downstream. Access to river left is over a narrow bridge crossing just upstream from the site. Water flow at this location can vary seasonally from high to no flow.

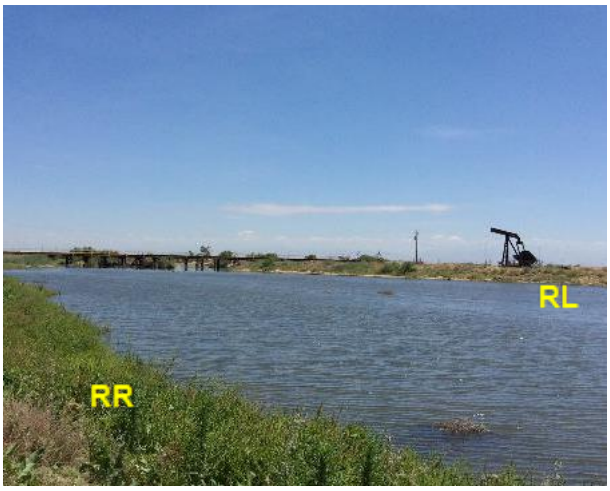
Vehicular Access: Passenger vehicles, small trucks, vacuum trucks, trailers

Recreational Use: N/A

Boat Launches: Direct river access, shallow boat launch for small skiff (river left or river right)

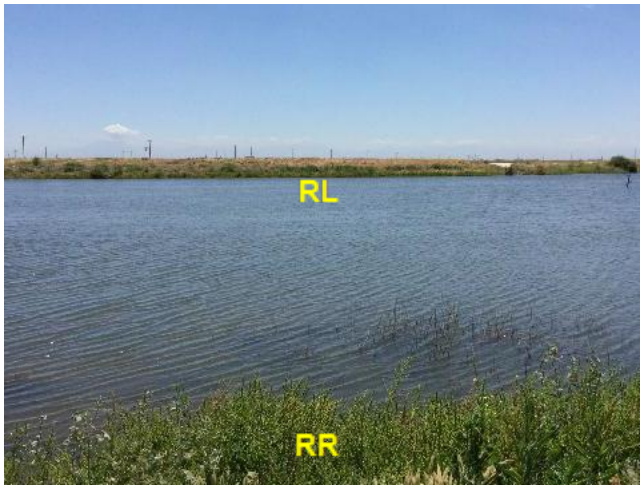
ESI Shoreline Type: 9B Vegetated low banks

Site Images



Upstream

Downstream



Straight Across

RR = River Right RL = River Left

Photo Date: 06/09/2017

Site Objectives: Deploy boom and allow for oil collection on river right.

Implementation: Deploy between 100 - 700 ft. of containment boom (based on site conditions since width of water in river varies) upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river right along river's edge.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location would need to be closer to the gas plant at an equipment staging lot. Restrooms and electricity onsite at the plant office.

Response Strategy Map (overview)

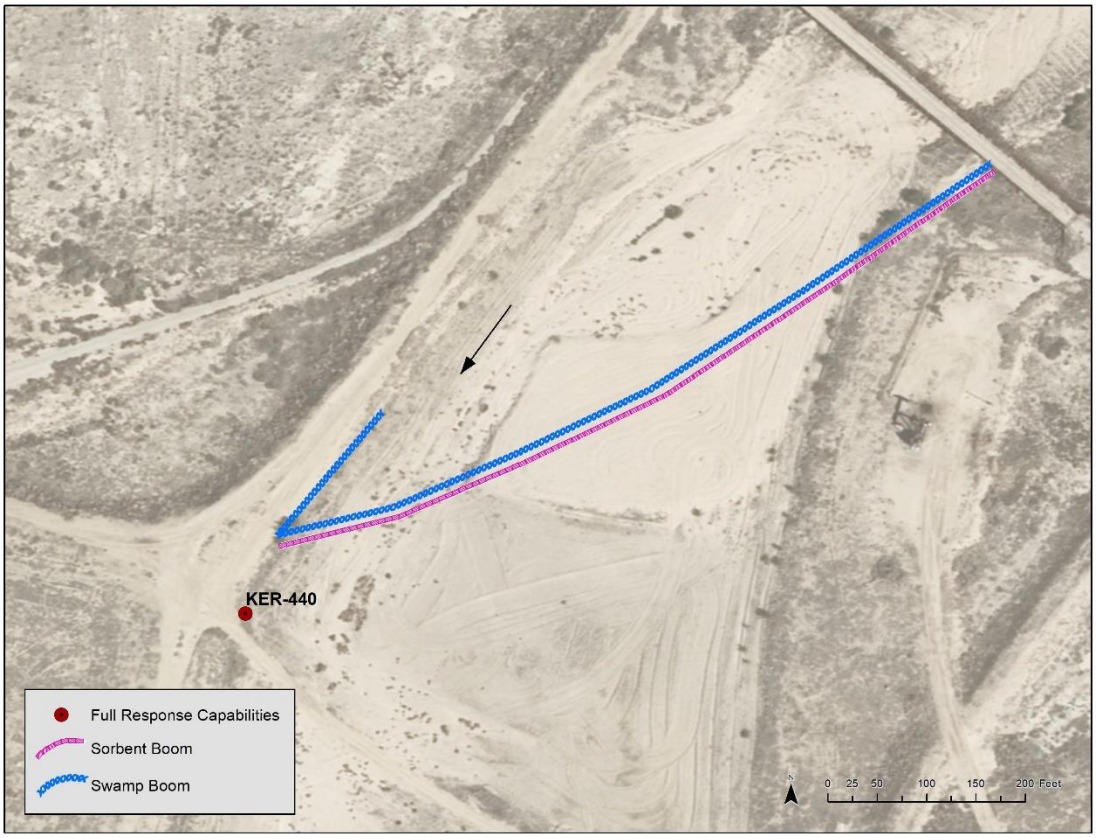


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	700 ft.	Booming strategy only effective during medium to low flow
Boom	Sorbent	5 or 8	Inch	700 ft.	5 inches for light oiling, 8 inches for heavier oiling
Stakes	Anchoring			6	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	1-2	Midstream anchoring.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Latitude: 35.26892
Longitude: -119.30886

Highway Postmile: N/A

Railroad Milepost: N/A

Nearest Address and Thomas Guide #:
25761 Highway 119
Tupman, CA 93276

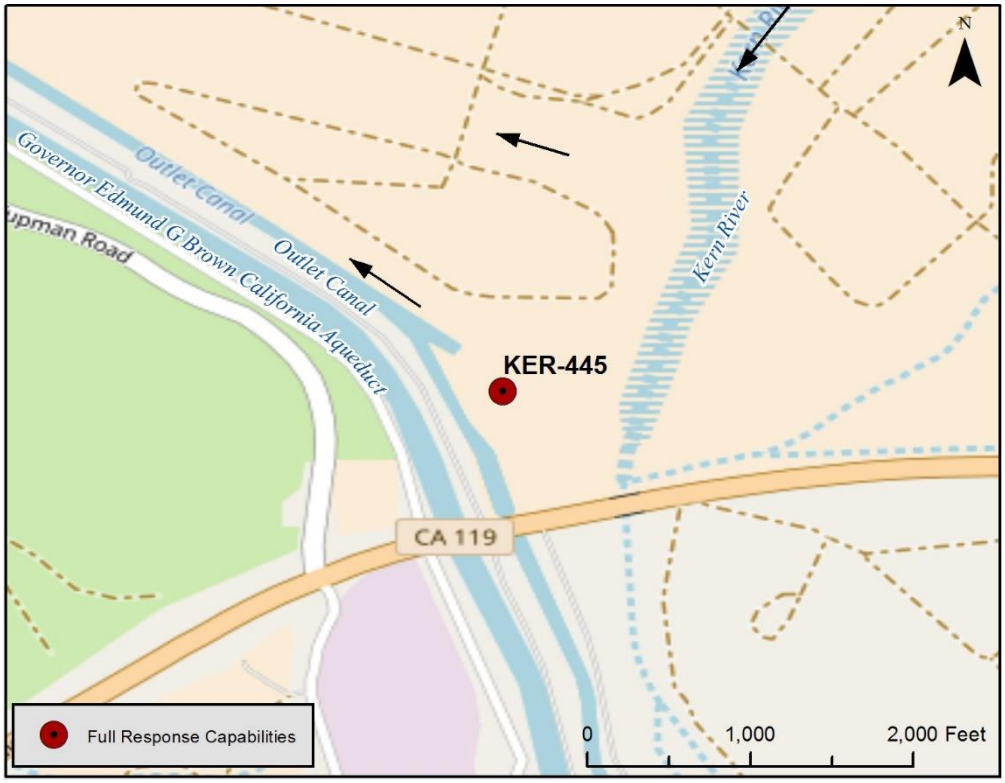
Cell Service: Yes, Verizon

Driving Directions

From the East: From Bakersfield, take Highway 119 west towards Taft. Turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and turn right onto a dirt access road in approximately 0.3 miles. Turn right at the "T" and then a sharp left to follow the road to the river's edge (river right).

