# Walker River Geographic Response Plan

Draft

Mono County, California and Douglas and Lyon Counties, Nevada



May 2006

Prepared by: Carson & Walker Rivers Area Committee (CWRAC)

#### Acknowledgements

The Walker River Geographic Response Plan (WRGRP) was developed through a collaborative effort between the local, state, and federal government agencies listed below.

#### Local Government

- Carson City Fire
- Carson Valley Conservation District
- Churchill County Emergency Management
- Douglas County Emergency Management
- East Fork Fire and Paramedic Districts
- Lyon County Sheriff's Office
- Mason Valley Fire
- Mineral County Fire Department
- Mono County Conservation District

#### State Government

- California Department of Fish and Game, Office of Spill Prevention and Response
- California Office of Emergency Services
- Nevada Department of Wildlife
- Nevada Division of Emergency Management
- Nevada Division of Environmental Protection
- Nevada Division of Forestry
- Nevada Highway Patrol

#### Tribes

- Fallon Paiute-Shoshone Tribe
- Walker River Paiute Tribe
- Washo Tribe
- Yerington Paiute Tribe

#### **Federal Government**

- U.S. Environmental Protection Agency (EPA) Region IX
  - EPA's Superfund Technical Assessment and Response Team (START), Ecology & Environment, Inc.
- U.S. Bureau of Land Management



# If this is an Emergency...

...Involving a release or threatened release of hazardous materials, petroleum products, or other contaminants impacting public health and/or the environment

#### Most important – Protect yourself and others!

Then:

- 1) Turn to the **Immediate Action Guide** (Yellow Tab) for initial steps taken in a hazardous material, petroleum product, or other contaminant emergency.
- 2) Make the initial notification to *Dispatch* by dialing 911. *Dispatch* will make the *Mandatory Notifications*. A list of county dispatch centers is on page R-2 of this plan.

Dispatch will make the following Mandatory Notifications						
California State Warning Center (OES)	(800) 852-7550 or (916) 845-8911					
Nevada Division of Emergency Management	(775) 687-4240 or (775) 688-2830					
National Response Center	(800) 424-8802					
Walker River Water Master (Jim Shaw)*	(775) 463-6620**					
Walker River Irrigation District (Ken Spooner)*	(775) 463-6620**					
Notify Downstream Agencies:						
Mono County Sheriff's Office	(760) 932-7549					
Douglas County Emergency	(775) 782-9911					
Management						
Lyon County Emergency Management	(775) 463-6620					

\*Notify for all spills impacting or potentially impacting the Walker River.

\*\*Contact Lyon County Emergency Management and ask for the Walker River Water Master to be notified.

- After the *Mandatory Notifications* are made, use Notification (Red Tab) to implement the notification procedures described in the Immediate Action Guide.
- **4)** Use the Walker River Corridor Maps (Green Tab) to pin point the location and surrounding geography of the incident site.
- Use the River Response Site Strategies (Blue Tab) to develop a mitigation plan.
- 6) Review the **Supporting Documentation** (White Tabs) for additional information needed during the response.

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# **Plan Overview**

#### Purpose

- 1. The Walker River Geographic Response Plan (WRGRP) establishes the policies, responsibilities, and procedures required to protect the health and safety of the populace, the environment, and public and private property from the effects of hazardous materials incidents.
- 2. This plan establishes the emergency response organization for hazardous materials incidents occurring within the Walker River watershed. The plan is generally intended to be used for oil spills or chemical releases which impact or could potentially impact the Walker River, its tributaries, its reservoirs, as well as irrigation ditches and canals associated with the river.
- 3. The WRGRP is the principal guide for agencies within the Walker River watershed, its incorporated cities, and other local government entities in mitigating hazardous materials emergencies. This plan is consistent with federal, state and local laws and is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between local, state, and federal agencies, in hazardous materials emergencies.
- 4. This plan is an operational plan as well as a reference document. It may be used for pre-emergency planning and emergency response. Agencies having roles and responsibilities established by this plan are encouraged to develop standard operating procedures (SOPs) and emergency response checklists based on the provisions of this plan.

#### **Plan Objectives**

- 1. Describe the overall emergency response organization for hazardous materials incidents occurring within the Walker River response area.
- 2. Establish a prompt and efficient notification system that ensures that the appropriate local, state and federal response agencies are informed of oil spills and chemical releases impacting the river.
- 3. Identify river response strategies in advance, so that response personnel can more effectively deploy personnel and equipment.
- 4. Delineate the responsibilities of local, state, and federal agencies in the event of a hazardous materials incident within the Walker River response areas
- 5. Establish lines of authority, coordination and notification for hazardous materials incidents.

- 6. Facilitate mutual aid to supplement local resources.
- 7. Describe procedures for accessing outside funding (e.g., state and federal funding) for the mitigation of, and recovery from, hazardous materials incidents.

#### **Incident Objectives**

For emergency response personnel to evaluate hazardous materials and take appropriate emergency actions in order to save lives, reduce injuries, and prevent or minimize damage to the environment and property, the following actions should be taken:

- 1. Securing the *affected* area, isolating the hazard, and denying the entry of unauthorized persons into the area.
- 2. Identification of the hazardous material.
- 3. Providing rapid and effective warning, information, and instructions to threatened populations.
- 4. Providing means to access technical resources to stabilize the affected area and return to normal conditions as quickly as possible.
- 5. Train and equip emergency response personnel (hazmat team members as well as first responders) to efficiently and effectively mitigate hazardous materials incidents.

# How to Use the Immediate Action Guide

#### IF YOU ARE NOT QUALIFED TO ACTIVATE THIS PLAN: DIAL 911 AND ASK FOR ASSISTANCE

Complete the following steps to activate the Walker River Geographic Response Plan.



#### This is only a guide:

Nothing in this section shall supersede the experience, initiative, and ingenuity of the responders in overcoming the complexities that existing under actual emergency conditions.



#### **Make Immediate Notifications**

# Collect the following information whenever there is a threat or actual discharge of hazardous materials, petroleum products or other contaminants into a waterway\*.

\* A waterway is defined as any river, stream, tributary, creek, ditch, canal, storm drain or sewer that is part of, connected to or has the ability to discharge into the Walker River.

Provide the following information to Dispatch making initial *Mandatory Notifications*:

- Type of Incident (Rail, Motor Transport, Fixed Facility, etc.)
- Date and time of Incident
- Location where the incident happened
- Number of Injuries
- Product Name (if known)
- Type of Release
  Solid
  Liquid
  Gas
- Size of spill
  ➢ Quantity\_\_\_\_\_
- Location where the product entered or will enter the waterway
- Area threatened

### Refer to the Red Tab for the Emergency Notification Guide and the Contact Number List to make additional notifications



#### **Review General Information Regarding HazMat Response**

#### First Responder

- 1. Approach incident location from an upwind, uphill, and/or upstream direction.
- 2. Position vehicle heading away from the incident location.
- 3. If available wear full protective clothing (i.e., turnouts-pants, coat, hood, gloves, boots, helmet) and positive-pressure, self-contained breathing apparatus (SCBA).
- 4. Avoid "rushing" into the area.
- 5. Avoid entering or approaching vapors or smoke and contact with product.
- 6. Confine exposed victims for emergency decontamination.
- 7. Consider all unidentified containers or released products (including smoke) as a hazardous material until it is positively identified as non-hazardous.

#### Incident Command and Scene Security

- 1. Establish an Incident Command Post and fully implement ICS.
- 2. Isolate the scene and deny entry to all unauthorized personnel, vehicles, and equipment (establish a perimeter).
- 3. Notify appropriate emergency response agencies (**Notification -** Red Tab).
- 4. Ensure qualified personnel perform the items on the checklist.
- 5. Review the following checklist:

	Immediate Action Checklist	Date/Time
1.	Establish Incident Command	
2.	Determine Isolation Zones	
3.	Establish Exact Incident Location	
4.	Determine Lead Agency	
5.	Identify Product	
6.	Determine the Size of Exclusion Zone	
7.	Determine Level of Response	
8.	Determine if Additional Resources are Required	
9.	Established Size of Spill and Spill Potential	
10.	If spill can reach a waterway, begin Downstream Notifications	
11.	Establish Evacuation Routes	
12.	Determine Medical Needs	
13.	Determine Entry Level (PPE)	
14.	Determine Communications Needs	
15.	Make Appropriate Notifications	
16.	Determine exposures	
17.	Develop Incident Action Plan	



#### Railroad, Roadway, and Fixed Facility Incidents

#### Responder

- 1. Notify Local Emergency Dispatch Activate 911.
- 2. Isolate and deny entry to the area.
- 3. Shutdown all possible ignitions sources (Stop ALL vehicle traffic).
- 4. Establish Parameters.
- 5. Attempt to identify the material.

#### Dispatcher

- 1. Determine the following information
  - Type of Incident (Rail, Motor Transport, Fixed Facility, etc.)
  - Date and Time of Incident
  - Location where the incident happened
    - Mile Marker
    - > Accessibility
    - > Latitude/Longitude
  - Number of Injuries
  - Product Name (if known)
  - Type of Release
    - 🗅 Solid 🔹 Liquid 🗳 Gas
  - Size of spill
    - Quantity\_\_\_\_\_
    - (If quantity is unknown, describe size of the leaking container)
  - Has the spill ignited? Yes\_\_\_\_ No\_\_\_
  - Any information on rail car or container
  - Has the spill been contained? Yes\_\_\_\_ No\_\_\_\_
  - Has the spill impacted the surface water? Yes\_\_\_\_ No\_\_\_\_
  - Description of exposures
    - Occupied buildings
    - Important buildings or structures
    - Proximity to roadway, bridges, drainage structures, waterways
- 2. Make the initial *Mandatory Notifications* (Notification Red Tab)
- 3. Contact the owner and/or potentially responsible party
  - Union Pacific Railroad
  - Shipper
  - Fixed Facility Emergency Coordinator
- 4. Request local hazardous materials response team.
- 5. Provide updates to all Notified Agencies as new information becomes available.



#### Abandoned/Unknown Containers and WMD

#### Responder

- 1. Notify Local Emergency Dispatch Activate 911.
- 2. Isolate and deny entry to the area.
- 3. Shutdown all possible ignitions sources (Stop ALL vehicle traffic).
- 4. Establish Parameters.
- 5. Attempt to identify the material. DO NOT MOVE THE CONTAINER OR DETERMINE IF IT IS FULL.
- 6. For WMD or NBC Device, determine if there are secondary devices.
- 7. Treat location as a *possible crime scene*!

#### Dispatcher

- 1. Determine the following information
  - Location of the container
  - Date and Time of discovery
  - Number of Injuries
  - Product Name (if known)
  - Has the container been breached? Yes\_\_\_\_ No\_\_\_\_\_
  - Type of Release
    - □ Solid □ Liquid □ Gas
  - Size of spill
    - Quantity\_\_\_\_
    - (If quantity is unknown, describe size of the leaking container)
  - Has the spill ignited? Yes\_\_\_\_ No\_\_\_\_
  - Can the spill be contained? Yes\_\_\_\_ No\_\_\_\_
  - Has the spill impacted the surface water? Yes\_\_\_\_ No\_\_\_\_
  - Description of exposures
    - Occupied buildings
    - Important buildings or structures
    - Proximity to roadway, bridges, drainage structures, waterways
- 2. Request local hazardous materials response team
- 3. Make the initial *Mandatory Notifications* (Notification Red Tab)
- 4. Provide updates to all Notified Agencies as new information becomes available.



#### Public Information/Press Release

#### To release information to the public/media:

- 1. Establish a Public Information Officer (PIO).
- 2. Determine the following information for inclusion into a press release and/or press conference.
  - Nature of the incident
  - Precautions for the public and possible symptoms of exposure (High Hazard)
  - Date and time of incident
  - Approximate location where the incident happened (city, county, state)
  - Hotline number for public inquiries
  - Traffic patterns affected by spill
  - Number of injuries and property damage
  - Product name and normal uses
  - Response agencies involved
  - Any mitigation efforts underway
  - Evacuation instructions if incident is considered High Hazard
  - Mass care information if High Hazard
- 3. The following example statement can be used.

#### Hazardous Material Incident - Summary Statement for Media

At approximately (<u>time</u>) a.m./p.m. today, a spill/release of a potentially hazardous substance was reported to this office. Emergency services personnel were immediately dispatched to cordon off the area and direct traffic.

The material was later determined to be (<u>substance</u>), a (<u>hazardous/harmless</u>) chemical/substance/material/gas that, upon contact, may product symptoms of (<u>list symptoms</u>). Precautionary evacuation of the (<u>location</u>) area surrounding the spill was (<u>requested/required</u>). Approximately (<u>number</u>) of persons were evacuated.

Clean up crews from (<u>agency/company</u>) were dispatched to the scene, and normal traffic was resumed by (<u>time</u>), at which time residents were allowed to return to their homes. There were no injuries reported – OR – (<u>number</u>) persons, including (<u>number</u>) of emergency personnel, were treated at area hospitals for (<u>injuries/symptoms</u>) and (all/number) were later released. Those remaining in the hospital are in (<u>condition</u>). Response agencies involved were (<u>list agencies</u>).

### Walker River Geographic Response Plan Notification Overview

# The chart below shows the flow of notifications that must be made in a hazardous material, petroleum product, or other contaminant emergency.



\*Notify for all spills impacting or potentially impacting the Walker River.

\*\*Contact Lyon County Emergency Management and ask for the Walker River Water Master to be notified.

To ensure that all affected agencies/organizations are notified:

- 1) First On-Scene will notify Dispatch. (Page R-2 for List of Dispatch Centers)
- 2) Dispatch will make the *Mandatory Notifications*.
- 3) Use the **Emergency Notification Guide** (Notification Red Tab) to contact additional agencies/organizations.
- 4) Use the **Contact Number List** (Notification Red Tab) to find emergency phone numbers.

For updates to the contact information, contact Tom Dunkelman at (775) 687-9480 or dunkelman.tom@epa.gov.

#### LIST OF DISPATCH CENTERS

Dispatch Center	Phone Number	Area of Dispatch
Mono County, CA	(760) 932-7549	All of Mono County
Alpine County, CA	(530) 694-2231	All of Alpine County
Douglas County, NV	(775) 782-9911	All of Douglas County Secondary Dispatch for Alpine County, CA
Carson City County, NV	(775) 887-2007	All of Carson City County
Lyon County, NV	(775) 463-6620	All of Lyon County including Smith Valley, Central Lyon County (Dayton, Stagecoach, Silver Springs), North Lyon County (Fernley), Mason Valley and Yerington.
Churchill County, NV	(775) 423-3116	All of Churchill County including Fallon
Mineral County, NV	(775) 945-2434	All Mineral County including Hawthorne and Schurz

# Emergency Notifications are made in accordance with the area plan developed by the appropriate County's Office of Emergency Services.

# Use the following checklist as a guide to contact additional agencies/organizations not listed in the Mandatory Notifications table above:

- Document the Time of Contact and Estimated Time of Arrival (ETA) in the space provided.
- Notifying the agencies downstream of the release may be mandatory or may have priority.
- Consider notifying other agencies listed when appropriate.
- Checklist may be used to identify agencies that can provide additional resources.

