

OIL SPILL PREVENTION AND RESPONSE
TECHNICAL ADVISORY COMMITTEE (TAC)
http://www.dfg.ca.gov/ospr/tech_advis_comm.asp

Public comments will be accepted for each Agenda item. Five minutes are allowed per commenter per item.

Meeting of
Thursday, January 17, 2019
10:00 a.m. to 3:00 p.m.

Coast Guard Station – Sector San Diego
2710 N Harbor Drive
San Diego, CA 92101

AGENDA

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|----|--|--|
| 1. | INTRODUCTIONS.....
<i>Captain Thomas Cullen, OSPR Administrator</i> | 10:00 am – 10:05 am (5 Min) |
| 2. | RECOGNITION FOR MR. STEPHEN RICKS.....
<i>Captain Thomas Cullen, OSPR Administrator</i> | 10:05 am – 10:25 am (20 Min) |
| 3. | SELECTION OF TAC CHAIR..... | 10:25 am – 10:45 am (20 Min) |
| 4. | APPROVAL OF MINUTES..... | 10:45 am – 10:50 am (5 Min) |
| 5. | OSPR UPDATES.....
<i>Captain Cullen, Dr. Julie Yamamoto, Dr. Steve Hampton</i> | 10:50 am – 11:25 am (35 Min) |
| 6. | AGENCY BRIEFINGS.....
<i>Mr. Jonathan Bishop, California Coastal Commission.....</i>
<i>Ms. Linda Scourtis, BCDC.....</i>
<i>Mr. Podoreanu, Alin, CAL Fire.....</i>
<i>Mr. Timothy Holmes, U.S. Coast Guard.....</i> | 11:25 am – 12:05 pm (40 Min)
11:25 am – 11:35 am (10 Min)
11:35 am – 11:45 am (10 Min)
11:45 am – 11:55 am (10 Min)
11:55 am – 12:05 pm (10 Min) |
| | LUNCH | 12:05 pm – 01:05 pm (60 Min) |
| 6. | PRESENTATION ON NON-FLOATING OILS.....
<i>OSPR Presenter</i> | 01:05 pm – 01:25 pm (20 Min) |
| 7. | 2017-2018 TAC BIENNIAL REPORT TO GOVERNOR AND LEGISLATURE
<i>TAC Chair</i> | 01:25 pm – 02:55 pm (90 Min) |
| 8. | NEXT MEETING..... | 02:55 pm – 03:00 pm (5 Min) |

ADJOURN

NOTE: Please contact Elizabeth Vos at (916) 445-9326 if you have any person(s) participating in this meeting who require services for disability related modifications or accommodations.



**OIL SPILL PREVENTION AND RESPONSE
TECHNICAL ADVISORY COMMITTEE (TAC)**

<https://www.wildlife.ca.gov/OSPR/Preparedness/Technical-Advisory-Committee>



*Meeting of
Wednesday, October 3, 2018
9:30 a.m. to 3:10 p.m.*

*Department of Fish and Wildlife
Yolo Wildlife Area
45211 County Road 32B
Davis, CA 95618*

MINUTES

Attendance:

<i>TAC members</i>	<i>Agency Representatives</i>	<i>OSPR Participants</i>	<i>Guests</i>
John Berge	Debra French, Calif Fire	Thomas M. Cullen, Jr.	
Matt Rezvani	Jonathan Bishop, CCC	Yvonne Addassi (by phone)	
Lynn Korwatch	Linda Scourtis, S.F. BCDC	Julie Yamamoto	
Janell Myrhe	Timothy Holmes, U.S.C.G.	Ted Mar	
Tracy Van Houten	Jordan Stout, NOAA	Eric Milstein	
Joseph Cobb	Chris Beckwith, CSLC	Bernadette Fees	
Sejal Choksi-Chugh (by phone)		Paul Hamilton	
James Farner (by phone)		Greg McGowan	

1. INTRODUCTIONS – OSPR UPDATE
(report provided)

Captain Thomas Cullen, Jr., OSPR Administrator

Administrator Thomas Cullen, Jr. offered a brief update of each branch of the Office of Spill Prevention and Response, touching on a few highlights. Further updates can be found in the report provided.

- OSPR has ten TAC members, which is the highest number since I’ve been an Administrator. There are still four vacancies that need to be filled.
- Some OSPR staff were graciously hosted by Joseph Cobb down in Bakersfield, to tour Aera and other production fields.
- Dr. Hampton and I embarked on Alaska Tanker Company’s tanker, the Explorer, in Long Beach for a two night transit up to Anchorage Nine in San Francisco. We want to continue that partnership with a great company like Alaska Tanker to open it up to some of our field folks, or other folks at OSPR, to embark and see first hand an operation by one of our major industry partners.
- Travelled to Washington D.C. and sat in on the National Response Team meeting at US EPA and the Coast Guard. Also attended the Coast Guard Change of Command. This was the first of many changes of command for the Coast Guard.
- OSPR will be holding a local government on scene coordinator workshop. We recognize the importance of having locals, who know the people and the lay of the land, participate in a liaison type role.
- Attended Congressman Garamendi’s maritime advisory committee meeting.
- California Department of Fish and Wildlife held their Department Awards Ceremony, recognizing two of OSPR’s own - Randy Imai and the Santa Cruz Marine Wildlife Veterinary Care and Research Center.

2. APPROVAL OF MINUTES

Mr. John Berge, TAC Vice Chair

February 7, 2018 Minutes – A motion to accept the minutes was made and seconded. The minutes were unanimously approved.

3. OSPR 101 OVERVIEW AND CURRENT UPDATES

*Dr. Steve Hampton,
OSPR Assistant Deputy Administrator*

(report provided)

Mission

- OSPR’s missions is to provide best achievable protection of California’s natural resources by preventing, preparing for, and responding to spills of oil and enhancing affected resources.
- OSPR’s mission is four pronged: Prevention, Preparedness, Response and Restoration.

- OSPR has 16 office locations and 240 personnel; 100 scientists/oil spill prevention specialists, 100 administrative support or other specialists and 40 wildlife officers.

Prevention

The goal of OSPR's Prevention Branch is to reduce both the number and total volume of oil spills reaching California's waters. Working with state and federal partners, Prevention staff analyze the root causes of spills and design policies and programs to reduce risk.

Preparedness

OSPR's Preparedness Branch ensures that producers and transporters of oil, as well as OSPR and other responders, are prepared in case there is an accident.

Response

OSPR's Field Response Teams consist of wildlife officers, oil spill prevention specialists, and environmental scientists. Together, they respond physically to an average of 248 spills each year – over four per week. They address another 960 spills per year via telephone consultations. Other programs in OSPR:

- Response Technology and Support
- Marine Wildlife Veterinary Care and Research Center
- Laboratories
- Response Equipment Grants
- Oiled Wildlife Care Network
- California Oil Spill Study and Evaluation Program
- Marine Invasive Species
- Military and Superfund Sites

Restoration

As a trustee for natural resources, OSPR conducts natural resource damage assessments (NRDA) to examine the natural resource injuries from oil spills, to quantify the injuries, and to seek damages to both restore the injured resources and to compensate the public for the lost interim ecological benefits and uses of those resources.

Regulations

The Lempert-Keene-Seastrand Oil Spill Act defines OSPR's mission and responsibilities. To implement the Act, OSPR creates regulations that require the oil industry to take various measures to prevent oil spills and to be prepared in the event of a spill.

Technical Advisory Committee

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act established the Technical Advisory Committee to provide independent recommendations to OSPR.

The Committee consists of fourteen members. Eight are appointed by the Governor, three by the Speaker of the Assembly, and three by the Senate Rules Committee. They meet at least twice a year and prepare a report at least once every two years for the Governor and Legislature.

Finances

OSPR receives the bulk of its funding from a 6 ½ cent per barrel fee on crude oil delivered to refineries in California. A smaller fee on non-tank vessels augments these revenues. Together, these form the Oil Spill Prevention and Administration Fund, which funds most of OSPR, as well as the Oiled Wildlife Care Network and portions of the State Lands Commission. OSPR receives some additional funds for non-oil related work, such as Base Realignment and Closure (BRAC), Marine Invasive Species, and various programs within the laboratories.

4. AGENCY BRIEFINGS

California Coastal Commission
(report provided)

Mr. Jonathan Bishop

Meetings

The Commission staff attended the following meetings from February 7, 2018 to October 3, 2018:

- Seven Harbor Safety Committee (HSC) meetings. Updates to all Harbor Safety Plans are continuous and ongoing. Humboldt, Port Hueneme and San Diego HSC's continue to work on SB 414 emergency tug/tow capability reports.
- Eight Area Committee (AC) meetings. CCC OS Program staff has been working on updates to the LA/LB Area Plan and is currently signed up for working subgroups engaged in stakeholder engagement and outreach as well as the offshore workgroup looking at issues surrounding offshore pipelines and platforms.
- One Regional Response Team 9(RRT 9) meeting. CCC oil spill program staff attended and presented at the RRT 9 State Agency Roundtable. Updates to the California Dispersant Plan and the CCC CZMA review process of the CA Dispersant Plan were highlighted.
- Prevention First Symposium, Long Beach. CCC OS Program staff attended the Prevention First Symposium held in Long Beach, CA.
- Local Government On-Scene Coordinator (LGOSC) Training. CCC OS Program staff attended the OSPR/OES sponsored LGOSC training in San Rafael at the Emergency Operations Facility.
- USCG/Chevron El Segundo Drill. Staff participated in the two day USCG/Chevron spill drill at the El Segundo refinery.
- Beacon West Oil Spill Response Plan (OSRP)/Federal Consistency Review. CCC OS Program staff is working with BSEE and OSPR on Beacon West's OSRP.