From Interstate 5: Exit CA-43 South (Exit 246) and continue to Highway 119. Turn right onto Highway 119 towards Taft. In approximately 3.3 miles, turn right onto Tupman Road. In approximately 9/10ths of a mile, turn right onto Arco Road to access the South Coles Levee Compressor plant. Call CRC dispatch prior to entering gas plant (661) 763-6363. Continue on Arco Road and turn right onto a dirt access road in approximately 0.3 miles. Turn right at the "T" and then a sharp left to follow the road to the river's edge (river right).

Overview Street Map



Hazards, Restrictions and Advice for Responders

- Swift water during winter and spring flows
- Private property (gas compressor plant), call CRC dispatch prior to entering gas plant (661) 763-6363
- Watch for propane trucks while accessing compressor plant, speed limit is 5 mph
- Flame resistant clothing and hard hats may be required
- Biological hazards (e.g., wildlife including rattlesnakes)
- San Joaquin Valley Railroad rail crossing approximately 8.5 miles upstream from site
- Multiple pipeline crossings upstream

Resources-At-Risk

Ecological: Western Pond Turtle**,** Blunt-nosed Leopard Lizard, California Glossy Snake, Bakersfield Legless Lizard, San Joaquin Coachwhip, San Joaquin kit fox, American badger, Tipton kangaroo rat, short-nosed kangaroo rat, Tulare grasshopper mouse, San Joaquin antelope squirrel, Buena Vista Lake ornate shrew, Le Conte's Thrasher, Tricolored Blackbird, Loggerhead Shrike, Burrowing Owl, Swainson's Hawk, Horn's milk-vetch, Lost Hills crownscale, Kern mallow, recurved larkspur, San Joaquin woollythreads, Bakersfield cactus. Buena Vista Lake ornate shrew Critical Habitat. Riparian habitat supports sensitive plant and animal communities including migratory birds and raptors.

Economic: Multiple water intakes.

Tribal: Contact the Native American Heritage Commission at (916) 373-3710.
Cultural and Historic: Contact the Southern San Joaquin Valley Information Center Information Center at (661) 654-2289.

Site Description and Field Notes

River Width:
250 meters (824 feet)

Gradient: Low

Site Contact/s:

CRC Dispatch
661-763-6363

City of Bakersfield Water Resources (661) 326-3716

Buena Vista WSD: Andrew Bell (661) 204-1379

Site Location/Segment: KER-KN-L-025

This site is located at the Kern River terminus. Access to the site is through the South Coles Levee Compressor plant, which is operated by California Resources Corporation. This area is part of the Coles Levee Ecological Preserve. Propane trucks are frequently entering and exiting the road. The Outlet Canal gates are present and critical habitat for the Buena Vista Lake ornate shrew are just north of this intake. Water intakes to the California Aqueduct are just south of the site. Access to river left is off an access road just east of the California Aqueduct.

Vehicular Access: Passenger vehicles, small trucks, small trailers, small vacuum truck.

Recreational Use: N/A

Boat Launches: Direct river access, small skiff on river left or river right.

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: 06/09/2017

Site Objectives: Deflect oil and protect water intakes from oiling. Deploy boom and allow for oil collection on river right.

Implementation: Boom A: Deploy 500 ft. of containment boom upstream at an angle to prevent entrainment, utilizing anchoring stakes. Oil collection will be on river right along river's edge. Boom B: Deploy 200 ft. of containment boom across entrance to northern outlet to protect water gates. Boom C: Deploy 300 ft. of containment boom across southern inlet to protect gates.

Staging Area Location and Capabilities/Amenities/Waste Management: Limited staging on river right. A small vacuum truck and small trucks could use the space, but it is limited. Larger staging location would need to be closer to the gas plant at an equipment staging lot. Restrooms and electricity onsite at the plant office.

Response Strategy Map (overview)

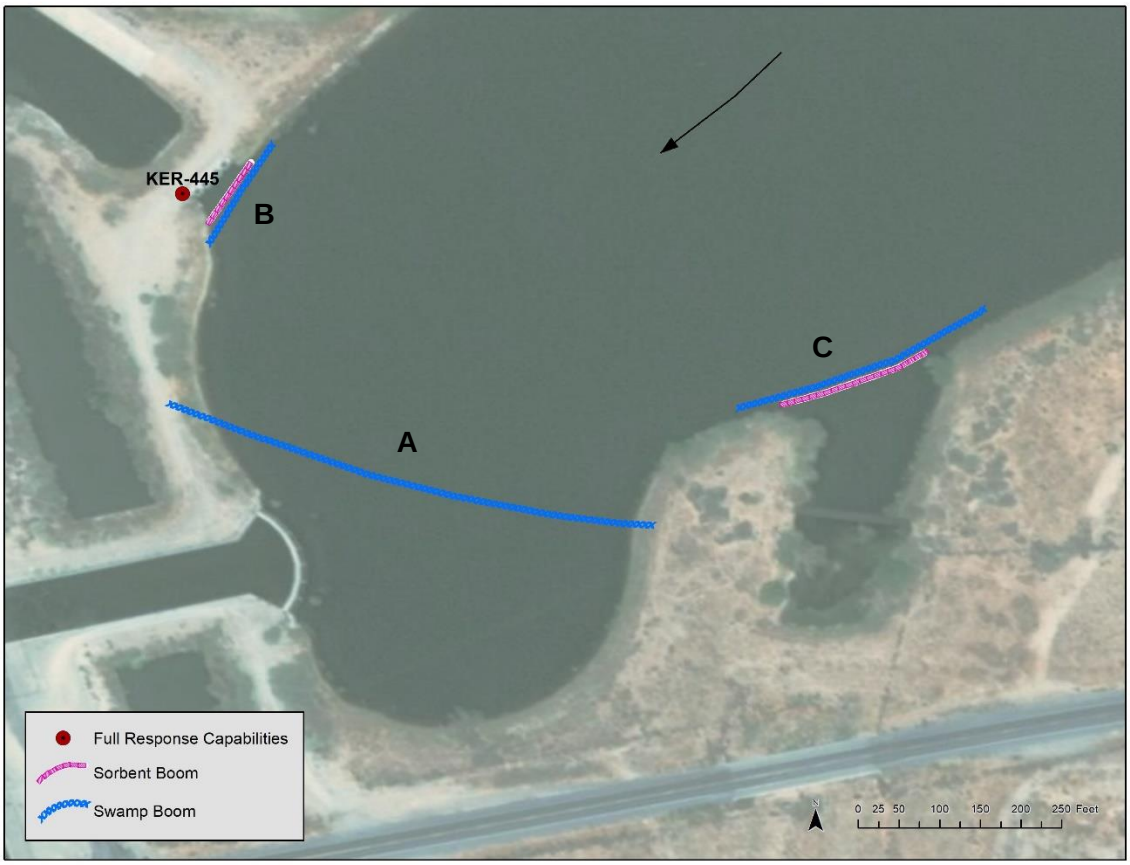


Table of Response Resources

Type	Sub-Type	Size	Unit	QTY - Unit	Special Equipment or Comments
Boom	Swamp	12	Inch	1000 ft.	Booming strategy only effective during medium to low flow. Boom A = 500-feet, Boom B = 200-feet, Boom C = 300-feet.
Boom	Sorbent	5 or 8	Inch	500 ft.	5 inches for light oiling, 8 inches for heavier oiling. Boom B = 200-feet, Boom C = 300-feet.
Stakes	Anchoring			18	6 stakes per boom, 3 on either end. Any boom with a "J" in its shape would require an additional stake. Recommend angled iron beams.
Anchors	Danforth	40	lb	2	Midstream anchoring for Boom A.
Skimmer	Drum				Number will vary depending on response.
Boat	Small Skiff			1	Only necessary if river currents and water levels are optimal for launching a skiff to deploy boom.
Personnel				8	4 boat crew and 4 shoreside personnel.

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Kern 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 Kern 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 Kern River GRP as well as seasonal and special considerations including nesting and spawning seasons, seasonal migration, large species concentrations, rookeries and blooming periods for special plant species. The CDFW California Wildlife Habitat Relationship (CWHR) system is a state-of-the-art information system for California's wildlife and is the primary resource for the information provided in Table 4-1 below. Information on the species and habitats listed in Table 4-1 were developed using the best information available at the time of preparation; over time, new species occurrences may be added to reference databases (e.g. CWHR), the status of species may change including becoming listed by the State or federal fish and wildlife agencies, or new information may become available regarding nesting locations and seasons. During a spill incident, the Environmental Unit under the Planning Section will utilize reference databases to ensure that the most up-to-date and accurate information on potential species and habitats in the area are addressed and protections put in place.

