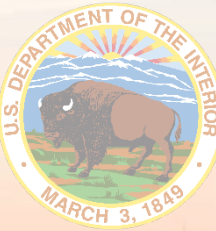
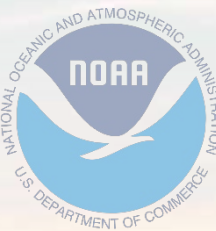


Natural Resource Damage Assessment (NRDA)

Introduction and Overview

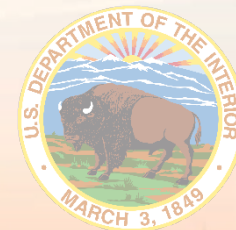
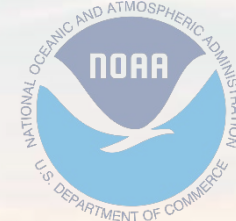
Damian K. Higgins

Natural Resource Damage Assessment & Restoration Program Coordinator
Department of the Interior, U.S. Fish and Wildlife Service
Pacific Southwest Region, Sacramento, California



Meeting Purpose

- To inform you about the Natural Resource Damage Assessment activities that the Natural Resource Trustees have undertaken to date on the Pipeline P00547 Incident
- To solicit ideas for potential restoration actions as the Natural Resource Trustees move forward in evaluating the types of compensation available in the planning process



Incident Summary 1

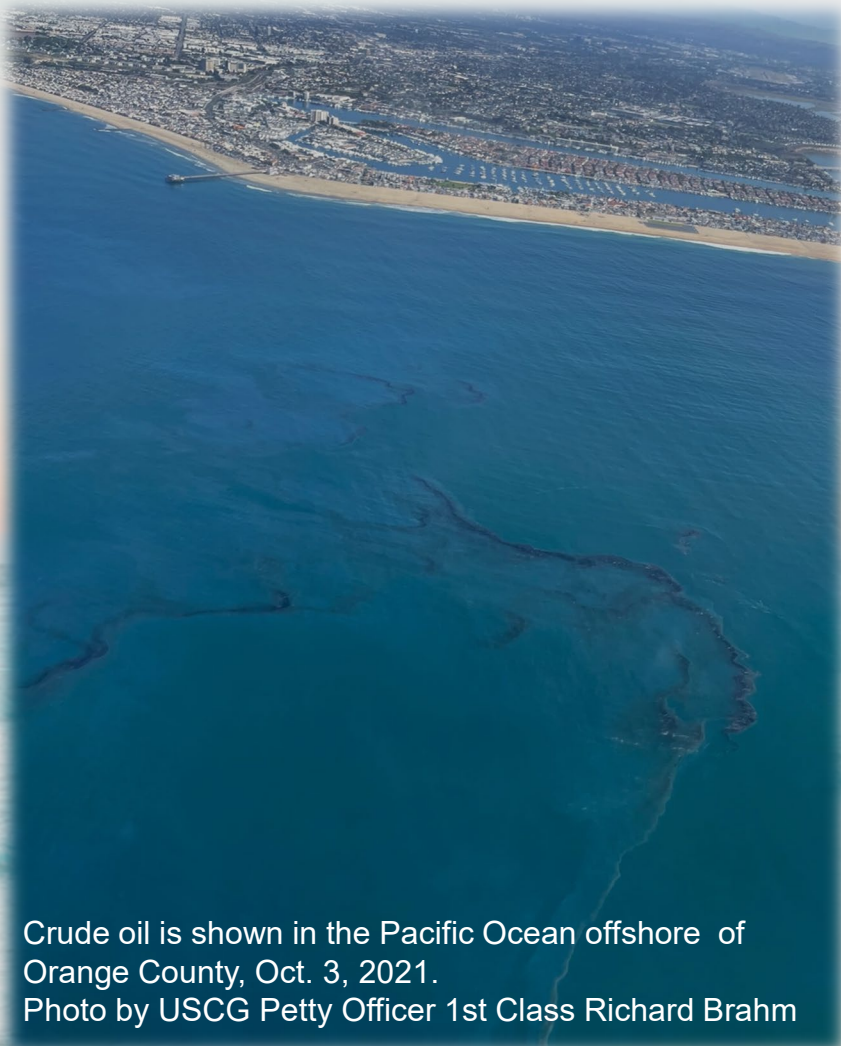


Source: Beta Offshore Operating Co. LLC.



Unified Command examines the P00547 pipeline, October 7, 2021.
Source: U.S. Coast Guard District 11

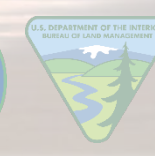
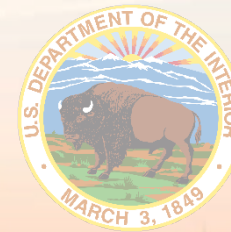
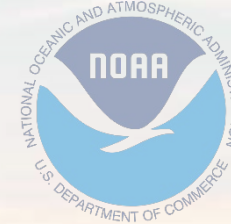
Incident Summary 2



Crude oil is shown in the Pacific Ocean offshore of Orange County, Oct. 3, 2021.
Photo by USCG Petty Officer 1st Class Richard Brahm



A person stands near the shore at Huntington State Beach on October 3, 2021.
(Mario Tama/Getty Images)



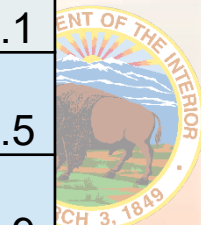
Incident Summary 3



Drone overflight footage of Orange County oil spill response, Oct. 6, 2021.
 Video by USCG Petty Officer 1st Class Richard Brahm.