Time Contacted	ETA		Time Contacted	ETA	
		Local Fire			Red Cross / Salvation Army
		Local Law			School Superintendent
		Hospital(s)			Local Government
		Property Owner(s)			Water Authorities
		Bordering Jurisdictions			Sewer Districts
		Airport			USA Underground
		Water Districts			Chemtrec or other product info sources
		Homeowner's Associations			Water Master
		News Media			Ditch Owners/Users
		Public Works			Other:
		Railroad			Other:
		Public Utilities			Other:

#### **Local Agencies**

#### Continue on next page for further notifications

# **County Agencies**

Time Contacted	ΕΤΑ	Agency	Time Contacted	ΕΤΑ	Agency
		Sheriff's Office			Air Quality Control Board
		Environmental Health			Other:
		Office Emergency Services			Other:
		Agriculture Commissioner			Other:
		Health Officer			Other:
		Road Department			Other:

# State of California Agencies

Time Contacted	ΕΤΑ	Agency	Time Contacted	ΕΤΑ	Agency
		Highway Patrol			Dept. of Justice
		State Emergency Warning Center			Lahontan RWQCB
		Fish and Game			Dept. of Forestry
		CalEPA/DTSC			State Historic Preservation Office
		CalOSHA			Other:
		CalTrans			Other:

# Continue on next page for further notifications

State	of	Nevada	Agencies
otato	•••	1101000	/ (goiloi00

Time Contacted	ETA	Agency	Time Contacted	ΕΤΑ	Agency
		Highway Patrol			Dept. of Justice
		Div. of Emergency Management			Div. of Water Planning
		Dept. of Wildlife			Div. of Forestry
		Div. of Environmental Protection			State Historic Preservation Office
		Div. of Industrial Relations			Other:
		Dept. of Transportation			Other:

#### Tribal Governments

Time Contacted	ETA	Agency	Time Contacted	ETA	Agency
		Washo Tribe			Other:
		Yerington Paiute Tribe			Other:
		Walker River Paiute Tribe			Other:

# Federal Agencies

Time Contacted	ΕΤΑ	Agency	Time Contacted	ETA	Agency
		National Response Center			Bureau of Reclamation- Dams
		BLM			Army Corps of Engineers
		USEPA			FBI
		USFWS			Other:
		USFS			Other:

#### **Contact Number List**

Agency	Emergency No.	Business No.	Comments
Alpine County Sheriff (Markleeville, CA)	(530) 694-2231		
American Red Cross	(775)856-1000	(530) 582-4137	
Barton Memorial Hospital		(530) 541-3420	
California Department of Fish and Game	(916) 358-1300	(916) 445-9338 8-5PM	NORCOM Dispatcher
California Department of Fish and Game - Bishop	(760) 872-1171		
California Department of Forestry	(530) 477 5761	(530) 477-0641	
California Department of Parks and Recreation	(916) 358 1310		
California EPA/DTSC	(800) 260-3972	(800) 852-7550	
California Highway Patrol	(530) 582-7500		
California Highway Patrol - Bridgeport	(760) 932-7995		
California Occupational Safety and Health Agency	(916) 263-2800	(800) 963-9424	
California Office of Emergency Services	(800) 852-7550	(916) 845-8911	
California Public Utilties Commission	(800) 755-1447	(415) 703-2782 (8-5PM)	
California State Historic Preservation Office	(916) 653-6624		
CalStar (Air Ambulance)	530) 477-5761	(530) 887-0569	
CalTrans - District 9 (Mono County)		(760) 872-0601	
CalTrans - Bridgeport	(760) 932-7055		
Carson City Combined Dispatch	(775) 887-2007		
Carson City Emergency Management	(775) 887-2007	(775) 887-2068	
Carson Tahoe Hospital	(775) 356-4040		
Carson Valley Conservation District		(775) 782-3661 ext 102	
Carson Valley Medical Center	(775) 782-1600		
Chemical Transport Emergency Center	(800) 424-9300		
CHEMNET	(800) 424-9300		
CHLORREP	(800) 424-9300		
Douglas County Emergency Management	(775) 782-9911	(775) 782-9977	
East Fork Fire and Paramedic (Douglas County)	???	(775) 782-9040	
H2O Environmental (Spill Contractor)	(866) H2O-SPILL	(702) 396-4148	
KOLO Television	(775) 858-8880		
KVLV Radio	(775) 423-2243		
Lahontan Regional Water Quality Control Board	(530) 542-5400		recording after 5PM
Lead TV EAS (Nevada)	(775) 858-8888		
Lead TV Radio EAS (Nevada)	(775) 325-9178		
Lyon County Fire District	(775) 577-5006	(775) 575-5337	

#### **Contact Number List**

Agency	Emergency No.	Business No.	Comments
Lyon County Office of Emergency Management	(775) 463-6620		
Lyon County Public Works	(775) 577-5030	(775) 246-6220 (8-5PM)	roll-over to ER# (775)720- 7353
Lyon County Sheriff's Office	(775) 463-6620	(775) 463-6600	
Minden Dispatch	(775) 883-5995		
Minden Medical Center	(775) 782-8181		
Mineral County Emergency Dispatch	(775) 945-2434		
Mono County Sheriff (Bridgeport, CA)	(760) 932-7549		
Mono County Conservation District		(775) 782-3661 ext 112	
NACA Pesticide Safety Team	(800) 424-9300		Same As ChemTransEmerCent
National Response Center	(800) 424-8802		
National Weather Service	(775) 673-8100		
Nevada Department of Transportation	(775) 888-7000		
Nevada Division of Emergency Management	(775) 688-2830	(775) 687-4240	
Nevada Division of Environmental Protection - Spill Report	(775) 687-9485	(888) 331-6337	24 Hour Numbers
Nevada Division of Forestry	(775) 883-5995	(775) 849-2500 (8-5PM)	
Nevada Division of Water Resources	(775) 684-8641	(775) 687-4380 (8-5PM)	
Nevada Department of Wildlife	(775) 423-3171		
Nevada Emergency Response Commission		(775) 687-6973 (8-5PM)	
Nevada OSHA	(775) 687-5240	(775) 824-4600	
Nevada Highway Patrol	(775) 688-2510		
Nevada State Historic Preservation Office		(775) 684-3448	
Northern Nevada Medical Center (Sparks)	(775) 331-7000		rollover to ER # after 5:30PM
Nuclear Regulatory Commission	(301) 816-5100	(301) 951-0550	
Paiute Gas	(775) 882-0148		
PG & E	(800) 743-5000		Recording
Radiological Assistance - USDOE Response Center	(202) 586-8100		
REMSA - Ambulance	(775) 858-6005		
Reno Combined Dispatch	(775) 334-2161		
Reno Gazette	(775) 788-6397	(775) 788-6200	
Reno VA Hospital		(775) 786-7200	
Sacramento Bee	(916) 321-1000		
Saint Mary's Hospital (Reno)	(775) 770-3000		
Salvation Army	(775) 688-4555		
SBC (Corporate Offices)	(800) 303-3000		# is corporate offices, Missouri
Sierra Pacific Resources	(775) 834-4100 (8-5PM)		roll-over to Dispatcher after 5PM
Sierra Pacific Resources Power Company	(775) 834-4100		

#### **Contact Number List**

Agency	Emergency No.	Business No.	Comments
Southwest Gas	(800) 772-4555	(775) 882-2126	
Southwest Gas - Pipeline	(775) 772-4555		
South Lyon Medical Center		(775) 463-2301	
U.S. Bureau of Alcohol, Tobacco & Firearms		(775) 784-5251 (8-5PM)	rollover to SDiego Office after 5PM
U.S. Dept of Homeland Security FEMA REG 9	(800) 427-4661	(510) 627-7235	800# is Disaster Response in WashDC
U.S. Bureau of Land Management	(775) 883-3535	(775) 885-6000 (8-5PM)	
U.S. Bureau of Reclamation - Dams	(916) 979-3004	(775) 882-3436	SEE US BOR No. Nevada Ops
U.S. Bureau of Reclamation - Lwr Colo Rvr- Water Master	(702) 596-0245	(702 596-0245	
U.S. Bureau of Reclamation No. Nev. Ops- Water Master	(775) 882 3436	(775) 884-8351	
U.S. Coast Guard - National Response Center	(800) 424-8802		
U.S. Department of Agriculture	(775) 784-6057		Recording w/options
US Department of Justice FBI (Reno, NV Office)	(775) 823-2623		
U.S. Department of Homeland Security	(202) 282-8000		
U.S. Environmental Protection Agency Region IX RRC	(800) 300-2193		
U.S. Fish and Wildlife Service	(775) 287-4678	(775) 861-6337	
U.S. Forest Service - Inyo National Forest (Lee Vining)	(760) 647-3044		
U.S. Forest Service - Toiyabe National Forest (Carson City)	(775) 883-5995	(775) 331-6444 (8-5PM)	
U.S. Forest Service - Toiyabe National Forest (Bridgeport)	(760) 932-7070		
U.S. Geological Survey	(775) 887-7600		Recording with options
U.S. Occupational Safety and Health Agency USOSHA	(800) 475-4020	(800) 321-6742	
Underground Service Alert (USA)	(800) 227-2600		
Universal Environmental, Inc., Sparks, NV (Spill Contractor)	(775) 351-2500	(775) 351-2500	
Walker River Irrigation District (Ken Spooner)	(775) 463-6620	(775) 463-3523	Emergency Contact via Lyon Co Emergency Management
Walker River Paiute Tribe			
Walker River Water Master (Jim Shaw)	(775) 463-6620	(775) 463-3540	Emergency Contact via Lyon Co Emergency Management
Washoe County Environmental Health	(775)328-2436	(775) 328-2434	Rollover after 5PM
Washoe Medical Center (Reno)	(775) 982-4144	(775) 982-4100	
Washo Tribe	(775) 782-9087	(775) 265-8692	
Yerington Paiute Tribe	(775) 224-3661	(775) 463-7866	

# Walker River Corridor Maps – List of Maps

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NV Detail Reference Map NV Detail Site Index Map NV Detail #1 NV Detail #2 NV Detail #3 NV Detail #4 NV Detail #5 NV Detail #6 NV Detail #6 NV Detail #7 NV Detail #8 NV Detail #8 NV Detail #9 NV Detail #10 NV Detail #11 NV Detail #12	G-7 G-8 G-9 G-10 G-12 G-13 G-14 G-15 G-16 G-17 G-18 G-19 G-20

\* CA Detail Maps #1-3 show areas along the Carson River and can be found in the Carson River Geographic Response Plan.

### **River Response Strategies**

#### INTRODUCTION

Whenever spilled oil enters water it begins to spread quickly. In flowing water, oil will travel downstream with the current causing even more widespread environmental damage. Oil damages wildlife and their habitats by coating the surface of any thing the oil contacts; soil, vegetation, rocks, feathers and fur. The more area contaminated, the greater the environmental injury, the more time needed for cleanup, and the greater its cost. Environmental injury and cleanup cost can be minimized by taking prompt, effective action to contain spilled oil and minimize its dispersion in the environment.

A chemical release into the river is likely more difficult to respond to, due to the fact that the chemical involved may be miscible in water or may sink in water. Depending on the physical properties of the chemical released, it is likely that booming strategies described here for responding to petroleum, may not be relevant. However, other strategies may be of use, such as closing intakes to surface water ditches.

This plan has been prepared as an aid to first responders to a petroleum spill or chemical release that threatens the waters of the Walker River system. Selection of response sites was based on the suitability of that location for diversion, containment, collection, and removal of spilled products. Site selection criteria used included access for response personnel and equipment, stream morphology and gradient, and development of a feasible, workable site-specific response strategy.

This River Response Strategy section contains the following information:

- A brief description of the types of spill containment equipment typically used;
- Historical hydrologic flow data for the Walker River;
- Identification of specific booming sites and strategies which can be employed to deploy spill containment and recovery devices.

With regard to identification of specific booming sites and strategies, there are several considerations which need to be kept in mind:

 Many (if not most) of the sites identified are on private property. This version of the Walker River Geographic Response Plan does not identify private property owners; although it is possible that this type of information could be included in subsequent versions of the plan, if the parties involved believe this is appropriate. As such, responders need to follow the appropriate procedures for obtaining access to private property. One of these steps may include contacting both the Walker River Water Master and the Walker River Irrigation District and requesting assistance in contacting the appropriate property owners.

- Flow conditions in the Walker River system vary tremendously throughout the season, as a function of precipitation, snow-melt, and agricultural diversions. As such, the booming sites and strategies identified here may or may not be appropriate depending on the flow conditions. For example, a site that is boomable at low flow conditions may not be boomable at higher flow conditions. Similarly, the strategy employed at a specific location will likely change depending on the flow of the river. The Walker River Water Master and the Walker River Irrigation District are likely valuable sources of information regarding flow conditions on the river and regarding the status of agricultural diversions.
- Boom sites are identified sequentially for each river. First, sites along the West Walker River are identified. Next, sites along the East Walker River are identified. Finally, sites along the main stem of the Walker River, after the confluence of the West Walker and East Walker Rivers, are identified. Boom sites are not identified for the myriad of agricultural ditches located throughout the Walker River system. However, the intake locations, for several of the larger irrigation ditches are identified in the site strategies section. Again, the Water Master is likely the best source of information regarding the current status of the of the irrigation ditches. Again, the Walker River Water Master and Walker River Irrigation District would be responsible for determining if it is necessary or appropriate to close an irrigation ditch, to prevent it from becoming contaminated.

#### **OIL CONTAINMENT AND COLLECTION DEVICES**

Containment Boom (also called hard boom or curtain boom)

Features of typical containment boom: constructed of PVC-coated fabric; a top tension cable sealed in fabric and connected to aluminum 'universal' end connectors; flotation of closed-cell foam sealed within the PVC fabric; a 'skirt' of the same fabric which extends below the water surface; chain ballast in an open pocket along the length of the skirt; aluminum 'universal' end connectors at each end to join 50 ft lengths of boom into longer sections; oiled boom can be cleaned and re-used. Containment boom for river application should have 4 inch (diameter) flotation and a 6 inch skirt (vertical measurement). Flowing water will exert a substantial force against the submerged skirt so the boom must be secured with strong anchor points at each end. Avoid use of boom with larger flotation and deeper skirt. Containment boom is essential for oil spill containment and collection; sorbent boom is not a substitute for containment boom.

#### Sorbent Boom (also called sausage boom)

Features of typical sorbent boom: constructed of melt-blown or shredded polyethylene (same as sorbent pads or 'diapers'); collects oil by absorbing product into the body of the boom like a sponge; sorbent material is generally contained in a net or sock, usually about 10 ft long and 4 to 6 inches in diameter; usually with a snap and ring near each end so that when the snap of one is connected to the ring of another, the two overlap along side each other so that no space occurs between them that could allow oil to escape; very effective for recovery of light petroleum products like gasoline, diesel fuel, or home heating oil; not a substitute for containment boom.

#### Oil Snare (also called pom-pom)

Features of oil snare; constructed of a multitude of polyethylene plastic strands bound in a bundle; come separate (pom-pom) or on a 50 ft rope with about 20 units attached (oil snare *or* snare boom); collects oil by adsorbing product *or* sticking it to the surface of plastic; these devices work well with heavy oil (i.e. #6 fuel oil). Each unit will collect about 50-60 times its weight in heavy oil. The snare is inefficient for recovery of light oils and thus is not recommended for recovery of products like diesel fuel.

#### SITE SELECTION AND BOOM DEPLOYMENT

Boom is generally most easily deployed and most effective in areas where the water moves slowly. In streams, the water moves slowest in long pools where the water is deep and the stream gradient is low. Oil should be collected at an easily accessible location out of the main stream water flow where there is little current. Generally, such an oil collection location will be along one bank near the downstream end of a pool, on the inside of a bend in the river or where a natural eddy occurs. Boom should be deployed at about a 30 degree angle across the current and it should be taut; the boom will not contain and collect oil if it is deployed in a 'U' or 'J' shape. The skirt of the boom must hang freely below the floatation along its entire length. If the skirt breaks the water surface because of some obstruction (log or rock), or if rope is tied around the floatation and skirt, or if the skirt is lifted out of the water near the end connector when tying the boom to an anchor point, the boom will fail to contain oil. In addition, at the collection point, the boom must be secured into the soil or gravel of the bank so that there is no way for collected oil to leak past, around, or under the boom. We recommend 3/8 inch polypropylene line be used to secure booms and anchors. When all these are done properly, that is when the boom is deployed at a shallow angle to the flow of water, it is taut and well anchored to the banks with no leaks at the collection point, floating oil will

be carried along the upstream face of the boom and into the slow-moving water of the collection point along the bank where the accumulated oil can be removed.