Wetlands

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

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

The USFWS definition includes: swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools; periodically inundated saltflats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric in nature. (Adapted from Cowardin, Carter, Golet and LaRoe (1979) Wetlands Subcommittee Federal Geographic Data Committee, August 2013; and http://resources.ca.gov/wetlands/introduction/defining_wetlands.html).

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

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

Common Name	Scientific Name	Status^	CHWR (General Habitat Description) and USFWS (Critical Habitat Designated) *	Micro Habitat Description
Birds				
Burrowing Owl	*Athene cunicularia*	State: SSC Fed:	CWHR: Frequents 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.
Le Conte's Thrasher	*Toxostoma lecontei*	State: SSC Fed:	CWHR: Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent habitats; also occurs in Joshua tree habitat with scattered shrubs. USFWS: N/A	Frequents desert washes and flats with scattered shrubs and large areas of open, sandy, or alkaline terrain in desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats.
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 in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures.
Tricolored Blackbird	*Agelaius tricolor*	State: CE/SSC Fed:	CWHR: Frequents fresh emergent wetlands. USFWS: N/A	Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats.
White-tailed Kite	*Elanus leucurus*	State: FP Fed:	CWHR: Inhabits herbaceous and open stages of most habitats mostly in cismontane California. USFWS: N/A	Uses trees with dense canopy for cover. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands.

Loggerhead Shrike	*Lanius ludovicianus*	State: SSC Fed:	CWHR: Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. USFWS: N/A	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low or sparse cover.
Mammals				
American badger	*Taxidea taxus*	State: SSC Fed:	CWHR: Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. USFWS: N/A	Suitable habitat for badgers is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils. Badgers dig burrows in friable soils for cover. Help control small mammal populations.
Buena Vista Lake ornate shrew	*Sorex ornatus relictus*	State: SSC Fed: E	CWHR: Most abundant in riparian habitat. USFWS: Designated 2013, within the boundary of the Kern River GRP	Prefers moist microhabitats with low, dense vegetation for protection from the elements. Uses stumps, logs, and litter for cover.
San Joaquin kit fox	*Vulpes macrotis mutica*	State: T Fed: E	CWHR: Lives in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub. USFWS: N/A	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance represent suitable habitat for kit foxes. Kit foxes can also be found in the urban environment.
San Joaquin antelope squirrel (Nelson's antelope squirrel)	*Ammospermophilus nelsoni*	State: T Fed:	CWHR: Dry, sparsely vegetated, loam soils. USFWS: N/A	Frequent areas with sandy loam soils, widely spaced alkali scrub vegetation, and dry washes. This species digs burrows or uses kangaroo rat burrows.
Short-nosed kangaroo rat (subspecies of San Joaquin kangaroo rat)	*Dipodomys nitratoides brevinasus*	State: SSC Fed:	CWHR: Western side of San Joaquin Valley in grassland and desert shrub associations, especially Atriplex. USFWS: N/A	Needs soft friable soils on flat or gently rolling terrain in grassland and desert-shrub vegetation. Digs burrows in elevated soil mounds at bases of shrubs.
Tipton kangaroo rat (subspecies of San Joaquin kangaroo rat)	*Dipodomys nitratoides nitratoides*	State: E Fed: E	CWHR: Saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. USFWS: N/A	Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.

Tulare grasshopper mouse	*Onychomys torridus tularensis*	State: SSC Fed:	CWHR: Alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. USFWS: N/A	Low to moderate shrub cover is preferred. Frequents desert areas, especially scrub habitats with friable soils for digging. Nests are constructed in burrows abandoned by other rodents or may be excavated.
Fish				
N/A				
Amphibians				
Western Spadefoot	*Spea hammondii*	State: SSC Fed:	CWHR: This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood wetlands. Some populations persist for a few years in orchard or vineyard habitats. USFWS: N/A	Grasslands with shallow temporary pools are optimal habitats for the Western Spadefoot.
Reptiles				
Bakersfield Legless Lizard	*Anniella grinnelli*	State: SSC Fed:	CWHR: Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types. USFWS: N/A	Sparsely vegetated areas with sandy or loose organic soils or where there is plenty of leaf litter.
Blunt-nosed Leopard Lizard	*Gambelia sila*	State: E/FP Fed: E	CWHR: Scarce resident of sparsely vegetated alkali and desert scrub habitats. USFWS: N/A	Suitable habitat for leopard lizards is characterized by sparsely vegetated scrub and grassland habitats in areas of low topographic relief. In areas of high relief, distribution is usually confined to broad sandy washes. Use small mammal burrows for cover.

California Glossy Snake	*Arizona elegans occidentalis*	State: SSC Fed:	CWHR: Most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. USFWS: N/A	Prefer open sandy areas with scattered brush, but also found in rocky areas.
San Joaquin Coachwhip	*Coluber flagellum ruddocki*	State: SSC Fed:	CWHR: Coachwhips occur in open terrain and are most abundant in grass, desert, scrub, chaparral, and pasture habitats. USFWS: N/A	Coachwhips seek cover in rodent burrows, bushes, trees, and rock piles.
Western Pond Turtle	*Emys marmorata*	State: SSC Fed:	CWHR: Associated with permanent or nearly permanent water in a wide variety of habitat types. USFWS: N/A	Western Pond Turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.
Invertebrates				
N/A				
Plants				
Bakersfield cactus	*Opuntia basilaris* var. *treleasei*	State: E Fed: E Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Chenopod scrub, valley and foothill grassland, cismontane woodland. Sandy or gravelly soils.
Horn's milk-vetch	*Astragalus hornii* var. *hornii*	State: Fed: Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Meadows and seeps, playas. Alkaline sites.
Kern mallow	*Eremalche parryi* var. *kernensis*	State: Fed: E Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	On dry, open sandy to clay soils; usually within valley saltbush scrub and foothill grasslands, on eroded hillsides and alkali flats.
Lost Hills crownscale	*Atriplex coronata* var. *vallicola*	State: Fed: Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Chenopod scrub, valley and foothill grassland, vernal pools. In powdery, alkaline solids that are vernally moist with *Frankenia*, *Atriplex* spp., and *Distichlis*.

rose-flowered larkspur	*Delphinium purpusii*	State: Fed: Plant Rank: 1B.3	CWHR: N/A USFWS: N/A	Chaparral, cismontane woodland, pinyon and juniper woodland. On shady rocky slopes, often on carbonates.
San Joaquin woollythreads	*Monolopia congdonii*	State: Fed: E Plant Rank: 1B.2	CWHR: N/A USFWS: N/A	Alkaline or loamy plains; sandy soils, often with grasses and within chenopod scrub.
Shevrock's golden-aster	*Heterotheca shevockii*	State: Fed: Plant Rank: 1B.3	CWHR: N/A USFWS: N/A	Chaparral, cismontane woodland. Ditches, crevices, shallow sand.
oil neststraw	*Stylocline citroleum*	State: Fed: Plant Rank: 1B.1	CWHR: N/A USFWS: N/A	Chenopod scrub, coastal scrub, valley and foothill grassland. Flats, clay soils in oil-producing areas.

^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

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**
Palustrine System: Emergent (aka Freshwater Emergent Wetland)	Includes all nontidal vegetated wetlands. It also includes wetlands lacking 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 the basin less than 2.5m (8.2 ft) at low water, and (4) salinity due to ocean-derived salts less than 0.5ppt.	In this wetland class, emergent plants (i.e., erect, rooted, herbaceous hydrophytes, excluding mosses and lichens) are the tallest life form with at least 30% areal coverage. In areas with relatively stable climatic conditions, Emergent Wetlands maintain the same appearance year after year.
Palustrine System: Scrub-shrub (aka Freshwater Scrub-shrub Wetland)	Includes all nontidal vegetated wetlands. It also includes wetlands lacking 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 the basin less than 2.5m (8.2 ft) at low water, and (4) salinity due to ocean-derived salts less than 0.5ppt.	In Scrub-Shrub Wetlands, woody plants less than 6m (20ft) tall are the dominant life form - i.e., the tallest life form with at least 30% areal coverage. Scrub-Shrub Wetlands may represent a successional stage leading to Forested Wetland, or they may be relatively stable communities.
Palustrine System: Forested (aka Freshwater Forested Wetland)	Includes all nontidal vegetated wetlands. It also includes wetlands lacking 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 the basin less than 2.5m (8.2 ft) at low water, and (4) salinity due to ocean-derived salts less than 0.5ppt.	In Forested Wetlands, 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 (20 ft) in height. Normally, Forested Wetlands possess an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer.
Palustrine System: Unconsolidated Bottom (aka Freshwater Pond)	Includes all nontidal vegetated wetlands. It also includes wetlands lacking 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 the basin less than 2.5m (8.2 ft) at low water, and (4) salinity due to ocean-derived salts less than 0.5ppt.	Includes all wetlands and deepwater 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.