New Legislation

AB 1197 (Limon) Spill Management Teams – This bill regulates SMT's. CCC OS program staff participated in the scoping meeting for the new regulations in Playa del Rey (2/27), and is reviewing the draft regulations that were recently released.

AB 2864 (Limon) NRDA Participation – This bill would ask the OSPR Administrator to invite the CCC and BCDC to participate in the NRDA process for coastal and Bay oil spills. During this reporting period, the CCC OS, Energy, Legislative and Legal staff worked with OSPR and others on clarifications/fine tuning the language of the bill. Awaiting Governor's approval.

Coastal Development Permits and Projects

Refugio Oil Spill/Coastal Development Permitting Update (CDP # 9-17-0297) – The public hearing and action on the emergency oil spill cleanup work at Refugio conducted under Emergency Permit No. G-9-15-006 was held and approved on March 9th in Port Hueneme. CCC staff continues to coordinate with trustee agencies and other interested parties on the NRDA process and possible future mitigation projects.

City of Long Beach Southeast Areas Development and Implementation Plan (SEADIP). On July 26, the CCC certified the Land Use Plan and Implementation Policies of SEADIP and the City's Oil Code, both components of the City of Long Beach's LCP. The amendment adds Oil Production Uses as an allowable use on two sites in the SEADIP area (the Pumpkin Patch site and the Los Cerritos Wetland Authority site) and revises the Oil Code to reflect the addition of these two areas as "Oil Operating Areas".

Pacific Quest Vessel Salvage. On August 12th, the 56-foot commercial fishing vessel, *Pacific Quest*, ran aground near Natural Bridges State Beach, in Santa Cruz County, with a maximum potential capacity of 1,200 gallons of diesel fuel aboard. The CCC issued an emergency coastal development permit (ECDP) which authorized emergency development consisting of removal of diesel fuel and other pollutants from the wrecked vessel. Debris cleanup has been ongoing and continues. Plans with UCSC and the LML are being coordinated to restore the upper bluff staging area to pre-development conditions. A follow-up regular permit will be required to mitigate for unavoidable impacts to coastal resources as a result of the wreck and salvage of the vessel.

BCDC

Ms. Linda Scourtis

(report provided)

BCDC participated in the February - September HSC meetings, although no meeting was held in August. The next meeting is scheduled October 11 in Richmond.

BCDC's primary effort over the spring was managing the Harbor Safety Plan's annual update, which was adopted for submission to the OSPR Administrator during the June 14 HSC meeting.

BCDC spill staff attended USCG Deep Draft Industry Day April 25. Staff listened to the Pac States/BC annual meeting webinar on abandoned and derelict vessels June 19.

Following the July 12 HSC meeting, spill staff joined the Navigation work group for a NOAA briefing and discussion on CATZOC (Categories of Zone of Confidence).

Spill staff attended a maritime stakeholder meeting sponsored by Rep. John Garamendi September 17, where accomplishments over the previous two years were presented and suggestions for future actions were received.

Spill Contingency Planning

Spill staff participated in the March 20, May 15 and September 18 Area Committee meetings, and joined other Sensitive Sites work group members in determining potential restoration sites to be added to the ACP.

BCDC spill staff attended the Joint LEPC, Coast Guard Area Committee-HazMat working group meeting in Martinez May 9.

Staff participated in the July Statewide Area Committee meeting at the Shell Clubhouse in Martinez.

Participated in OSPR sensitive site survey of Bel Marin Keys restoration site in Marin County September 5.

Response

Primary spill staff received annual 8-hour HAZWOPER refresher training February 28.

Backup spill staff received SCAT training with Pacific Strike Team March 27-29.

Primary staff logged in to a webinar re oil spill effects on marine mammals March 29.

Backup spill staff:

Attended a marinas spill workshop in Vallejo May 8.

Took ICS-300 in June with the Pacific Strike team.

Received 24-hour HAZWOPER training June 26-28.

Participated in the July 19 Shell NPREP.

Attended Prevention First September 25-26.

Primary spill staff participated in:

Chevron Richmond worst-case exercise August 15-16.

LGOSC workshop in San Rafael August 21.

Chevron Avon worst-case exercise in San Ramon September 27.SF Fleet Week Emergency Exercise October 1.

BCDC Enforcement staff continues to participate in the USCG Abandoned Vessels working group as well as the Richardson's Bay Regional Authority and City of Sausalito efforts to improve navigational and open waterways.

NOAA

(report provided)

Mr. Jordan Stout

- **Some lessons from the 2017 Hurricane season** – NOAA's Emergency Response Division was heavily deployed during the 2017 Hurricane Season, staffing command posts in TX, FL, Puerto Rico and the USVI in support of USCG's ESF-10 (oil & hazmat) operations. Many disaster-related response lessons were learned including the value of abandoned/derelict vessel regulations, management of electronic field data (QA/QC, cross-platform connectivity/integration, visualizations), and coastal habitat protection guidance for the removal of 1,566 sunk, capsized, grounded, or displaced vessels. The evolving learning curve across multiple hurricanes in the same season underscored the value of disaster planning.
- **NOAA Spill Science Following Deepwater Horizon (DWH)**
 - Remote sensing – Multi-level field tests at the Ohmsett test tank (NJ) and a chronic leak site off the Louisiana coast have improved the use of remote sensing tools to detect, characterize and estimate volumes of surface oils in open water environments. Simultaneous field data collection by satellite, aircraft-mounted sensors, Un-manned Aerial Systems (UASs), and in-situ oil thickness measurements have helped validate sensor packages and improved classification algorithms to distinguish oil sheens from thicker and emulsified oils. Updated classification (TCNNA – Texture Classifying Neural Network Analysis) algorithms have already been incorporated into NOAA satellite spill reporting process (see below for more on NESDIS).
 - Endangered Species Research special issue on DWH – Volume 33 of Endangered Species Research (2017) includes 22 scientific articles summarizing 5 years of interdisciplinary studies of DWH impacts on marine mammals & sea turtles. Over 200 authors including NOAA and partner researchers. Available for OpenAccess download at: <https://www.int-res.com/abstracts/esr/v33/>
 - Dolphin inhalation study – One of the key routes of DWH oil exposure to dolphins was through inhalation of VOCs, aerosols and droplets. Dolphins are particularly susceptible to inhalation effects due to their large lungs, deep breaths, and extended breath-hold times so NOAA Fisheries is working with the National Aquarium (Baltimore) to better assess aerosol and droplet inhalation pathways in dolphins.
- **NOAA satellite spill reports now public** – In March 2018, NOAA NESDIS' (National Environmental Satellite Data & Information Service's) Marine Pollution Surveillance Reports (MPSRs) became publicly-available at: <https://www.ospo.noaa.gov/Products/ocean/marinepollution/>. These reports, formerly "for government use only", indicate areas of "possible oil" identified by NESDIS analysts using a variety of constantly streaming environmental satellite data.
- **Voluntary SCAT data standard published** – In May 2018, NOAA published a voluntary standard for digital data describing oiled shorelines using SCAT (Shoreline Cleanup Assessment Technique). With the ever-increasing use of digital data during incident responses, this voluntary standard provides a common point of reference for the development of electronic field data collection tools, databases and information products for SCAT activities.
- **Interagency Agreement (USCG & NOAA) for use of ERMA as COP** – In September 2018, an interagency agreement (IAA) was signed by USCG & NOAA at the headquarters-level providing a framework for USCG's use of ERMA as the Common Operating Picture for spills, exercises, and planning. In development since DWH, this IAA:
 - Clarifies ERMA as part of NOAA's Scientific Support role coordinated through SSCs
 - Addresses the importance of data sharing
 - Provides a mechanism for future USCG-funded ERMA projects

- Supports nationally-consistent approaches/visualizations for USCG activities, including tracking Abandoned & Derelict Vessels (ADVs), Geographic Response Strategies (GRSs), training and exercises
- **LRAUV field demo off Moss Landing** – Researchers at the Monterey Bay Aquarium Research Institute (MBARI), Woods Hole Oceanographic Institution (WHOI), and University of Alaska’s Arctic Domain Awareness Center (ADAC) developed a small Long-Range Autonomous Underwater Vehicle system (Tethys AUV), which was demonstrated in an open-water field test on 27-SEP-2018 in Monterey Bay. It is described as “a helicopter-portable system that functions as a rapid response solution to incidents occurring in the maritime environment, and aims to increase the situational awareness of first responders.” The goal of this five-year project is to provide an autonomous underwater capability to survey oil spills at long range, at high latitudes, and under ice. The field test involved sensing and mapping sea dye, simulating an oil spill in open water.
- **CRRC Science/Academic Leveraging Workshop** – In early January 2019, UNH’s Coastal Response Research Center (CRRC) will host a workshop on “Leveraging Science and Academic Engagement During Incidents” on January 8-9 in Tiburon, CA. Yvonne Addassi is a member of the Organizing Committee. Workshop goals include:
 - Develop best practices for advancing NOAA ORR (Office of Response & Restoration) interactions with the academic community during response, enabled by relationships built during the preparedness phase
 - Build relationships and foster understanding of the roles and responsibilities of the oil spill response/assessment scientific community and the academic community, including an understanding of each other’s strengths and limitations
 - Develop mechanisms that facilitate access for academic research during oil spills
 - Develop implementation recommendations and metrics for evaluating success
- **Upcoming SeaGrant spill workshop in CA** – The National Sea Grant College Program (aka “SeaGrant”), a Federal-University partnership program, is planning a series of five workshops around the country focusing on the "Health, social, and economic disruption related to oil spills" (<http://masgc.org/oilscience/NAS-project-flyer.pdf>). These workshops, held in coordination with the National Academy of Sciences’ Gulf Research Program (GRP) and the Gulf of Mexico Research Initiative (GOMRI), will aim to listen to those directly affected by spills, identify regional priorities for improving preparedness, promote networking, identify resources, and address gaps related to spill-relevant public health topics. Each workshop will result in a summary report, laying the foundation for potential follow-up activities to improve public health response and regulatory frameworks.