Oil Recovery Location		Gallons
On-Water Oil Recovery	Oil Recovered by boats:	700
	Oil recovered with decon of boats and boom	7,363.1
On Land Oil Recovery	Oil recovered in Orange County	763.5
	Oil recovered in San Diego	200.9
Wildlife Recovery	Oil recovered from decon of wildlife	49.0
Total Gallons of Recovered Oil		9,076.4

CDFW-OSPR Liaison Briefing to Public Agencies- Feb. 2, 2022.



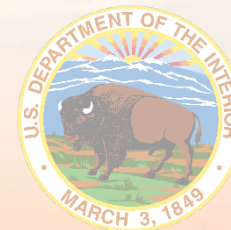
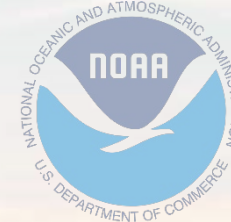
Incident Summary 4

- 549,658 pounds of oily debris
- 764 miles of shoreline cumulatively cleaned
- 271 recreational vessels decontaminated

Pipeline P00547 Oil Spill Federal On-Scene Coordinator's After Action Report. April 2022



A cleanup crew in Newport Beach Harbor decontaminates an oiled sailboat, Oct. 14, 2021. Photo by USCG Petty Officer 2nd Class Steven Strohmaier



Incident Summary 5

PRESS RELEASE

Three Companies Agree to Plead Guilty to Federal Offense and Pay Nearly \$13 Million in Federal Fines and Response Costs for Offshore Oil Spill

Friday, August 26, 2022

Share >

LOS ANGELES—A Texas-based oil company and two of its subsidiaries have agreed to plead guilty to violating the federal Clean Water Act, pay a \$7.1 million criminal fine, and compensate federal programs approximately \$5.8 million in connection with the discharge of approximately 25,000 gallons of crude oil last October during an offshore leak in the 17-mile-long San Pedro Bay Pipeline, according to plea agreements filed today.

Federal prosecutors this afternoon filed plea agreements for the Houston-based Amplify Energy Corp., Beta Operating Co. LLC (a wholly owned subsidiary of Amplify doing business as Beta Offshore), and San Pedro Bay Pipeline Co. (a wholly owned subsidiary of Amplify). All three companies were charged in an indictment returned by a federal grand jury in December 2021.

Representatives of the three companies are expected to appear in the near future in United States District Court in Santa Ana to formally enter the guilty pleas. Each company has agreed to plead guilty to one misdemeanor count of negligently discharging oil into San Pedro Bay during the oil spill on October 1 and 2, 2021. The plea agreements are "binding" plea agreements, which means that the judge presiding over the case, United States District Judge David O. Carter, must accept or reject all aspects of the plea agreements. Should the court decide not to accept the plea agreements, any party may withdraw from the agreements and the case would proceed toward trial.

For Immediate Release

U.S. Attorney's Office, Central District of California



ROB BONTA
Attorney General

Attorney General Bonta and District Attorney Spitzer Announce Criminal Charges Against Amplify Energy for Huntington Beach Oil Spill

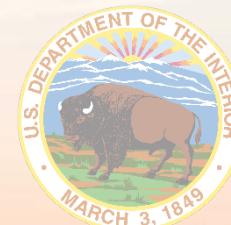
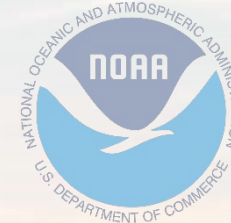
Press Release / Attorney General Bonta and District Attorney Spitzer Announc...

Thursday, September 8, 2022

Contact: (916) 210-6000, agpresso@doj.ca.gov

SANTA ANA – California Attorney General Rob Bonta and Orange County District Attorney Todd Spitzer today announced the filing of misdemeanor charges against Amplify Energy, Beta Operating Company, and San Pedro Bay Pipeline (collectively, "Amplify") for discharging approximately 25,000 gallons of petroleum from an underwater pipeline off the coast of Huntington Beach in October 2021. The charges are the result of an investigation led by the California Department of Justice, the California Department of Fish and Wildlife, and the Orange County District Attorney's Office. As part of a plea agreement entered today in the Orange County Superior Court, Amplify will plead no contest to six misdemeanor charges, pay \$4.9 million in fines and penalties to the state and the county in what is believed to be the largest state misdemeanor criminal fine in Orange County history, and be placed on probation for 12 months. Amplify separately will pay a \$7.1 million federal fine and also will reimburse federal agencies for expenses incurred during the response to the spill.

