



Refugio Beach Oil Spill

Draft Damage Assessment and Restoration Plan/Environmental Assessment

Prepared by:
California Department of Fish and Wildlife
California State Lands Commission
California Department of Parks and Recreation
University of California
The Department of Interior, U.S. Fish and Wildlife Service
National Oceanic and Atmospheric Administration



Executive Summary

About the Spill

On May 19, 2015 a 24-inch diameter on-shore pipeline (Line 901) that extends approximately 10.7 miles along the Santa Barbara County coastline in California ruptured resulting in the release of approximately 2,934 barrels (bbl) of heavy crude oil (Pipeline and Hazardous Materials Safety Administration 2016).

Line 901 is a buried, insulated pipeline that transports heated crude oil from Exxon Mobil's storage tanks in Las Flores Canyon westward to Plains' Gaviota Pumping Station. The pipeline is owned and operated by Plains Pipeline, L.P. (a subsidiary of Plains All-American Pipeline Company).



Natural Resource Damage Assessment scientists track changes in rocky intertidal habitats following the Refugio spill. Photo by Jenny Marek/USFWS.

discharged into the Pacific Ocean at Refugio State Beach.

The crude oil that entered the ocean posed a significant risk to and injured marine plants and wildlife, including seagrasses, kelp, invertebrates, fish, birds, and mammals. In addition to direct natural resource impacts, the closure of beaches and fisheries occurred days before the Memorial Day weekend resulting in losses for local businesses and lost opportunities for the public to visit and enjoy the shore and offshore areas.

Some tar balls attributable to the Line 901 release were carried by southerly ocean currents and eventually reached some beaches in Los Angeles County (California Department of Fish and Wildlife 2016).

The clean-up of this significant spill brought together a large number of federal, state, local agencies, and Native American tribes operating under a Unified Command. For the Refugio

ON THE COVER: Oiled Beach by U.S. Coast Guard. Photo of oiled octopus by NOAA, dolphins by NRDA, pelicans by USFWS, and harbor seal by Santa Barbara ChannelKeeper.



Bruce Joab with California Department of Fish and Wildlife preps with NRDA field teams for tar ball sampling the morning of May 26, 2015. Photo courtesy of NRDA Field Teams.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) determined that the cause of the Line 901 failure was external corrosion that thinned the pipe wall to a level where it ruptured suddenly and released heavy crude oil. Crude oil from the buried pipeline saturated the soil and flowed into a culvert that crosses under Highway 101 and railroad tracks and ultimately



Western snowy plovers are one of the shore bird species that were affected by the Refugio Oil Spill in 2015. Photo by Hazel Rodriguez/USFWS.

response, the Incident Commanders consisted of the United States Coast Guard (USCG), California Department of Fish and Wildlife (CDFW-OSPR), Santa Barbara County, and Plains Pipeline. The Unified Command officially declared the response to be complete on March 2, 2017, 653 days after the spill (U.S. Coast Guard 2017).

Natural Resource Damage Assessment

In parallel with the response and clean-up effort, the natural resources trustee agencies (Trustees) conducted a Natural Resource Damage Assessment (NRDA) to quantify the injuries to natural resources from the spill and to seek compensation in the form of restoration projects.

In this case, the Trustees for the natural resources injured by the spill include the United States Department of Commerce represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior represented by the United States Fish and Wildlife Service (USFWS) and the Bureau of Land Management

(BLM); the CDFW-OSPR; the California Department of Parks and Recreation (CDPR); the California State Lands Commission (CSLC); and the Regents of the University of California (the Trustees).

As a designated Trustee, each of these agencies is authorized to act on behalf of the public under state and/or federal law to assess and recover natural resource damages and to plan and implement actions to restore, rehabilitate, replace, or acquire the equivalent of the affected natural resources injured as a result of a discharge of oil.

Draft Damage Assessment and Restoration Plan

Under the Oil Pollution Act regulations ((33 U.S.C. 2706(b)), the Trustees have cooperatively gathered information for this Draft Damage Assessment and Restoration Plan (DARP)/Environmental Assessment (EA) for public review and comment. This document describes the injuries resulting from the spill and proposes restoration projects intended to compensate the public for those injuries.

This document is also an Environmental Assessment intended to satisfy the Federal Trustees' requirement to evaluate the environmental impacts of the proposed restoration projects under the National Environmental Policy Act (NEPA). This document is therefore called a DARP/EA.