U.S. Coast Guard
(report provided)

Mr. Timothy Holmes

Meetings, Plans & Coordination:

- RRT9, November 6-8, 2018. This meeting will serve as an RCP workshop (11/7-8), preceded by an ExecSec meeting on 11/6. Location TBD. January RRT Meeting, January 9-10, 2019 in Long Beach.
- ESA7: CG & EPA received concurrence on the Biological Assessment on the CA Dispersant Use Plan from USFWS and NMFS.
- Draft RRT9 Dispersant Use Plan for CA: Draft is being briefed to CG FOSCs, Area Committees, NMSs, TAC, and EPA9 & CGD11.
- CA Area Committees: SFBD – 9/18 Sausalito CA; LA North & South – 10/9 Santa Barbara, CA; SD County – 10-11 Carlsbad, CA; CC – 10/25 Moss Landing, CA; NC 11/15 Eureka, CA.
- MEXUSPAC: D11 & SEMAR Region 2 signed the 2018 MEXUSPAC Annex in Ensenada, NX on March 23, 2018. 2019 MEXUSPAC Mtg & TTX scheduled for February 20-21, 2019 at SEMAR R2 in Ensenada, MX.
- OWCN continues efforts to move SEMAR & Baja Norte forward with their development of an oiled wildlife response plan.
- HQ/NRT:
CG & NOAA Interagency Agreement (IAA) standardizes use of ERMA as the Common Operation

Picture for USCG-let training, exercises, and response to discharges of oil and releases of hazardous substances, pollutants, and contaminants. It also establishes a formal framework for policy decision and use of ERMA to support USCG activities.

PREP Guidelines 2016.1: The Federal Register Notice of Availability is being finalized with anticipated release date OOA 30 September 2018.

NRT Abandoned Vessel Guidance Workgroup Meeting held 9/26.

Clean Gulf – November 13-15, 2018.

Response Activities (IMD)

July 12, 2018: SEC SD received notification from San Diego Harbor Police of flooding at the General Dynamics NASSCO facility in the vicinity of 32nd Street Naval Base, San Diego.

Readiness:

GIUEs: FY18 = 81% compliance Coast Guard-wide. 10% compliance in D11.

Training:

DRAT completed multiple Boom Training evolutions using CA OSPR Boom Trailers for County Park Rangers, Fire Departments, Marine patrols and the Yurok Tribe.

August 2018: DRAT and NOAA provided spill response management training for over 40 CG and OSPR Responders at Sectors SD & LA/LB.

Late November 2018: DRAT to provide annual CGC ASPEN Spilled Oil Recovery System (SORS) training south of Bay Bridge.

5. 2017/2018 TAC BIENNIAL REPORT TO GOVERNOR AND LEGISLATURE

*Mr. John Berge
TAC Vice Chair*

The Biennial Report is a report that is sent to the Governor and the Legislature every two year.

- Matt Rezvani and Janell Myhre will work on future issues
- John Berge and Tracy Van Houten will work on accomplishments
- Julie Yamamoto will liaise between both teams

6. MEETING DATES

Mr. John Berge, TAC Vice Chair

Next TAC meeting(s) – Thursday, January 17, 2019, in San Diego, CA.

ADJOURN

Meeting adjourned 3:45 p.m.



Department of Fish and Wildlife
Office of Spill Prevention and Response (OSPR)
Report to the Technical Advisory Committee
January 17, 2019



Executive Branch

Verbal update provided by Administrator Cullen.

Enforcement Branch

Spill Response: From October 2018 through December 2018, Wildlife Officers responded to, and vetted, approximately 500 oil spills throughout inland and coastal California. These discharges varied from oil production facilities and truck accidents, to abandoned vessels and sunken barges. The most significant or notable events included:



October

- 18-6660: Derelict Vessel. The Southern FRT assisted local law enforcement and USCG personnel with the removal an abandoned vessel that was part of an illicit drug smuggling operation in Orange Co. Fuel and potential pollutants were removed from the vessel.
- 18-6775: Vessel Fire. Wildlife Officers responded to a vessel fire in Huntington Harbor, Orange Co. Officers assisted with deploying boom and took actions to minimize the impacts to the harbor. Vessel owner was arrested for suspicion of arson.
- 18-6779: Sunken Vessel. The Central FRT responded to a sunken vessel in Santa Barbara Harbor, Santa Barbara Co. The FRT assisted local responders with securing the vessel and initiated clean-up operations. Once the vessel was secured, and the pollutants removed from the vessel, FRT members completed the response and their investigation.
- 18- 6791: Derelict Vessel. Wildlife Officers assisted the USCG with the response to a sunken vessel in San Diego Harbor, San Diego Co. Officers responded to the spill site and helped coordinate the removal of oily bilge water and hazardous materials.
- 18-6970: Bunker Fuel Release. The Southern FRT responded to a report of a bunker fuel release in Long Beach Harbor, Los Angeles Co. Responders investigated the spill and assisted the USCG with taking measures to limit the spill's impact to the harbor.
- 18-7128: Sunken Vessel. Wildlife Officers responded to a report of a sinking vessel that was spilling fuel into a marina in the City of Stockton, San Joaquin Co. Officers assisted local responders with securing the scene and limiting the impact of the fuel release. The vessel was ultimately salvaged, and removed, from the marina.
- 18-7134: Pipeline Discharge. Wildlife Officers responded to a report of a potential pipeline spill in Fresno Co. Officers assisted local responders and Kinder Morgan with identifying the source of the leak and took measures to minimize environmental impacts. Additional resources were deployed by Kinder Morgan to investigate the pinhole leaks origin and ensured that the line remained shut down until the contaminated soil was removed.
- 18-7240: Asphalt Oil Truck Accident. Wildlife Officers responded to an asphalt oil tanker truck rollover that threatened to enter the California Aqueduct, Merced Co. Officers assisted with securing the scene and ensured that the pollutant threat was removed.



November

- 18-7333: Oil Production Facility Discharge. Wildlife Officers responded to an oil spill at the Breitburn Energy facility in Santa Fe Springs, Los Angeles, Co. Once on-scene, officers assisted with the response and investigation into the cause of the spill.
- 18-7340: Pipeline Discharge. Central FRT members responded to a report of an oil spill near Taft, Kern Co. FRT member assisted with the response investigated the cause of the spill. Measures were taken to limit the impacts to the adjacent dry creek.
- 18-7868: Pipeline Discharge. Central FRT members responded to a report of a pipeline discharge near Derby Acres, Kern Co. FRT members responded to the spill site and found a ¼ mile of dry streambed impacted by the crude oil. The FRT assisted Aera Energy in developing a plan to remove the oil from the environment and conducted an investigation to the cause of the discharge. Approximately 70 barrels of crude oil and 150 barrels of produced water collected from the streambed.
- 18-8170: Sunken Vessel. Southern FRT members responded to a sunken vessel leaking fuel in Newport Harbor, Orange Co. The 33-foot powerboat sunk at its' mooring and was leaking fuel into the harbor until OSPR and USCG responders took measures to lift the vessel and remove the remaining fuel.



December

- 18-8219: Pipeline Discharge. Wildlife Officers responded to a report of a Chevron crude oil pipeline spill in Kern Co. The officers responded to the spill site and assisted with initial clean-up operations. Once the spill was contained and the incident stabilized, officers conducted an investigation and ensured that the 84 barrels of oil in the dry streambed was cleaned up.
- 18-8258: Derelict Vessel. Northern FRT members responded to a mystery sheen event in the Carquinez Straits area of San Francisco Bay, Contra Costa Co. Initial reports noted a large rainbow sheen emanating from a series of docks near the City of Crockett. FRT members investigated and discovered a derelict vessel leaking petroleum. Measures were taken to contain the spill, plug the leak, and remove all of the remaining fuel. This is an on-going derelict vessel removal project.
- 18-8399: Tanker Truck Accident. Southern FRT members responded to a report of an overturned oil tanker truck near Los Coyotes Creek, Los Angeles Co. Responders arrived at the spill site and discovered an overturned oil transport trailer laying on top of several 55-gallon drums of oil. Measures were taken to contain the spill within the impacted asphalt parking lot. Responders assisted with the removal of oil from an adjacent stormdrain and completed an investigation to the cause of the accident.
- 18-8456 (also # 18-8451): Tanker Truck Accident. Central FRT members responded to an overturned tanker truck in Kern Co. FRT members responded to the spill site and assisted with the stabilizing the scene and initiated clean-up operations. Responders ensured that the crude oil spill was isolated to the initial spill site and took measures to protect an adjacent waterway.



Personnel: OSPR's Law Enforcement Branch has four statewide vacancies. One of these vacancies comes from the well-deserved retirement of Lt. Hector Orozco. Lt. Orozco spent almost 30 years as a State Peace Officer, in both Northern and Southern California, working on

some the State's largest oil spill response. In addition, this Fall the Enforcement Branch filled the vacant South / Central Patrol Captain position with Joseph Mello. Joseph Mello is a 29-year officer with the California Department of Fish & Wildlife and is a welcome addition to our management team.

