MEMORANDUM

Item 4

TO: California Ocean Protection Council
FROM: Cyndi Dawson, Marine Protected Area Policy Advisor
DATE: July 29, 2015
RE: Update on the Refugio Oil Spill

1. Refugio Oil Spill

On May 19, 2015 a 24" buried pipeline (Line 901, the Las Flores to Gaviota) owned by Plains All American Pipeline (Responsible Party) failed and released crude oil into the environment. The line was shut down at approximately 11:30 AM PT. The Responsibility Party estimates up to 2,500 barrels (~101,000 gallons) of oil were released from the pipeline (based upon the pipeline flow rate and its elevation profile). A yet undetermined substantial amount of oil reached the coast, entering the marine environment near Refugio State Beach. Spill estimates are still under investigation. A Unified Command Post was set up at the Santa Barbara County Emergency Operations Center shortly after the pipe was shut down to coordinate the response.

Upon the recommendation of the Office of Environmental Health Hazard Assessment, the California Department of Fish and Wildlife (CDFW) closed fishing and shellfish harvesting in Santa Barbara County shortly after the spill on May 19, from 1 mile west of Refugio State Beach to 1 mile east of the beach. The fishery closure was extended on May 21 to Canada de Alegeria at the western edge to Coal Oil Point at the eastern edge. Both Refugio State Beach and El Capitan Beach State Park were closed by the Department of Parks and Recreation within 24 hours of the spill. The Santa Barbara County Public Health Department issued advisories to local community members on May 20 to avoid contact with areas where the oil spill was present and began air, water and sediment testing. On May 20, Governor Brown declared a state of emergency in the response area to facilitate rapid and aggressive action from state agencies to mitigate the effects of the oil spill. On May 24, the Federal Aviation Administration established a flight restriction for non-response aircraft including drones that centered on Refugio State Beach and extended to a five-mile radius around the park with a 1,000 foot ceiling. The United States Coast Guard established an on-water safety zone encompassing six miles of shoreline extending 500 yards offshore from Coal Oil Point to Gaviota State Beach to protect the safety of responders and the public. At this time, Refugio State Beach remains closed and all other restrictions to the public have been lifted.

2. Response and Interagency Coordination

The response effort commenced quickly with both state and federal resources being transferred and activated in the affected area. Figure 1 provides a detailed account of Response Highlights from May 19 – June 22 and can also be found here[1]. Product and water were recovered by vacuum trucks from oil containment areas on land and on-water utilizing skimmers, vacuum trucks, absorbent pads, and absorbent boom. The response effort was guided by the recently updated 2014-Sector LA-LB Area

[1] http://www.refugioresponse.com/go/doc/7258/2551654/

Contingency Plan[2] (ACP) that identifies sensitive areas that warrant priority response, relevant on-the-ground contacts and response options for specific areas of the coastline. The ACPs are prepared by the CDFW Office of Oil Spill Prevention and Response (OSPR) in coordination with a wide range of government and non-governmental entities and individuals. The ACPs, which exist for the entire coastline of California, help ensure that response concerns and the appropriate level of preparedness is in place prior to any spill to help mitigate impacts to environmental, economic and cultural resources. The Ocean Protection Council is working with appropriate agency staff to discuss including guidance in future ACP updates to provide prioritized protection to marine protected areas to help reduce impacts to these special areas.

The Ocean Protection Council staff has been in regular contact with trustee and other agencies involved with the response assisting with facilitating communication and fulfilling information requests where appropriate. There has been a heightened level of concern from the membership of the MPA Statewide Leadership Team and stakeholders about impacts to the marine protected areas located within and nearby to the affected area. OPC has been monitoring the Refugio Oil Spill and are identifying potential future actions to strengthen the preparedness steps in place related to marine protected areas.