#### CASCADE BOOM SYSTEM

Containment boom can be less difficult to set and more effective if deployed in 'cascade' fashion. Two or more short boom lengths are used to span the river rather than one long continuous boom. Each boom segment is deployed to span a portion of the river so that oil streaming off the downstream end of one boom is captured by the next boom just downstream. The last boom downstream has a containment point against the bank arid out of the main current just as other boom sets do. The advantage of a cascade system is that the short lengths of boom create less drag in the water and are easier to set than a single long diversion boom. Also, cascade systems can work well in a site that is not adequate for a single diversion boom. The disadvantage is that more rope and anchor points are required and therefore more of the stream bank must be accessible.

#### **Stream Flow Data**

The following stream flow data was obtained from the U.S.G.S. and may be of use to the responder in selecting booming locations based on stream flow discharge and measured travel times. Real-time stream flow data can be obtained from the U.S.G.S. web page at <u>http://nevada.usgs.gov</u> (click on "data," then click on "water data," then click on "real-time stream flow"). Historic mean monthly stream flows are also available on this web page and are summarized in the table below:

Table B-1: Historic Mean Monthly Stream Flows – Walker River (cubic feet per second)													
Location	Time- frame	Jan	Feb	March	April	May	June	July	August	Sep	Oct	Nov	Dec
East Walker River Bridgeport, CA	1921- 2004	45.3	50.8	89.1	173	253	308	296	237	153	61.8	29.6	37.8
East Walker River Mason, NV	1947- 2004	70.3	77.5	92.1	177	254	313	279	218	154	72.1	44.9	53.5
Little Walker River Bridgeport, CA	1944- 2004	22.1	22.0	27.1	49.8	123	170	99.3	37.9	22.6	19.6	21.2	21.3
West Walker River (below Little Walker River) Coleville, CA	1938- 2004	77.4	74.3	112	303	784	954	485	149	72.7	54.0	66.7	70.3
West Walker River Coleville, CA	1902- 2004	78.4	80.9	128	307	792	989	520	164	82.4	68.9	69.9	67.1
West Walker Wellington, NV	1910- 2004	56.4	53.8	83.2	268	611	700	496	285	160	81.2	44.5	44.4
West Walker Hudson, NV	1914- 2004	80.1	87.8	98.8	211	437	584	352	170	106	71.8	63.8	70.0
Walker River Wabuska, NV	1902- 2004	129	139	149	153	253	471	251	90.6	67.9	75.4	89.6	109
Walker River above Weber Reservoir Schurz, NV	1977- 2004	152	162	138	143	338	399	246	76.6	60.2	42.0	66.3	71.5
Walker River above Little Dam Schurz, NV	1995- 2001	340	325	231	160	526	721	402	80.2	19.3	34.5	108	137
Walker River at Lateral 2-A Siphon Schurz, NV	1994- 2004	240	218	153	99.0	369	494	270	61.0	20.0	24.3	68.0	86.6

#### **DESCRIPTION OF SITE PAGE HEADINGS**

<u>Site Number</u>: The number and name of the site; corresponds to the site number on the attached maps.

<u>Site Rank</u>: Sites are ranked as A. B. or C. Sites ranked 'A' have a number of ,good attributes; 'B' sites have at least one disadvantage; 'c' sites have more than one drawback but may be used, depending on the spill circumstances.

'A' sites have the following attributes: good stream morphology for boom placement and collection of oil; good access for deploying the boom for recovery of oil contained by the boom, and for boom maintenance; support vehicles and other equipment can be brought reasonably near the site; the site is a safe work place for response personnel. 'B' sites lack at least one of these; 'C' sites will lack several of these.

Directions: How to locate the site; includes highway mileposts or notable landmarks,

<u>Site Description & Response Strategy</u>: A general description of the site is provided, including its attributes and drawbacks. The boom deployment strategy is described including placement of the upstream and downstream boom anchor points (using site landmarks if possible).

<u>Boom Requirements</u>: The minimum amount of containment boom necessary to fulfill the described deployment strategy using an angle of about 30 degrees across the river. The mistake made most often when setting boom is that oil containment or collection devices (hard boom, sorbent boom also called sausage boom, and pom-poms or oil snare) is deployed from one side of the river directly across to the opposite bank. As a result, the boom takes on a 'U' shape. Oil tends to collect in the center where the current is strongest, and eventually entrains beneath (washes under) the boom, and is carried further downstream. Photographs are provided for each of the boom sites. Many of these photographs have suggested boom deployments drawn in. **These suggested boom deployments are simply that – suggestions. Depending on water levels, equipment availability and other factors, other boom deployments may be appropriate.** 

Comments: Notes regarding other pertinent information about the site

<u>USGS 7.5 min Quad.</u>: Identifies the name of the appropriate 7.5 min USGS Quad

<u>Coordinates</u>: Latitude and longitude of the site; for use with GPS navigation instruments.



**Site:** West Walker River Site # WW1 – Sonora Bridge (Photo from taken south bank, looking upstream at bridge)

Sensitive Site: No

**Directions to Site**: From the junction of Highway 395 and S.R. 108 (16 miles north of Bridgeport), proceed 2.0 miles west on S.R. 108 to the Sonora Bridge Day Use Area. This location is in California.

Stream Width: 50 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: The bridge provides access to both sides of the river. There is abundant parking at the day use area. The best booming location is about 150 yards downstream from the bridge. The collection point is on the south side of the river. The anchor point is just downstream of the bridge, on the north bank.

**Comments**: This is the uppermost booming location identified on the West Walker River. To the west of this location the river passes close to the U.S. Marine Corps Mountain Warfare Training Center. Also to the west, S.R. 108 goes up and over the Sonora Pass. The Sonora Bridge site would be a good location for catching spills originating at either the Marine Corps Base or on the east side of the Sonora Pass. Sonora pass is closed in winter months.

USGS 7.5 min Quad: Fales Hot Springs

Coordinates: N 38 22.008 W 119 28.896



Site: West Walker River Site # WW2 – West Walker Bridge (B47-11) (Photo taken from west bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 108 (16 miles north of Bridgeport) proceed 2.3 miles north to Bridge B47-11. This location is in California.

Stream Width: 80 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: The best booming site is downstream from the bridge. The collection point is about 125 yards downstream of the bridge, on the west bank of the river. The anchor point is just downstream from the bridge, on the east bank.

**Comments**: This location is just downstream from the confluence of the West Walker River and the Little Walker River. The bridge provides access to both sides of the river. There is parking at the bridge, on the south side of the river.

USGS 7.5 min Quad: Chris Flat

Coordinates: N 38 22.846 W 119 26.992



Site: West Walker River Site # WW3 – Chris Flat Campground (Photo taken from campsite #10, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 108 (16 miles north of Bridgeport) proceed 3.3 miles north to the Chris Flat Campground. This location is approximately 9.2 miles south on Highway 395 from Walker, CA. This location is in California.

Stream Width: 50 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: This is a straight section of the river. The best booming location is at the south end of the campground, adjacent to site #10. The collection area is on the west bank of the river, adjacent to site #10. The anchor point is 50 yards upstream from the collection area on the east bank.

**Comments**: It is possible to bring equipment to within 30 yards of the river, via campsite #10.

USGS 7.5 min Quad: Chris Flat

Coordinates: N 38 23.554 W 119 27.119



Site: West Walker River Site # WW4 – Bootleg Campground (Photo taken from the west bank, looking upstream)

Sensitive Site: Yes

**Directions to Site**: From the intersection of Highway 395 and S.R. 108 (16 miles north of Bridgeport) proceed 4.8 miles north to the Bootleg Campground. This location is approximately 7.7 miles south on Highway 395 from Walker, CA. This location is in California.

Stream Width: 40 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: This is a rocky location, with a significant amount of white water. As such, it would be difficult to boom. However, there is access to the river here.

**Comments**: The river is shallow here, and likely wadeable much of the year.

USGS 7.5 min Quad: Chris Flat

Coordinates: N 38 24.898 W 119 26.965



#### Site: West Walker River Site # WW5 – Shingle Mill Day-Use Area (Photo taken from west bank, looking downstream)

Site Rank: C

#### Sensitive Site: Yes

**Directions to Site**: From the intersection of Highway 395 and S.R. 108 (16 miles north of Bridgeport) proceed 7.3 miles north to the Shingle Mill Day-Use Area. This location is approximately 5.2 miles south on Highway 395 from Walker, CA. This location is in California.

Stream Width: 40 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: This is a rocky location, with a significant amount of white water. As such, it would be difficult to boom. However, there is access to the river here. This location is preferable to the Bootleg Campground site, as the water is a little slower here.

**Comments**: Water is slower towards the north end of the day use area. There is ample parking at the day use area.

USGS 7.5 min Quad: Chris Flat

Coordinates: N 38 26.924 W 119 27.389



Site: West Walker River Site # WW6 – Big Slough Diversion (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: This site is located in Walker, CA. From Minden/Gardnerville, take Highway 395 south past Topaz Lake. At the south end of Walker, turn east onto North River Lane. Go 0.2 miles and turn north onto a dirt road. Go 0.8 miles and turn left near a mobile home.

Stream Width: 100 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There is a large diversion dam at this location, which diverts water into the Big Slough, through a gate located on the east bank of the river. Water is flowing fairly swiftly here, potentially making booming more difficult. The diversion gate on the east bank would make for a good collection point.

**Comments**: This is the first boomable location as the Walker River enters the Antelope Valley. There is a large diversion dam here. This is the Big Slough Diversion, which is the largest diversion on the West Walker River. At the time of our visit in August, 100 cfs out of a total of 170 cfs were being diverted from the river here. As such, this could be a critical location, and consideration may be give to closing the diversion gate in the event of a spill.

USGS 7.5 min Quad: Risue Canyon

Coordinates: N 38 31.123 W 119 28.433



Site: West Walker River Site # WW7 – Larson Lane Bridge (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: This site is located near Coleville, CA. From Minden/Gardnerville, take Highway 395 south past Topaz Lake. Go 6.9 miles past Highway 89 (Monitor Pass). Turn east onto Larson Lane and go 0.2 miles to the bridge.

Stream Width: 60 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: The best collection point is just on the downstream side of the bridge, on the west bank. Begin anchoring boom on the east bank, 50 yards upstream of the bridge.

**Comments**: There is adequate parking on the shoulder of the road, on either side of the bridge.

USGS 7.5 min Quad: Risue Canyon

Coordinates: N 38 33.162 W 119 28.009


# Site: West Walker River Site # WW8 – Cunningham Lane Bridge (B47C-12) (Photo taken from bridge, looking upstream)

Site Rank: A

Sensitive Site: No

**Directions to Site**: This site is located north of Coleville, CA. From Minden/Gardnerville, take Highway 395 south past Topaz Lake. Go 4.6 miles past Highway 89 (Monitor Pass). Turn east onto Cunningham Lane and go a short distance to Bridge B47C-12.

Stream Width: 60 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There is a good pool on the upstream side of the bridge that could be used as a collection area. Collect on the west bank of the river, and anchor 50 yards upstream on the east bank.

**Comments**: There is adequate parking on the shoulders on either side of the bridge. There is a 20 foot lift from the river to the roadside. Access to the river is fenced. There is a sizeable diversion dam located downstream from here, which diverts water into the Swauger ditch. This ditch intake is on private property.

USGS 7.5 min Quad: Coleville

Coordinates: N 38 34.787 W 119 30.414



Site: West Walker River Site # WW9 – Topaz Lane Bridge (B47C-5) (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: This site is located north of Coleville, CA. From Minden/Gardnerville, take Highway 395 south past Topaz Lake. Go 2.2 miles past Highway 89 (Monitor Pass). Turn east on Topaz Lane and go a short distance to Bridge B47C-5.

Stream Width: 70 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: The river is very slow and wide here. There are good booming locations upstream and downstream of the bridge. The best collection point is 75 yards downstream of the bridge, on the west bank. Anchor on the east bank, at the bridge. There is excellent access to the collection point, but it is through a gate associated with a private residence.

**Comments**: There is a diversion dam located downstream on the Summer's ranch (see next location). Of the three locations near Coleville (Topaz Lane, Cunningham Lane and Larson Lane), this appears to be the best booming location.

USGS 7.5 min Quad: Coleville

Coordinates: N 38 36.638 W 119 31.060



Site: West Walker River Site # WW10 – Summers Ranch (Topaz Diversion) (Photo taken from west bank, looking downstream)

Sensitive Site: No

**Directions to Site**: This site is located north of Coleville, CA. From Minden/Gardnerville, take Highway 395 south past Topaz Lake. Go 0.5 miles past Highway 89 (Monitor Pass). Turn east onto dirt road, go 0.1 mile and turn left onto smaller dirt road that passes just behind the\ hay barns and go 1.75 miles (through two gates) to the river.

Stream Width: 60 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: This is an excellent booming location. The best booming location is upstream from the diversion dam. Anchor on the east bank, and collect on the west bank, just upstream from the bridge/dam.

**Comments**: Access to this location is through private property owned by Tom Summers. It is necessary to obtain permission, before entering the property. There is a sizeable diversion dam at this location. At the diversion dam, the natural course of the West Walker River flows to the northeast, while the diversion to the northwest carries water to Topaz Lake. In the event of a significant spill, it may be desirable to close off the diversion to Topaz Lake.

USGS 7.5 min Quad: Topaz Lake

Coordinates: N 38 38.126 W 119 30.469



**Site**: West Walker River Site # WW11 – Topaz Lake (Photo taken from boat ramp at Topaz Lake County Park)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Topaz Lake. Just north of the Topaz Lodge, turn east onto Topaz Park Road. Go 1.8 miles to the Topaz Lake County Park entrance. Topaz Lake straddles the California/Nevada border.

Stream Width: N/A

Boom Required: varies

**Site Strategy**: The flow of water into Topaz Lake can be controlled at the diversion dam located upstream of the lake on the Summers' ranch property. There is a submerged water intake at the northeast corner of the lake (approximately 75 yards offshore), which allows water to be discharged from the lake. Water flows through the submerged intake, through an underground pipeline, to a canal which essentially becomes a tributary to the West Walker River. There is a gatehouse which regulates flow through the underground pipeline. Staff from the Water Master, Walker River Irrigation District, or Douglas County Parks have the ability to control flow through this pipeline. Standard slow water procedures and equipment (slow water boom) should be used for addressing spills into Topaz Lake.

**Comments**: There is a boat ramp, parking and restrooms at the Topaz Lake County Park (Douglas County, NV).

**USGS 7.5 min Quad**: Topaz Lake **Coordinates**: N 38 41.591 W 119 31.188



Site: West Walker River Site # WW12 – Topaz Lake Canal (Photo taken from outflow pipe, looking downstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Topaz Lake. Just north of the Topaz Lodge, turn east onto Topaz Park Road. Go 1.8 miles to the Topaz Lake County Park entrance. Continue 0.3 miles past the park entrance to a cement gate house. Past this gate house (0.1 miles) is a canal into which water from the Topaz Lake dam by-pass (underground pipeline) is received. This location is in Nevada.

Stream Width: 50 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: There are multiple locations along the canal which could be used as booming locations. The canal runs very straight; however the banks are near vertical and unstable, which would complicate booming activities. The side-walls along the canal are up to 20 feet high.

**Comments**: By-pass water from the Topaz Lake flows into a submerged drain, through an underground pipeline and empties into the Topaz Lake Canal, which essentially becomes a tributary to the West Walker River. There is a dirt road which follows the north side of canal for 1.5 miles. There are multiple locations along this canal which could be used as boom sites in the event that spill material was sucked into the Topaz Lake submerged drain (depending on the water level this drain may only draw from the bottom of the lake, or may form a toilet bowl effect and draw from the top of the lake).