Environmental Response Branch (ERB)

Please see above for recent responses. ERB program manager Randy Imai retired as of January 4, 2019 and is using excess leave until approximately October 2019. The three Senior Environmental Scientist Supervisors for the North, Central and South units will be rotating as Actings until a permanent replacement is hired. A more complete update on ERB activities will be provided in the next OSPR update to the TAC.

Resource Restoration Program

The State and federal agencies pursuing civil claims in connection with the Refugio oil spill and Plains Pipeline LLC have entered into Mediation in an on-going effort to resolve all civil claims. As part of this effort, the lead trustees for natural resources impacted by the spill, including CDFW-OSPR, met with representatives of Plains in November to try and settle natural resource damages resulting from the spill which impacted the Gaviota Coast and Southern California shorelines. The meetings included a third party mediator to facilitate negotiations. Significant progress was made in resolving natural resource damages; however, the ongoing federal government shutdown has delayed further negotiations aimed at resolving other aspects of the case.

Laboratory

The OSPR Lab Program's Aquatic Bioassessment group collected baseline high risk rail samples from the Upper Sacramento River in October 2018. Those samples are in the queue to be processed and data will be reported to OSPR's NRDA unit. The report will include physical, chemical, and biological data that can be utilized as reference conditions should a spill occur in the upper Sacramento River. There is a proposal to collect future samples in the upper Salinas River near San Ardo oil production area.

Response Technology and Support Program

Applied Response Technology and Best Achievable Technology

- Dispersant Use Plan for California – Secured Coastal Zone Management Act (CZMA) concurrence from Coastal Commission. All external reviews and approvals now complete (e.g., Section 7 NOAA/USFWS, CZMA), Text complete. Significant public outreach regarding update across California. Revised and updated text, tables, & figures complete. Planning for signature in early 2019.
- Non-chemical Dispersant Field Demonstration – Successful technology demonstrations completed in marine and freshwater settings. Please see attached summary.
- Technology Workshop – OSPR and Chevron jointly host an annual technology workshop. The next workshop is scheduled for the last week of February 2019. High interest from industry, OSROs, and agencies. 100+ registered attendees and 42 presentations. See attached agenda.
 - TAC members welcome to participate!
 - Primary Topics: Agency and Industry Updates, Mechanical Containment & Recovery Technology, Remote Sensing, In-situ Burn Enhancement, Dispersants
 - Information on the workshop is posted on OSPR Website
- Response Technology Evaluation (RTE) Program – Development is in progress on new RTE program for OSPR to evaluate and compare new technologies.

- Drills and Exercises – In-person and remote participation in multiple drills throughout California addressing ART and BAT practices.

Oiled Wildlife

- Wildlife Branch Director Training – Additional OSPR WBDs have been trained. Coordinating with OWCN for additional DWBD trainings in 2019
- Wildlife Resources Web Tool – In early development of web tool to advance wildlife response by providing quick accessible information for the protection and recovery of California's inland species.
- RCP Update – Supporting USCG with RCP update
- Drills and Exercises – In-person and remote participation in multiple drills throughout California including standing up the Wildlife Branch at 3 NPREP and at several other large drills.

Marine Wildlife Veterinary Care & Research Center

- Facility Maintenance – Recently hired Maintenance Mechanic has provided immediate value addressing deferred maintenance work throughout the facility. High priorities have been addressed in the laboratory units as well as the mobile labs and ancillary infrastructure.
- Temporary Support for Partner Organizations – MWVCRC continues to work closely with UCSC, TMMC, IBR, and USGS working cooperatively to support wildlife care and research during periods where no oiled wildlife are present. Mobile veterinary hospital currently supporting OWCN and USGS for duck study.
- Research – Staff continue with studies of the health and pathology of sea otters and seabirds to assure best achievable care during spill response.
- Drills and Exercises – In-person and remote participation in multiple drills throughout California addressing oiled wildlife roles and responsibilities.

Fishery Closure

- OEHHA + OSPR – OSPR is coordinating closely with OEHHA to optimize the communications and operations associated with fishery closure and reopening.
- RCP Update – Supporting USCG with updates to the Fishery Closure elements of the RCP.
- Drills and Exercises – In-person and remote participation in multiple drills throughout California addressing fishery closure coordination practices.

Geographic Information Systems

- COSSEP Study – Conducted initial calibration flights with new UAV to begin testing of camera/sensor arrays for study of UAV use for SCAT.
- OtterSpotter – iPad application developed for sea otter surveys is in beta field-testing
- SCATologue v.1.58 – Delivered to App store and FRT for operational use
- GRP Development – Supporting spatial analysis and mapping for multiple concurrent GRPs. Developed iPad application for data collection.
- ERMA Updates – Continual data additions to ERMA for Common Operating Picture during response.
- Drills and Exercises – In-person and remote participation in multiple drills throughout California addressing Common Operating Picture, Situation Unit support, SCAT, spatial analysis, and mapping.

Spill Desk

- Considering changes to hours and interface with state parks and OES to optimize reporting and notification.

Incident Tracking Database

- Continuing historical data review (through 2012) to ensure complete reporting
- Preparing BC/Pacific States annual data review

Recent OSPR Technology Demonstrations
Fall 2018

Water-Gate Underflow Dam



OSPR Response Technology Program



Financial and Administrative Services Branch

Several FASB staff members will join their OSPR colleagues and deploy to Debris Management Project Teams to aid recovery efforts in the aftermath of the recent devastating California wildfires. Assignments to the Planning Sections for the Northern California Camp Fire and Southern California Woolsey Fire responses will provide exceptional ICS experience to our folks who typically staff the Logistics and Finance sections of oil spill response incidents and offer an expanded personal opportunity to contribute to a disaster relief effort beyond the scope of a usual OSPR response. Staff volunteered for the 30-day rotational assignments that are expected to last until summer and will have their regular OSPR duties covered by their fellow FASB team members while they are deployed to ensure continuity of service to our internal and external customers. All staff time and expenses for the wildfire response are paid by the Department with partial recovery of those costs to be requested through FEMA. The Department has tapped into our Cost Recovery staff's expertise in tracking response costs to aid the Department's cost recovery process. No OSPAF or OSRTF funds are expended for this effort.

Plans for OSPR HQ's move into West Sacramento continue with the projected move date extended to June 2019. FASB management staff is participating on several teams to help address facility parking and public transit, security services and general use issues/policies.

Recent staffing changes include the addition of Information Technology Associate Elliot Frodah (IT) and Attorney Joshua Brooks (Legal) in the Sacramento HQ, Environmental Scientist Katherine Hummel (Drills and Exercises Unit), Oil Spill Prevention Specialist Van Vu (Southern FRT) in Los Alamitos, Environmental Scientist Leilani Birch (Central FRT) in Bakersfield, and Wardens Dennis Rosenberg (Southern FRT) and Pete Georges (Northern FRT). OSPR staffing changes include the departures of Warden Lieutenant (Specialist) Hector Orozco (Northern FRT), Management Services Technician Erica Donnelly-Greenan from the Marine Wildlife Veterinary Care and Research Center in Santa Cruz, Senior Environmental Scientist (Specialist) Carolyn Rech (BRAC Unit), Associate Governmental Program Analyst Janet Dias (FASB), Associate Governmental Program Analyst Dan Warren (Regulations Unit), Management Services Technician Andrea Moore (Legal) from the Sacramento HQ, Environmental Scientist Sandra Finlayson, Senior Environmental Scientist (Specialist) Jim Harrington from the Lab Program in Rancho Cordova, the transfer of Management Services Technician Vanessa Pino from the Environmental Response Branch's Spill Desk to its management support services and Oil Spill Prevention Specialist James Foto (Southern FRT) from the Los Alamitos office to the San Diego office.

IT Operations Branch

- OSPR's 10 production applications have been successfully upgraded to MS Access 2016
- OSPR is 55% complete with its portion of the department wide Windows 10 upgrade and migration from Windows 7.
- The Area Contingency Plan Environment Database has been in production for a year now. The application has been stable and well used. Modifications continue to be made to refine usability and add functionality.
- Raul Luna, longtime PC support and help desk staffer retired May 1, 2018. He had 28 years of service.
- We have hired two new employees; Hannah Ferguson, Information Technology Associate (application development), and Elliott Frohdal, Information Technology Associate (PC support and help desk). Information Technology Branch is fully staffed.

Legal Branch

- Refugio Incident:

Criminal Enforcement: On September 7, 2018, the jury returned their verdict and the defendant, Plains All-American Pipeline, was found guilty of multiple counts under the California Government and Fish and Game codes. A sentencing hearing scheduled for December has been postponed and a new date has not yet been set.

Civil Enforcement: Natural Resource Damage Assessment (NRDA) – The NRDA Trustees include representatives from the California Department of Fish and Wildlife, California State Parks, California State Lands Commission, UC Regents, National Oceanographic and Atmospheric Administration (NOAA), and the US Department of the Interior. Legal staff are working closely with trustee attorneys, state and federal technical staff, and outside experts to evaluate Plains' (the Responsible Party's) position with regard to the pathway of the oil and possible restoration projects, to gather additional evidence, and to refine the Trustees' claim for natural resource damages. The Trustees are preparing for additional settlement negotiations with Plains in the coming months. The measure of natural resource damages is based on the cost to restore the injured resources and compensate the public for the loss of use and enjoyment of natural resources, public beaches and other public resources. The Trustees have reached out to

the public, local governments, and NGOs for restoration project ideas for resources injured by the spill. They are also coordinating with Marine Protected Area representatives, academics and other local experts.