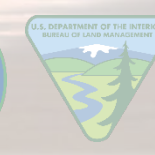
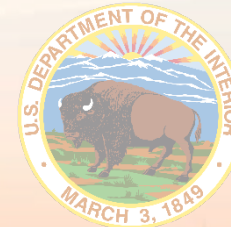
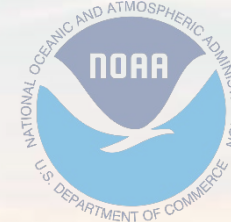
"The oil spill off the coast of Huntington Beach polluted state waterways, shut down local beaches, and wreaked havoc on our fish and



Characteristics of the Affected Area ₁



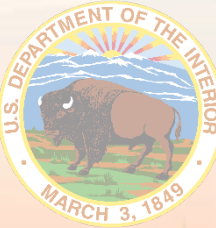
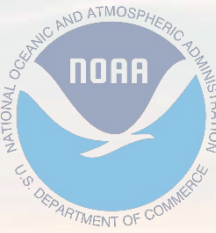
Laguna Beach with Cameo Cove at left, and Emerald Bay at right.
(File Photo by Leonard Ortiz, Orange County Register/SCNG)



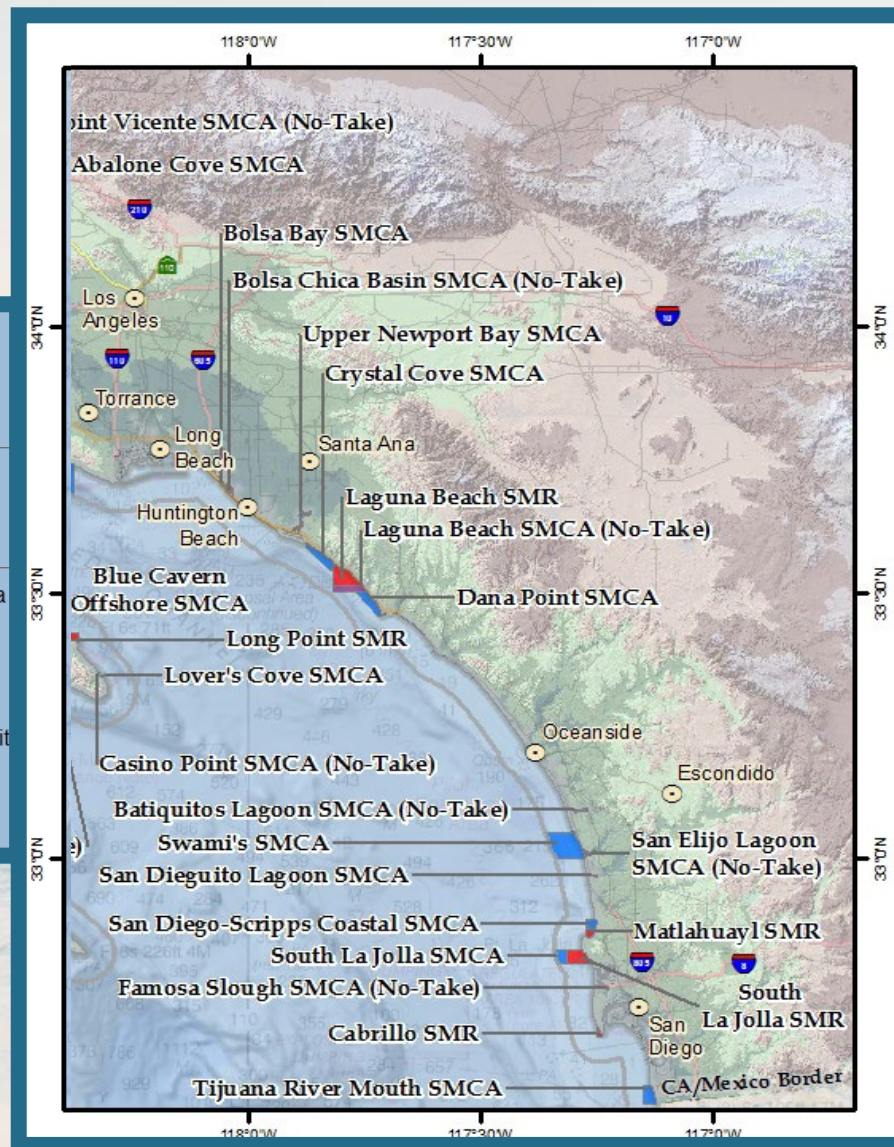
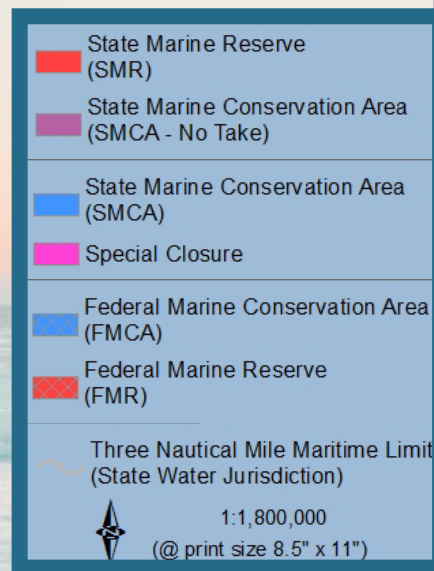
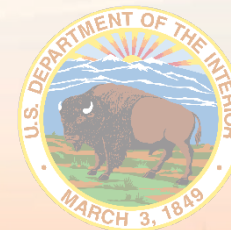
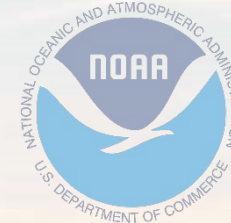
Characteristics of the Affected Area ₂



An endangered blue whale spouts near Platforms Elly and Ellen on July 16, 2008 near Long Beach, California. (David McNew/Getty Images)