Palustrine System: Unconsolidated Shore (aka Freshwater Pond)	Includes all nontidal vegetated wetlands. It also includes wetlands lacking 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 the basin less than 2.5m (8.2 ft) at low water, and (4) salinity due to ocean-derived salts less than 0.5ppt.	Unconsolidated Shore includes all wetland habitats having three characteristics: (1) unconsolidated substrates with less than 75% areal cover of stones, boulders, or bedrock; (2) less than 30% areal cover of vegetation other than pioneer plants; and (3) exposed or flooded on an irregular, regular, temporary, seasonal, or intermittent basis.
Lacustrine System: Limnetic unconsolidated bottom (aka Lake)	Includes wetlands and deepwater 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 8 ha (20 acres). Limnetic subsystem includes all deepwater habitats (i.e., depth greater than 2.5m (8.2 ft) at low water.	Includes all wetlands and deepwater 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.
Lacustrine System: Littoral unconsolidated bottom (aka Lake)	Includes wetlands and deepwater 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 8 ha (20 acres). Littoral subsystem includes all wetlands from the shoreward boundary of the system to a depth of 2.5m (8.2 ft) below low water.	Includes all wetlands and deepwater 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.
Lacustrine System: Littoral unconsolidated shore (aka Lake)	Includes wetlands and deepwater 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 8 ha (20 acres). Littoral subsystem includes all wetlands from the shoreward boundary of the system to a depth of 2.5m (8.2 ft) below low water.	Unconsolidated Shore includes all wetland habitats having three characteristics: (1) unconsolidated substrates with less than 75% areal cover of stones, boulders, or bedrock; (2) less than 30% areal cover of vegetation other than pioneer plants; and (3) exposed or flooded on an irregular, regular, temporary, seasonal, or intermittent basis.

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**
rainbow trout	*Oncorhynchus mykiss*	San Joaquin/Kern River Hatchery; CDFW Region 4 fisheries	Open all year. Stocking at lakes: Ming, Hart Park, Truxtun, River Walk
black bass	*Micropterus spp.*		open all year
bullhead & catfish	*Ictalurus spp. & Ameiurus spp.*		open all year
striped bass	*Morone saxalis*		open all year
common carp	*Cyprinus carpio*		open all year
sunfish & crappie	*Lepomis spp. & Pomoxis spp.*		open all year

Designated or Protected Lands			
Area Name	**Designation**	**Contact Information**	**Seasonal and Special Considerations, Notes**
Panorama Vista Preserve	habitat conservation	Carolyn Belli (661) 872-3569	school tours
Cole's Levee	habitat conservation	Joe Cobb (661) 340-8378	conservation credits
Kern Water Bank	habitat conservation	Jonathan Parker (661) 398-4900	migratory birds
Bakersfield Cactus Ecological Reserve	ecological reserve	Erin Tennant (661) 477-9239	
Tule Elk State Natural Reserve	state natural reserve	Calif. Dept. of Parks and Rec. (661) 764-6881	public wildlife viewing, guided tours, geocaching, visitor center

4.2 Wildlife Response Plan

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

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

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

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

These objectives are achieved through a suite of methods that include: communication with/through the Planning Section to response teams in the field; hazing of wildlife; aerial, ground, and on-water wildlife reconnaissance; recovery, stabilization, and transportation of injured wildlife; care and processing of oiled wildlife; and eventual release of rehabilitated wildlife.

Oiled Wildlife

Attempting to capture oiled wildlife can be hazardous to both the animal and the person attempting to capture the animal. Response personnel should NOT approach or attempt to recover oiled wildlife. Responders should report their observations to the Wildlife Branch of the Operations Section via the OWCN Hotline (877) 823-OWCN (6926) so appropriate action can be taken. Information provided should include the location, date, and time of the sighting, and the estimated number and kind of animals observed. This Hotline is active 24/7 including early on in a response, before a UC is established.

Wildlife Avoidance Measures

Avoidance measures may be recommended by the WBD (Operations Section) or EU (Planning Section) for the purpose of minimizing disturbance that could result in injury to wildlife during an oil spill response. By keeping a safe distance from identified sensitive areas, field responders can minimize the risk of direct wildlife and habitat injury, prevent the accidental hazing of wildlife into oiled areas, avoid causing abandonment of nests or dens, and other unintentional injuries. Avoidance measures may include exclusion zones or placing limits on: ingress/egress routes, unnecessary disturbance of sensitive areas, low altitude flights, night operations, and other activities.

4.3 Oiled Wildlife Care Network

The OWCN is a cooperative system of specialized wildlife rehabilitation centers and organizations. The OWCN is administered by the Wildlife Health Center at UC Davis. The Wildlife Health Center has an MOU with OSPR for operation of the OWCN to establish and equip wildlife rescue and rehabilitation stations and provide services to rescue and rehabilitate oiled wildlife. During an oil spill, OSPR activates and directs activities of the OWCN within the Wildlife Branch. The OWCN maintains a corps of veterinarians, paid staff, and professionally trained volunteers. The OWCN enlists more than 40 rehabilitation, academic, and private non-profit organizations to actively participate during oil spill responses. This includes more than 10 permanent wildlife care facilities for use during a spill, the majority occurring along the California coast. If a particular wildlife care facility becomes overwhelmed, additional facilities and/or temporary tents can be utilized. For more information on the OWCN, see www.owcn.org.

4.4 Economic Resources at Risk

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

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

Name	Agency/ Company	Contact Info.	Phone
Drinking, Industrial, and Agricultural Intakes			
Rio Bravo Water Intake 1	Rio Bravo Ranch	Jeff Siemens	(661) 364-3010
Rio Bravo Water Intake 2	Rio Bravo Ranch	Jeff Siemens	(661) 364-3010
Rio Bravo Water Intake 3	Rio Bravo Ranch	Jeff Siemens	(661) 364-3010
Lake Ming Water Intake	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Unknown Lake Ming Intake	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Idle pump - Lake Ming	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
CA Water Service Co. Intake	CA Water Service Company		(661) 343-6705
Hart Lake Intake	CA Water Service Company		(661) 343-6705
Irrigation canal pump - Hart Lake	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Canal discharge to Kern River	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Hart Park bridge discharge to Kern River	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Little Hart Park Lake discharge to Kern River	Kern County Parks & Recreation		(661) 342-8339 (661) 432-6550 (661) 345-7175
Beardsley Canal	City of Bakersfield Water Resources		(661) 326-3716
Carrier Canal	City of Bakersfield Water Resources		(661) 326-3716
Panorama Vista Preserve Intake	Panorama Vista Preserve		(661) 872-3569 (661) 319-5805
Carrier Canal outflow to Kern River	City of Bakersfield Water Resources		(661) 326-3716
Carrier Canal endpoint	City of Bakersfield Water Resources		(661) 326-3716
Calloway Canal	City of Bakersfield Water Resources		(661) 326-3716
Kern River Canal	City of Bakersfield Water Resources		(661) 326-3716
Bellevue Weir	City of Bakersfield Water Resources		(661) 326-3716
McClung Weir	City of Bakersfield Water Resources		(661) 326-3716

Diversion Weir	City of Bakersfield Water Resources, Kern Waterbank		(661) 326-3716 (661) 440-4668
Old Main Canal	City of Bakersfield Water Resources, Kern Waterbank		(661) 326-3716 (661) 440-4668
Canal flood gate	City of Bakersfield Water Resources		(661) 326-3716
CA Aqueduct gate	City of Bakersfield Water Resources		(661) 326-3716
Dams and Hydroelectric Facilities			
Rio Bravo Hydroelectric Plant Intake	Rio Bravo Ranch		(661) 872-4487
Recreational - Parks, Marinas, Boat Ramps, Fishing Guide Service, Sporting Goods Stores			
Bob's Bait Bucket		2131 S. Chester Ave, Bakersfield, CA 93304	(661) 833-8657
Cope's Tackle and Rod Shop		1654 Calloway Dr, Bakersfield, CA 93312	(661) 679-6351
Kern River Bait		8011 Niles St, Bakersfield, CA 93306	(661) 366-7866
Quickdraw Tackle Bags		2205 Carol Place, Bakersfield, CA 93304	(661) 805-6489
Fishin Hole		3400 Buck Owens Blvd, Bakersfield, CA 93308	(661) 631-2248
Lake Ming	Kern County Parks & Recreation	13375 Lake Ming Rd., Bakersfield, CA 93306	(661) 342-8339 (661) 432-6550 (661) 345-7175
Lake Ming Campground	Kern County Parks & Recreation	13375 Lake Ming Rd., Bakersfield, CA 93306	(661) 342-8339 (661) 432-6550 (661) 345-7175
Camp Okihi	Kern County Parks & Recreation	13081 Round Mountain Rd., Bakersfield, CA 93308	(661) 342-8339 (661) 432-6550 (661) 345-7175
River's End Rafting		15701 CA-178, Bakersfield, CA 93306	(661) 326-7003
Kern County Soccer Park		9400 Alfred Harrell Hwy, Bakersfield, CA 93308	(661) 871-7711
Pyles Boys Camp Picnic Area	Kern County Parks & Recreation	Lake Ming Road	(661) 868-7022 (661) 205-4851
Yokuts Park	City of Bakersfield Recreation & Parks	4200 Empire Dr., Bakersfield, CA 93309	(661) 326-3866
Beach Park	City of Bakersfield Recreation & Parks	3400 21st St., Bakersfield, CA 93301	(661) 326-3866
Hart Park	Kern County Parks & Recreation	Alfred Harrell Hwy at Mirror Dr.	(661) 868-7022 (661) 205-4851
Kern River Parkway Park	City of Bakersfield Recreation & Parks	11200 Stockdale Hwy., Bakersfield, CA 93311	(661) 326-3866
Uplands of the Kern River Parkway	City of Bakersfield Recreation & Parks	4415 Chester Ave., Bakersfield, CA 93301	(661) 326-3866
Riverview Park	North of the River Recreation & Parks District	401 Willow Dr., Bakersfield, CA 93308	(661) 392-2000 ext. 1022 (661) 619-0481

