

California's Response to USCG Nationwide Standardization of Area Contingency Plans

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ABSTRACT (#687340)

California Department of Fish and Wildlife (CDFW) - Office of Spill Prevention and Response (OSPR), working with the United States Coast Guard (USCG), and Area Committee members, made significant strides to streamline the Area Contingency Plans (ACPs) for improved efficiency and statewide consistency to adhere to new USCG guidance. Beginning with Sector San Diego's ACP, which underwent major revision in 2018, and Sector Los Angeles/Long Beach in 2019, OSPR worked closely with USCG to ensure that there is comparable information statewide, improved maps and GIS compatibility, and updated environmentally and economically sensitive site information. OSPR created a new environmental sensitive site database, including more user-friendly Geographic Response Strategy pages for those identified sites. OSPR also revised the content of Section 9800, which describes the environmental, cultural, historic, and economic sensitivities of a given ACP area, and includes the Geographic Response Strategies. This paper describes in detail the contributions and changes that OSPR has made to California ACPs since 2018. It highlights its approaches to streamlining for efficiency and statewide consistency and lessons learned from the new revision and approval processes.

INTRODUCTION

The United States Coast Guard (USCG) and California Department of Fish and Wildlife (CDFW) - Office of Spill Prevention and Response (OSPR) have jointly prepared oil spill contingency plans coastwide since their inception following the enactment of the Oil Pollution Act of 1990 (OPA-90). Historically, despite USCG's best efforts, varying guidance and oversight for completion of the Area Contingency Plans (ACPs) has resulted in inconsistencies and information gaps. This is true for the six ACPs in California as well. Furthermore, formatting, content, robustness, usability, and validation have varied both nationally and within California.

Federal On Scene Coordinators (FOOSC) within USCG Districts and Sectors are responsible for creating and maintaining the coastal ACPs. As the FOOSC, they also serve as the co-chairs for the six Area Committees (multijurisdictional bodies that maintain and update the ACPs). Dedicated USCG ACP Coordinators, which can be either civilians or active duty members, were created in 1992 to assist with the plans. Guidance in the form of memos, checklists, templates, and a USCG Marine Environmental Response and Preparedness Manual have evolved as well as the ACP revision and approval processes. From 1996 to 2002 USCG-Pacific Area and District 11 were combined to support a single review for both, but lacked national review. USCG reorganized in 2003, separating District 11 from USCG-Pacific Area, and the ACP review process continued at the District-level without headquarters involvement. Between 2000 and 2018, all plans within a District were simultaneously revised every 3 years, and the USCG was mostly successful in meeting that timeline.

OSPR has always participated in the planning and revision processes as the State On Scene Coordinator (SOSC) and co-chairs of the Area Committees. OSPR, being both the lead natural resource trustee and oil spill response agency for the State, provides technical expertise

and resources that are unique and unavailable in many other USCG Districts. Since its inception, OSPR has supported the ACPs through GIS and mapping resources, crafting and maintaining plan content (e.g. State Oiled Wildlife Response Plan and Section 9800, which describes the environmental, cultural, historic, and economic sensitivities of a given ACP), and surveying for and validating the Geographic Response Strategies for environmentally sensitive sites. OSPR's statewide coordination of these efforts has fluctuated over the decades as responsibility moved between headquarters and the field office staff. Internal communication, guidance, and timelines were never formalized. Shifts in program coordination and plan management led to varying degrees of District-wide and statewide consistency in the revision processes, information and data management, and content throughout the years.

2017 USCG ACP REVITALIZATION

After the Deepwater Horizon oil spill in 2010, state and federal agencies revived attention on the ACPs. Many of the coastal ACPs left both oil spill responders and the public wanting more. It became imperative that the USCG improve the consistency, usability, and approval process of ACPs nationally. Between 2016 and 2017, an ACP Summit and a planning workshop were held, and a comprehensive national survey of ACP stakeholders was conducted. The goal was to identify strengths and weaknesses then set goals, objectives, and areas of emphasis for future ACP revisions.