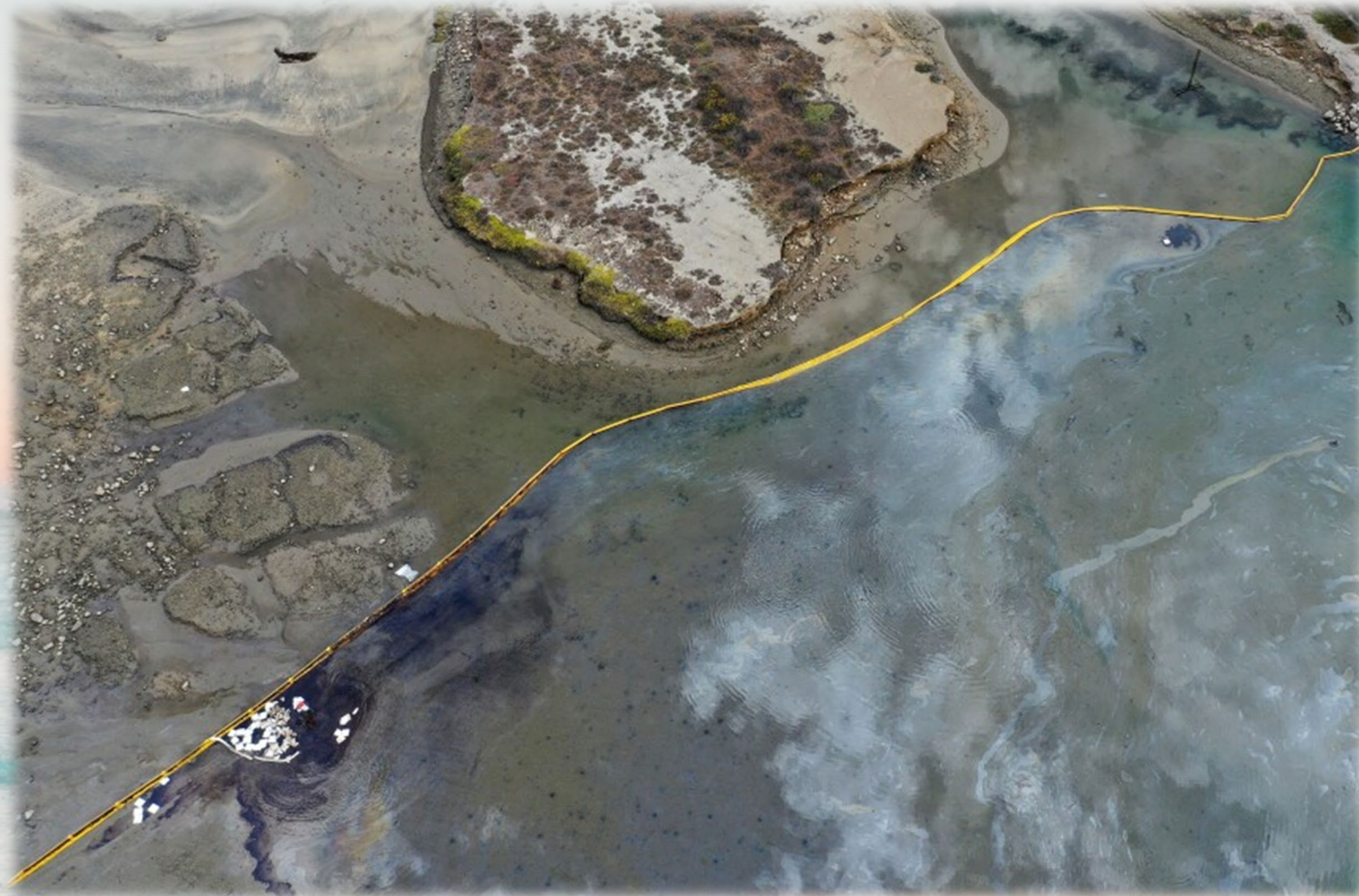
Characteristics of the Affected Area ₃



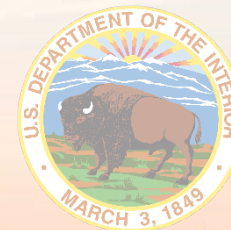
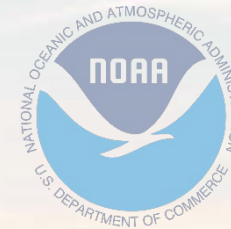
**CALIFORNIA
MARINE
PROTECTED
AREAS**



Characteristics of the Affected Area 4



In an aerial view, a containment boom blocks oil-contaminated water (L) in the area of the Talbert Marsh wetlands in Huntington Beach, California.
(Mario Tama /Getty Images North America)



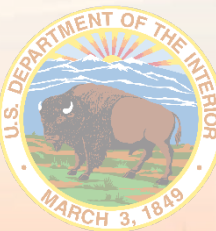
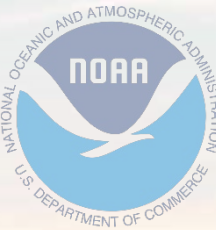
Characteristics of the Affected Area 5



A sign posted south of the Huntington Beach Pier lets the public know that the shoreline and water are closed due to the offshore oil spill. (Mark Rightmire/Orange County Register/Getty Images)



Oiled Snowy Plover captured from the oil spill site awaiting transport to an OWCN field stabilization facility, on Oct. 5, 2021 (credit: OWCN/UC Davis)



Spill Authorities/Processes 1

Response

(Unified Command)



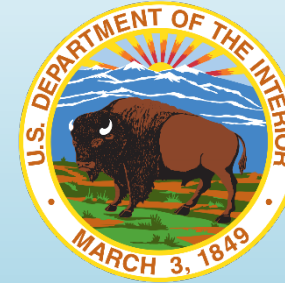
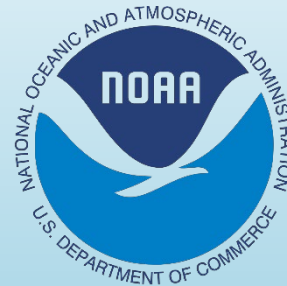
Enforcement,
Environmental
Response, &
Preparedness
Branches