USGS 7.5 min Quad: Topaz Lake

Coordinates: N 38 41.703 W 119 30.558



#### Site: West Walker River Site # WW13 – Hoye Canyon Diversion #1 (Photo taken from diversion dam, looking upstream)

Site Rank: A

#### Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 11.3 miles to Wellington, NV. Turn right onto Hoye Canyon Road (across from the CG Bar). Go 2.3 miles on this dirt road to a turn-out on the right. There are several gates here, the last of which was not locked. Go through the last gate to a large dirt parking areas that is adjacent to a large diversion dam.

#### Stream Width: 60 ft.

#### Boom Required: 300 ft. (minimum)

**Site Strategy**: There is a large diversion dam here, which is used to divert water into a sizeable ditch which runs along the south side of the river. There is an excellent booming area upstream of the dam, at the western end of the parking area. The collection area would be on the south bank, about 10 yards upstream from the western end of the parking area. Anchor on the north bank, 50 yards upstream from the diversion dam, near the bend in the river. The entrance to the diversion ditch could be used as a secondary collection area, but there is a debris fence made of a large cable and logs across the entrance to the ditch.

**Comments**: A boat would be helpful at this location. This is the first identified booming location downstream from the diversion at the Summers Ranch location, which is upstream of Topaz Lake. There is another booming location just upstream from the Hoye Canyon #1 site, which could also be used (2.7 miles in from S.R. 208), although parking is limited at this location. There are other potential located over the next 1.5 miles to the west, which could potentially be used as well. Hoye Canyon Road continues on to the west for approximately 10 miles before coming out at the intersection of East Valley Road and Topaz Lane, near Coleville, CA.

#### USGS 7.5 min Quad: Oreana Peak

Coordinates: N 38 44.202 W 119 24.311



Site: West Walker River Site # WW14 – Hoye Canyon Diversion #2 (Photo taken from diversion dam, looking upstream)

# Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 11.3 miles to Wellington, NV. Turn right onto Hoye Canyon Road (across from the CG Bar). Go 1.0 miles on this dirt road to a turn-out on the right.

Stream Width: 60 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There is an excellent booming location just upstream of the diversion dam. The collection area is about 30 yards upstream from the dam on the southeast bank. The anchor point is on the northwest bank, 100 yards upstream from the dam, near the bend in the river.

**Comments**: There is a large diversion dam here, which is used to divert water into two separate ditches. One ditch is at the dam, and runs along the northeast side of the river, and the second ditch is 150 yards downstream from the dam and runs along the southeast side of the river. There are operable gates located at both ditch intakes. It is possible to walk across the dam to reach the other side of the river, so a boat is likely not necessary.

USGS 7.5 min Quad: Oreana Peak

Coordinates: N 38 44.940 W 119 23.668



Site: West Walker River Site # WW15 – Smith Valley Bridge (B-822) (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 11.7 miles to the intersection of 208 and 338 in Wellington. Continue to the left on S.R. 208 to the intersection op S.R. 208 and 824 (16.2 miles from Holbrook Junction). Bear to the left on S.R. 824 and go 1.6 miles to Bridge B-822.

Stream Width: 75 ft.

**Boom Required**: 300 ft. (minimum)

**Site Strategy**: The river is slow here and excellent for booming. The best booming location is upstream of the bridge. The collection point is on the southeast bank, just upstream from the bridge rip rap. The anchor point is on the northwest bank, just below the river bend.

**Comments**: There is ample parking on the shoulders, adjacent to the bridge. The bridge provides access to both sides of the river. There is barbed wire fencing present between the road and the river, on both banks.

USGS 7.5 min Quad: Smith

Coordinates: N 38 49.398 W 119 19.721



# Site: West Walker River Site # WW16 – Walker River Resort Bridge (B-1612) (Photo taken from bridge, looking upstream)

Site Rank: A

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 18.2 miles to Hudson Way. Turn left (north) on to Hudson Way and go 3.0 miles to Bridge B-1612. **Stream Width**: 60 ft. **Boom Required**: 200 ft. (minimum)

**Site Strategy**: The most accessible booming location is upstream of the bridge. Collect on the west bank, just up from the bridge. Anchor on the east bank, about 50 yards upstream from the bridge. This location involves at least 15 feet of lift to a vacuum truck. There is an alternate location that can be accessed via a dirt road that is 30 yards past the bridge on the left. However, there are no trespassing signs and the gate is locked. For this location it would be possible to park adjacent to the river. For this location, the collection point would be the anchoring point described above. The anchor point for this alternate location would be further upstream on the west bank.

**Comments**: The bridge provides access to both banks of the river.

USGS 7.5 min Quad: Smith

Coordinates: N 38 50.348 W 119 16.518



Site: West Walker River Site # WW17 – Wilson Canyon Rest Area (Photo taken looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto Highway 208 and go 21.6 miles to the Wilson Canyon Rest Area.

Stream Width: 95 ft.

Boom Required: 400 ft. (minimum)

**Site Strategy**: The collection point is at the east end of the rest area, on the south bank, at the beginning of the bend. The upstream anchor location is 315 feet from the collection point, on the north bank. The north bank can be accessed by boat or by driving east on S.R. 208 one mile, crossing the river and driving back.

**Comments**: There is ample parking at this location. There are also rest rooms present here. This is a good location to capture contaminants before the river enters Wilson Canyon. There is another possible location, just downstream at the Copper Belt Road Bridge (B-778). However, stream access at that location is not great.

USGS 7.5 min Quad: Wilson Canyon

Coordinates: N 38 48.510 W 119 13.770



Site: East Walker River Site # WW18 – Wilson Canyon #1 (Photo taken from northeast bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 23.2 miles to this location, which is within Wilson Canyon. This location is 1.2 miles north of the intersection of S.R. 208 and S.R. 339.

Stream Width: 70 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: The water flow is very fast here, and booming will be challenging. The flow is a little slower at this location than at Wilson Canyon #2. There is a large diversion structure present here. The collection area is upstream of the diversion, on the north bank. The anchor point is 150 feet upstream from the collection area, on the south bank.

**Comments**: Wilson Canyon is a likely spill area, due to the number of vehicular accidents in the canyon. However, it is unlikely that boom could be deployed quickly enough here to address issues associated with accidents in the canyon. Prompt closure of the diversion gate may be a consideration.

USGS 7.5 min Quad: Wilson Canyon

Coordinates: N 38 49.135 W 119 12.332



Site: West Walker River Site # WW19 – Wilson Canyon #2 (Photo taken from northeast bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 24.3 miles to this location, which is immediately downstream from Wilson Canyon. This location is 0.7 miles north of the intersection of S.R. 208 and S.R. 339.

Stream Width: 70 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: The water flow is very fast here, and booming will be challenging. There is a diversion structure present here. The collection area is at the entrance to the diversion, on the north bank near the diversion gate. Oil could be allowed to enter into the diversion, where it could be collected. The anchor point is 180 feet upstream from the collection area, on the south bank.

**Comments**: Wilson Canyon is a likely spill area, due to the number of vehicular accidents in the canyon. However, it is unlikely that boom could be deployed quickly enough here to address issues associated with accidents in the canyon. Prompt closure of the diversion gate may be a consideration.

USGS 7.5 min Quad: Wilson Canyon

Coordinates: N 38 49.426 W 119 12.007



Site: West Walker River Site # WW20 – Wilson Canyon #3 (B-146) (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 25.3 miles to the intersection of S.R. 208 and Wilson Canyon Road. Bridge B-146 crosses the West Walker River at this location.

Stream Width: 50 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: Either the upstream or downstream side of the bridge could be boomed, but the upstream side is preferable. The collection point is just on the upstream side of the bridge, on the east bank. The anchor point is 165 feet upstream from the bridge, on the west bank.

**Comments**: The bridge allows access to both banks of the river. This is the last booming location identified on the West Walker River. The confluence of the West Walker and East Walker Rivers is downstream of this location. The first booming location on the main stem of the Walker River is at Nordyke Road.

USGS 7.5 min Quad: Wilson Canyon

Coordinates: N 38 50.030 W 119 11.154



Site: East Walker River Site # EW1 – Dogtown (Photo taken looking across stream)

Sensitive Site: No

**Directions to Site**: Take Highway 395 south from Bridgeport. Turn right onto a dirt road that is located 0.2 miles south of the Bodie turn-off. Proceed 0.1 miles (across creek) to a dirt parking area. This location is in California.

Stream Width: 15 ft.

Boom Required: 50 ft. (minimum)

**Site Strategy**: There are multiple booming locations on this small stream which could be used for booming. Just downstream of this location, the creek enters a small pond. The pond could be used for capturing contaminants as well, although access to the pond is limited.

**Comments**: This location is on Virginia Creek which is a tributary to the East Walker River. This location is the uppermost (southernmost) booming site located on the East Walker system. This area is generally referred to as Dogtown, and was formerly a mining district. In order to access this site it is necessary to cross a small stream. This area likely would not be accessible in the winter. Due to the poor access, this is a marginal location.

USGS 7.5 min Quad: Big Alkali

Coordinates: N 38 10.375 W 119 11.662



Site: East Walker River Site # EW2 – Bodie Truck Sign (Photo taken from east bank, looking upstream)

Sensitive Site: No

**Directions to Site**: Take Highway 395 south from Bridgeport. There is a dirt turn out area on the west side of the road, located 0.2 miles north of the Bodie turn-off. This location is in California.

Stream Width: 20 ft.

Boom Required: 100 ft. (minimum)

**Site Strategy**: The stream flow at this location is fairly swift. Due to the swift water, this is a marginal site. Access is better here than at Dogtown.

**Comments**: This location is on Virginia Creek which is a tributary to the East Walker River. There is good staging room for equipment along Highway 395, but access to the creek is difficult due to heavy vegetation.

USGS 7.5 min Quad: Big Alkali

Coordinates: N 38 10.760 W 119 11.787



Site: East Walker River Site # EW3 – Gauging Station (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: Take Highway 395 5.0 miles south from the intersection of 395 and S.R. 182 in Bridgeport. This site is 1.3 miles north of the Bodie turn-off. Look for yellow "man crossing" sign on west side of highway. This location is in California.

Stream Width: 20 ft.

Boom Required: 100 ft. (minimum)

**Site Strategy**: There is a small diversion dam associated with the Gauging Station at this location. The booming location is just upstream of this dam. The dam diverts water to the east, under the highway. The entrance to the diversion, on the east side of the creek, would be a good collection point.

**Comments**: This location is on Virginia Creek which is a tributary to the East Walker River. Shoulder access along Highway 395 allows for limited staging of equipment and easy access to the creek. This site is preferable to the Dogtown and Bodie Truck Sign sites, due to slower water and better access. The Gauging Station here is operated by U.S. Geological Survey (Gauging Station #2890).

USGS 7.5 min Quad: Big Alkali

Coordinates: N 38 11.505 W 119 12.556



Site: East Walker River Site # EW4 – Green Creek Road (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: Take Highway 395 4.3 miles south from the intersection of 395 and S.R. 182 in Bridgeport. This site is 2.1 miles north of the Bodie turn-off. Turn right on Green Creek Road, and go a short distance to the bridge.

Stream Width: 20 ft.

Boom Required: 100 ft. (minimum)

**Site Strategy**: At this location the creek is straight and narrow. Stream flow is swift, but not likely too fast to be boomable. Either the upstream or downstream side of the bridge could likely be boomed.

**Comments**: This location is on Virginia Creek which is a tributary to the East Walker River. The upstream and downstream locations both appear to be on private property.

USGS 7.5 min Quad: Big Alkali

Coordinates: N 38 11.794 W 119 13.148



**Site:** East Walker River Site # EW5 – Point Ranch (Photo taken looking downstream towards diversion)

Sensitive Site: No

**Directions to Site**: Take Highway 395 2.9 miles south from the intersection of 395 and S.R. 182 in Bridgeport. Turn right onto private property – the Point Ranch. This location is in California

Stream Width: 25 ft.

Boom Required: 100 ft. (minimum)

**Site Strategy**: There is a diversion structure behind the ranch house. There are multiple booming locations in this area, the best of which is just upstream from the diversion structure.

**Comments**: This location is on private property, and it would be necessary to receive permission at the ranch house, prior to entering. The site is located on Virginia Creek, near the confluence with the East Walker River.

USGS 7.5 min Quad: Big Alkali

Coordinates: N 38 12.849 W 119 13.960



# Site: East Walker River Site # EW6 – Swauger Creek Campground (Photo taken from bridge, looking downstream)

Site Rank: A

Sensitive Site: Yes

**Directions to Site**: Take Highway 395 5.0 miles north from the intersection of 395 and Twin Lakes Road in Bridgeport. Turn right onto a dirt road that leads in to the campground. Take dirt road east 0.1 miles across a small bridge to the Swauger Creek Campground. This location is in California.

Stream Width: 10 ft.

Boom Required: 50 ft. (minimum)

**Site Strategy**: This is a small creek which would be easily boomable; although the dense vegetation may limit access.

**Comments**: This site is on Swauger Creek, which Creek flows north to south along the east side of Highway 395 and into Bridgeport Reservoir.

USGS 7.5 min Quad: Mount Jackson

Coordinates: N 38 17.247 W 119 18.251



#### Site: East Walker River Site # EW7 – Bridgeport Highway 395 Bridge (Photo taken from southeast bank, looking upstream at bridge)

Site Rank: A

Sensitive Site: Yes

**Directions to Site**: This site is located at the intersection of Highway 395 and State Route 182, at the east end of Bridgeport.

Stream Width: 40 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: The site is in a long pool on the downstream side of the bridge at the east end of town. The upstream end of the boom is anchored on the west bank, near the bridge where a fence extends into the river. The downstream end of the boom (collection point) is anchored on the east bank, near the ice skating rink. Both sides are accessible. The east side offers a large parking area for equipment.

**Comments**: The advantages of this site area good access, low stream gradient and off-highway parking. The disadvantage of the site is that it is so close to the bridge that anything spilled into the river here, will have already been transported downstream before boom could be deployed. However, if a spill were to occur at this bridge, it would be good to deploy boom to catch any spilled product that might enter the water during cleanup.

# USGS 7.5 min Quad: Bridgeport

Coordinates: N 38.25592 W 119.22240



Site: East Walker River Site # EW8 – Stock Drive Bridge (Photo taken from bridge, looking upstream)

# Sensitive Site: Yes

**Directions to Site**: From the intersection of Highway 395 and State Route 182, go 0.1 miles north on S.R. 182, turn left on Court Drive, then right immediately on Stock Drive. Proceed 0.2 miles to the bridge on Stock Drive (past the entrance to the small airport).

Stream Width: 40 ft.

Boom Required: 150 ft. (minimum)

**Site Strategy**: Upstream of the bridge is a long pool. Both banks are accessible by foot. The upstream end of the boom is anchored to the east bank, on the inside of a bend in the river. The downstream end of the boom (collection point) is anchored against the west bank, next to the bridge in an eddy.

**Comments**: There is parking for vehicle along the little-used street. Boom should be deployed at this location as soon as possible, in the event of a spill at the Highway 395 bridge.

USGS 7.5 min Quad: Bridgeport

Coordinates: N 38.25840 W 119.22417



**Site:** East Walker River Site # EW9 – Mile Post 7.0 (Photo taken from northwest bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 7.0 miles north on S.R. 182. The site is 0.6 miles downstream from Bridge 47-58.

Stream Width: 40 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: Just 0.1 miles upstream of milepost 182 MNO 7.0, there is a long pool. There is only one small pull-out along side the pool. Better off highway parking is available at milepost 7.0. The upstream end of the boom should be anchored to the far bank at the upstream end of the pool. The downstream end of the boom (collection point) should be anchored against the near bank, below the roadway by a short distance from milepost 182 MNO 7.0. It is recommended that a cascade boom system be used at all flows because of the length of boom required to span the river at the proper angle.