The result of these efforts was translated into guidance and internally distributed via two USCG memos in 2017, then rolled into the revised Marine Environmental Response and Preparedness Manual in 2018. The Manual instructed that the Environmental Response Management Application (ERMA; GIS based online mapping tool) would be used as a standard

repository for environmental data (California had already been doing this). The response strategies for environmentally sensitive sites would officially be termed “Geographic Response Strategies” to eliminate nationally inconsistent descriptions. The Manual also emphasized programmatic consultations with the United States Fish and Wildlife Service prior to spills and adherence to the National Historic Preservation Act. Finally, there was a directive to describe the validation of the Geographic Response Strategies (i.e., are they being tested?), to enhance the overall usability of ACPs, and to update the Worst Case Discharge Scenarios. It also stated that interagency and nongovernmental engagement would be important to achieving robust ACPs. While this collaboration was novel to most Area Committees nationally, California’s Area Committees included long-standing, diverse memberships and were already adopting this recommendation through regular meetings and continued engagement in oil spill drills and events.

USCG refined their ACP revision process as well. Prior to this ACP revitalization process, the Sectors would revise the ACPs and Districts would provide the final approval. A Coast Guard National Review Panel (Panel) was established to ensure Districts comply with the new guidance and utilize the standardized approval process. The Panel reviews a subset of national ACPs every year, then those ACPs move to a five-year revision schedule. 2018 was the inaugural year for implementing this new review and approval processes, including an updated standardized checklist for both the Sectors and the Panel to use. The 2018 Sector San Diego ACP was one of seven nationwide ACPs reviewed and evaluated by the Panel, and Panel scored this ACP the highest. The information in Section 9800 (where the Geographic Response Strategies are listed) was deemed superior to the other ACPs reviewed. Similarly, in 2019 the Sector Los Angeles/Long Beach ACPs went through the Panel review and were also highly scored (in top

3). Both Sectors received few substantial comments and suggested revisions. California's ACPs set the benchmark for national oil spill contingency planning. The following sections describe what was updated and examples are provided in the Appendix.

IMPLEMENTING THE NEW GUIDANCE

OSPR's standardization of internal processes & Area Contingency Plan content

With this new, staggered ACP revision process and the emphasis on standardization, OSPR hired a Statewide ACP Coordinator in 2018. Reinstating a Statewide Coordinator has been integral to the management of the vast ACP content that OSPR contributes. Beyond the entirety of Section 9800, OSPR contributes to various ACP Sections, including but not limited to, wildlife response, applied response technologies, planning, and stakeholders. Numerous OSPR staff provide data, language, and editorial review of these and other Sections. Coordinating these staff, developing internal guidance and tools, and maintaining an internal meeting and revision schedule were key steps for the Coordinator to move OSPR and the ACPs towards statewide and national consistency.

The Statewide Coordinator focused on establishing robust and clearer standards for everything from environmental site data input, to ACP Sections' content, maps/diagrams, and formatting. Through an internal ACP Workgroup, which includes OSPR field staff with intimate knowledge of their local ACPs, standards have been developed and captured in numerous formats, including guidance documents, templates, and meeting minutes. Work plans are utilized to guide the revision of "OSPR-owned" ACP content and were used to guide status updates in Workgroup meetings. Formatted Excel spreadsheets are also used to document and share suggested edits with USCG.

In addition to developing the “OSPR-owned” content, the OSPR Statewide Coordinator also contributed to the review and update of other Sections as well, OSPR compared and contrasted the varying content of all six California ACPs. Through constant communication and shared Excel spreadsheets, OSPR worked closely with the USCG Sectors to greatly improve their usability, consistency, and reduce verbosity and superfluous information (including recommending housing common federal and statewide information in the Regional Contingency Plan instead). Since improving usability was a focus of the revitalization process, OSPR and USCG ensured that hyperlinks were functional, corrected references to other Sections and documents (which lessened regurgitated information), and crafted new and improved templates, samples, and guides. For example, the 2019 Sector Los Angeles/Long Beach ACPs’ Volume I was reduced from 340 to 117 pages and included new guidance on environmental response sampling, a Waste Management Plan template, a Decontamination Plan sample, and a stakeholder engagement template. More products are currently in the works, including a spill or command post Site Access Request Form for researchers, nongovernmental organizations, and other stakeholders, guidance for consultation over the Endangered Species Act and the National Historic Preservation Act, and an example of a completed Incident Action Plan.

ACP database: improved Geographic Response Strategies

OSPR has long recognized the need for consistency in the process of environmental site documentation and response strategy development. Initially, a form was developed to gather specific information about each environmentally sensitive site on the coast and to develop site

protection strategies. As database technology improved, OSPR converted this information into a digital format through the development of a database. The database was first used to produce portions of the ACPs revised in 2000.