The Park at Riverwalk	City of Bakersfield Recreation & Parks	11200 Stockdale Hwy., Bakersfield, CA 93311	(661) 326-3866
Truxtun Lake	City of Bakersfield Water Resources	Truxtun Ave between Mohawk St. and Coffee Rd.	(661) 326-3716
Hart Park Lake	Kern County Parks & Recreation	Alfred Harrell Hwy at Mirror Dr.	(661) 868-7022 (661) 205-4851
Little Hart Park Lake	Kern County Parks & Recreation	Alfred Harrell Hwy at Mirror Dr.	(661) 868-7022 (661) 205-4851
Riverwalk Park Lake	City of Bakersfield Water Resources	11200 Stockdale Hwy., Bakersfield, CA 93311	(661) 326-3716
Aera Park	City of Bakersfield Recreation & Parks	100 Jewetta Ave., Bakersfield, CA 93314	(661) 326-3866
River Oaks Park	City of Bakersfield Recreation & Parks	12608 Monterey Beach Dr., Bakersfield, CA 93311	(661) 326-3866
River Dependent Waterfront/Neighboring Businesses (those that may be immediately or directly impacted)			
JEH Ranch	Meredith Carter	10421 Round Mountain Rd, Bakersfield, CA 93308	(661) 399-0588 business (661) 330-9261 cell
Delamater	Terry Delamater	Round Mountain Road & Adolphus Ave toward Brandy Lane	(661) 205-9859
Hinds River Ranch	Chris Hinds	717 E Roberts Lane, Bakersfield, CA 93308	(805) 234-7074
Kern River Golf Course		Rudal Road, off of Lake Ming Road	(661) 872-5128
California Living Museum		10500 Alfred Harrell Hwy, Bakersfield, CA 93306	(661) 872-2256
Rio Bravo Ranch	Rio Bravo Ranch House	Private road west off of Rancheria Rd; north side of CA-178 and south of Kern River	(661) 872-4487 (760) 549-3280
Kern County Parks & Recreation		1115 Truxtun Ave., 3rd Floor Bakersfield, CA 93301	(661) 868-7022 (661) 205-4851
City of Bakersfield Recreation & Parks		1600 Truxtun Ave, 3rd Floor Bakersfield, CA 93301	(661) 326-3866
North of the River Recreation & Parks District	Paul Anderson	3825 Riverlakes Dr., Bakersfield, CA 93312	(661) 392-2000 ext. 1022 (661) 619-0481

River's End Rafting		15701 CA-178, Bakersfield, CA 93306	(661) 326-7003
City of Bakersfield Water Bank	City of Bakersfield Water Resources	1000 Buena Vista Road, Bakersfield, CA 93311	(661) 326-3716
Commercial Fisheries			
N/A			
Additional Economic Resources			
N/A			

4.5 Tribal and Cultural Resources and Historic Properties at Risk

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

Tribal Notification

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

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

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

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

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

Agency/ Company	Contact Info.	Phone
Historical and Cultural Resources		
Southern San Joaquin Valley Information Center		
Celeste Thomson	ssjvic@csub.edu	(661) 654-2289
Website	www.csub.edu/ssjvic	
Tribal Resources (State Agency)		
Native American Heritage Commission	1550 Harbor Blvd., Suite 100, West Sacramento, CA	(916) 373-3710
Katy Sanchez	Katy.Sanchez@nahc.ca.gov	(916) 373-3710
Steven Quinn	Steven.Quinn@nahc.ca.gov	(916) 373-3710
CDFW Tribal Liaison		
Nathan Voegeli	nathan.voegeli@wildlife.ca.gov	(916) 651-7653

Local Tribal Contact Information		
Leo Sisco, Chairperson, Santa Rosa Indian Community of the Santa Rosa Rancheria	P.O. Box 8, Lemoore, Ca 93245	(559) 924-1278
Delia Dominguez, Chairperson Kitanemuk & Yowlumne Tejon Indians 2deedominguez@gmail.com	115 Radio Street Bakersfield, CA 93305	(626) 339-6785
Octavio Escobedo III, Chairperson Tejon Indian Tribe oescobedo@tejonindiantribe-nsn.gov	P.O. Box 640 Arvin 93203	(661) 834-8566
Colin Rambo, CRM Tech Tejon Indian Tribe colin.rambo@tejonindiantribe-nsn.gov	P.O. Box 640 Arvin 93203	(661) 834-8566 (484) 515-4790 Cell
Robert L. Gomez Jr., Tribal Chairperson Tubatulabals of Kern Valley	P.O. Box 226 Lake Isabella, CA 93240	(760) 379-4590
Neil Pevron, Chairperson Tule River Indian Tribe neil.peyron@tulerivertribe-nsn.gov	P.O. Box 589 Porterville, CA 93258	(559) 781-4271
Julio Quair, Chairperson Chumash Council of Bakersfield chumashtribe@sbcglobal.net	729 Texas Street Bakersfield, CA 93307	(661) 322-0121
Julie Turner, Secretary Kern Valley Indian Community	P.O. Box 1010 Lake Isabella, CA 93240	(661) 340-0032
Robert Robinson, Chairperson Kern Valley Indian Community bbutterbredt@gmail.com	P.O. Box 1010 Lake Isabella, CA 93240	(760) 378-2915
Brandy Kendricks Kern Valley Indian Community krazykendricks@hotmail.com	30741 Foxridge Court Tehachapi 93561	(661) 821-1733 (661) 972-0445
Kenneth Woodrow, Chairperson Wuksache Indian Tribe/Eshom Valley Band kwood8934@aol.com	1179 Rock Haven Ct. Salinas, CA 93906	(831) 443-9702
James Rambeau, Sr., Chairperson Big Pine Paiute Tribe of the Owens Valley j.rambeau@bigpinepaiute.org	P.O. Box 700 Big Pine, CA 93513	(760) 938-2003
Sally Manning, Environmental Director Big Pine Paiute Tribe of the Owens Valley s.manning@bigpinepaiute.org	P.O. Box 700 Big Pine, CA 93513	(760) 938-2003
Danelle Gutierrez THPO Big Pine Paiute Tribe of the Owens Valley d.gutierrez@bigpinepaiute.org	P.O. Box 700 Big Pine, CA 93513	(760) 938-2003, ext. 228
Jairo F. Avila, THPO Fernandeno Tataviam Band of Mission Indians, jairo.avila@tataviam-nsn.us	1019 Second St., Suite 1 San Fernando 91340	(818) 837-0794
San Manuel Band of Mission Indians Jessica Mauck, Director-CRM Dept. jmauck@sanmanuel-nsn.gov	26569 Community Center Drive Highland 92346	(909) 864-8933
yak tityu tityu yak tiłhini - Northern Chumash Tribe Mona Olivas Tucker, Chairwoman olivas.mona@gmail.com	660 Camino Del Rey Arroyo Grande 93420	(805) 489-1052 Home (805) 748-2121 Cell

Appendix A
Kern River Geographic Response Plan – Original Contributors

The Kern 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. Environmental Protection Agency
Calif. Office of Emergency Services
CALFIRE State Fire Marshal's Office, Pipeline Safety Division
Native American Heritage Commission

Local Representatives
Santa Barbara County Public Health
Kern County Environmental Health
Kern County Parks and Recreation
Kern County Water Agency
City of Bakersfield Water Resources Department
Kern Water Bank Authority

Tribal Representatives
Bear River Band of Rohnerville Rancheria

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
Chevron North American Exploration and Production Company
Aera Energy

Environmental Non-Governmental Organizations
Trout Unlimited
Panorama Vista Preserve

Other Organizations
Nickel Family LLC
South Valley Biology Consulting LLC

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Appendix B
Site Description

1.0 Overview

This section provides a description of the physical features, hydrology, and climate in the area of the Kern River located in Kern County, California, and includes an overview of the oil spill risks in the region. This GRP only encompasses a section of the river, beginning at the mouth of the Kern River Canyon along Highway 178 and concluding at the California Aqueduct.