Injunctive Relief/Civil Penalties: Legal staff are also coordinating with counsel for other federal and state enforcement agencies, including U.S. Environmental Protection Agency, the U.S. Coast Guard, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration, the Central Coast Regional Water Quality Control Board and the Office of the State Fire Marshall, as well as the U.S. Department of Justice and California Department of Justice to develop a global settlement offer. The global offer will include civil penalties, injunctive relief, natural resource damages and cost recovery.

- Grove Incident:

OSPR is retaining and will be coordinating with the Attorney General's office in representing the State in regards to this spill.

- HVI Cat Canyon Inc., fka Greka:

The civil trial against Greka occurred on the week of October 22 in Federal District Court in Los Angeles in response to a series of spills and incidents occurring at facilities in the Santa Maria area. Final filings are due by the parties by the end of January and the court will decide the matter sometime after that.

- Change to Bagley Keene Open Meeting Act. Assembly Bill (AB) 2958 has made a change to the law governing bodies like the TAC to make it easier to participate via telephone. We will be providing further guidance on this but the basics are that if there is a quorum at a physical location and if the public is given the ability to hear the conversation, then members other than the quorum can dial in from any location. Previously, members could only dial in from a noticed location that was open to the public.

Legislative and Regulatory Update:

The inland regulations (Contingency Plans for Inland Facilities; Ratings of Oil Spill Response Organizations; Drills and Exercises for Inland Regulations; and Definitions) have been finalized and approved by the Office of Administrative Law (OAL). These regulations went into effect January 1, 2019. They can be viewed on our website at <http://www.wildlife.ca.gov/OSPR/Legal/Approved-Regulations>.

- The Spill Management Team regulations (AB 1197) are still in the development phase. OSPR has already held several scoping meetings and have shared initial drafts of the text to industry for their feedback. It is anticipated the formal rulemaking process will begin by this spring or summer.
- The Shoreline Protections Table regulations are on hold pending updates to the Area Contingency Plans anticipated for 2019. We are exploring alternate ways to present the details laid out in the tables, such as including the timing requirements in the ACPs.
- We have embarked on a long-overdue spill response cost study to help us set appropriate COFR levels. This will be the first real study evaluating this since the Mercer study shortly after OSPR's inception in 1990. It will look at the costs of both large and small, marine and inland spills and will probably be the most comprehensive study of its kind ever. We expect results in September 2019 and will then incorporate them into revised COFR and Reasonable Worst Case Spill (RWCS) volume estimates.

- OSPR will also be working towards harmonizing the marine and inland regulations. This process will include adjustments to COFR levels and RWCS volume levels as described above, as well as other potential improvements. This process will probably not enter the formal rulemaking process until 2020.

Preparedness Branch

Drills and Exercises

Personnel Update

- Two vacant Environmental Scientist (ES) positions were filled;
 - One ES Drill Coordinator position was filled in the OSPR Sacramento office. ES Jenna Driscoll started on October 9, 2018, and
 - One ES Drill Coordinator position was filled in the OSPR Los Alamitos office. ES Katherine Hummel started on October 29, 2018.

Total Drills Statewide 2018

- Statewide summary for 2018 oil spill contingency plan regulated drills and exercises;
- Total Drills: 178
- Total Tabletop: 123
- Total Equipment Deployment: 55

Total Drills Southern California 2018

- Total Drills: 88
- Tabletop: 62
- Equipment Deployment: 26

Total Drills Central California 2018

- Total Drills: 41
- Tabletop: 32
- Equipment Deployment: 9

Total Drills Northern California 2018

- Total Drills: 49
- Tabletop: 29
- Equipment Deployment: 20

Drill Planning for 2019

- Southern California drill coordinators are preparing for a ConocoPhillips/Polar Tankers California Objectives/NPREP drill scheduled for May 6-7 in Huntington Beach
- Northern California drill coordinators are preparing for a BP Shipping California Objectives/NPREP drill scheduled for June 19-20 in Northern California.

Unannounced Drill Program

- **Plan Holder Notification Unannounced Drills for 2018**
 - 3 Total: 3 passed
- **Spill Management Team Unannounced Drills for 2018**
 - (Marine and Inland) 10 Total: 10 passed
- **Inland OSRO Renewal Rating Drills for 2018**
 - 4 Total: 3 passed

- **Inland OSRO Inspections 2018**

- 2 Total: 2 passed

Other Drills and Training

- USCG – GIUE – Chevron Eureka, Ca
- USCG GIUE – Vopak Terminal Los Angeles, Ca.
- Response Equipment Grant Trailer. Port of San Luis Harbor District refresher boom training, Boat Operations / Towing Boom, 19 personal in attendance.

Oil Spill Contingency Plans: 2018

- Vessels Plans: 2461 total
 - Total new approved plans for 2018: 136
- Vessels Revisions: 2,143
- Vessel Resubmittal approvals: 207
- Facilities: (All) 927 total
 - Inland Plans: 58 total to date

Inland Geographic Response Plans (GRPs)

GRP Coordinator continues to work on GRP products; the first 2 GRPs (Ballona Creek and Cajon Pass) have been reviewed by the OSPR Internal GRP Workgroup as well as upper management. Finalization of those 2 plans is expected in late February. The Russian River, North Fork American River and Kern River GRPs have been reviewed by local GRP Subcommittees and are now being review by the OSPR Internal GRP Workgroup. The newly developed GRP Companion Manual is also currently being reviewed by the OSPR Internal Workgroup. The Upper Sacramento River GRP is pending its first draft to be completed and sent to the local GRP Subcommittee for review.

- **OSPR GRP Workgroup:**

The OSPR GRP Workgroup has continued to meet on a monthly basis throughout 2018. The group has worked to finalize language and products for the GRPs. The workgroup reviewed and provided comments on the Ballona Creek and Cajon Pass GRPs and is currently reviewing the Russian River, North Fork American River, and Kern River GRPs as well as the GRP Companion Manual. The GRP Companion Manual was developed through the efforts of the GRP Workgroup in order to downsize each of the GRPs. The Companion Manual is a compilation of information relevant to an oil spill event and common to all GRPs and is analogous to Volume 1 of the ACPs.

- **Statewide GRP Steering Committee:**

The GRP Steering Committee met 3 times in 2018 and will schedule its first meeting of 2019 for March or April. The Committee has continued to refine GRP products and was recently introduced to the proposed GRPs for round 2 as well as the GRP Companion Manual.

- **GRP Subcommittee's:**

The GRP Leads have held numerous meetings with their individual GRP Subcommittee's and have provided a first draft of the respective GRPs to 5 out of 6 of the Subcommittees (Upper Sacramento River GRP first draft still in process). We have received input from the local experts on additional details for response and access sites, site access assistance (e.g. locked gates), pertinent contacts for the Contact Sheet, including water intakes, and areas of economic, recreational, or environmental concern.

OSPR Response Qualifications and Certifications Unit (RQCU)

- Since January 1, 2018, the RQCU held one 40-hour Hazardous Waste Emergency Response (HAZWOPER) certification course, four 24-Hour HAZWOPER certification courses, and eight 8-hour HAZWOPER Refresher courses. The unit will continue to provide 24-Hour and 40-Hour HAZWOPER certification courses, as well as 8-Hour HAZWOPER refresher courses through 2019.
- OSPR held two, one-day ICS Risk Communication classes for OSPR staff who hold ICS positions. The classes were held in Sacramento on March 27, 2018, and in Los Alamitos on March 29, 2018.
- Members of OSPR's Northern Field Response Team participated in a two-day Swift Water Rescue and American River North Fork Reconnaissance training on May 22-23, 2018.
- Eight OSPR staff who work near running water took a Swift Water Rescue class in Coloma, CA on June 26-27, 2018. Two additional classes are scheduled for the summer of 2019.
- Thirteen OSPR staff attended Small Unmanned Aerial Vehicle courses in 2018, in preparation for becoming licensed CDFW drone pilots.
- OSPR's Response Qualifications and Certifications Unit staff participated in the Continuing Challenge HazMat Workshop on September 4-6, 2018.
- Using a Group Training Fund grant from the Office of Training and Development, OSPR Environmental Scientist, Mia Roberts, obtained her ATV instructor certification on September 15, 2018.
- The annual Environmental Response to Oil Spills course was held in Bishop on October 23-25, 2018. Representatives from national, State, and local government agencies, industry, and NGOs were in attendance

Other Initiatives:

OSPR Internal Drills and Exercises Program: OSPR is establishing its internal drills and exercises working group.

- Nov 9, 2018 – Internal OP Center Drill – Greg McGowan, Mike Caliguire
- Jan 9, 2019 – Internal OP Center Drill – Mike Caliguire

Marine Area Contingency Plans (ACPs) and Regional Contingency Plan (RCP): Preparedness staff is now responsible for the coordination of the six marine ACP and revision of the RCP. The San Diego ACP revision is completed. The LA/LB revision is due in 2019 and the SF ACP revision is due in 2020. The RCP is currently under revision.