The need and desire to modernize this database resulted in a multi-year long process to create a new ACP Environmental Database (ACPEDB), which was revealed in the 2018 revision of the Sector San Diego ACP. It centralized the data within OSPR, and in doing so, resulted in a parallel process to further streamline and standardize ACP data collection, description, and management across all the ACPs. Ensuring the validation of the Geographic Response Strategies is a focus for this revitalization process, and OSPR's Geographic Response Strategy forms, which are easily and readily produced by the new database, highlight when protection strategies have been tested and updated (See Figure 2). To ensure future ACP revisions adhere to these newly established standards, an internal ACPEDB guidance document is maintained and updated.

Diagrams and maps

OSPR has been the lead on producing diagrams and maps for the ACPs and has pushed for utilizing advanced technology and mapping capabilities throughout their evolution. Having the dedicated GIS resources and expertise in house has shaped California's ACPs, and more specifically the Geographic Response Strategies, into more user-friendly and operational plans for response. Furthermore, OSPR was quick to support, utilize, and collaborate with National Oceanic and Atmospheric Administration's Environmental Response Management Application (ERMA) for publishing ACP data on a universal, online mapping platform.

Despite all of this, as maps and diagrams within the ACPs evolved, it wasn't always in a consistent manner. OSPR field staff often worked with GIS staff independently from their regional counterparts, leading to different products. To improve statewide standardization, guidance on maps and diagrams was drafted and the process for internal GIS requests was clarified. As Geographic Response Strategies get validated and updated (described below), their diagrams get updated as well, including utilizing the latest imagery and making them consistent per OSPR's internal guidance. Given that California has over 600 sensitive sites (many with multiple response strategies), updating diagrams in this way makes the workload manageable. Looking ahead, OSPR is working to employ drone derived high definition images to produce better quality maps, always striving towards better oil spill preparedness.

Economically sensitive sites

The identification of economically sensitive sites is mentioned in the U.S. Code of Federal Regulations (CFR) Title 40: Protection of Environment (40 C.F.R. § 300.210(c)(3)(1)), which describes the federal requirements for ACPs: "A description of the area covered by the plan, including the areas of special economical or environmental importance that might be damaged by a discharge". Additionally, USCG's ACP checklist has placeholders for listing economic stakeholders. Under these vague requirements, OSPR, USCG, and local Area Committee members have worked collaboratively to pre-identify economically sensitive sites statewide utilizing categories to group them. Economic resources that have a greater potential for long-term damages were targeted for inclusion in the ACPs. Example sites include power plant water intakes, marinas, ferries, aquaculture, and marine labs. A list of sites and a description of the categories are outlined in Section 9800 of every ACP, but the formatting and level of detail captured within each varied statewide.

As with other portions of the ACPs, the section detailing economically sensitive sites was revised upon a thorough comparison of the economically sensitive sites statewide. OSPR refreshed the categorization and description of economically sensitive sites that are included within ACPs and utilized a standardized numbering format for listing these sites (first revealed in the 2019 Sector Los Angeles/Long Beach ACPs, see Figure 1). The addition of a site number supports ease of reference, similar to the environmentally sensitive site numbering scheme. OSPR also updated the ACP Environmental Database to include economically sensitive sites and created a companion guidance document for statewide consistency. Utilizing a database allows for more controlled, and therefore consistent, data input, management, and display, as proven by its use for environmentally sensitive sites.

The next statewide project is for OSPR staff to revisit the list of economically sensitive sites to ensure the ACPs have the most current information. The next ACPs scheduled for a major revision are within Sector San Francisco and OSPR intends to employ the new database and format (See Appendix A for an example of the most current version of the economically sensitive site list). Concurrently, all economically sensitive sites are being updated in ERMA, as OSPR continues to expand the use of this online Common Operating Picture.

Validating Geographic Response Strategies

Validation of Geographic Response Strategies within California has been ongoing since 2002 when OSPR's Sensitive Site Strategy Evaluation Program (Program) was born. This program ensures the participation of Oil Spill Response Organizations in helping OSPR validate

Geographic Response Strategies every year along the coast. Through this process, Geographic Response Strategies contact information is also revisited and updated, if needed. Most importantly, lessons learned from the Program exercises are noted and changes to the strategies and diagrams, if needed, are incorporated into the new ACP Environmental Database and eventually into the ACPs. To get these evaluations and revised Geographic Response Strategies to the oil spill response community efficiently, OSPR posts updated Geographic Response Strategies annually online during non-revision years. When a major revision occurs, those updated sites are then officially incorporated into the revised ACP.