1.1 Physical Features

The Kern River is one of the primary river courses in the southern portion of the Central Valley of California. The Kern River in the Bakersfield area is supported by a large watershed (2,407 square miles above the city) that extends high into the Sierra Nevada Mountain Range, including Mt. Whitney (elevation 14,494 feet) at the watershed's northern end. The Kern River and its watershed are noted for their range of geographic and topographic conditions. The high elevations of the upper Kern River watershed typically collect a deep snowpack that supports Kern River flows (Kern River Flow and Municipal Water Program, DEIR, 2016). Where the Kern River enters the San Joaquin Valley, it is near its base level and erosion is replaced by deposition as the main process. Here the Kern River meanders within its floodplain depositing layers of sediment as alluvial fans at the canyon mouth, along the riverbed, and in natural levees (Burszytn).

The river has been heavily manipulated by human activity. Since the late 19th century, the Kern River has been almost entirely diverted for irrigation, recharging aquifers, and contributing to the California Aqueduct. Six weirs are in place in the river channel to safely control, divert, and measure water flow. These include the Beardsley Weir, Rocky Point Weir, Calloway Weir, River Canal Weir, Bellevue Weir, and McClung Weir (Kern River Flow and Municipal Water Program DEIR, 2016). There are numerous canals, including the Friant-Kern Canal, constructed as part of the Central Valley Project, which joins the river about 4 mi west of downtown Bakersfield.

Hydrology

The Kern River is within the South Valley Floor hydrologic unit of the Tulare Lake hydrologic basin. Receiving water bodies in the Kern Delta hydrologic area include the Kern River, Carrier Canal, Stine Canal, and Kern Island Canal (Centennial Corridor Project Final Environmental Impact Report/ Environmental Impact Statement and Section 4(f) Evaluation [Centennial Corridor EIR], Vol 1, 2015). The Southern San Joaquin Groundwater Basin underlies the Kern River. Average depth to groundwater is estimated at 80 to 120 feet below the ground surface. Variations in groundwater depth are due to seasonal groundwater fluctuations, weather conditions, surface runoff, and other factors (Centennial Corridor EIR, Vol 1, 2015). The Kern River also receives storm water through sheet flow and a number of drainage pipes, canals, retention basins, cross culverts, pump stations, and landscaped areas (Centennial Corridor EIR, Vol 1, 2015).

Diversions by, and on behalf of, various water districts and agricultural interests through a complex system of canals and diversion facilities severely impact hydrology of the Kern River (Kern River Flow and Municipal Water Program DEIR, 2016). Flow rates on the Kern River are managed by the mechanical manipulation of the above-mentioned weirs. The basic function of the weirs is to raise or maintain water surface elevation in the channel to allow gravity to divert flows to specified destinations. The weirs also regulate water velocity to reduce erosion and scouring of the channel bed and banks, and to allow for the settling of sediment for later removal.

Due to these diversions, weirs, and Isabella Dam, the Kern River's discharge changes considerably over its length. Below Isabella Dam, the Kern River flows southwest through a spectacular rugged canyon along the south edge of the Greenhorn Mountains, and this part of the river has remarkably swift flow even in the driest summers. The three stream gauge stations below Isabella Dam show a dramatically decreasing discharge. At the last gauge, near Bakersfield, the river's average flow is only 312 cubic feet/second (Surface-Water Data for the Nation, 2018) and is often dry through the city. When flowing, downstream from Bakersfield the river continues to be highly diverted and controlled. In an effort to provide a regular and more consistent flow of water in the Kern River channel, the city has been implementing the Kern River Flow and Municipal Water Program.

Climate and Winds

Bakersfield and Kern County are classified as desert or semiarid. They have a hot desert climate, with long, hot, dry summers, and brief, cool, slightly moist winters. The valley averages 3 to 7 inches of precipitation annually (Kern County Op Area HAZMAT Area Plan, 2017). The region is prone to seasonal drought conditions, as most of the precipitation falls as rain and snow between the months of November and April (U.S. Climate Data, 2018).

1.2 Risk Assessment

The Kern River is a critical hydrological resource in Kern County with natural, cultural, and historical resources, all at risk of injury from oil spills. Natural and beneficial uses of the Kern River and adjacent floodplain include fish and wildlife foraging, migration, and breeding; flood flow conveyance and storage; groundwater recharge; and recreational activities. Even with surrounding urbanization, the Kern River and adjacent floodplain have moderate wildlife habitat values (Centennial Corridor EIR, Vol 1, 2015). The man-made structures, like the Friant-Kern Canal, are also used for wildlife movement (Centennial Corridor EIR, Vol 1, 2015). Potential risks to these resources include rail transportation, oil production and storage, pipelines, vehicles and roads, recreational vessels, and other factors. Prevention of and preparation for oil spills impacting this river is paramount.

Oil Production, Refinement, and Storage

“As of 2015, Kern remains California's top oil producing county, with 78% of the state's 56,653 active oil wells. The county accounts for approximately 4% of overall U.S. oil production, and three of the five largest U.S. oil fields are in Kern County” (Kern County Op Area HAZMAT Area Plan, 2017). The Kern River Oil Field is adjacent to the Kern River on the north, just

before the river flows into Bakersfield. This field includes hundreds of oil derricks (the framework supporting a drilling apparatus in an oil rig) and their associated piping is often directly adjacent to or crosses over the Kern River. Additionally, numerous companies operate refineries and manage storage containers and terminal facilities in Kern County, many of which are within a ¼ mile of the river. Spills from the production, refinement, transport, and storage of crude oil or refined petroleum products occur regularly, but a large release can have a catastrophic and wide-ranging impact.

Oil Pipelines

In addition to the miles of facility piping associated with oil production and storage, Shell, Chevron, Plains All American, and other companies operate pipelines that transport oil throughout Kern County and Bakersfield. These pipelines often cross over or are adjacent to the Kern River, including the ditches and canals connected to it. Additional spill threats are from pipeline booster stations in Bakersfield, which are positioned throughout the length of the pipeline to adjust the pressure, pump the product along the line, and monitor flow and other information about the transmittal of the product. Pipeline and booster station leaks can result from aging or failed infrastructure, vehicular or rail accidents (some pipelines operate within a railroad right of way), man-made errors, and natural disasters. Even underground pipelines have the potential to significantly impact the river and other sensitive environmental resources through seepage in the soil, groundwater, and eventually into the river.

Rail Transportation

There are heavily utilized railways in Kern County. The Union Pacific, Burlington Northern Santa Fe, and San Joaquin Valley Railroad traverse through Kern County and employ mixed cargo trains that can carry hazardous materials, including crude oil. Locomotives by themselves typically hold several thousand gallons of diesel fuel plus large quantities of lube and motor oils. U.S. Department of Transportation has specifications for “DOT-111” tank cars, including the capacity of an individual tank car, which can be up to 30,000 gallons (Railway Supply Institute). Trains can carry up to 3,000,000 gallons of oil in a unit train of 100 tank cars, at 42 gallons per barrel that equates to 71,428 barrels.

Road Systems

Roadways that run adjacent to or cross over the river, and/or have storm drains that feed into it pose an oil spill risk. Several of the state’s main highway routes also pass through Kern County, including Interstate 5 and State Highway 99. The two highways branch off in the southern end of the County, where I-5 becomes the State’s principal north-south route, and Highway 99 parallels it to the east (Kern County Op Area HAZMAT Area Plan, 2017). Highway 99 is particularly dangerous due to fog and precipitation during the winter months, heavy commercial truck usage, and accidents involving drunk drivers. This highway had the most fatal accidents per 100 miles of any highway in the nation and was second for fatal drunk driving accidents for every 100 miles between the years of 2011 and 2015 (Fatality Analysis Reporting System, 2018). Commercial trucks that can contain hundreds to thousands of

gallons of fuel and oil utilize these roadways daily. An accident on these roadways, especially with these commercial trucks, can and has resulted in spilled oil reaching the river.

Recreational Boating

Accidents involving recreational watercrafts and/or fuel docks have the potential to result in spills of anywhere from a few gallons of gasoline up to hundreds of gallons of diesel fuel. Lake Ming is the only location where vessels are allowed to operate within this GRP. The water from Lake Ming can be released into the river, and therefore vessels do pose a small oil spill risk. Examples of such accidents include collisions, vessel groundings, and mechanical failures. These types of accidents, as well as problems with bilge discharges and refueling operations, are the most typical types of spills to occur.

Other Spill Risks

Other potential spill risks in the area include road run-off during rain events, construction activities where heavy equipment is being operated, and hydro-electric facilities and power lines. Kern County has some hydro-electric facilities upstream from the GRP that could release hydraulic oil and power lines that could (and have) released mineral oil into the river from downed transformers.

Appendix B References:

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Bursztyn, Natalie. The Kern River, California: A Story of Uplift, Incision, and Flood Control. Retrieved from https://serc.carleton.edu/69374.

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Kern River Conservancy. Retrieved (2018) from http://www.kernriverconservancy.org/.