3. Natural Resource Damage Assessment

As of July 10, 2015 most response efforts have been concluded and clean-up goals have been met in the majority of the affected area. The phases of an oil spill response[3] (Figure 2) from notification to the natural resource damage assessment (NRDA) involve a coordinated and predetermined path. Initial efforts to assess the geographic scope of the spill, deploy containment measures and remove the oil from the environment quickly evolve to include data collection in the field on the impacts to natural, economic and cultural resources. The NRDA is led by trustee agency scientists from OSPR, National Oceanic and Atmospheric Administration, United States Fish and Wildlife, California Department of Parks and Recreation, California State Lands Commission, University of California, the National Park Service and the Bureau of Land Management to quantify the injuries and to both restore the injured resources and compensate the public for the lost interim ecological benefits and uses of those resources. The NRDA is broken down into several Technical Working Groups (TWG) that are focused on a particular use type (e.g. human uses), habitat (e.g. intertidal) or species group (e.g. birds) and lead by agency scientists with expertise in that field.

The OPC reached out directly to the scientists leading the NRDA early in the process to describe the significant data resources available to them. Significant contributions to these data are from OPC-supported projects that are part of an ongoing investment in developing management relevant data resources to help inform decision makers. OPC invested $4 million dollars in the MPA Baseline Monitoring Program (Program) in the south coast region, which encompasses Pt. Conception to the Mexico border, to establish a baseline condition assessment at the time of implementation of the MPA network in that region. The Program involved agency, academic and citizen scientists as well as local experts including recreational and commercial fisherman. These groups collected data across multiple habitats and species from sandy beaches out to deeper offshore waters. The Program also included a socioeconomic project which assessed recreational and commercial fishing as well as other ocean activities. The California Ocean Trust led the management of the Program and in response to the oil spill accelerated the public release of the results. All data and technical reports are now publically available

[2] https://www.wildlife.ca.gov/OSPR/Preparedness/LA-LB-Spill-Contingency-Plan
[3] http://www.refugioresponse.com/external/content/document/7258/2551506/1/PhasesOilFinal%20(1).pdf

on oceanspaces.org. OPC's continued commitment to the California Seafloor and Coastal Mapping Program[4] allowed for critical data to be available to responders. The mapping information on bathymetry and habitat types in the affected area of the oil spill was integrated into NOAA's Emergency Response Management Application[5] (ERMA, Figure 3). ERMA is used by responders to understand the local area and is critical in helping responders develop an area-specific strategy to respond to an oil spill.

At the request of the NRDA scientists the Ocean Science Trust has begun discussions with the OPC Science Advisory Team (OPC-SAT) to engage them in providing recommendations for restoration concepts appropriate for the affected area of the spill. Marine restoration projects in the open coastal environment provide a unique set of challenges. Most of the affected areas are exposed to waves and wind on a regular basis, which may limit the types of restoration that will be successful. The OPC-SAT will aggregate the best available science and provide some general recommendations to the NRDA scientists to consider as they develop a program to restore the affected area of the spill.

Another significant contribution that OPC has been able to leverage during the response to the oil spill is the active partnerships across sectors in the ocean community that have been forged through the implementation of the Marine Protected Areas Partnership Plan[6]. These partnerships have allowed OPC staff to gather critical information from scientists and provide information about response efforts and next steps to interested stakeholders. Scientists, local experts and other groups that have been involved in data collection in the affected area prior to the spill responded to OPC's unfunded request to provide information on their data sets which was then provided to NRDA scientists. This included scientists that were part of the MPA Baseline Monitoring Program as well as many others who were not. These relationships have been built with the scientific community over time with a focus on maintaining an on-going dialogue to ensure the state is benefitting and integrating the best science available into decision making. The Refugio Oil Spill has highlighted the need for and benefits of this partnership–based approach. As groups have come together and data has been collected to support the effective management of the statewide MPA network, this aggregation of knowledge and expertise actively benefits the state for a much broader range of management priorities.

[4] http://walrus.wr.usgs.gov/mapping/csmp/
[5] https://erma.noaa.gov/southwest/erma.html#/x=-120.12889&y=34.37650&z=11&layers=1+1433+12218+446+12601
[6] http://www.opc.ca.gov/2014/12/adopted-final-version-of-the-california-collaborative-approach-marine-protected-areas-partnership-plan/

Figure1. Response highlights from May 19 – June 22 provided by Unified Command for the Refugio Oil Spill.