OSPR works closely with the Area Committees, Oil Spill Response Organizations, and other natural trustee agencies in planning and executing these exercises and other oil spill drills. Through this collaborative process, identification of any priority strategies, gaps in knowledge, and associated mitigation for testing the strategies are evaluated and included into the Program exercises. Additionally, through State and federally mandated oil spill drills, the Geographic Response Strategies' contacts are reviewed and simulated emergency calls are conducted. This gives agencies and stakeholders associated with environmentally sensitive sites the opportunity to test their emergency procedures as well. These are a few ways that OSPR meets the USCG focus on consultations with USFWS and the validation of Geographic Response Strategies.

Cultural and historic sensitive sites and tribal inclusion

Per numerous State and federal regulations including, but not limited, to the National Historic Preservation Act and the National Contingency Plan Programmatic Agreement on Protection of Historic Properties during Emergency Response, historic and cultural resource

protection and tribal inclusion must be incorporated into emergency response. Therefore, ACPs describe requirements for consideration of cultural and historic resources during oil spill response and discuss the roles and authorities of tribal governments. No site-specific information is captured in ACPs nor is there direct access to the California Historical Resources Information System (CHRIS) database, which houses State cultural and historic site information. The ACPs can only describe the process of contacting a State Historic Preservation Officer or other authorized archaeologists with access to CHRIS. They also describe the process for a FOSC to request a trained Historic Properties Specialist, the inclusion of tribal representatives into a spill response, and lists of contact information. The processes and resource considerations were clarified, and each environmentally sensitive site was updated with the Native American Heritage Commission and authorized CHRIS contacts. Concurrently, OSPR formed a new internal Tribal Working Group with a goal to develop statewide protocols and guidelines for OSPR and tribal nations and communities in oil spill planning and response. With lessons learned from recent spills and drills and these forthcoming guidelines, OSPR anticipates further refinement of these ACP sections in the next round of revisions.

CONCLUSION

California's ACPs are not perfect nor perfectly consistent statewide, but they are living documents kept breathing by the many people who have poured their time and energy into making them better over the last 25+ years. They shine because of the State and federal resources dedicated to their maintenance and improvement. They are collaborative, with a reliable stakeholder engagement process (Area Committees) and are verifiable through a Geographic Response Strategy evaluation program and a robust statewide oil spill drill program. OSPR is continuously looking to improve processes for the protection of environmental, cultural, historic,

and economic resources. OSPR has utilized evolving technology, like databases and GIS, to improve the ACPs as well.

Although already meeting many of USCG's focus areas for improvement, ultimately this ACP revitalization process has brought consistency into the forefront; It promptly became a priority for OSPR and the District 11 USCG Sectors. The high scores of the most recently revised ACPs, Sector San Diego and Sector Los Angeles/Long Beach, validate this significant effort to ensure the highest consistency standards set by both organizations. The complete and revised ACPs can be found on OSPR's website at: <https://wildlife.ca.gov/OSPR/Contingency>.

REFERENCES

Federal Contingency Plans. Title 40 Code of Federal Regulations Section 300.210(c)(3)(1).
<https://www.law.cornell.edu/cfr/text/40/300.210>

FIGURES BELOW

Figure 1. Example of an economic site list from Los Angeles/Long Beach ACP 2019 Revision

Econ Site	Econ Site Name	Lat/Long	Address	City/State/Zip	Phone	Econ Site Desc.	Category	Type	Op-Div	Co
4-6-SB-100-E	Goleta Beach County Park	34.41604 -119.83042			(805) 681-5526	Beach - fishing pier and day use.	Parks, Beaches, Recreational Areas	E	SB - P	SB
4-6-SB-110-E	Arroyo Burro Beach County Park	34.40313 -119.74387			(805) 681-5526	Beach - day use and restaurant.	Parks, Beaches, Recreational Areas	E	SB - Q	SB
4-6-SB-120-D	Santa Barbara Mariculture Co.	34.37768 -119.74585	939 North Patterson Ave.	Santa Barbara CA 93111	(805) 886-1283	Mariculture - Hope Ranch mussels growing area is offshore of Arroyo Burro Creek.	Aquaculture and Mariculture	D	SB - Q	SB
4-6-SB-130-E	Leadbetter Beach	34.40071 -119.69946			(805) 963-4286	Beach - day use, picnic area, restaurant, city beach.	Parks, Beaches, Recreational Areas	E	SB - R	SB
4-6-SB-140-E	West Beach	34.41075 -119.69065	Seaward of Cabrillo Blvd.	Santa Barbara CA	(805) 963-4286	Beach - day use, recreational city beach.	Parks, Beaches, Recreational Areas	E	SB - R	SB
4-6-SB-150-E	Santa Barbara Harbor & Waterfront	34.40395 -119.69175	132-A Harbor Way	Santa Barbara CA 93109	(805) 564-5530	Harbor-Berthing: 1000, Mooring: 12, marina, launch ramp, fuel dock,	Vessel Traffic Areas	E	SB - R	SB