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Kern River, National Wild and Scenic River System. Retrieved (2018) from https://www.rivers.gov/rivers/kern.php.

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Railway Supply Institute, Tank Car Standard. Retrieved from http://www.rsiweb.org/files/Tank-Car-Handout1.pdf.

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U.S. Climate Data, Bakersfield. Retrieved (2018) from https://www.usclimatedata.com/climate/bakersfield/california/united-states/usca0062U.S.G.S.

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
09/28/2020	1	First annual contacts update: Contact Sheet, Chpt. 2 tables, Chpt. 3 strategy sheets, Chpt. 4 Econ and Tribal matrices	A. Burkholder

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Appendix E
Other Relevant Emergency Response Plans

Region V Local Emergency Planning Committee Hazardous Materials Emergency Plan

There are six California Governor's Office of Emergency Services (CalOES) mutual aid regions in California which 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). The Region V LEPC district is comprised of the seven inland central California counties of Fresno, Kern, Kings, Madera, Mariposa, Merced and Tulare.

This Hazardous Materials Emergency Plan builds on the Hazardous Materials Area Plans of local government and facility Hazardous Materials Business Plans located within the emergency planning district. It is a regional planning tool that describes the identity, location, and emergency contacts for facilities that handle above threshold quantities of extremely hazardous substances, procedures for immediate response to a chemical release, ways to notify the public about actions they must take if a release occurs, emergency coordinators at the county government level, and plans for exercising the Hazardous Materials Emergency Plan.

Kern County Operational Area Hazardous Materials Area Plan

The **Area Plan program** was established in 1986 as a planning tool for local government agencies to respond to and minimize the impacts from a release or threatened release of a hazardous material. It requires local implementing agencies, called Unified Program Agencies (UPA), to create an Area Plan that: 1) identifies the hazardous materials which pose a threat to the community, 2) develops procedures and protocols for emergency response, 3) provides for notification and coordination of emergency response personnel, 4) provides for public safety including notification and evacuation, 5) establishes training for emergency response personnel, 6) identifies emergency response supplies and equipment, and 7) provides for the critique and follow-up after a major incident. UPAs use information collected from the Hazardous Materials Business Plan (HMBP) and California Accidental Release Prevention (CalARP) programs to identify hazardous materials in their communities. This information provides the basis for the Area Plan and is used to determine the appropriate level of emergency planning necessary to respond to a release.

The Kern County Operational Area Hazardous Materials Area Plan identifies the use, storage, and transportation of hazardous materials and the generation and transportation of hazardous wastes as issues of increasing importance in the protection of life, the environment, and property in the Kern County Operational Area (OA). It designates Kern County (OA) as the primary agency for coordination and communication between the cities and special districts within the County's boundaries at the time of a significant emergency, with the Kern County Office of Emergency Services providing oversight and administrative support. It also identifies local, state, and federal responsibilities during incidents involving the release or threatened release of hazardous substances.

Chevron North America Exploration & Production (CNAEP) Company, San Joaquin Valley Business Unit, Tactical Oil Spill Response Plan- Kern River

This tactical plan is a guide for Chevron personnel and business partners for oil spill response specific to the Kern River, the Beardsley Canal, and Carrier Canal by the Kern River Oil Field. This document incorporates the key elements for emergency response from the Kern River Initial Responder's Guide (IRG), and procedures developed by contracted clean-up companies into a comprehensible, useable format.

Eight response sites have been defined in the plan based on accessibility for both response teams and equipment. On each page, there is a description of the response zone, how to access the boom deployment location, specific emergency equipment that is to be used for response, a set of response procedures, and a GIS map of the response zone with boom location setup. Its primary use is to be utilized as a comprehensive response guide by the on-scene response team.

California State Oil Spill Contingency Plan

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

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

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

Federal Region 9 Regional Contingency Plan

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

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

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Appendix F
Local/Regional Asset Resources

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

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Table F-1: Local/Regional Response Assets

Resource	Home Base/Owner	Contact Information and Comments
Water Supplies for Firefighting		
Lake Ming	Kern County Parks and Recreation Department	(661) 868-7000
Foaming Operations		
	Bakersfield City Fire Department	(661) 326-3911
	Kern County Fire Department	(661) 324-6551
Air Monitoring Equipment		
HazMat/Chemical Monitoring	Kern County Environmental Health	(661) 549-9927
	Bakersfield City Fire Department	(661) 326-3911
	Kern County Fire Department	(661) 324-6551
Communication Equipment: Portable Radio/Mobile Repeaters		
HazMat Teams		
Type 1	Bakersfield City Fire Department	(661) 326-3911
Type 2	Kern County Fire Department	(661) 324-6551
See Figure F-1 below, Cal OES Certified Hazardous Material Teams Map, for Additional Type 1-3 HazMat Teams and Table F-2 for a list of statewide Certified California HazMat Teams by Type.		
Swift Water Rescue Teams		
Kern County Sheriffs Dept. Search and Rescue – Kern Valley Unit	Kern County Sheriffs Dept.	(323) 957-4121
Bakersfield Fire Dept. Swift Water Rescue Team	Bakersfield City Fire Department	(661) 326-3911
Kern County Fire Dept.	Kern County Fire Dispatch	(661) 861-2521 (661) 324-6551

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

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

CERTIFIED CALIFORNIA HAZMAT TEAMS, BY TYPE (Items highlighted is new data since last update) – 4/30/18