**Comments**: This appears to be a good site for spill containment and recovery.

USGS 7.5 min Quad: Bridgeport

Coordinates: N 38.35011 W 119.20510



Site: East Walker River Site # EW10 – Mile Post 7.6 (Photo taken from northwest bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 7.6 miles north on S.R. 182. The site is just north of milepost 7.5 at a bend in the road.

Stream Width: 40 ft.

Boom Required: 150 ft. (minimum)

**Site Strategy**: At this site, a pool runs parallel to the highway at the foot of a low embankment rip-rapped with large boulders. There is a large pull-out on the river side at milepost 7.5. The upstream end of the boom should be anchored to the far bank, on the inside of a bend just upstream in the river. The downstream end of the boom (collection point) should be anchored against the near bank along the foot of the embankment. At low flows (less than 25 cfs) a single diversion boom will probably be adequate; however at higher flows a cascade system will probably be needed.

**Comments**: This site is just downstream from the curve at mile 7.4, where a number of vehicle accidents and spills have occurred. There is ample off-highway parking near this site. At the upstream end of the pool, there is an eddy where debris (and oil) tend to collect. The rip-rap is a drawback because oil can get trapped in the spaces among the boulders. Placing boom, oil-snare or heavy geo-cloth fabric over the rip-rap may minimize the amount of oil that enters the rip-rap.

USGS 7.5 min Quad: Bridgeport Coordinates: N 38.3587823 W 119.2021141



Site: East Walker River Site # EW11 – Staging Area (Photo taken from northwest bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 8.0 miles north on S.R. 182. The site is just north of milepost 8.0, at a large pull-out on an embankment overlooking the river.

Stream Width: 40 ft.

Boom Required: 100 ft. (minimum)

**Site Strategy**: A pool runs parallel to the highway at the foot of a high, steep embankment at the back of a large parking area pull-out. The upstream end of the boom should be anchored to the far bank, upstream at a point where the river turns and flows along the foot of the embankment. The downstream end of the boom (collection point) should be anchored against the near bank, along the foot of the embankment. At low flows (less than 25 cfs) a single diversion boom will probably be adequate; however, at higher flows, a cascade system will likely be needed.

**Comments**: There is ample off-highway parking at this site. The steep embankment down to the river at the back of the parking lot is a drawback, but it can be negotiated with little difficulty. This is an important site to use in order to try to keep spilled product out of the dense cattail beds that cover a broad area in Murphy's Pond. However, since the collection point is on the outside of a turn where water current may be strongest, this site may not be useable at high stream flow.

USGS 7.5 min Quad: Bridgeport Coordinates: N 38.36580 W 119.19806



Site: East Walker River Site # EW12 – Murphy's Pond (Photo taken from northwest bank, looking downstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 8.5 miles north on S.R. 182. The site is just north of milepost 8.5. Park off the highway at the north end of the guard rail.

Stream Width: 40 ft.

Boom Required: 150 ft. (minimum)

**Site Strategy**: There is a large pool at the downstream end of Murphy's Pond. At the point where water leaves the pond, the pond narrows abruptly, the stream gradient steepens, and the water flows out among large boulders. The upstream end of the boom should be anchored on the far bank of the pond. The downstream end of the boom (collection point) should be anchored against the near bank, in a slack water area at the foot of the embankment below the roadway.

**Comments**: The drawback of this site is that it lies well below the roadway, down a steep embankment. However, this is a good location to collect oil in order to keep it from contaminating the river downstream, which is even more difficult to access and much more difficult to cleanup in the event it becomes oiled. This site is a high priority for boom deployment if oil is spilled anywhere upstream. Traffic control may be necessary at this site, in order to protect response personnel.

USGS 7.5 min Quad: Bridgeport Coordinates: N 38.37068 W 119.19488



Site: East Walker River Site # EW13 – Mile Post 10.3 (Photo taken from northwest bank, looking upstream)

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 10.3 miles north on S.R. 182. The site is between mileposts 10.0 and 10.5 along a straight stretch of highway.

Stream Width: 40 ft.

Boom Required: 150 ft. (minimum)

**Site Strategy**: The river forms a large, long pool that parallels the highway. The upstream end of the boom should be anchored on the far bank. The downstream end (collection point) should be anchored against the near bank, below the roadway.

**Comments**: Access to the site is hampered by dense willow thickets. The shoulder is narrow with limited parking. The embankment down to the river is short and steep. Traffic control may be required at this site, in order to protect response personnel. Fast water, access off the highway, the steep slope of the bank and dense willow thickets area all drawbacks to this site, but it is one of the few places along this stretch of river that offers an adequate booming location.

USGS 7.5 min Quad: Sweetwater Creek

Coordinates: N 38.38911 W 119.17873



Site: East Walker River Site # EW14 – Mile Post 11.5 (Photo taken from northwest bank, looking upstream)

# Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 11.5 miles north on S.R. 182. The site is near milepost 11.5, on the east side of the road at a locked gate that leads out to a small open pasture. The site is to the left after entering the gate. Permission to use the site and a key must be obtained at the Sceirine Ranch, 0.8 miles across the California-Nevada border.

Stream Width: 40 ft.

Boom Required: 150 ft. (minimum)

**Site Strategy**: The upstream end of the boom should be anchored on the far bank. The downstream end of the boom (collection point) should be anchored against the near bank, at a point before the river bends to the rights.

**Comments**: This site is on private property so permission and a key must be obtained prior to use. There is ample off-highway parking in the pasture.

USGS 7.5 min Quad: Sweetwater Creek

Coordinates: N 38.40575 W 119.16946

# NO PHOTO AVAILABLE

# Site: East Walker River Site # EW15 – Stateline

#### Site Rank: A

Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go 12.5 miles north on S.R. 182. The site is near milepost 12.5, on the east side of the road at a locked gate that leads out to a small pasture. There are two potential boom sites at this location. Permission to use the site and a key must be obtained at the Sceirine Ranch, 0.8 miles across the California-Nevada border (about 1 mile north of the site).

**Stream Width**: 40 ft. (minimum)

Boom Required: Site A 250 ft.

Site B 150 ft. (minimum)

**Site Strategy**: Site A is reached by driving straight ahead 500 feet, after passing through the gate. There is an irrigation diversion in the stream here and a water control structure that controls water flow into an irrigation ditch. The upstream end of the boom should be anchored on the far bank and well upstream. The downstream end of the boom (collection point) should be anchored against the near bank, at a point located at least 30 feet upstream of the water control structure. Boom placed here would collect and contain oil, and if tended properly should also keep oil out of the irrigation ditch.

Site B is a few hundred feet to the left, after passing through the gate. There is a long pool upstream of a sharp bend that provides a suitable location to deploy boom. The upstream end of the boom should be anchored on the far bank. The downstream end of the boom (collection point) should be anchored against the near bank, at a point before the river becomes shallow and the gradient steepens as the river enters the bend.

#### Comments:

NOTE - As of March 2006, the property owner indicated he is not willing to allow responders onto this property, due to concerns relating to the previous oil spill response.

The site is on private property so permission and a key must be obtained prior to use. There is ample off-highway parking. Check with the Sceirine Ranch before using the irrigation take-out structure as a place to collect and contain spilled product.

USGS 7.5 min Quad: Sweetwater Creek

**Coordinates:** N 38.41682 W 119.15979

# NO PHOTO AVAILABLE

#### Site: East Walker River Site # EW16 – Sceirine Ranch Bridge

#### Site Rank: A

#### Sensitive Site: No

**Directions to Site**: From the intersection of Highway 395 and S.R. 182, go north on S.R. 182 to the California-Nevada border. The Sceirine Ranch is near Nevada milepost 1.0, on the east side of the road (the driveway is 0.8 miles beyond the state border). The bridge is immediately east of the ranch buildings and corrals. Permission to use the property must be obtained from the ranch owners.

Stream Width: 40 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: The bridge crosses a relatively small pool. One anchor point is on the west bank, about 75 feet upstream of the bridge. The downstream anchor point (collection point) is on the east bank, downstream of the bridge about 100 feet, at the bottom end of the pool, just before a riffle. At low flows (less than 25 cfs) a single diversion boom will likely be adequate; however at higher flows a cascade system should be used.

#### Comments:

NOTE - As of March 2006, the property owner indicated he is not willing to allow responders onto this property, due to concerns relating to the previous oil spill response

Obtain permission for access to the site. Drive slowly on ranch property.

USGS 7.5 min Quad: Sweetwater Creek

**Coordinates:** N 38.42672 W 119.15177



# Site: East Walker River Site # EW17 – Rosachi Ranch Bridge (a.k.a. Sweetwater Rd. #1)

(Photo taken from southeast bank, looking upstream at bridge)

Site Rank:

А

Sensitive Site: No

**Directions to Site**: Take CA State Route 338 north of Bridgeport. At the California/Nevada border Highway 182 turns into NV Highway 338. Follow Highway 338 2.6 miles north of the California-Nevada border, and turn right onto Sweetwater Road. This is a dirt road. There is a sign at the turn-off that reads "Hawthorne – 38 miles). Go 1.5 miles on Sweetwater Road to the Rosachi Ranch Bridge.

Stream Width: 40 ft.

Boom Required: 250 ft. (minimum)

**Site Strategy**: The bridge crosses a long pool. Both sides are accessible; however, the north bank is high and steep, while the south bank is low and near the water. One anchor point is on the north about 100 feet upstream of the bridge. The downstream anchor point (collection point) is on the low south bank, about 100 feet downstream of the bridge at the bottom end of the pool, just before a riffle. It is recommend that a cascade system be used at all flows because of the length of boom required to span the river at the proper angle.

**Comments**: This is the first booming location on the East Walker River that is located in Nevada. There is a public parking area adjacent to the bridge, which provides ample parking. This site is situated on land owned by the U.S. Forest Service. A USFS key is required to unlock the gate that provides vehicle access to the collection point.

USGS 7.5 min Quad: The Elbow

Coordinates: N 38 26.424 W 119 06.360



Site: East Walker River Site # EW18 – Sweetwater Rd. #2 (Photo taken from southeast bank, looking upstream)

#### Sensitive Site: No

**Directions to Site**: Take Highway 182 north out of Bridgeport. At the California/Nevada border Highway 182 turns into Highway 338. Follow Highway 338 for 2.6 miles past the California/Nevada border, and turn right onto Sweetwater Road (dirt road). An alternate route would be to follow Highway 338 south from Smith Valley, NV to Sweetwater Road. Go 5.8 miles on Sweetwater Road to this location. The road passes immediately next to the river here, and there is a 50 yard stretch of open access to the river. This location is in Nevada.

Stream Width: 50 ft.

Boom Required: 400 ft. (minimum)

**Site Strategy**: The river is straight here and easily boomable. Anchor boom on the north side of the river (near a small ditch which enters the river on the north bank). The collection point is on the south bank.

**Comments**: There is no access to the other side of the river here, so a boat would be useful. There is another booming location 0.1 miles west of this location, which could also be used.

USGS 7.5 min Quad: The Elbow

Coordinates: N 38 25.546 W 119 02.493



Site: East Walker River Site # EW19 – Sweetwater Rd. #3 (Photo taken from east bank, looking upstream)

# Sensitive Site: No

**Directions to Site**: Take Highway 182 north out of Bridgeport. At the California/Nevada border Highway 182 turns into Highway 338. Follow Highway 338 for 2.6 miles past the California/Nevada border, and turn right onto Sweetwater Road (dirt road). An alternate route would be to follow Highway 338 south from Smith Valley, NV to Sweetwater Road. Go 7.2 miles on Sweetwater Road, and turn left on to dirt road #765. Go 0.7 miles to the river.

Stream Width: 60 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There is an excellent eddy on adjacent to the southeast bank, which would make for an ideal collection area. Anchor boom on the northwest bank 40 yards upstream of the collection area.

**Comments**: A boat would be useful here, as there is no access to the far side of the river. The dirt road is bumpy, but passable to this location. It is possible to drive equipment to within about 30 feet of the river.

USGS 7.5 min Quad: Ninemile Ranch/Mitchell Spring

Coordinates: N 38 25.916 W 119 00.978



Site: East Walker River Site # EW20 – Flying M Ranch (Photo taken from west bank, looking upstream)

# Sensitive Site: Yes

**Directions to Site**: This site can be accessed from two directions. One is to follow Sweetwater Road (as in the previous three sites) for 15.7 miles and then turn left (north) onto East Walker River Road (dirt road) and go another 19.8 miles. Then turn right (east) onto a small dirt road and go 0.1 miles to the river. Alternatively, take Pine Grove Road south from Mason Valley. Use of a GPS will aid in finding this site.

Stream Width: 50 ft.

**Boom Required**: 300 ft. (minimum)

**Site Strategy**: The best booming location is south of the parking area. Anchor on the north bank, and collect on the south bank in the area of a large eddy.

**Comments**: This site is a long way from any likely major spill sources. This site is located on private property owned by the Flying M Ranch. It would be necessary to cut a barbed wire fence in order to bring equipment to the river bank.

USGS 7.5 min Quad: Butler Mountain

Coordinates: N 38 35.375 W 119 59.997



Site: East Walker River Site # EW21 – Pitchfork Ranch Bridge (B-1615) (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: Follow S.R. 208 south from Yerington to Minister Rd. Proceed 3.6 miles on Minister Road to Bridge B-1615.

Stream Width: 60 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There are good booming locations upstream and downstream from the bridge; although the upstream location is preferable. The collection area is 60 feet upstream from the bridge on the east bank. Anchor 180 feet upstream from the bridge on the west bank.

**Comments**: Upstream sources of contamination are likely a significant distance away, as the land upstream from here is largely unpopulated until the river nears Bridgeport.

USGS 7.5 min Quad: Yerington SE

Coordinates: N 38 50.683 W 119 04.992



Site: East Walker River Site # EW22 – River Split Ranch Bridge (B-144) (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: Follow S.R. 208 south from Yerington several miles to Bridge B-144.

Stream Width: 70 ft.

Boom Required: 300 ft. (minimum)

**Site Strategy**: There is a diversion dam 100 yards upstream from the bridge. The area upstream of the dam would be a good booming location.

**Comments**: This is the last booming location identified on the East Walker River prior to the confluence with the West Walker River. Access to this location is through private property owned by the River Split Ranch.

USGS 7.5 min Quad: Yerington

Coordinates: N 38 52.652 W 119 08.676



Site: Walker River Site # WR1 – Nordyke Road (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 25 miles to the intersection of S.R. 208 and S.R. 339. From the intersection of S.R. 208 and S.R. 339 (south of Yerington, NV), proceed 3.9 miles north on S.R. 339. Turn right (east) on Nordyke Road to Bridge B-1611. Alternately, from the intersection of S.R. 339 and Highway 95A in Yerington, follow S.R. 339, 7.5 miles south to Nordyke Road.

Stream Width: 70 ft.

Boom Required: 400 ft. (minimum)

**Site Strategy**: This is an excellent booming location. The collection point is 150 feet upstream from the bridge, on the east bank. The anchor point is a cottonwood tree, 350 feet upstream from the bridge on the west bank.

**Comments**: This is the first booming location identified on the Walker River, after the confluence of the East Walker River and West Walker River. The confluence is 200 yards upstream from this location.

USGS 7.5 min Quad: Wilson Canyon

Coordinates: N 38 53.365 W 119 10.761


Site: Walker River Site # WR2 – Mason Road Bridge B-1281 (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 25 miles to the intersection of S.R. 208 and S.R. 339. From the intersection of S.R. 208 and S.R. 339 (south of Yerington, NV), proceed 8.3 miles north on S.R. 339. Turn right (east) on Mason Road and go to Bridge B-1281. Alternately, from the intersection of S.R. 339 and Highway 95A in Yerington, follow S.R. 339 2.5 miles south to Mason Road.