Figure 2. Example of an environmentally sensitive site with Geographic Response Strategies from Los Angeles/Long Beach ACP 2019 Revision

4-120-B Site Summary - Cayucos Point and San Geronimo Creek 4-120-B
County: San Luis Obispo **ACP Division/ Segment:** SL - D - 5002
NOAA Chart : 18703 **Map Book :** 590 D-2 **Decimal Degrees** 35.44637 -120.94022

Site Description:

Estero Bluffs State Park property (State Park goes from Villa Creek south to N. Ocean Blvd. in northern Cayucos). Cayucos Point and to the north is a wave-cut rock platform, and is a major harbor seal haulout. Mixed sand and gravel pocket beaches in between rocky platforms; rocky platform approx. 1/2 mile long. San Geronimo Creek empties in small pocket sandy/gravel beach. The 3.5 mile long coast line contains rocky intertidal tide pool habitat, and sandy coves with coastal terrace grasslands above. This rocky platform is a major harbor seal haulout. 1,200 mammals have been observed here. Southern sea otters can also be observed offshore. These species are present year-round. American black oystercatchers, grebes, pigeon guillemots, and brown pelicans can be observed here. Creek is Tidewater goby designated critical habitat. California red-legged frogs and western pond turtles may be found in the creek. Black abalone may be present in rocky intertidal habitat (designated critical habitat). Offshore is designated critical habitat for leatherback sea turtles.

Resources at Risk:

- ESI and Habitat:** 4 Coarse-grained sand beaches
 5 Mixed sand and gravel beaches
 2A Exposed wave-cut platforms in bedrock, mud, or clay
 10A Salt - and brackish-water marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Amphibians	California red-legged frog	FT, SSC	Year-round	
Birds	shorebirds		Year-round	
Fish	tidewater goby	FE, SSC	Year-round	
Invertebrates	black abalone	FE	Year-round	
Mammals	harbor seal	FP	Year-round	
Mammals	Southern sea otter	FT, SP	Year-round	
Reptiles	leatherback sea turtle	FE	Aug - Nov	
Reptiles	western pond turtle	SSC	Year-round	

FT-Federally Threatened, FE-Federally Endangered, FP-Federally Protected, SE-State Endangered, ST-State Threatened, SP -State Protected, SR-State Rare, SSC-Species of Special Concern, BGEPA-Bald and Golden Eagle Protection Act, SSSP-State Special Status Species

List of Key Contacts:

Type	Name/Title	Organization	Phone
C	/	Central Coast Archeological Information Center	(805) 893-2474
C	/	Native American Heritage Commission	(916) 373-3710
O	Brian Hatfield/Marine Mammal Expert	US Geological Survey, Biological Division	(805) 927-3893
T	SURCOM (24-hr/)	California State Parks (Dispatch)	(951) 443-2969
T	Melissa Neuman/Marine Biologist	NOAA National Marine Fisheries Service	(562) 481-4594
T	Tina Fahy/Sea Turtle Recovery Coordinator	NOAA National Marine Fisheries Service	(562) 980-4023
T	/	US Fish and Wildlife Service, Federal T&E Speci	(805) 644-1766

C - Cultural, Historic, Archaeological; E - Entry/Owner/Access; O - Other; S - Safety; T - Trustee; X - Exclusion or Security

Additional Site Summary Comments:

Marine mammal pupping seasons: Harbor seal March - June; southern sea otters year-round. Tidewater gobies nesting in estuary sediments April - July; leatherback sea turtles most commonly observed August - November. California red-legged frogs breed November - April; western pond turtles breed May - August.