Spill Authorities/Processes 2

Natural Resource Damage Assessment or NRDA

(Natural Resource Trustees)



Resource
Restoration
Branch



Spill Authorities/Processes ₃

Natural Resource Damage Assessment or NRDA

(Natural Resource Trustees)



Resource
Restoration
Branch

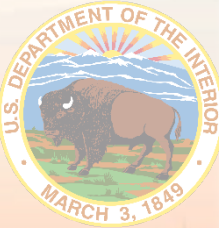


Advisory Members

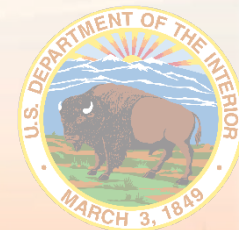
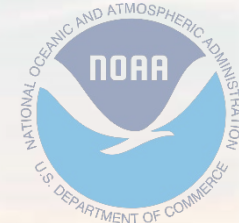
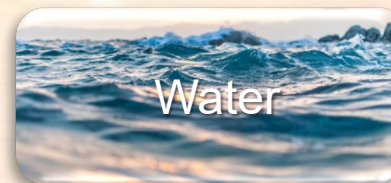
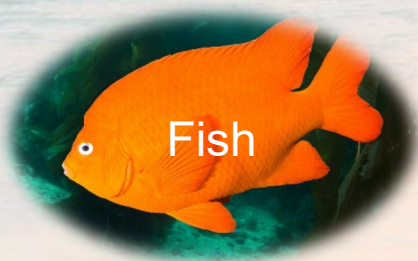
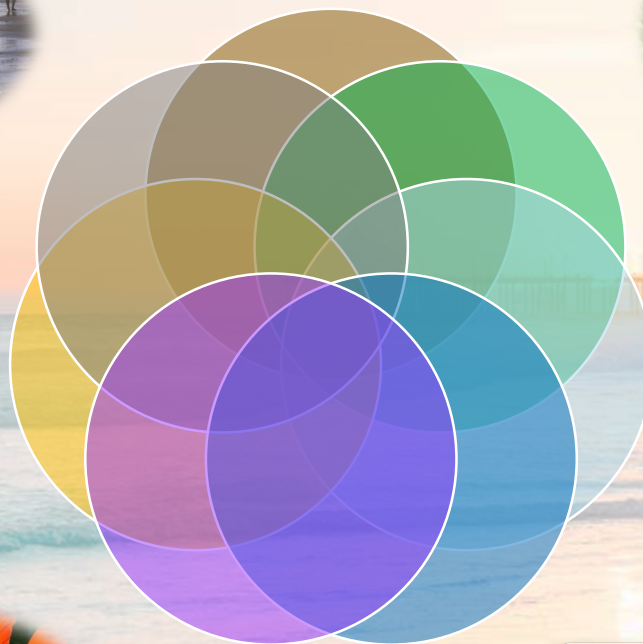
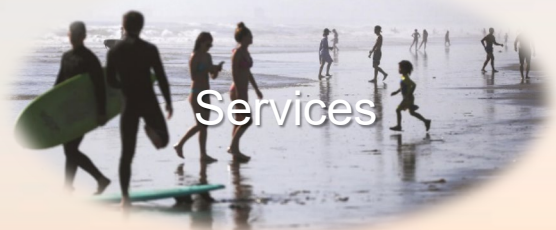


Natural Resources ₁

“includes land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by” the United States, any State, or an Indian Tribe.



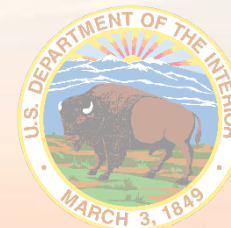
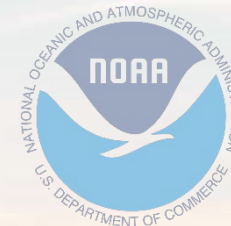
Natural Resources ₂



Natural Resource Damage Assessment

What is it?

- It is a legal process.
- It has Federal and State authorities behind it.
- It is informed by facts (gathered from Response) and data (collected by NRDA Trustees).
- What NRDA is **NOT**...
 - Punitive (fine or penalty)
 - Part of costs for the cleanup
 - Mitigation
 - 3rd Party Claims



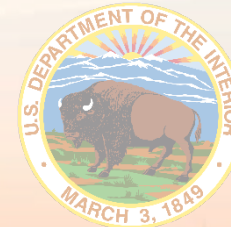
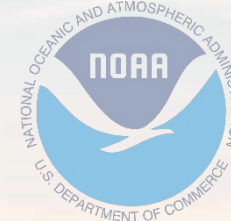
Response vs. NRDA Goals ₁

UNIFIED COMMAND

- Secures and stops the spill or release
- Protects the public, sensitive sites, recovers oiled wildlife
- Maximizes recovery of oil & ends cleanup

NATURAL RESOURCE TRUSTEES

- Collects time-sensitive info about the spill or release
- Gathers data about impacts to habitat and species
- Analyzes impacts of cleanup actions to natural resources