Prevention Branch (Jan 01, 2018 – Dec 31, 2018)

Vessel Arrivals: 9387

Vessel Boardings: 526

Category 1 – 3 Risk Boardings: 50

Category 4 Risk Boardings/Monitorings: 6

Oil Transfer Notifications: 6804
Oil Transfer Monitorings: 110
Percent of Transfers Monitored: 01.6%

Facility/SCRD C-Plan Verification/Visit: 96/53

Loss of Propulsion Incidents: 58

Marine Oil Spill Incidents: 673	Volume Spilled: 4958.3 gal
Inland Oil Spill Incidents: 542	Volume Spilled: 53504 gal

Inland Facility Exemption Requests: 167
N/A: 42
Granted: 112
Denied: 3
Withdrawn: 5
Superseded: 2
Duplicate: 1
Pending: 2

Inland Facility Contingency Plans: 58
Approved: 46
Returned for Revision: 0
Withdrawn: 11
Under Review: 1
Denied: 0



THE INSIDER

OFFICE OF SPILL PREVENTION AND RESPONSE



The Attorney General's Office announced guilty verdicts in the case against Plains All-American Pipeline.

Plains All-American Pipeline convicted by Santa Barbara County jury

Justice was served in a Santa Barbara courtroom more than three years after the May 2015 crude oil spill we all know as Refugio fouled the pristine Southern California coastline, killing hundreds of marine animals including birds and mammals.

After four months of testimony and a week of deliberations, the jury found Plains All-American Pipeline guilty of a felony and eight misdemeanors. The felony concluded that Plains knowingly engaged or caused oil to spill into state waters.

Misdemeanors had to do with delaying and providing a false or misleading oil spill report to Cal OES, and the unlawful taking of dolphins and sea lions. A mistrial was declared on three other counts filed by the State Attorney General's Office.

OSPR's Southern California investigative team played a crucial role in the incident aftermath and more recently on the witness stand.

"My heartfelt thanks goes out to all of you that

(Continued from page 1) have worked on this response and subsequent litigation,” said Tom. “I would like to offer my specific appreciation to Wendy Johnson, Anastasia Norris, Bryan Gollhofer, and Jim McCall who have lived and breathed Refugio for more than three years.”

Norris and Gollhofer had been assigned to investigate the spill early on, and their role meant they never set foot at the Command Post, in keeping their findings separate from the response efforts.

Johnson was the lead OSPR attorney handling the case, working closely with the state prosecutor from the AG’s Office. McCall’s scientific expertise allowed him to analyze petroleum samples and eventually take the witness stand to explain his findings.

CDFW Director Chuck Bonham provided a statement

in a news release issued by the Attorney General’s Office:

“As the state’s law enforcement agency charged with protecting California’s fish and wildlife resources and lead for oil spill response, we take our responsibilities seriously. The integrated effort of California’s wildlife officers, the Office of the Attorney General and the Santa Barbara County District Attorney produced a good outcome here in response to one of the state’s worst spills in decades.”

The next step in court is a sentencing hearing, set for mid-December.



Jack Prescott, right, retired recently after nearly three-decades of state service. He was OSPR’s first oil spill prevention specialist. He often worked with San Diego-based Scientist Kris Wiese, left.

OSPS Jack Prescott retires

Oil Spill Prevention Specialist Jack Prescott retired last month after 27 years of state service; he was OSPR’s very first OSPS and assigned to the San Diego region.

Prescott recalls his response to notable spills over the nearly three decades he was in uniform.

“The Platform Irene response comes to mind as one of the most complex incidents I’ve been on,” he recalled. “You hear about tarballs, but with that response we were actually dealing with tar tables that were as big as a truck. We ended up making stockpiles of these tables that were as wide as a football field, half as long, and 10-feet high.”

Prescott said he advises anyone following in his footsteps to get to know their industry and government partners, which will in turn aid in any response.

Technical Advisory Committee gets new member

Peter Santillan of the Los Angeles area is the newest Technical Advisory Committee (TAC) member appointed by the Speaker of the California Assembly, Anthony Rendon in early July. Peter is an organized labor member who will serve as one of the committee's public representatives.

The TAC provides public input and independent judgment of the actions of the OSPR administrator. Of the 14-member committee, three vacancies remain.



OSPR scientists achieve recognition

OSPR Scientists Corrine Gibble and Laird Henkel were recently featured on CDFW's Science Institute webpages this summer. To learn more about these two scientists and others recently featured within CDFW, click [here](#).



Corrine Gibble performing a necropsy at the Santa Cruz lab earlier this year.

CDFW's Science Institute is part of an initiative to expand and enhance CDFW's scientific capacity and to provide the public with opportunities to see and learn about the important science we do in support of the mission of CDFW.

(At right) Laird Henkel working with tufted puffins in 1995.



Guadalupe Oil Field Spill partially funds Dunes Center

Legendary filmmaker Cecil B. Demille constructed the largest movie set in history at the Guadalupe-Nipomo Dunes just south of Pismo Beach in the 1920's. The structure has been buried for decades, but after a recent excavation and funding, The "Dunes Center" is attracting a worldwide audience. The new center is expected to host hundreds of children annually, with hands-on environmental science displays that include a virtual topographical map of the dunes. Part of the center's funding comes from the Guadalupe Oil Field Oil Spill penalties collected and awarded by OSPR.



Click on the thumbnail above to watch the video, *The Guadalupe Oil Field Response*.

Drill season 2018: Shell, Chevron host large exercises

Many OSPRians took part in two large-scale marine drills in July and August in Northern California.

The Shell Martinez Refinery held a two-day, worst case discharge exercise on July 18-19 that included staff from OSPR in almost every incident command section. This drill focused on the transition from the Shell Refinery's Local Spill Management Team to Shell's Americas Response Team, with an associated transition from the refinery's emergency operation center to a larger incident command post at the Hilton Concord.

Shell staff came from different geographic arms of the company, and their response contractors TRG and Cardno, as well as local and national resource trustees, helped coordinate and staff this large exercise.

The Chevron Richmond Refinery also held their worst case discharge exercise, which included

a terrorist component, on August 15-16 at the refinery's fire house. The primary aim of the exercise's first day was to test the Coast Guard's Area Maritime Security Plan and the Area Contingency Plan concurrently, using a scenario involving a hijacked ferry and a cyberattack on a tanker vessel docked at the Richmond Long Wharf. The exercise, dubbed Elevate Shield, involved an area command overseeing the law enforcement and the oil spill incident command posts, simulated at separate locations.

The Federal Bureau of Investigations served as the lead agency in the law enforcement incident command post on day one, assisted by the Coast Guard and the California National Guard – a first for several OSPRians. The oil spill response portion continued on day two of the drill, with participation from local, state, and federal resource and health agencies. Several Chevron staff came from across the globe for this drill.



Andrea Moore & Amreeta Fallin coordinated volunteers during the Shell Martinez drill.



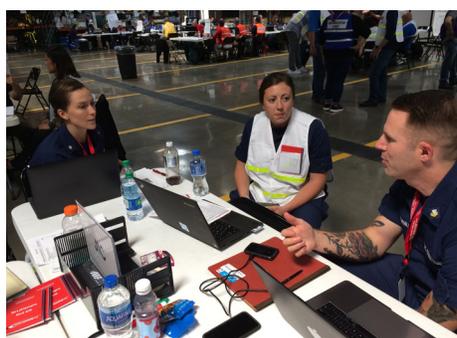
More than 200 people showed up for the two-day drill.



Wildlife officers worked with staff to prepare for a media event.



Ryan Todd represented OSPR in the legal unit at the Chevron drill.



Members of the USCG in the JIC (Joint Information Center) discussed next steps.



Yvonne Addassi conducted an elected officials tour of the incident command post at the Chevron drill as the lead liaison Officer.

Abandoned vessels in San Joaquin Delta featured on KOVR

OSPR Executive Steve Hampton recently spoke to a local TV station on the abandoned and derelict vessel problem in the San Joaquin Delta. Interesting fact: Abandoned and derelict vessels account for 20 percent of OSPR responses. To see the news coverage of the story, click on the thumbnail below.



Grant program now accepts proposals

OSPR is now seeking grant applications to help fund projects that enhance or restore habitat for wildlife, with available funding totaling more than \$735,000 over the next three years. For more information on qualifications, application process and deadlines, click [here](#).

Special thanks goes to Dan Orr for coordinating the request for proposals.

OSPR takes part in the 29th Annual Continuing Challenge

OSPR took part in the 29th Annual Continuing Challenge Workshop that brought together hazmat responders from around the world. The workshop featured courses displaying the latest safety techniques, aimed at keeping responders safe while protecting the public and the environment. Attendees networked with other hazmat responders, received training from specialists in the field, and interacted with vendors offering safety products.

“During a response, crews are busy mitigating the emergency situations and don’t always have time to share ideas and best practices with other agency responders,” said OSPR Environmental Scientist Brenda MacGregor. “Continuing Challenge gives responders an opportunity to network and learn about each agency’s role in a professional environment.”

OSPR is one of the sponsors of this annual event.



The annual Continuing Challenge Workshop is in its 29th year.

OSPR & State Parks rescue endangered bird

Staff from OSPR and California State Parks assisted a grounded, just-learning-to-fly marbled murrelet found on Sunday, August 5 at Big Basin State Park. Parks concession staff first spotted the endangered seabird and Parks staff brought it to OSPR's Marine Wildlife Veterinary Care & Research Center in Santa Cruz for an examination.