Stream Width: 90 ft.

Boom Required: 400 ft. (minimum)

**Site Strategy**: There are good booming locations both upstream and downstream from the bridge. Either location can be used.

**Comments**: The bridge provides access to both sides of the river.

USGS 7.5 min Quad: Yerington

Coordinates: N 38 57.253 W 119 11.235



#### Site: Walker River Site # WR3 – Bridge Street (Yerington) Bridge B-1408 (Photo taken from east bank, looking upstream at bridge)

#### Site Rank: A

#### Sensitive Site: No

**Directions to Site**: From Minden/Gardnerville, take Highway 395 south to Holbrook Junction. Turn east onto S.R. 208 and go 23.7 miles to the intersection of S.R. 208 and S.R. 339. From the intersection of S.R. 208 and S.R. 339 (south of Yerington, NV), proceed 10.6 miles north on S.R. 339. Turn right (east) onto Bridge Street (not to be confused with Bridge St. in Mason), and go to Bridge B-1408. Alternately, from the intersection of S.R. 339 and Highway 95A in Yerington, follow S.R. 339 2.5 miles south to Bridge Street.

Stream Width: 70 ft.

#### Boom Required: 400 ft. (minimum)

**Site Strategy**: This is a slow, straight stretch of the river which should be easily boomed. The best location is downstream from the bridge. Anchor just upstream from the bridge on the west bank, and collect 180 feet downstream from the bridge on the east bank

**Comments**: There is a large parking area on the east bank, downstream from the bridge near the collection area.

USGS 7.5 min Quad: Yerington

Coordinates: N 38 59.021 W 119 10.923



#### Site: Walker River Site # WR4 – Goldfield Road (Highway 95A) Bridge B-600 (Photo taken from bridge, looking upstream)

Site Rank: A

Sensitive Site: No

**Directions to Site**: From the intersection of S.R. 339 and Highway 95A in Yerington, follow 95A 0.1 miles south (east) to Bridge B-600.

Stream Width: 105 ft.

**Boom Required**: 500 ft. (minimum)

**Site Strategy**: There is a large diversion 50 yards upstream from the bridge. The diversion gate on the east bank of the river would make an ideal collection point. The anchor point is 300 feet upstream from the gate on the west bank. If necessary, a secondary boom could be set just upstream from the bridge. Anchor this boom on the east bank, using Willow trees located just downstream from the diversion gate. The collection point would be on the west bank, just upstream from the bridge.

**Comments**: This may be the best booming location in the Yerington area.

USGS 7.5 min Quad: Yerington

Coordinates: N 38 59.613 W 119 10.688

### COULD NOT ACCESS THIS SITE

### Site: Walker River Site # WR5 – Yerington Weir

Site Rank: A

Sensitive Site: No

**Directions to Site:** 

Stream Width: ft. Boom Required: ft. (minimum)

Site Strategy:

Comments:

USGS 7.5 min Quad: Yerington

Coordinates:



Site: Walker River Site # WR6 – Miller Lane Bridge (B-1519) (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Yerington, take Highway 95A north about 3 miles. Turn right (east) onto Miller Lane and go 2.5 miles to Bridge B-1519.

Stream Width: 30 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: There is a good collection area 100 feet upstream from the bridge on the west bank, adjacent to a concrete structure. However, access to this area is difficult due to heavy brush.

**Comments**: There are private property signs posted at this location. The limited access makes this a B site.

USGS 7.5 min Quad: Mason Butte

Coordinates: N 39 02.890 W 119 07.988



Site: Walker River Site # WR7 – Bybee Lane Bridge (Photo taken from bridge, looking upstream)

Sensitive Site: No

**Directions to Site**: From Yerington, take Highway 95A east about 5 miles. Turn left (north) onto Bybee Lane and go about 8 miles to the Bybee Lane Bridge (large power lines above).

Stream Width: 60 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: The collection area is just upstream from the bridge, on the south bank. Anchor on the north bank 50 yards upstream from the bridge.

**Comments**: This road is likely not passable under wet conditions. The site is located on Walker River Paiute Tribal Land.

USGS 7.5 min Quad: Wabuska

Coordinates: N 38 09.154 W 119 03.093



Site: Walker River Site # WR8 – Julian Lane #1 (Photo taken from bridge, looking downstream)

Sensitive Site: No

**Directions to Site**: See directions to Bybee Lane Bridge. Continue 6.4 miles past the Bybee Lane Bridge site. Then turn right towards river on a smaller dirt road.

Stream Width: 30 ft.

Boom Required: 200 ft. (minimum)

**Site Strategy**: The river is very slow here. The collection area is on the northeast bank, 30 yards south of where the dirt road hits the river.

**Comments**: This road may not be passable in wet conditions. This location is on Walker River Paiute Tribal Land.

USGS 7.5 min Quad: Parker Butte

Coordinates: N 39 06.985 W 118 58.028



Site: Walker River Site # WR9 – Julian Lane #2 (Photo taken from bridge, looking downstream)

Sensitive Site: No

Directions to Site: This location is 2.4 miles past (southeast) Julian Lane #1.

Stream Width: 40 ft.

**Boom Required**: 200 ft. (minimum)

**Site Strategy**: The river is very slow here. There is a stream gauge located here. The collection area is on the north bank, 40 yards downstream from the gauge. The anchor point is on the south bank, 20 yards upstream from the gauge.

**Comments**: This location is better than Julian Lane #1. This road may not be passable in wet conditions. This location is on Walker River Paiute Tribal Land.

USGS 7.5 min Quad: Parker Butte

Coordinates:



Site: Walker River Site # WR10 – Weber Reservoir Dam (Photo taken from bridge, looking downstream)

Sensitive Site: Yes

**Directions to Site**: Weber dam can be accessed via dirt roads from either Highway 95 or 95A. Via either route, it is approximately 10 miles from the dirt road turnoffs to Shurz.

Stream Width: N/A

Boom Required: 300 ft. (minimum)

**Site Strategy**: It would be possible to boom across the intake area on the upstream side of the dam.

**Comments**: There is a boat ramp at this location. The reservoir is located on Walker River Paiute Tribal land.

USGS 7.5 min Quad: Weber Dam

Coordinates: N 39 02.589 W 118 51.550

# Walker River Basin – General Information

#### Introduction to the Walker River

The Walker River Basin encompasses an area of approximately 4,050 square miles in the states of California and Nevada. The basin stretches in a generally northeasterly direction from its headwaters, located in the Sierra Nevada Mountains in Mono County, California, to its end at Walker Lake in Mineral County, Nevada, located approximately 160 miles away.

Approximately 75% (3,048 square miles) of the Walker River Basin is located in western Nevada, with the remaining 25% (1,002 square miles) situated in California. In Nevada, the Walker River Basin includes a large portion of Lyon County, but also includes sections of Douglas and Churchill Counties. The Walker River Basin is bounded by the crest of the Sierra Nevada Mountain Range to the southwest, the Pine Nut Mountain Range to the west, the Desert Mountain Range to the north, Gabbs Valley and the Gillis Mountain Ranges to the east, and the Excelsior Mountain Range to the southeast. The upper section of the Walker River is divided into two forks, the East Walker River and the West Walker River. These forks are separated by the Sweetwater Mountain Range and Pine Grove Hills. The East Walker River is separated from Walker Lake by the Wassuk Mountain Range.

Elevations range from approximately 4,000-7,000 feet in the valleys; mountain elevations are typically 2,000-5,000 feet higher than valley elevations. The highest Nevada peak is Mount Grant in the Wassuk Range near Walker Lake at an elevation of 11,239 feet. The highest California peak is Matterhorn Peak in the Sierra Nevada Mountain Range at an elevation of 12,264 feet. The majority of precipitation falls in the 25% of the basin that is located in California; however most of the basin's water consumption occurs in Nevada, with agriculture constituting the single largest use of water from the Walker River Basin.

#### Hydrologic Overview of the Walker River Basin

The major hydrologic features of the Walker River Basin include the two forks of the Walker River (the West Walker River and the East Walker River), the main stem of the Walker River, Weber Reservoir, and Walker Lake, as well as a number of lesser upstream storage lakes and tributaries.

The West Walker River is the larger of the two forks. It begins in California near the Yosemite National Park border, below Hawksbeak Peak (9,790 feet), Ehrnbeck Peak (11,240 feet), and Tower Peak (11,755 feet) and ends near Yerrington, Nevada, where the two forks join to form the Walker River. From its origin, the West Walker flows north for 14 miles to Leavitt Meadows and drops 4,000 feet in elevation. At Leavitt Meadows, the West Walker River is joined by Leavitt Creek and Brownie Creek. It then travels

northeast to Pickel Meadows, where it is joined by Poore, Little Wolf, Cloudburst, Wolf, and Silver Creeks. From Pickel Meadows, the West Walker flows east to U.S. Highway 395, near the Sonora Junction. Here it is joined by the Little Walker River and continues north for 10 miles through a canyon to Antelope Valley. Burcham, Driveway, Grouse, Deep, Mill, and Slinkard Creeks feed into the West Walker River in this section. A major diversion canal leaves the West Walker River for the Topaz Reservoir just before the river reaches the California/Nevada state line.

The West Walker River crosses the border into Nevada approximately 50 miles from its headwaters. It is joined by the outflow of the Topaz Reservoir approximately four miles into Nevada and continues to the northeast through Hoye Canyon into Smith Valley, and then through Wilson Canyon into Mason Valley. The Smith and Mason Valleys are primary agricultural areas. At this point, the West Walker River joins the East Walker River to form the Walker River, which continues through Mason Valley to the north.

The East Walker River begins in California just north of Mono Lake, below Mount Olsen (11,086 feet) and Dunderberg Peak (12,374 feet). Its sources include Virginia, Green, and Summers Creeks. The East Walker River flows into Bridgeport Reservoir, where it is joined by Robinson and Buckeye Creeks., and continues to the north-northeast for approximately 6 miles through a narrow valley to Devils Gate. From Devil's Gate, the valley widens and the East Walker River flows for another 6 miles to the east before it turns north and parallels the Wassuk Range. It continues in a northerly direction to the Mason Valley, where it joins the West Walker River to form the Walker River. By the time it reaches this confluence, much of the East Walker River's flow has been diverted for irrigation in the Mason Valley.

The Walker River begins in the Mason Valley, approximately seven miles south of Yerrington, Nevada, at the confluence of the East and West Forks. It continues north through Mason Valley and enters the Mason Valley Wildlife Management Area approximately 7 miles north of Yerrinton, Nevada. As it leaves this area, the Walker River loops in a clockwise direction back to the south, passing through the Walker River Paiute Indian Reservation and Campbell Valley, and entering Weber Reservoir 13 miles later. From Weber Reservoir, the Walker River continues south for approximately 21 miles to its end at Walker Lake.

Walker Lake is a terminal desert lake, meaning it has no outflow. It measures 13 miles long, 5 miles wide, and approximately 90 feet deep, with a volume of 2 million acre-feet of water. The waters of Walker Lake are typically characterized by high concentrations of total dissolved solids, high temperatures, low dissolved oxygen, and the presence of hydrogen sulfide. This poor water quality has threatened the viability of native fish species, although the lake does contain a viable population of Lahontan tui chub and is stocked with Lahontan cutthroat trout.

#### **Walker River Diversions**

Along the West Walker, East Walker and Walker River, there are numerous diversion structures which divert river water into irrigation ditches. Surface water withdrawals within the Walker River Basin are adjudicated under a Federal Consent Decree, administered by a federally appointed Water Master.

These diversion structures are identified in Figure W2-1 (to be included at a later date) Due to their accessibility and the fact that these structures lower the stream gradient and thereby cause water to back up, many of the diversion locations have been selected in this plan as booming locations. Table W2-1 summarizes information relating to these diversion structures including the corresponding identification number from Figure W2-1, name of the diversion structure and/or name of the associated irrigation ditch, and whether the structure has been identified as a booming location in this plan.

The Walker River Water Master and the Walker River Irrigation District have information regarding the ownership of the diversion structures and irrigation ditches. The Water Master and Irrigation District should be contacted in the event that there is a need to conduct response activities at one of these locations.

FIGURE W2-1 To be included at a later date.

ID # From	Name	River	Used as Boom Locations
1	Big Slough	W. Walker	Yes, Site #WW6 Big Slough Diversion
2		W. Walker	No
3	Swauger Ditch	W. Walker	No, located just downstream of Site #WW8 Cunningham Lane
4	Summer's Ranch/ Topaz Lake	W. Walker	Yes, Site #WW10 Summer's Ranch/Topaz Diversion
5	Hoye Canyon #1	W. Walker	Yes, Site #WW13 Hoye Canyon #1
6	Hoye Canyon #2	W. Walker	Yes, Site #WW14 Hoye Canyon #2
7	Wellington Bridge	W. Walker	No, just downstream from Site #WW14 Hoye Canyon #2
8	Wilson Canyon #1	W. Walker	Yes, Site #WW18 Wilson Canyon #1
9	Wilson Canyon #2	W. Walker	Yes, Site #WW19 Wilson Canyon #2
10		W. Walker	No, just downstream from Site #WW20 Wilson Canyon #3 and just upstream from Site #WR1 Nordyke Road
11	Goldfield Road/ Highway 95A	Walker River	Yes, Site #WR4 Goldfield Road/ Highway 95A
12	Goldfield Road/ Highway 95A	Walker River	Yes, Site #WR4 Goldfield Road/ Highway 95A
13	Yerington Weir	Walker River	Yes, Site #WR5 Yerington Weir
14	Yerington Weir	Walker River	Yes, Site #WR5 Yerington Weir
15		E. Walker Tributary	No
16		E. Walker Tributary	No
17		E. Walker Tributary	No
18	Sceirine Ranch	E. Walker	Yes, Site #EW Stateline
19	Sceirine Ranch	E. Walker	Yes, close proximity to Site #EW16 Sceirine Ranch
20	Rosachi Ranch	E. Walker	No, just upstream from Site #EW17 Rosachi Ranch
21	Flying M Ranch	E. Walker	No, upstream from Site #EW20 Flying M Ranch
22	Flying M Ranch	E. Walker	No, upstream from Site #EW20 Flying M Ranch
23		E. Walker	No
24		E. Walker	No
25		E. Walker	No
26		E. Walker	No
27	River Split Ranch	E. Walker	Yes, Site #EW22 River Split Ranch
28		E. Walker	No, downstream from Site #EW22 River Split Ranch

#### References

Nevada Division of Water Planning. *Walker River Basin 9: Nevada's Hydrogeographic Regions (Basins), Areas and Sub-Areas*. Retrieved August 1, 2005 from http://water.nv.gov/Water%20planning/basins/hydro\_09.htm

Nevada Division of Water Planning. *Walker River Chronology – A Chronological History of the Walker River and Related Water Issues: Part I – Overview*. Retrieved August 4, 2005 from http://water.nv.gov/Water%20planning/carson/carson1.htm

U.S. Geological Survey. Surface-Water Data for Nevada. Retrieved August 2005 from http://waterdata.usgs.gov/nv/nwis/sw

#### **Resource Matrix**

Walker River Geographic Response Plan May 2006 - Draft Resources (White Tab #3)