Response vs. NRDA Goals ₂

UNIFIED COMMAND

- Cleans up the oil



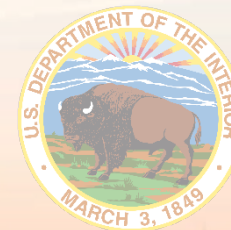
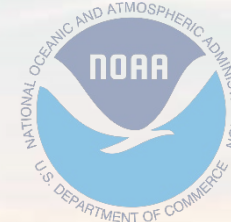
Response workers clean up tar balls near Huntington Beach
(photo credit: Los Angeles Times)

NATURAL RESOURCE TRUSTEES

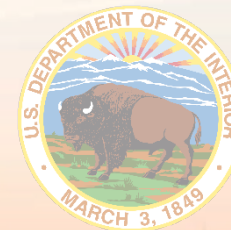
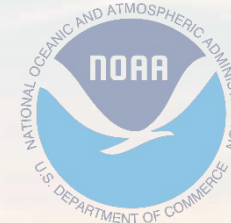
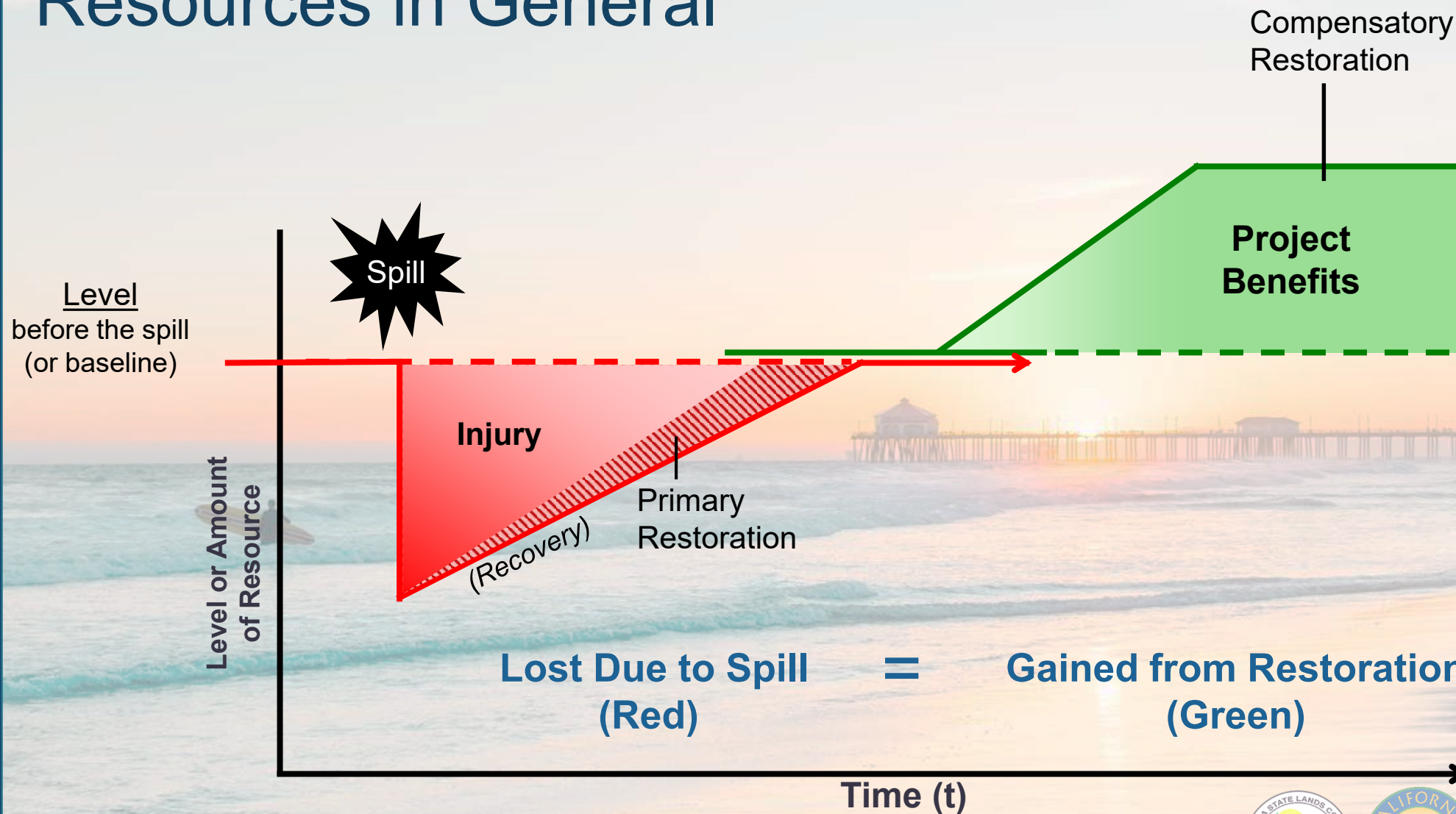
- Studies the oil



Natural Resource Trustees collecting data on fish
(photo credit: NOAA)



NRDA Approach for Natural Resources in General



Technical Working Groups ₁



Birds

Western snowy plover with chick
(National Park Service/ Matt Lau photo)



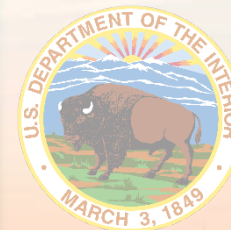
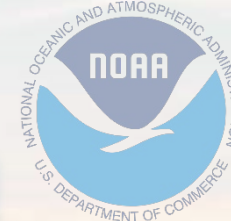
Marine Mammals