	Orig. Req. #	Orig. Insp. #	Recent Pass #	AGENCY	Operational and Local Identifier	Region	Unit Designation	Most Recent Attained	Zip Code
TYPE 1	46	41	28	Anaheim Fire	XOR-ANA	1	HM-8	1/13/2017	92807
	14	13	32	Burbank City FIre	XLC-BRK	1	HM-12	6/08/2017	91505
	10	10	9	Glendale City Fire	XLC-GLN	1	HM-24	7/06/2017	91208
	7	7	5up	Long Beach Fire Dept.	XLF-LOB	1	HM-24	10/06/2016	90802
	18	17	30	Los Angeles County Fire	XLB-LAC	1	HM-150	12/15/2010	91351
	51	46	37	Orange Co Fire Authority	XOR-ORC	1	HM-4	8/15/2017	92612
	49	44	26	Orange Co Fire Auth. (formerly Santa Ana hm-9)	XOR-ORC	1	HM-79	8/15/2017	92705
	45	40	23	Ventura County Fire	XVE-VNC	1	HM-50	6/07/2017	93010
	26	25	15	Vernon City Fire	XLE-VER	1	HM-151	7/15/2017	90058
	55	58	47	Santa Fe Springs Fire	XLE-SFS	1	HM # 851	4/20/2018	90670
	54	48	48	Santa Monica Fire	XLA-SMA	1	HM-4	10/27/2016	90404
	6	6	11	Alameda County Fire	XAL-ACF	2	HM-12	5/23/2017	94546
	5	5	7up	Contra Costa County JPA	XCC-CCH	2	HM-1	10/20/2016	94553
	33	31	17up	Marin County Fire Haz-Mat JPA	XMR-MRN	2	HM-1	8/02/2016	94960
	43	62	52	Oakland City Fire	XAL-OKL	2	HM # 2599	8/23/2013	94607
	61	60	50up	Salinas City Fire – Monterey County JPA	XMY-SLS	2	HM-2	6/14/2017	93901
	22	50	31	San Jose City Fire	XSC-SJS	2	HM-29	4/05/2017	95134
	24	23	19	Santa Clara County Fire	XSC-CNT	2	HM–72	3/14/2017	95014
	50	45	38up	Solano County O.E.S. (Fairfield City FD)	XSO-FRF	2	HM-1	7/18/2017	94533
	1	1	1	Roseville City Fire	XPL-RSV	4	HM-1	5/17/2016	95678
	2	2	2	Sacramento City Fire	XSA-SCR	4	HMRT-7	12/01/2016	95823
	3	3	3	Sacramento City Fire	XSA-SCR	4	HMRT-30	12/01/2016	95835
	4	4	4	Sacramento Metro F.P.D.	XSA-SAC	4	HM-109	11/17/2017	95608
	42	37	25up	Bakersfield Fire. Dept	XKE-BKF	5	HM-15	3/16/2017	93314
	27	26	13	Clovis City Fire	XFR-CLV	5	HM-40	12/21/2016	93611
	17	16	12	Fresno City Fire	XFR-FRN	5	HM-1	4/26/2018	93703
	16	15	6	Fresno City Fire	XFR-FRN	5	HM-16	4/26/2018	93722
	11	11	14up	Merced County F.D.	XMD-MRD	5	HM-62	3/13/2013	95301
	32	30	41	Visalia Fire	XTU-VSA	5	HM-55	7/16/2017	93291
	67	73	62	Ontario City Fire	XBO-OTO	6	HM-133	8/7/2015	91761
	57	55	44u	Riverside City Fire	XRI-RIV	6	HM-2	4/7/2014	92503
	68	66	55	San Bernardino County Fire	XBO-BDC	6	HM-74	4/7/2014	92335
	9	69	56	San Diego City Fire	XSD-SND	6	HM-1	5/30/2014	92126
	48	70	57	San Diego City Fire	XSD-SND	6	HM-2	5/30/2014	92126
	71	72	61up	San Manuel Fire Dept.	XBO-SMI	6	HM-241	4/25/2017	92346
	15	14	7	U.S. Marine Corp Camp Pendleton	XSD-MCP	6	HM-1	8/25/2017	92055
				TYPE 1 TOTAL:			*36*		
TYPE 2	59	67	59	Santa Barbara City	XSB-STB	1	HM-1	11/03/2014	93101
	66	65	53	Santa Barbara County	XSB-SBC	1	HM-31	10/07/2013	93427
	72	74	63	San Luis Obispo County / CAL Fire	XSL-SLU	1	HM-1	1/05/2016	93446
	63	71	58	Belmont City Fire	XSM-BEL	2	HM-14	7/03/2014	94002
	41	35	33	Fremont City Fire	XAL-FRE	2	HM-57	4/04/2018	94538
	31	29	22	Humboldt Bay Fire Dept	XHU-EUR	2	HM-8190	2/26/2018	95501
	53	51	48	Livermore-Pleasanton	XAL-LAP	2	HM-92	1/18/2018	94588
	20	49	36up	Mt. View Fire	XSC-MTV	2	HM-5	3/08/2017	94043
	35	32	29	Napa County Fire	XNA-NPA	2	HM-27	10/24/2010	94558
	73	75	64	Presidio of Monterey	XMY-POM	2	H2MT61	9/20/2017	93955
	44	39	35	San City Francisco Fire	XSF-SFR	2	HM-1	4/05/2011	94102
	28	27	16	San Ramon Fire Prot. Dist	XCC-SRM	2	HM-35	2/01/2017	94506
	23	52	45	Santa Clara City Fire	XSC-SNC	2	HM-9	6/19/2012	95051
	58	56	46up	Santa Rosa City Fire	XSN-SRS	2	HM-1	2/16/2018	95404
	8	8	18	Sonoma County Fire	XSN-SSR	2	HM-2936	3/07/2017	95403
	25	24	24	Sunnyvale Dept. Public Safety	XSC-SNY	2	HM-2	11/30/2016	94085
	36	33	20	Butte County Fire	XBU-BUT	3	HM-5	2/02/2017	95928
	12	54	42	Shasta-Cascade HM JPA (Redding Fire)	XSH-SHS	3	HM-24	2/17/2012	96002
	69	68	60	Placer Co. Fire (CDF)	XPL-PCF	4	HM-10	2/01/2015	95603
	13	12	10up	Truckee Fire Prot. District	XTB-TRK	4	HM-1	4/11/2018	96161
	47	42	40	Kern County Fire	XKE-KRN	5	HM-66	3/16/2017	93308
	60	59	49up	Corona City Fire	XRI-COR	6	HM-4	4/05/2013	92879
	56	57	43up	Hemet City Fire	XRI-HMT	6	HM-1	6/05/2013	92545
	64	63	51	Riverside County Fire	XRI-RRU	6	HM-34	5/14/2013	92596
	~~65~~	~~64~~	~~54~~	~~Riverside County Fire~~	~~XRI-RRU~~	~~6~~	~~HM-81~~	~~10/15/2013~~	~~92211~~
				TYPE 2 TOTAL:			*24*		
TYPE 3	21	20	27	Palo Alto Fire Dept.	XSC-PAF	2	HM-2	8/02/2010	94304
				TYPE 3 TOTAL:			*1*		
				TOTAL TEAMS PASSED INSPECTION			*61*		

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

NOTES: Changes to HM Unit status:

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

Changes to Chart Statistics:

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

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

ICP Facility Assessment Checksheet		
Facility Name:	**Facility Address/phone number:**	
Rental/lease cost:	**Maximum Occupancy:**	
General Impressions:		
Limitations/Constraints:		
Proximity to services		
Type/Name		Approximate Distances
Interstates-		
State Routes-		
Restaurants-		
Hotels-		
Airport-		
Emergency Services-		
Copy Centers (i.e. Kinko's)-		
Other-		
Cell phone coverage		
Nearest cell tower:		
Signal strength within the ICP (on your cell phone/list provider):		
Parking	**Site Security**	
Adequate?	Public access controls:	
Secure?		
Number of spaces:	On-site security:	
Comments:	Security needs/comments:	

ICP physical characteristics

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

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

Appendix G
ACRONYMS

A

ACP Area Contingency Plan

ADC Accredited Disaster Council

API American Petroleum Institute

ART Applied Response Technologies

AST Above-Ground Storage Tank

B

BLM Bureau of Land Management

BOR Bureau of Reclamation

C

CA California

CalARP California Accidental Release Prevention Program

CalOES California Office of Emergency Services

CalEPA California Environmental Protection Agency

CalOSHA California Occupational Safety and Health Administration

CalTrans California Department of Transportation

CCR California Code of Regulations

CDF/CalFire California Department of Forestry and Fire Protection

CDFW California Department of Fish and Wildlife

CERT Community Emergency Response Team

CFR Code of Federal Regulations

CFS Cubic Feet per Second

CHEMTREC Chemical Transportation Emergency Center

CHP California Highway Patrol

CHMIRS California Hazardous Materials Incident Reporting System

CHRIS California Historical Resources Information Center

CLEMARS California Law Enforcement Mutual Aid Radio System

CLERS California Law Enforcement Radio System

CNPS California Native Plant Society

COTP Captain of the Port (USCG)

CUPA Certified Unified Program Agency

CWA Clean Water Act

CWHR California Wildlife Habitats Relationship (System)

D

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

DOI Department of the Interior

DOT Department of Transportation

DPH Department of Public Health

DPR California Department of Pesticide Regulation

DSW Disaster Service Worker

DSWVP Disaster Service Worker Volunteer Program

DTSC California Department of Toxic Substances Control

DWR California Department of Water Resources

E

EOC Emergency Operations Center

USEPA Environmental Protection Agency

ERG Emergency Response Guidebook

ESI Environmental Sensitivity Index

EU Environmental Unit

EUL Environmental Unit Leader

F

FGC Fish & Game Code

FOSC Federal On-Scene Coordinator

G

GC Government Code

GRP Geographic Response Plan

H

HAZWOPER Hazardous Waste Operations and Emergency Response

I

IAP Incident Action Plan

IC Incident Commander

ICP Incident Command Post

ICS Incident Command System

IH Industrial Hygienist

IMH Incident Management Handbook

IMT Incident Management Team

ISB In-Situ Burning

J

JIC Joint Information Center

L

LEPC Local Emergency Planning Committee

LGOSC Local Government On-Scene Coordinator

M

MMAA Master Mutual Aid Agreement

MOU Memorandum of Understanding

N

NAHC Native American Heritage Commission

NALEMARS National Law Enforcement Mutual Aid Radio System

NCP National Contingency Plan

NEBA Net Environmental Benefit Analysis

NGO Non-Governmental Organization

NIMS National Incident Management System

NOAA National Oceanic and Atmospheric Administration

NRC National Response Center

NRDA Natural Resource Damage Assessment

NWVP Non-Wildlife Volunteer Program

O

OEHHA Office of Environmental Health Hazard Assessment

OPA 90 Oil Pollution Act of 1990

OSC On-Scene Coordinator

OSCA Oil Spill Clean Up Agent

OSLTF Oil Spill Liability Trust Fund

OSPR Office of Spill Prevention and Response

OWCN Oiled Wildlife Care Network

P

PA Participating Agency

PPE Personal Protective Equipment

PRC Public Resources Code

R

RCP Regional Contingency Plan

RGS Reconnaissance Group Supervisor

RP Responsible Party

RRT Regional Response Team

RWQCB Regional Water Quality Control Board

S

SCAT Shoreline Clean-Up and Assessment Technique

SEMS Standardized Emergency Management System

SHPO State Historic Preservation Officer

SIMA Spill Impact Mitigation Assessment

SMARS Statewide Mutual Aid Radio System

SOFR Safety Officer

SOP Standard Operating Procedures

SOSC State On-Scene Coordinator

SPCC Spill Prevention Containment and Countermeasures

SRT Self-Regulated Tide (gate)

SWA Surface Washing Agent

SWRCB State Water Resources Control Board

T

TSD Treatment, Storage, and Disposal

U

UC Unified Command

USCG United States Coast Guard

USEPA United States Environmental Protection Agency

USFWS United States Fish & Wildlife Service

USGS United States Geologic Survey

UST Underground Storage Tank

V

VC Volunteer Coordinator

VHF Very High Frequency

VU Volunteer Unit

VUL Volunteer Unit Leader

W

WISER Wireless Information System for Emergency Responders

WRGS Wildlife Recovery Group Supervisor

WRP Wildlife Response Plan

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