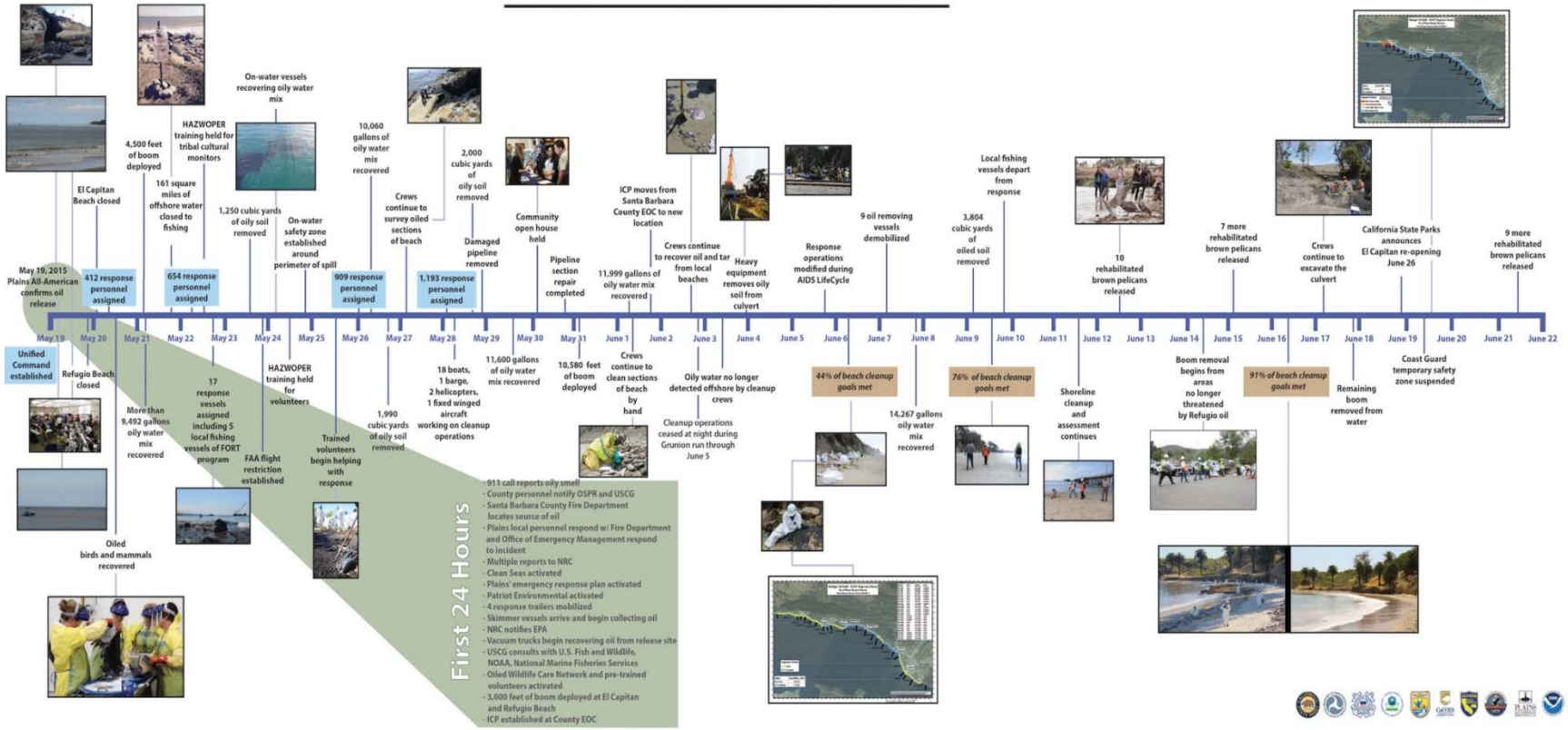

Figure 2. Phases of an Oil Spill Response provided by Unified Command for the Refugio Oil Spill.