California sea lion
(Marine Mammal Center photo)



**Fish, Sub-tidal,
& Water Column**

Garibaldi in southern CA kelp habitat
(Photo from scubadiverlife.com)



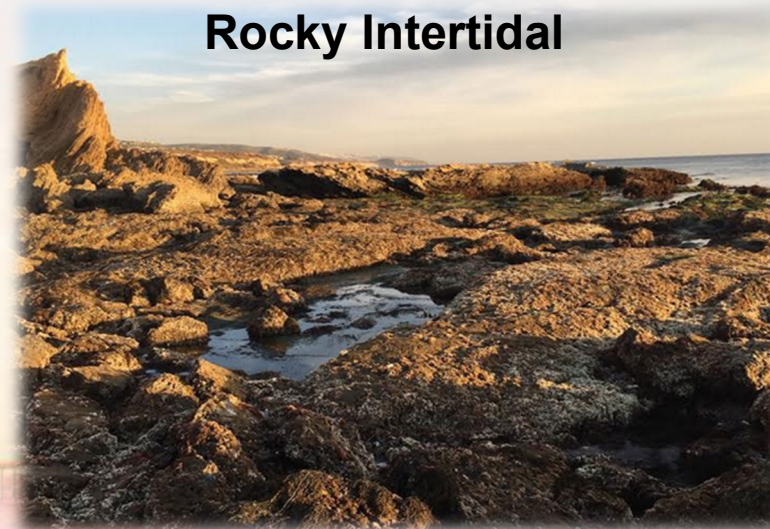
Technical Working Groups ₂

Sandy Beach



Huntington Beach State Park
(photo from Tourism Media)

Rocky Intertidal

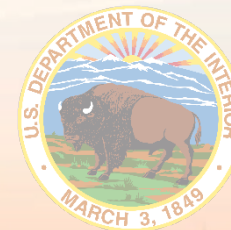
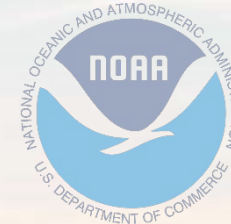


Tide pools @ Crystal Cove State Park
(Cal State Parks photo)

Marsh



Bolsa Chica Ecological Reserve
(photo from alltrails.com)

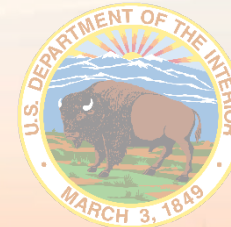
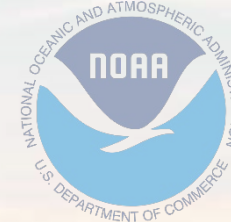


Technical Working Groups ₃

Human Use



Beach-going spectators of the Pacific Air Show
(photo from pacificairshowusa.com)



Technical Working Groups 4

Restoration

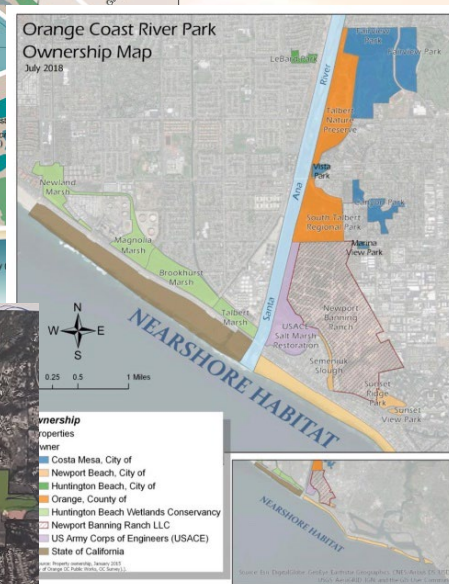
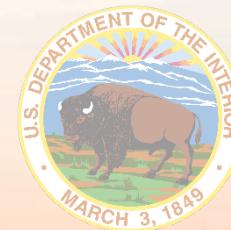
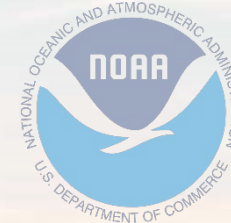