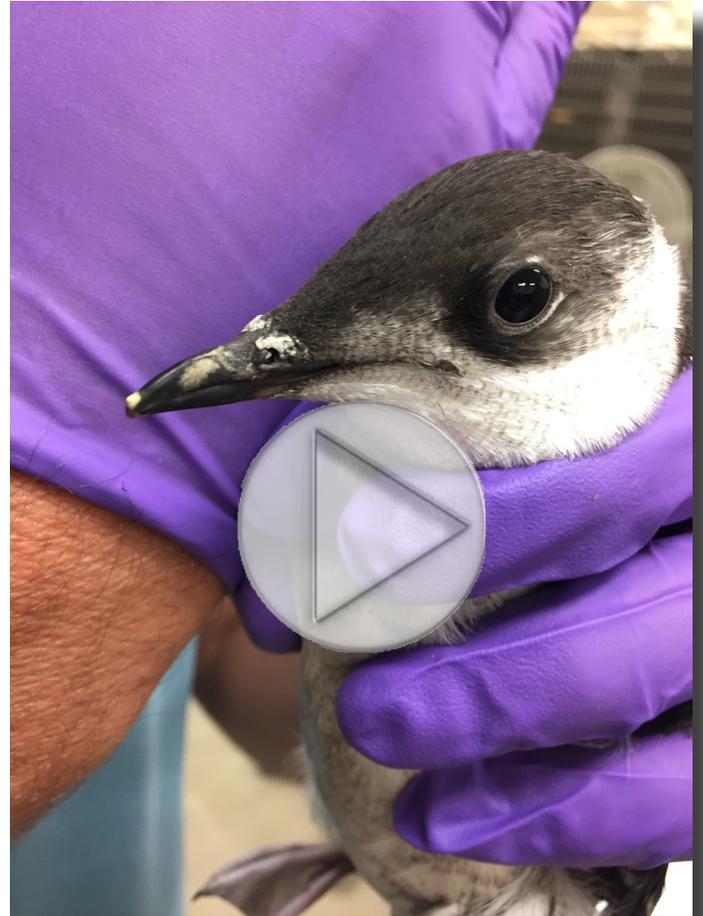
Marbled murrelets are unlike typical seabirds in that they nest in large trees, usually well inland. Once a chick hatches, the parents deliver food (small fish) from the ocean until it's ready to fledge. On its first flight, the fledgling must make it all the way to the ocean, which can be ten or more miles away. The trip oftentimes takes place at dusk, when the young birds follow their parents. Those that don't make it end up on the ground short of the sea.

Scientific staff from OSPR, Laird Henkel and Cori Gible, examined the bird and determined it to be bright, alert, and responsive, with no injuries or broken bones and in good overall condition. Because the bird was strong enough, OSPR staff and State Park Ranger Alex Tabone successfully released it to the ocean at Bean Hollow State Beach later that evening.

Loss of habitat due to logging, marine pollution, and oil spills are considered potential threats to marbled murrelet populations. Some of these factors have also contributed to the bird being federally-listed as threatened, and listed as endangered in California.

Special thanks goes to California State Parks, and OSPR staff for saving the endangered bird. Luckenbach and Cosco Busan restoration funds support related coordinated efforts to help rebuild California's marbled murrelet population.

To see the bird release, click on the photo below.



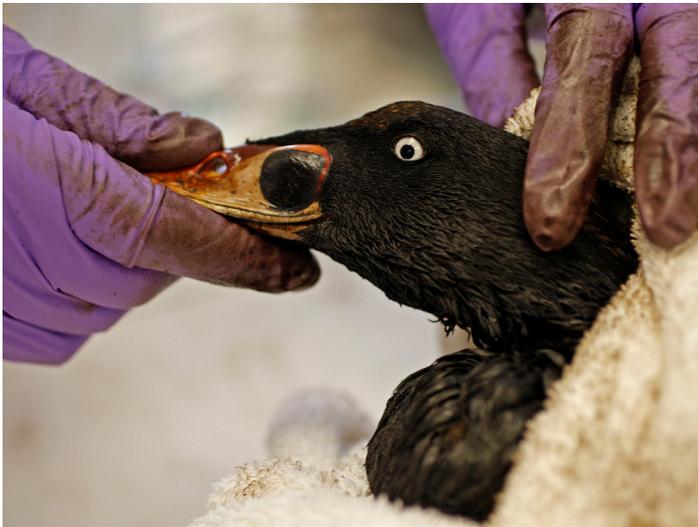
Video credit: California State Parks & OSPR staff

Follow us @Calspillwatch



Wildlife.ca.gov/OSPR

Oiled wildlife experts published in journal



An oiled bird washed at a recent oil spill in California.

Laird Henkel, Supervising Environmental Scientist and Dr. Michael Ziccardi, the director of the Oiled Wildlife Care Network at the UC Davis School of Veterinary Medicine, recently published an opinion essay that advocates rehabilitation and release, rather than euthanization, of animals injured by oil spills.

The essay, entitled “Life and Death: How Should We Respond to Oiled Wildlife?” can be found in the June 2018 issue of the *Journal of Fish and Wildlife Management*. To read the feature story, click [here](#).

USCG celebrates 228 years

OSPR gave a shout out on social media to the USCG on their 228 years of service in early August. We are USCG's proud partners in protecting California's natural resources during marine oil spills.

Update on move to West Sacramento

CDFW is scheduling a construction meeting to finalize plans for this project. The current projected date for the soon-to-be OSPR headquarters in West Sacramento is March 2018.

This date could change after the meeting takes place and building drawings and construction schedules are finalized. Updated information will be shared as it becomes available. For the most up-to-date information on the West Sacramento Consolidation Project, go [here](#).

The move to West Sacramento, called the West Sacramento Consolidation Project, showcases CDFW's ongoing efforts to improve operational efficiencies and support the Governor's green initiatives aimed at reducing our carbon footprint. The facility at 1010 Riverside Parkway is central to this project which will consolidate program staff and operations currently spread amongst four facilities.

OSPR releases program report

Our organization recently released the OSPR Program Report 2018, highlighting our efforts to prevent, prepare and respond to oil spills statewide. You will receive a hard copy of the report and the new OSPR brochure. If you are in a field office, your copies will reach you soon! Special thanks to Steve Hampton for gathering and analyzing data shown in the report.





Environmental Scientists Diana Grosso, Melissa Boggs and Roy Kim in costume having a great time at OSPR table during the Coastal Discovery Fair.

OSPR presence at Coastal Discovery Fair

Scientists from the Central Field Response Team engaged participants of the Annual Ocean Fair at William R. Hearst State Beach in San Simeon. Hundreds attended the family-friendly event, which was sponsored by the Monterey Bay National Marine Sanctuary. OSPRian Roy Kim donned a full-body fish costume dubbed “Sammy the Steelhead” and explained to kids the importance of keeping our waters clean. Diana Grosso and Melissa Boggs were also in the outreach booth, and used science experiments to help explain the dangers of oil in the environment.



OSPR gets CDFW's first hybrid mini-van

OSPR Business Management Branch recently purchased the first hybrid minivan in the department, a Chrysler Pacifica.

“The hybrid vehicle’s utilitarian design offers versatile passenger/cargo space to accommodate the varying needs of OSPR programs,” said Fleet Coordinator Jaime Rodriguez, “It’s also being considered by several other CDFW department programs for this reason.”

The van will be available to all staff and located at K Street once it receives its permanent license plates and maintenance gear.

OSPR leads the way with the most hybrid/low emission vehicles within CDFW.



OSPRian Jaime Rodriguez showed CDFW's Business Management Branch Fleet and Procurement Units the Department's first hybrid minivan.

Update on move (cont.)

this project which will consolidate program staff and operations currently spread amongst four facilities. Questions about the move can be directed to [James Bradley](#) of OSPR's Financial and Administrative Services Branch.

OSPR employee spotlight

New hires

Michael Caliguire joined OSPR recently as an oil spill prevention specialist in the Preparedness Branch in Sacramento. Michael works in the new Spill Management Team Program and is also responsible for resurrecting the Internal Drills Program. He has 20 years in the U.S. Coast Guard on active duty and as an active drilling reservist assigned to the Pacific Strike Team in Novato. He most recently spent four years at Patriot Environmental Services as a field response supervisor.



David Mosley recently joined OSPR's Central Valley Prevention Branch as an oil spill prevention specialist. David has over two decades of experience in construction and oil spill response. He was previously the director of emergency response at Patriot Environmental Services having participated in both the Refugio and Grove incidents. Given David's background, he is a familiar face to many OSPRians throughout the state.

Martin Garcia recently joined OSPR's Central Valley Prevention Branch as an oil spill prevention specialist. Martin has 12-years experience in oil spill response as the lead responder for Marine Spill Response Corp (MSRC), responding to nationwide catastrophic events such as Hurricane Katrina, Deepwater Horizon and Cosco Busan, just to name a few. Martin previously worked in security at several private companies such as Kaiser Permanente.



Sean Kam joined the Marine Wildlife Veterinary Care & Research Center in Santa Cruz as the facility's maintenance mechanic. Prior to joining CDFW, Sean spent eight years as an automotive technician .

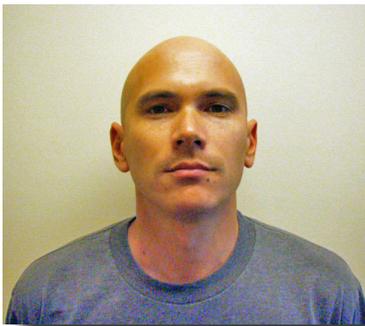
Andrew Caputo recently joined OSPR's Geographic Information Systems (GIS) group supporting geographic response plans, environmental sensitivity index (ESI), SCATologue (an app created for the Shoreline Cleanup and Assessment Technique during oil spills), and other spatial analysis work. Andrew has a Bachelor of Arts degree in geography from California State University, Sacramento .