4-120-B Site Strategy - Cayucos Point and San Geronimo Creek

4-120-B

Concerns and Advice to Responders:

Minimize disturbance in riparian/wetland areas when possible. When crews must walk in soft bottom wetland/riparian areas, restrict the number and size of pathways and avoid trampling oil into sediments. If creek conditions allow, boom/fencing deployment and recovery to be done by only having one person slowly walk across creek to position the boom/fencing to reduce disturbance. Avoid disturbing bottom lagoon sediments to protect tidewater gobies (endangered) especially April - July, goby nesting season. Equipment and foot traffic entering wetted areas should be avoided to the maximum extent practical to prevent crushing tidewater gobies, their burrows, and eggs. If supplemental water is used to flush recommend gradually increasing the intensity/volume during the flush for gobies. Wave washover may carry oil over natural berm into the lagoon during extreme onshore and tidal conditions. Nearshore waters include sensitive rafting areas for birds, sea otters, and other marine mammals. To protect seabirds, limit spill response activities within 1,000 feet of nesting seabirds when possible. Try to remain at least 100 yards away from marine mammals and sea turtles (designated critical habitat for leatherback sea turtles) and if approached closely by a marine mammal or turtle while motoring, reduce speed and shift to neutral; do not engage props until the animals are observed at the surface, clear of the vessel. Black abalone (endangered) may be present in rocky intertidal habitat (designated critical habitat). Southern sea otters (threatened) pup year-round.

Hazard and Restrictions:

Within Estero Bluffs State Park.

Site Strategies:

Strategy: 4-120.1 Objective: Deploy Containment Boom

Strategy: When creek mouth is open block entrance with short skirted containment boom (swamp boom) at appropriate angle for swift currents and changing tidal influences. If creek conditions allow, boom deployment and recovery to be done by only having one person slowly walk across the creek to position the boom (and fence posts or anchors on the bank) to reduce disturbance. Install boom in a configuration/angle which blocks channel and diverts oil to a collection point. Consider booming shorelines of inlet to prevent oiling. Maintenance/monitoring necessary; check boom for effectiveness.

Table of Response Resource

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Swamp			100	feet	
Anchor				2		
skimmer				1		
Staff				4		

Strategy: 4-120.2 Objective: Erect Filter Fence

Strategy: When creek mouth is closed install excelsior fencing along top of natural berm to capture oil when there is a potential for high tidal washover. When creek mouth is open use a filter fence barrier for exclusion/containment. Use this method when the cross-section of the watercourse does not exceed 30 feet in width, water flow volume is low, the channel bottom is capable of receiving and holding metal stakes, and the spill consists of heavy oil. If creek conditions allow, filter fence deployment and recovery to be done by only having one person slowly walk across the creek to position fencing (and fence posts) to reduce disturbance. Maintenance/monitoring of filter fencing necessary.

Table of Response Resource

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Fence	Construction Fencing			100	feet	
stakes				10		
skimmer				1		
Staff				4		
Misc.	Oil Snare (pom-pom)					
Misc.	Stake Driver			1		

Strategy: 4-120.3 Objective: Build Berm

Strategy: When creek mouth is open, under low flow conditions block creek entrance with sediment berm or sandbag berm, and install flow through pipes as necessary to prevent flooding. To create protective berm, take sand from active unvegetated beach face to prevent damage to dune habitat. Manual building of berm preferred over heavy equipment even when heavy equipment can access site. Maintenance/monitoring necessary; check for berm effectiveness.

Table of Response Resource

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
skimmer				1		
Sandbags						
Staff				6		
Piping						

Strategy: 4-120.4 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART

Strategy: Offshore containment and recovery (OCR) is the preferred option although heavy surf may hinder these operations. No specific response equipment listed due to the many variables associated with each spill regarding OCR. Early consideration should be given to the use of applied response technologies.

Table of Response Resource

Last Page Update

Logistics:

Directions: From the south: Take Hwy 101 N to Hwy 1 N, Morro Bay exit in San Luis Obispo. Site is approx. 1 mile north of Cayucos Creek. Vista turnouts for access to pocket beaches. From the north: Take Hwy 101 or 5 S to Hwy 46 W to Hwy 1 S to Cayucos Point, approx. 1 mile north of Cayucos Creek.

Land Access: Foot access only.

On-Water Limitations: Limitations: Depth, obstruction. Launching, Loading, Docking and Services Available: Morro Bay boat ramp is approx. 8 miles south.

Facilities, Staging Areas, Command Posts, Available Equipment: Command Post: Cayucos Veteran's Memorial building (support services needed). U.S. Coast Guard office in Morro Bay, approx. 8 miles South. CDFW office in San Luis Obispo. Staging Area: Turnouts along HWY 1 and/or Veterans Memorial Building parking lot at south end of Cayucos County Beach, contact (805) 995-1228 or county OES for alternate number. Chevron Estero Bay Marine Terminal is approx. 4 miles south. Airports: SLO County Airport, approx. 40 min south. Paso Robles Airport is approx. 45 min inland.