			S	Spec	cialize	ed F	erso	onne				-	Fecl	hnic	cal A	Advic	ce/In	forn	natic	on/D	Dutie	es			Equ	lipm	ent/	Clea	anup	)			Мо	deli	ng		Sa	mpl	ing/	Ме	asur	ring/	Ana	lyse	es
	Public Information Officer (PIO)	estigator for Hazma	Hazmat incident commander	Health officer	Emergency management coordinator		Wildlife Biologist	Fisheries Biologist	Industrial hygienist	Aquatic Toxicologist	Site safety	Public education	Tachnician/enecialist resonnee team		Emergency nouncauoris Declare health emergencies	Directives to responsible parties	Declare area safe	Environmental fate assessment	Technical and regulatory advice	Identify sensitive habitats	PRP oversight	GIS/mapping	Response Planning Operations	Provide environmental cleanup Water treatment	Cleanup technology assessment	Booms and adsorbent materials	SCBAs rescue equipment	Aerial photographs	Vehicles	Air support	Emergency Lighting Elow modeling	r iow model to estimate impact	Technical reference library	CAMEO/TOMES	Environmental fate	Toxicological modeling	Laboratory analyses	Water supply sampling	Streamflow measurement	Groundwater measurement	Hazard materials categorization	Water Quality Sampling/Analysis	Sediment Data Collection	Soil sampling	Biota Collection
Federal																																													
American Red Cross																																													
Bureau of Indian Affairs																																													
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US Fish & Wildlife Service						Α	X	Х		Х								Х	Х	Х													Х	(			в		Х			Х	Х		Х
USFS-Toiyabe National Forest																																													
USGS																																													
Water Master																																													
Tribal																																													
Fallon Paiute-Shoshone Tribe																																													
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Yerington Paiute Tribe																																													
State of California																																													
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National Guard	Х																1												Х	Х	Х						Ī								
Office of Emergency Services	Х				X)	( X	(					Х		)	x	Х			Х			Х	Х										Х	X		Х	Ī								
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A - Wildlife toxicology only B - By contract, if necessary

H - Heavy equipment, as necessary

U - Unified Command

#### **Resource Matrix**

Walker River Geographic Response Plan May 2006 - Draft Resources (White Tab #3)

			S	Spec	ializ	ed F	Perso	onne	el				Te	chn	cal	Adv	vice,	/Infc	orma	atior	n/Du	uties	5			Equ	ipm	ent/(	Clea	inup	)			Mo	delir	ng		Sa	mpl	ing/	Mea	asur	ing/	Ana	lyse	es
	Public Information Officer (PIO)	Special Investigator for Hazmat crimes	Hazmat incident commander	Health officer	Emergency management coordinator	Law eniorcement personnel Toxicologist	Wildlife Biologist	Fisheries Biologist	Industrial hygienist	Aquatic Toxicologist	Site safety	Public education	Water treatment of drinking water	Technician/specialist response team	Emergency notifications	Declare health emergencies	Directives to responsible parties	Declare area safe	Environmental fate assessment	Technical and regulatory advice	Identify sensitive habitats	CIC/manning		Brovido convincemental alconum	Provide environmental cleanup Water treatment	Cleanup technology assessment	Booms and adsorbent materials	SCBAs rescue equipment	Aerial photographs	Vehicles	Air support	Emergency Lighting Flow modeling	River model to estimate impact	Technical reference library	CAMEO/TOMES	Environmental fate	Toxicological modeling	Laboratory analyses	Water supply sampling	Streamflow measurement	Groundwater measurement	Hazard materials categorization	Water Quality Sampling/Analysis	Sediment Data Collection	Soil sampling	Biota Collection
-Fire Department																																														
-Sheriff's Office																																														
Mono County																																														
-Conservation District																																														
-Environmental/Public Health Department				Х	Х							Х			Х	Х						)	X									Х														
-Fire Department			Х																																											
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State of Nevada																																														
Highway Patrol																																														
NDOT																						)	X																							
Department of Wildlife																				2	X																									Х
Div. of Emergency Management					X							Χ			Х																															
Div. of Environmental Protection	Х											Χ					Х			X	)	<b>x</b> )	x																							
Div. of Water Planning																																														
NV Laboratories																																														
NV Natural Heritage							Х																																							
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Sierra Fire Protection Dist. (NDF)																																														
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-Environmental Health Department				Х	Χ				Χ			Χ				X	Х	Х		Χ														Х												
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-Sheriff's Office												Τ		Τ	Τ					Τ											Τ													Τ		

A - Wildlife toxicology only

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H - Heavy equipment, as necessary

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#### **Resource Matrix**

Walker River Geographic Response Plan May 2006 - Draft Resources (White Tab #3)

			S	Speci	alize	ed P	erso	nne					Тес	chni	cal	Adv	ice/l	Info	rma	ation	/Dut	ies			E	quip	mer	nt/Cl	ean	up			Ν	Mod	elin	g		Sar	npli	ng/l	Mea	asur	ing//	Ana	yses
	Public Information Officer (PIO)	Special Investigator for Hazmat crimes	Hazmat incident commander		Emergency management coordinator	Toxicologist	Wildlife Biologist	Fisheries Biologist	Industrial hygienist	Aquatic Toxicologist	Site safety	Public education	Water treatment of drinking water	l echnician/specialist response team	Emergency notifications	Declare health emergencies	Directives to responsible parties	Declare area sale Environmental fate accessment	Technicel and requilatory advice	recrimical and regulatory advice Identify sensitive habitats	PRP oversight	GIS/mapping	Response Planning Operations	Provide environmental cleanup	Water treatment	Cleanup technology assessment	Booms and adsorbent materials	SUBAS rescue equipment Aerial nhotographs	Vahicles	Air support	Emergency Lighting	Flow modeling	River model to estimate impact	Technical reference library	CAMEO/TOMES	Environmental fate	Toxicological modeling	Laboratory analyses	Water supply sampling	Streamflow measurement	Groundwater measurement	Hazard materials categorization	Water Quality Sampling/Analysis	Sediment Data Collection	soll sampling Biota Collection
Douglas County											-																		+													_	-	-	
-East Fork Fire and Paramedic Districts																																											-		
-Emergency Management																															1													-	
-Sheriff's Office						1																1						+	1		1	1	1	1										+	
Lyon County																																													
-Mason Valley Fire Department																																													
-Sheriff's Office																																													
Mineral County																																													
-Fire Department																																													
-Sheriff's Office																																													
Storey County																																													
-Fire Department																																													
-Sheriff's Office																																													
Local Nevada																																													
Fallon																																													
Gardnerville																																													
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# **Roles and Responsibilities**

#### Local Government Agencies

#### Fire Departments

Local fire departments provide incident support for the incident commander. The fire department works within the incident command system as needed for fire suppression and/or rescue activities. Fire departments also function to provide emergency decontamination, treatment, and transportation of patients injured as a result of a hazardous materials incident.

#### Local Emergency Planning Committees (LEPC)

The LEPCs provides a regional oversight to hazardous materials response planning. These plans include local oil and hazardous materials response. The LEPCs recommendations are discharged through the Administering Agencies.

#### Public and Environmental Health Services (EH)

Environmental health is designated as the administering agency in California. Duties include identification of product, approval of cleanup, public notification, and determining when an event is "clean" and safe for public reentry. EH is responsible to contact CalEPA—Department of Toxic Substance Control to access California superfund monies for clean up operations.

#### County Sheriff's Offices / Town Police Department (LE)

Law enforcement is designated by the area plan as the incident commander for off- highway areas including county and private properties. LE is responsible for overall scene management, resource coordination, and resource management.

#### Office of Emergency Services (OES)

OES assists the incident commander with coordination of resources at incidents that involve multiple agencies, including local, state, and federal. OES also assists the incident Information Officer to ensure timely and accurate information is disseminated to the public.

#### County / Town Public Works Department (PW)

Public Works is responsible to clean up spills occurring on roadways maintained by their agency when the responsible party is unknown or unable to pay for clean up.

#### State of California

#### Governor's Office of Emergency Services (OES)

OES is the designated state agency responsible for coordinating the mitigation, preparedness, response, and recovery activities related to all disasters in California. To facilitate coordination of emergency response resources, OES operates the central notification and reporting system for the State of California, through the OES Warning Center. Once the Warning Center receives a warning or notification of a hazardous materials incident, the on-duty Warning Center coordinator will then make the appropriate notifications (via fax, phone, and/or pager) to local, state, and federal agencies. OES coordinates mutual aid within the state and operates both the regional and state emergency operations centers. OES is delegated substantial emergency duties under the California Emergency Services Act.

When off-highway spills of hazardous substance impact human health and safety as the primary concern OES will assume the role of State On-Scene Coordinator (SOSC), as designated in the California Government Code section (CGC) §8574.17. During these off-highway incidents the California Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR) may function in a support capacity for wildlife issues in order to assist the lead agency or SOSC.

As of September 2005, California is a member of the Emergency Management Assistance Compact (EMAC).

#### California Department of Fish and Game (DFG)

DFG is the law enforcement agency charged to preserve, protect, and enhance the state's fish, wildlife, and their habitat (Fish and Game Code, Sec. 711.7). Because of this responsibility, and because polluting the environment of fish or wildlife or their habitat is a criminal offense (Fish and Game Code, Sec. 5650), DFG has traditionally accepted the role of lead state agency at off-highway spills whenever fish, wildlife, and/or their habitat are threatened or injured by a spill of oil, hazardous substance, or other deleterious material. When a hazardous substance spill is no longer a threat to public safety, but continues to pose a threat to fish or wildlife or the habitat, DFG may assume the lead state role as SOSC for the remainder of the clean up.

#### California Highway Patrol

CHP is the designated state agency responsible to function as the Incident Commander or part of the Unified Command for all hazardous materials incidents that occur on all state highways and freeways, as designated in California Vehicle Code § 2454. In addition, CHP is also the Incident Commander at all hazardous materials incidents that occur on county roads. In situations where another agency first becomes aware of an incident within CHP jurisdiction, the CHP shall be notified and provided with emergency information to ensure a safe response.

#### California Environmental Protection Agency (Cal/EPA)

Cal/EPA is the umbrella agency designated to oversee the following Boards, Departments, and Offices:

- California Air Resources Board (ARB) ARB is the designated state agency responsible to protect and enhance the ambient air quality of the state. The ARB fulfills this responsibility through local and regional air pollution control authorities. Notification to the ARB is required for hazardous materials incidents that threaten to adversely affect air quality.
- California Department of Pesticide Regulation (DPR) DPR is the designated state agency responsible for regulating the registration, sale, and use of agricultural chemicals (including pesticides, fertilizers, and livestock drugs) prior to entering the waste stream.
- California Department of Toxic Substance Control (DTSC) DTSC is the designated state agency responsible for providing executive management and control of the State's Toxic Control Program and is the lead for the handling, storage, treatment, and disposal of hazardous wastes. In addition, DTSC coordinates emergency funding for off-highway emergency response incidents, clandestine drug lab cleanups (including abandoned hazardous wastes resulting from these labs), and oversees the cleanup of sites contaminated with hazardous substances.
- California Integrated Waste Management Board (IWMB)
   IWMB is the designated state agency responsible for overseeing municipal solid waste landfills, other non-hazardous waste or recycling facilities, used oil and household hazardous waste facilities, and waste tire facilities.
- Office of Environmental Health Hazard Assessment (OEHHA) OEHHA is the designated state agency responsible to assess health effects and characterize risk to public health and the environment from toxic chemical releases in the environment.
- State Water Resources Control Board (SWRCB) SWRCB is the designated state agency responsible to protect the state's surface, coastal, and ground water resources. This involves a proactive role in providing technical assistance in evaluating the potential impact of hazardous materials spills to water resources. In addition, SWRCB issues cleanup and abatement or cease and desist orders to responsible parties, assesses fines, and pursues recovery of costs for abatement, mitigation, or contract cleanup.

There are nine Regional Water Quality Control Boards (RWQCB), one located in each of the nine major watersheds of the state. Regional Water Quality Control Boards develop basin plans, issue waste discharge requirements, take enforcement action against violators, and monitor water quality. They carry out state and federal law and are guided by policies established by the State Water Resources Control Board. The Lahonton Regional Water Quality Control Board serves the Carson River area.

#### California Department of Forestry and Fire Protection (CDF)

The California Department of Forestry and the State Fire Marshal have consolidated into the California Department of Forestry and Fire Protection (CDF) protects the people of California from fires, responds to emergencies, protects and enhances forest, range, and watershed values, providing social, economic, and environmental benefits to rural and urban citizens. CDF performs fire protection suppression and prevention duties for about 30 million acres of wildland in the state. In addition to their state responsibilities, CDF may provide fire service to some local jurisdictions under contract. In such cases, CDF carries out the responsibilities of local fire suppression agencies as they relate to hazardous materials incidents.

The State Fire Marshal's Office was consolidated into CDF as mentioned above, which includes all the Fire Marshal's resources and responsibilities including oversight responsibilities for pipelines within the state of California.

#### California Department of Health Services (CDHS)

CDHS is the designated state agency responsible to protect public health from the effects of hazardous and radioactive materials. CDHS has statutory responsibility for the regulation of public water systems to ensure that drinking water is safe, wholesome, and potable. In the event of a hazardous materials spill or threatened release which affects a public water system or source of drinking water such as a lake, river, or aqueduct, the Drinking Water Field Operations Branch within CDHS will work with the water utility to prevent contamination of the system. Notification is required for radioactive material incidents; releases involving a public water system or drinking water source; releases affecting a food, drug, medical device, cosmetic, or bottled water manufacturer or wholesaler; or significant releases affecting a large population or involving deaths, serious injuries, evacuations or in-place sheltering

#### California Department of Parks and Recreation (DP&R)

DP&R is the designated state agency responsible for the administration of State Parks, and for the safety and well being of the public and employees using the state parks system.

#### California Department of Transportation (CalTrans)

CalTrans is the designated state agency responsible for planning, designing, constructing, operating, and maintaining the state highway system. In coordination with other response agencies they ensure proper cleanup and restoration of the highway within its rights-of-way. CalTrans is responsible to determine the degree and type of maintenance required to restore the flow of traffic while protecting the health, safety, convenience, and welfare of the general public. It should also be noted that CalTrans determines when the roadway is re-opened.

#### California Department of Water Resources (DWR)

DWR is the designated state agency responsible to protect the operation and water quality of the State Water Project. This includes providing water of a quality that can be used for agricultural, recreational, municipal, and industrial purposes. Activities supporting this responsibility include protection of State Water Project facilities and flood control facilities. Notification to DWR is required when an incident threatens to contaminate or otherwise disrupt the operation of the State Water Project and its manmade and natural conveyance facilities or if a significant release of a hazardous substance occurs into the San Joaquin Delta.

#### California National Guard (CNG)

CNG is a state military agency that provides support to fire and law enforcement operations, aviation, general transportation, and other support for emergency operations. In the event of a major hazardous materials incident, the CNG can provide many resources and support functions. In addition, the CNG has Weapons of Mass Destruction Civil Support Teams (CST). The CSTs are designed to support local incident commanders and local emergency first responders 24 hours a day, seven days per week for any weapons of mass destruction terrorist event. The team assesses the situation, advises civilian authorities on appropriate actions, and provides assistance to expedite the arrival of additional state and federal resources.

#### California Occupational Safety and Health Administration (Cal/OSHA)

Cal/OSHA is the designated state agency responsible to prevent and regulate occupational exposures and injuries in the workplace. Cal/OSHA also administers the Process Safety Management Program (which is closely aligned with the CalARP program). Regulations regarding worker health and safety at hazardous materials incidents are contained in 8 CCR 5192. Cal/OSHA has the capability to evaluate the adequacy of health and safety plans designed to protect employees from exposure to hazardous materials during hazardous materials response and recovery operations.

#### California Public Utilities Commission (CPUC)

The Railroad Operations and Safety Branch of the CPUC have responsibility and authority for investigation of railroad accidents. This includes those incidents involving hazardous materials. It performs railroad safety oversight of daily operations and inspections of new and existing facilities for compliance with the PUC General Orders and with 49 CFR.

#### California State Lands Commission (SLC)

SLC acting as trustee for the people of California holds and manages all sovereign lands of the state. These lands include the beds of more than 30 navigable rivers, 40 navigable lakes, and submerged land adjacent to the coast and offshore islands of the state from the mean high tide line to three nautical miles offshore. Additionally, SLC manages more than 500,000 acres of "school lands" and exercises general oversight authority on granted lands. SLC has specific statutory jurisdiction over the operation of marine oil terminals located in the state, as well as trustee responsibility at other marine facilities on lands leased from the state.