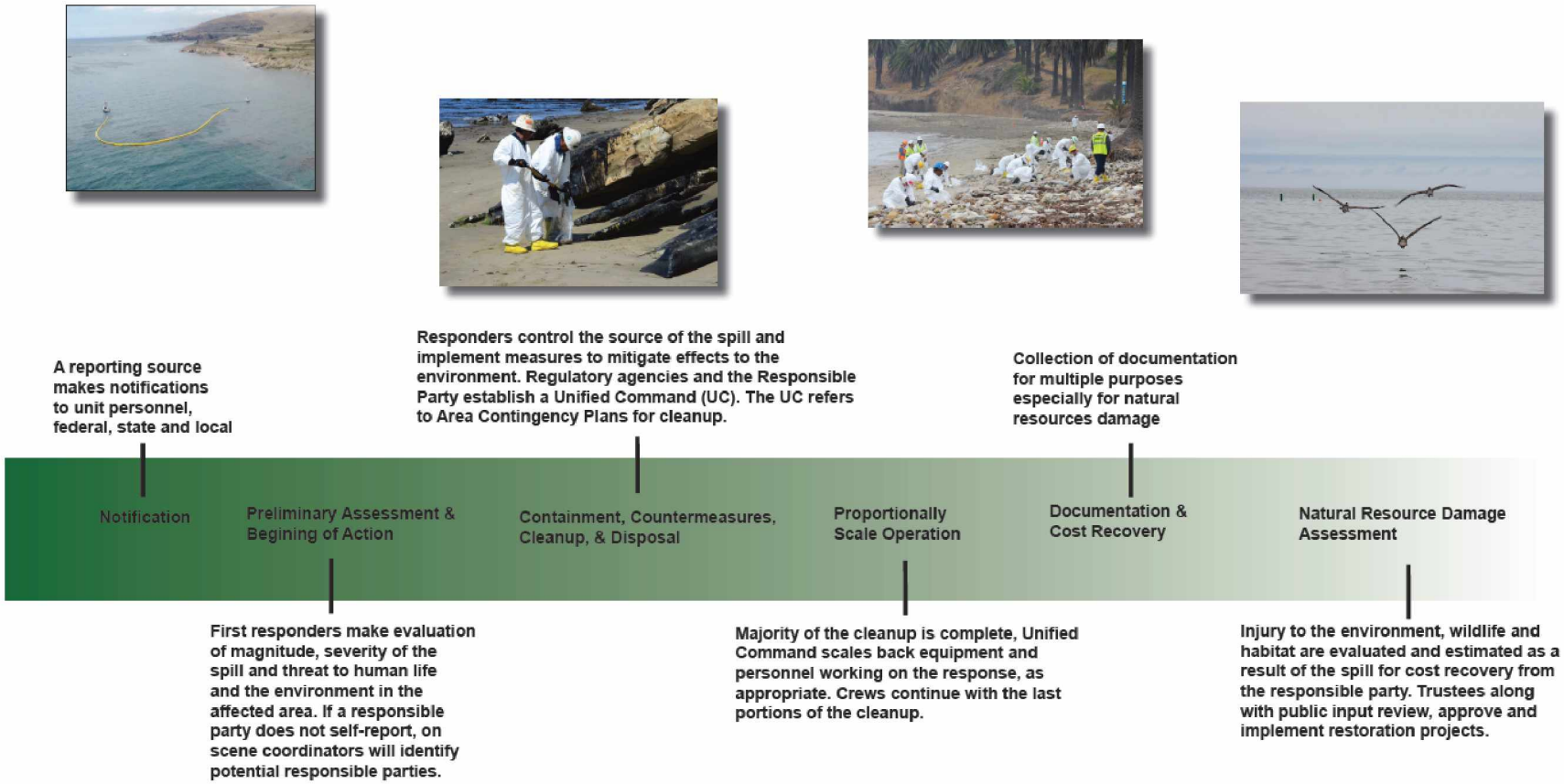

Figure 3. Screen grab of the Environmental Response Management Application displaying habitat data from the California Seafloor and Coastal Mapping Program in the vicinity of the Refugio Oil Spill.