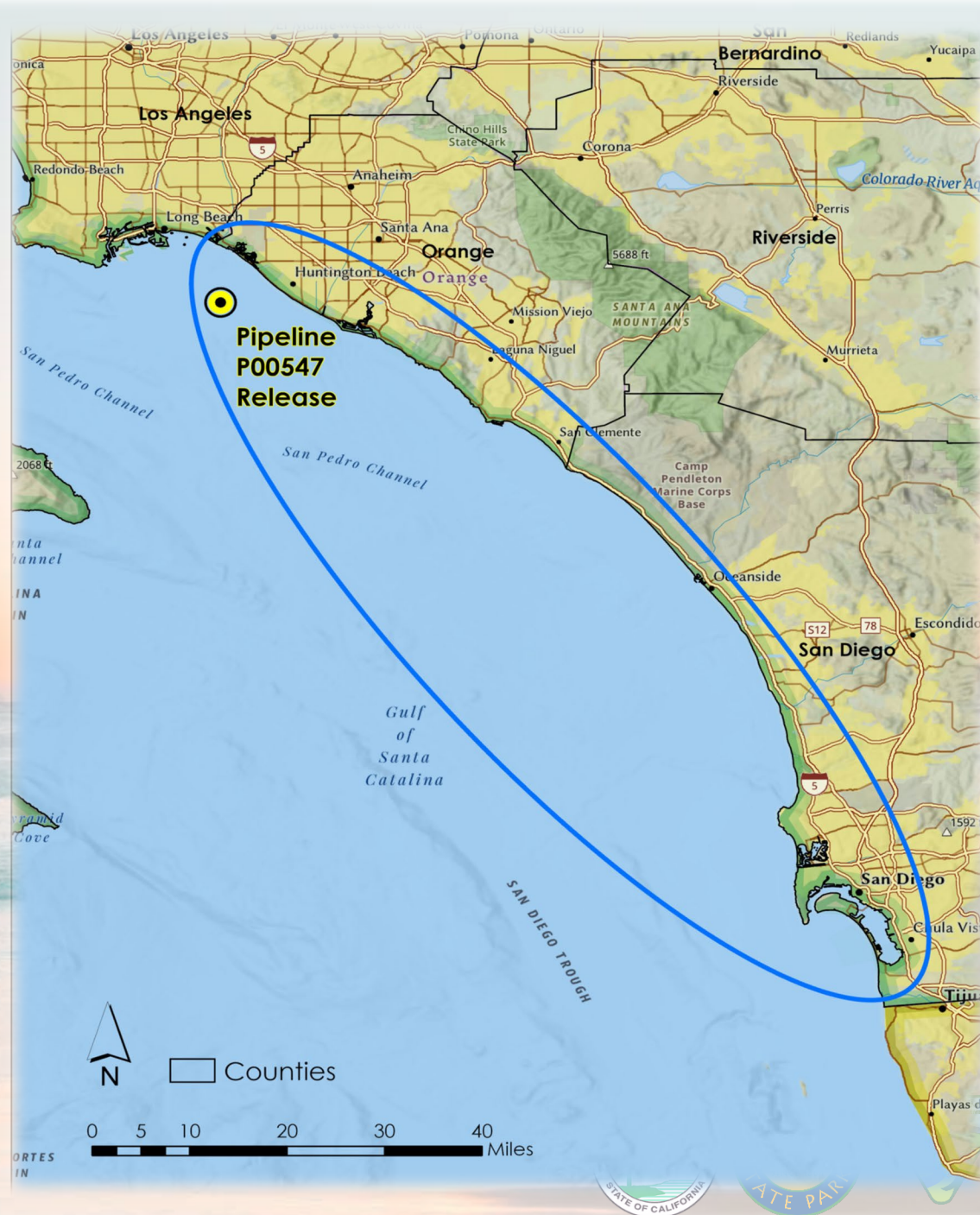
Figure C: Map Depicting Component Properties Of Orange Coast River Park Denoted By Owner

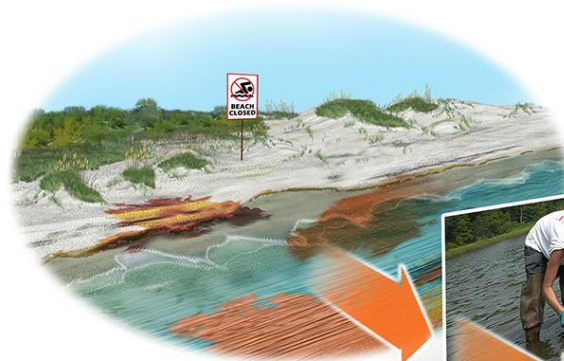


Area of Assessment Activities done by the NRDA Trustees

Types of data collected:

- Chemistry samples
- Habitat surveys
- Biological surveys and observations
- Community dynamics





1 Pre-assess

What was harmed?

- Identify resources at risk
- Collect field samples
- Conduct aerial photography



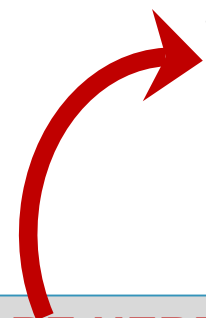
Public Participation



2 Assess and Plan

What can be restored, and how?

- Field and lab testing
- Modeling and analysis
- Develop Restoration Plan



WE ARE HERE

Settlement or Litigation

3 Restore

Restore, monitor, and adapt.

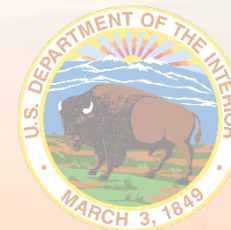
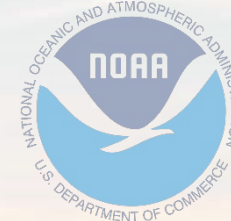
- Restore habitats, resources and services



Overview of the NRDA Process 1

Agenda

- ~~Purpose, Introduction, & Overview (Damian Higgins, USFWS)~~
- Oil Spill Movement/Trajectory (Amy MacFadyen/Troy Baker, NOAA)
- **Technical Working Group Presentations**
 - Birds (Nadia Martin, Industrial Economics, Inc.)
 - Marine Mammals (Ryan Takeshita, National Marine Mammal Foundation)
 - Fish, Subtidal, and Water Column (April DaSilva, CDFW-OSPR)
 - Sandy Beach (Dan Orr/Bruce Joab, CDFW-OSPR)
 - Rocky Intertidal (Peter Boucher, CDFW-OSPR)
 - Marsh (Colleen Grant, USFWS)
 - Human Use (Matt Zafonte, CDFW-OSPR)
 - Restoration (Jen Boyce, NOAA)
- **Next Steps Forward (Damian Higgins, USFWS)**
- **Q&A Session (Megan Stone, EMPSi, Facilitator)**



Technical Updates