#### Emergency Medical Services Authority (EMSA)

EMSA is the designated state agency responsible for planning and coordinating the state's medical response to disasters. At the request of the impacted jurisdiction, EMSA can arrange for emergency procurement and distribution of medical supplies. In conjunction with the affected medical associations, EMSA develops general guidelines for the triage and handling of contaminated/exposed patients. Notification is required when a significant number of human exposures, any evacuation, or when a chemical fire or vapor cloud has occurred or is expected to occur.

#### State of Nevada

#### Nevada Division of Emergency Management (NDEM)

NDEM is the central contact point for coordination of state and federal agencies during an emergency response situation in Nevada. NDEM is not an active response agency and has no in-house emergency response resources, but will provide coordination of resources needed for the response. Nevada is a member of the Emergency Management Assistance Compact (EMAC).

#### Nevada Highway Patrol (NHP)

NHP has statutory responsibility to police all primary and secondary highways in Nevada and to investigate all accidents that occur on those highways, including hazardous materials incidents.

#### Nevada State Emergency Response Commission (SERC)

Nevada SERC is primarily responsible for Nevada's compliance with the Federal Emergency Preparedness and Community Right to Know Act. The SERC acts in a preventative/planning capacity to coordinate working relationships among state, local, federal, and private agencies and industries.

#### Nevada Division of Environmental Protection (NDEP)

NDEP has Duty Officers available around the clock to receive spill reports. NDEP provides technical assistance on environmental matters, regulates hazardous waste, conducts sampling, and makes final decisions on remediation in the State (except for decisions made by the Washoe County District Health Department in that county). NDEP is currently developing emergency response capabilities. The Bureau of Corrective Action oversees cleanups being conducted on contaminated sites and enforces environmental regulations. The Bureau of Waste Management oversees and inspects facilities that generate, store and dispose of hazardous materials.

#### Nevada Division of Health (NDH)

NDH is responsible for the public's health and can test for contamination from chemicals and organisms. Other sections of the division that may assist are:

- Radiological Health Radiological Health is responsible for the incidents involving radioactive materials.
- Emergency Medical Services (EMS) EMS assists in coordinating emergency medical response.

#### Nevada Division of Investigations (NDI)

NDI conducts criminal investigations at crime scenes, including HazMat incidents. Their responsibilities include protecting the crime scene, collecting evidence, initiating investigations and providing investigative support to other agencies. NDI investigators are capable of making entries into hazardous environments.

#### Nevada Department of Transportation (NDOT)

NDOT has highway maintenance yards throughout the state with heavy equipment and other resources that may be used by the local responder under certain circumstances. NDOT has the power to close highways to traffic.

#### Nevada Department of Motor Vehicles and Public Safety

The Department of Motor Vehicles and Public Safety controls the licensing and regulation of commercial carriers through the state. The NHP is part of the department and enforces highway transportation regulations in the state. NHP also controls the Nevada law enforcement communications net that may be used for emergency communications.

#### Nevada State Fire Marshall

The Fire Marshall's office functions to promote and develop ways and means of protecting life and property from fire. As part of the Division of the State Fire Marshall, the Nevada Hazardous Materials and Fire Training Center provides training statewide to fire personnel, industry, business, governmental agencies, and private citizens. The State Fire Marshall's Office provides technical assistance on fire and life safety issues, investigates the cause of fires, and provides law and code enforcement.

#### Nevada Department of Wildlife (NDOW)

NDOW can provide rescue and rehabilitation support for fish and other wildlife in the river.

#### Nevada Division of Forestry (NDF)

NDF can provide manpower, aircraft, and heavy equipment to support emergency response personnel. Response times for these resources are usually two to four hours. Aircraft support includes several helicopters used for fire fighting, personnel transport, and rescue efforts. Heavy equipment that can be provided by NDF includes bulldozers and road graders. NDF utilizes inmate labor.

#### Nevada Occupational Safety and Health Enforcement Section (OSHES)

OSHES enforces health and safety standards required by the Nevada Occupation Safety and Health Act, and assists employers in identifying and correcting unsafe working conditions. OSHES can evaluate health and safety plans designed to protect employees from exposures to hazardous materials during HazMat responses and recovering operations.

#### **Tribal Government**

Walker River Paiute Tribe

To be added at a later time.

#### Washo Tribe of California and Nevada

The Washo Tribe's traditional territory covered an area from Honey Lake in Northern California and south to Topaz Lake California and extended outwards towards Pyramid Lake to the east and westward to the west slopes of the Sierra Nevada Mountains with Lake Tahoe as the center of the Washoe World. The Washo Tribe has been dependant on the free flowing rivers, streams, springs and lakes for thousand of years. There is great reverence to those places with stories and legends built around them. All water is viewed as life itself and has the healing powers that, has sustained the Washo People. The tribe has seen many changes in the environment, including the non-native immigrant population that has altered the ecosystem and river characteristics. In response the tribe has created the Washo Environmental Protection Department (WEPD) to respond to impacts and effects of the water quality in Washoe Country.

The responsibility of the Washo Tribe of California and Nevada for the waters that flow through the Tribal Lands in Nevada; the tribe is responsible for the management of two diversion dams located on the East Fork of the Carson River at the Dresslerville Ranch in Douglas County Nevada.

The Washo Tribe of California and Nevada is working collaboratively with other agencies to develop a regional response system for the protection of the river system in the event of a disaster situation. The tribe has very limited resources and for which the Tribe can only offer limited involvement if in the event of a river disaster and those resources are listed in the matrix.

#### Yerington Paiute Tribe

The Yerington Paiute Tribal lands encompass property in the vicinity of Yerington, NV. The Tribal resources include Tribal Law Enforcement, Emergency Operations Management and an Environmental program. At the current time, the Tribe does not have emergency response capabilities with regard to a spill impacting the Walker River.

#### **Federal Government**

#### U.S. Environmental Protection Agency (USEPA)

The USEPA has ten regional offices throughout the Nation. California and Nevada are within the boundaries of EPA Region IX. The USEPA is the primary federal agency involved in a hazardous materials emergency response.

The USEPA ensures that a timely and effective response is made to control and remove the discharge of oil or hazardous materials in the inland zones. The USEPA will assign the Federal On-Scene Coordinator (FOSC) in the event of a discharge into the inland zone, and can request activation of the USCG Pacific Strike Team.

The FOSCs in the USEPA Region IX Emergency Response Section can be contracted through the 24-hour emergency hazardous materials spill phone line at (800) 300-2193.

Depending on the site location, the FOSC could potentially be on-site in approximately four hours. A support staff consisting of members of the Superfund Technical Assessment and Response Team (START) and the Pacific Strike Team would accompany the FOSC. Additional emergency response resources, manpower, and equipment would be mobilized as necessary. Upon arrival on-site, the USEPA response organization can be integrated into the ICS command structure.

The START contract is designed to provide the FOSC with a broad range of technical support services for oil and chemical releases. The START maintains field offices in San Francisco and Los Angeles that are dedicated to the USEPA emergency response operations. Professional disciplines include chemistry, geology, biology, hydrogeology, soil science, environmental engineering, and industrial hygiene. Team capabilities include full media sampling, air monitoring, field and laboratory analysis, data management, quality assurance, health and safety, and other aspects of emergency response operations.

The USCG Pacific Strike Team (PST) is a very specialized unit within the Coast Guard whose mission is to prepare for, and response to oil and other chemical emergencies. The highly trained members of the PST maintain and deploy specialized equipment in support of the FOSC in response to inland spills. The PST will provide assistance in response planning and logistics, spill response techniques, medical monitoring, cost documentation, and operations oversight.

Actual cleanups are directed by the FOSC and performed by companies contracted through EPA's Emergency Rapid Response Services (ERRS). The ERRS contractor arranges for transfer of waste to the appropriate facilities and/or explores treatment options for hazardous and non-hazardous materials in a response.

#### U.S. Department of Homeland Security – U.S. Coast Guard (USCG)

The USCG administers the National Oil Pollution Fund. This fund can be accessed by FOSCs to respond to and mitigate oil spills. States may be reimbursed from this fund for reasonable costs incurred during oil spill removals.

#### U.S. Department of Energy (USDOE)

The USDOE can be contact for assistance involving radioactive materials through the California Department of Health Services Radiological Health Branch, through the National Response Center (800) 424-8802, or directly contacting the DOE Radiological Assistance Coordinating Officer. The USDOE can provide advice and assistance in identifying sources and extent of radioactive contamination. They can also remove and dispose of radioactive materials.

# U.S. Department of Health and Human Services – Agency for Toxic Substances and Disease Registry (ATSDR)

The ATSDR provides leadership and direction to programs and activities designed to protect both the public and workers from exposure and/or the adverse health effects of hazardous substances in storage sites or released in fires, explosions, or transportation accidents.

#### U.S. Department of Agriculture - Forest Service (USFS)

The USFS has responsibility for protection and management of national forests and grasslands. The USFS has personnel, laboratory, and field capacity to measure, evaluate, monitor, and control as needed, releases of pesticides and hazardous substances on lands under its jurisdiction. The USFS will respond to hazardous materials incidents and oil spills within the boundaries of the National Forest with available equipment and personnel as necessary when notified of such incidents.

#### U.S. Department of Defense (USDOD)

The USDOD provides the FOSC with information regarding releases of hazardous substances, pollutants, or contaminants from USDOD vehicles or rail cars. The U.S. Army Corps of Engineers and the U.S. Army's Explosives Ordnance Detachments are two USDOD organizations, which under some circumstances may provide the most relevant assistance to the Carson River area.

#### U.S. Department of Interior (USDOI)

The USDOI has stewardship responsibility for most of the nationally owned public lands and natural resources. The Bureaus of the USDOI include:

- National Parks Service
- U.S. Fish and Wildlife Service
- Bureau of Indian Affairs
- Bureau of Land Management
- Minerals Management Service
- U.S. Geological Survey
- Office of Surface Mining
- Bureau of Reclamation

#### U.S. Department of Justice - Environment and Natural Resources Division

The Environment and Natural Resources Division is responsible for litigating significant case ranging from protection of endangered species to cleaning up the Nation's hazardous waste sites.

#### U.S. Department of Labor - Occupational Safety and Health Administration (OSHA)

OSHA can provide advise, guidance, and assistance regarding hazards to persons involved in removal or control of oil discharges or releases of hazardous substances. OSHA is also responsible for the enforcement of worker health and safety regulations.

#### U.S. Department of Transportation (USDOT)

The USDOT includes:

- Federal Aviation Administration
- Federal Highway Administration
- Federal Railroad Administration (FRA) The FRA promulgates and enforces rail safety regulations, administers railroad assistance programs, and conducts research and development in support of improving railroad safety and national rail transportation policies.
- National Highway Traffic Safety Administration
- Federal Transit Administration
- Saint Lawrence Seaway Development Corporation
- Maritime Administration
- Pipeline and Hazardous Materials Safety Administration (PHMSA) The PHMSA is responsible for hazardous materials transportation research and development activities, and for collection and dissemination of air carrier economic data. The Office of Hazardous Materials Safety develops and issues regulations for the safe transportation of hazardous materials by all modes, excluding bulk transportation by water.
- Bureau of Transportation Statistics

#### Federal Bureau of Investigation (FBI)

The FBI is the lead agency for sites involving counter-terrorism activities. In addition, the FBI would be responsible for a site involving weapons of mass destruction including nuclear, biological, and chemical weapons.

#### Federal Emergency Management Agency (FEMA)

FEMA is responsible for administering the Federal Disaster Assistance Program in affected areas after the declaration of an emergency or a major disaster. Such a declaration must be requested by the Governor of the State and declared by the President.

#### National Oceanic and Atmospheric Administration (NOAA)

NOAA provides scientific support to the FOSC for emergency responses. NOAA also provides contingency planning in coastal and marine areas. When requested by the USEPA, NOAA provides scientific support for emergency responses in inland areas.

#### Water Master

To be added at a later time.

#### **Private/Public Organizations**

To be added at a later time.

# WRGRP's Relationship to Other Plans



## Incident Command System Forms

Electronic ICS Forms can be downloaded from the NOAA Office of Response and Restoration website:

http://response.restoration.noaa.gov/oilaids/ICS/intro.html

# Acronyms

ARB	Air Resources Board
ATSDR	Agency for Toxic Substances and Disease Registry
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Agency
CalTrans	California Department of Transportation
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CDHS	California Department of Health Services
CGC	California Government Code
CHP	California Highway Patrol
CNG	California National Guard
CPUC	California Public Utilities Commission
CST	Civil Support Team
CRGRP	Carson River Geographic Response Plan
DP&R	California Department of Parks and Recreation
DPR	California Department of Pesticide Regulation
DTSC	California Division of Toxic Substance Control
DWR	California Department of Water Resources
EH	Environmental Health
EMAC	Emergency Management Assistance Compact
EMS	Emergency Medical Service
EMSA	Emergency Medical Services Authority
ERRS	Emergency Rapid Response Services
FBI	Federal Bureau of Investigations
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FRERP	Federal Radiological Emergency Response Plan
FRA	Federal Railroad Administration
HWMP	Hazardous Waste Management Plan
ICS	Incident Command System
IWMB	California Integrated Waste Management Board
LE	Law Enforcement
LEPC	Local Emergency Planning Committee
NBC	Nuclear, Biological, Chemical
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
NDEM	Nevada Division of Emergency Management
NDEP	Nevada Division of Environmental Protection
NDH	Nevada Division of Health
NDI	Nevada Division of Investigations
NDOT	Nevada Department of Transportation

NDOW	Nevada Department of Wildlife
NHP	Nevada Highway Patrol
NOAA	National Oceanic and Atmospheric Administration
OEHHA	California Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
OSHES	Nevada Occupational Safety and Health Enforcement Section
OSPR	California Oil Spill Prevention and Response
PIO	Public Information Officer
PPE	Personal Protective Equipment
PG&E	Pacific Gas and Electric
PST	U.S. Coast Guard, Pacific Strike Team
PUD	Public Utilities District
PW	Public Works
RCP	Region IX Oil and Hazardous Substance Pollution Contingency Plan
RSPA	Research and Special Programs Administration
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SCBA	Self Contained Breathing Apparatus
SERC	State Emergency Response Commission
SHPO	State Historic Preservation Office
SLC	California State Lands Commission
SOP	Standard Operating Procedure
SOSC	State On-Scene Coordinator
START	Superfund Technical Assessment and Response Team
SWRCB	State Water Resources Control Board
USBIA USBLM USBOR USCG USDA USDOD USDOE USDOI USDOT USEPA USFS USFWS USFS USFS	<ul> <li>U.S. Bureau of Indian Affairs</li> <li>U.S. Bureau of Land Management</li> <li>U.S. Bureau of Reclamation</li> <li>U.S. Coast Guard</li> <li>U.S. Department of Agriculture</li> <li>U.S. Department of Defense</li> <li>U.S. Department of Energy</li> <li>U.S. Department of Interior</li> <li>U.S. Department of Transportation</li> <li>U.S. Forest Service</li> <li>U.S. Geological Survey</li> </ul>
WMD	Weapons of Mass Destruction
WRGRP	Walker River Geographic Response Plan

**Distribution Log** Numbered copies of the Walker River Geographic Response Plan have been distributed to the following agencies and/or individuals:

Name	Agency	Address 1	Address 2	City	State	Zip

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### **Record of Review**

The Walker River Geographic Response Plan is to be reviewed at least annually. Document plan reviews in the following table.

Review Date	By (Print)	Signature

Record of Changes Record changes to the Walker River Geographic Response Plan in the following table.

Change No.	Date Posted	Brief Description of Change	By (Print Name)	Signature