California sea lion sunbathing off the Channel Islands.
Photo by Lara Drizd/USFWS.

Full environmental review would be premature for some of the proposed projects in the document, particularly 2nd tier projects. Additional review may be required if those projects are implemented, and the need for additional NEPA review will be determined once detailed engineering design work or operational plans are developed for those projects. Under OPA, the responsible party (RP) is liable for the cost of implementing restoration projects, as well as the costs incurred by the Trustees to undertake this damage assessment. The Trustees have settled this claim for natural resource damages with the RP for \$22.3 million, subject to Court approval.

The Trustees have prepared this draft DARP/EA to inform the public about the natural resource damage assessment and restoration planning efforts that have been conducted following the oil spill.

Public Input

The Trustees seek comments on the restoration alternatives presented here. Public review of this draft DARP/EA is an integral component of the restoration planning process. A public review period is being held on this draft plan from April 22, 2020 to June 5, 2020. Written comments must be received by that date to be

considered part of the official record. Comments should be sent by email to refugio restoration@fws.gov or by letter to:

Refugio Oil Spill Natural Resource Trustees
C/O Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93004

Attn:

Michael Anderson, California Department of Fish and Wildlife

Laurie Sullivan, National Oceanic and Atmospheric Administration

Jenny Marek, U.S. Fish and Wildlife Service

The trustees will hold a public webinar on May 13, 2020 from 1:00 - 3:00 pm (PST), and later that evening from 6:00 - 8:00 p.m. (PST). In this virtual public meeting, trustees will present the draft plan, have an "open house" write question and answer session, take written public comments.

Both written questions, and written public comments will be submitted through the webinar platform.

Register for the webinar at:

<https://attendee.gotowebinar.com/t/5071390037067886094>

After registering, participants will receive a confirmation email with instructions for joining the webinar. A GoToWebinar system check is recommended before attending.

Refugio Beach Oil Spill Natural Resource Damage Assessment Summary:

Shoreline Habitats

\$5.5 million

Injury: Approximately 1,500 acres of shoreline habitat were impacted including sandy beach and rocky intertidal habitats.

Restoration: Remove Ellwood seawall, enhance black abalone populations, and restore degraded sand dune habitats.

Subtidal and Fish Habitats

\$6.1 million

Injury: Approximately 2,200 acres of benthic subtidal habitat were impacted.

Restoration: Restore abalone populations in Marine Protected Areas, restore eelgrass beds in Refugio cove, remove Ellwood seawall, restore sand dwelling kelp offshore of Goleta Beach.

Birds

\$2.2 million

Injury: 558 birds were estimated killed, representing over 28 different species.

Restoration: Remove invasive plants from brown pelican nesting colonies on Anacapa Island, reduce seabird injuries from recreational fishing, and implement conservation actions for western snowy plovers.

Marine Mammals

\$2.3 million

Injury: 156 pinnipeds and 76 cetaceans were estimated injured or killed.

Restoration: Increase the capability to recover and rehabilitate marine mammals in distress in Santa Barbara and Ventura County, and increase the capability to respond to instances of cetacean entanglement in the Santa Barbara Channel.

Human Uses

\$3.9 million

Injury: The Trustees estimate over 140,000 lost recreational user days in Santa Barbara and Ventura Counties; six days of beach closures in Los Angeles County; and lost research, education, and outreach opportunities at the University of California, Santa Barbara Coal Oil Point Natural Reserve. Affected recreational activities included camping, sunbathing, beach combing, exercising, swimming, wildlife viewing, fishing, diving, boating and surfing.

Restoration:

Restoration funds (53%) will be administered by State Parks for use on projects benefiting camping and shore-based recreation from Gaviota State Park to El Capitan State Beach.

Restoration funds (46%) will be administered by State Trustees for use on projects benefiting coastal recreation in Ventura County, Los Angeles County, and Santa Barbara County outside of State Park property upcoast of El Capitan State Beach.

Restoration funds (approximately 1%) will be administered by the University of California for use on projects benefiting research, education, or outreach at the Coal Oil Point Reserve.

Restoration Planning, Implementation, and Oversight

\$2 million

Public Input

Full Document: <https://go.usa.gov/xvWEg>

Administrative Record: <https://go.usa.gov/xvWEc>

Comment Period: April 22, 2020 to June 8, 2020

Virtual Public Meetings: May 13, 2020, 1:00 pm and 6:00 pm (PST)

Submit Comments: RefugioRestoration@fws.gov