OSPR employee spotlight (Continued)

Promotions

Joe Mello received a promotion to patrol captain within CDFW/OSPR's Central Law Enforcement District. Prior to joining CDFW, Joe served as an Army Reserve officer and graduated from CDFW's first Wildlife Resource Academy. During his 29 years with CDFW, he served as a defensive tactics/range Instructor, field training officer, regional pollution coordinator, special operations unit officer, Game Warden Association President and most recently as a Lt. Supervisor for CDFW/OSPR.



Corey Kong received a promotion to senior environmental scientist supervisor for the Environmental Response Branch in the Southern Field Office located in Los Alamitos. Corey has 15 years of experience with OSPR as an environmental scientist. He has led the testing of sensitive site protective booming strategies for the Area Contingency Plan, trained many new environmental scientists and has served as the environmental unit leader and shoreline cleanup assessment coordinator at several big spill events such as the Refugio and Pyramid Lake incidents.

Dr. Rachel Fabian received a promotion to senior environmental scientist in Sacramento, overseeing the new statewide spill management team program, and integrating public health concerns into oil spill preparedness and response. For the past year and a half, Rachel has served as the northern drills and exercises coordinator.



Cassidee Shinn received a promotion to senior environmental scientist responsible for most things "planning," including the State's coordination of the six marine Area Contingency Plans, the federal Regional Contingency Plan, the California State Oil Spill Contingency Plan and the environmental review for the inland facility contingency plans. Since 2015, Cassidee previously worked primarily on inland contingency plan review, unannounced drills and spill management team evaluation.

OSPR employee spotlight (Continued)

Transfers

Jessica Jacobsen recently joined OSPR's Law Enforcement Division in the Concord/Walnut Creek area. Jacobsen started her career with CDFW in 2000 as a volunteer, then as a scientific aid. In 2006, she graduated from the Fish & Game Academy having worked the last 12 years as a game warden for the North Coast District in Alameda and Contra Costa Counties. Jessica has worked major oil spill events such as the Cosco Busan and the Dubai Star.



David Lyons transferred to the field response team as an environmental scientist responsible for oil spill prevention and response in Southern California. David now responds to oil spills, develops geographic response plans, attends drills and exercises, and conducts outreach with local stakeholders. David previously worked in the preparedness branch coordinating drills and exercises in Southern California.

OSPR staff participate in invasive species survey

OSPR Senior Environmental Scientist Steve Foss recently took part in an invasive species survey in the harbors of Los Angeles and Long Beach. He and other scientists documented exotic marine organisms living in or near bottom sediments of the harbor. The survey is conducted annually by OSPR's Marine Invasive Species Program and the Smithsonian Environmental Research Center (SERC).

The following video shows scientists taking samples from 10 stations at shallow subtidal depths, using a device that retrieves sediment. The samples were then sorted, examined and preserved, before being sent to SERC's Laboratory in Tiburon for further identification as native or non-native.

Non-native, or exotic species can have a detrimental effect on California's marine ecosystem. OSPR's program seeks to reduce the introduction of these species, which often reach our state waters through ballast water from ships traversing international waters.



Aboard the CDFW R/V Garibaldi, researchers use a clamshell bucket to collect organisms, sort, and examine them under a microscope looking for non-native species.

Spill response highlights from a busy Summer 2018

Eureka city officials deployed boom from their response trailer in August to contain a release from an automatic bilge pump that sent oil into the Eureka Public Marina and Humboldt Bay. The response trailer was nearby and crews were able to contain the spill to only a few slips. Responders used sorbent boom and pads to capture most of the oil. OSPR granted the trailer to Eureka recently in May to respond to spills like this one.



OSPR responded to a commercial fishing vessel that grounded on rocks near Natural Bridges State Beach on Sunday, Aug. 12. The surf caused the vessel's fuel line to rupture, spilling an estimated 200 gallons of diesel. The leak's source was secured. No visible sheen or visibly-oiled wildlife observed.

A rockslide punctured a fuel tank of a refrigerated railcar causing diesel to seep into the steep, rocky terrain, eventually making its way to the Feather River Canyon. Spill responders deployed boom and contained the spill. OSPR crews monitored the cleanup.



OSPR responded to a diesel and gasoline spill as a result of an overturned tanker truck on Highway 70 west of Quincy. The truck released upwards of 4,000 gallons of diesel and gasoline combined, and the creek was boomed off downstream. Wildlife officers and an OSPR scientist conducted ongoing assessments of Spanish Creek. No visibly-oiled wildlife observed.

OFFICE OF SPILL PREVENTION AND RESPONSE

THE INSIDER



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OSPR staff on the front lines and behind the scenes during and after CA fires

California has suffered one of its worst fire seasons this year. The recent Camp Fire, which claimed 88 lives and displaced thousands more, considered the deadliest and most destructive in California history. This year's fires have burned 876,000 acres, almost three times more than last year. Nearly 13,000 firefighters battled these blazes and gained the upper hand due to their continued efforts and timely rainy weather.

CDFW-OSPR family sends positive thoughts and prayers to those affected by these wildfires. California's first responders include wildlife officers, who worked hard alongside local, state and federal law enforcement to keep people and property safe throughout California.

Story continued on page 3

Looking forward to a great 2019

Welcome to 2019 and the first issue of the OSPR Insider for the new year! I hope that all of you had a joyous and restful holiday season, having worked so strenuously these past twelve months. I imagine that, like me, you are wondering where this past year has gone. Certainly, the perception of time flying by is a function of the level of our activity and we have all been very busy, so that helps explain this phenomenon.

We had quite a year, happily spared by any major oil spills yet reflective of the tremendous loss of life and property in the record-breaking wildfires. I am very proud of those of you who, in this season of gratitude and giving, are preparing to deploy to Butte, Los Angeles, and Ventura counties to assist in the relief efforts.

I am also extremely proud and grateful for all of the accomplishments that you did this past year, ranging from the successful prosecution of the Refugio Beach spill RP to the final approval by the Office of Administrative Law of our comprehensive inland regulations. These two high-visibility examples are of the daily work that you perform so well and so professionally.

I hope that you will maintain a sense of optimism as we embark on this coming year as we face major changes, notably Governor Newsom and his executive team taking over as leaders of our executive branch and our move to the new DFW location in West Sacramento.

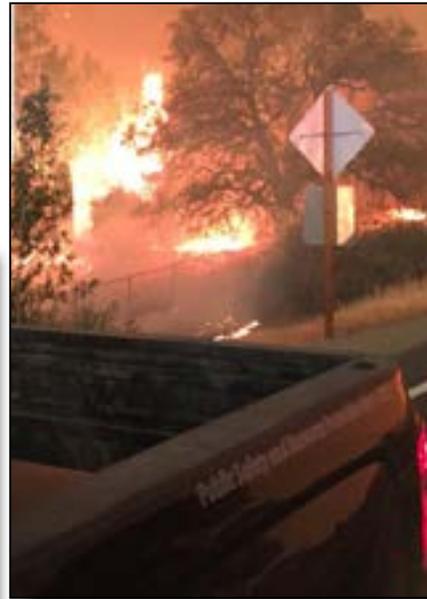
If there is one thing that we do better than any other agency it is how we adapt and excel to fluid, dynamic situations. I have no doubt that, for that reason, we will have a great 2019!

Thank you for your dedication and teamwork.

-Tom



During emergency events, LED staff often help evacuate folks and provide security against looting of neighborhoods. This video is an up-close look at wardens helping to evacuate folks at the Woolsey Fire in Southern California. Thank you to the Thin Green Line!



(At left) With a wildlife officer's truck in the foreground, the Camp Fire rages through the Paradise area in Northern California. Below, OSPR's mobile response trailer arrives in Oroville.

This year, more than 30 people from OSPR are being deployed to help with fire cleanup. Cal OES sent out a request for operations and planning personnel to help stand up a Unified Command to facilitate debris removal. OSPRian's will be working in Northern and Southern California, with shifts of six days a week for two month long tours. Leadership is proud that OSPR can share its expertise of ICS and help Californians in a time of crisis.

OSPR mobile command trailer aids fire response

Work space became an issue as response staff showed up at the Oroville emergency operations center to respond to the Camp Fire, which has taken the largest number of human lives and destroyed the most structures in California history.

The Governor's Office of Emergency Services (Cal OES) immediately requested use of OSPR's mobile command trailer to house approximately 10 of their employees so they could be situated near the Oroville Emergency Operations Center and provide support. Cal OES also needed the Wi-Fi and telecommunications capabilities the trailer offers.

"We quickly fulfilled their request for use of OSPR's Command Trailer, said Jim Bradley, manager of Administrative Services Unit for OSPR. "Cal OES and other State agencies rely on OSPR for their experience in response and will request the support of staff and sometimes equipment when large-scale events like this occur."

A special thanks goes to OSPRians Jayson Smith and Mike Caliguire for transporting the command trailer on short notice the week before Thanksgiving. Martin Amezcua also provided IT support and assisted with trailer set up, staying late into the evening Friday night to ensure OES was covered.



Yurok Tribe attends equipment deployment

OSPR joined members of the Yurok Tribe's Environmental Program, National Response Corporation (NRC), and the U.S. Coast Guard this fall for hands-on training to protect the Klamath River estuary in the event of an oil spill.

OSPR Senior Environmental Scientist Jeff Dayton helped facilitate and coordinate the evaluation of the Area Contingency Plan (ACP) protection strategy. The ACP provides guidance for the protection of the Klamath estuary during an ocean-based oil spill that may cause contaminants to enter the waterway on an incoming tide.

NRC used two boats, deploying 1000 ft. of boom near the mouth of the estuary. A team of five responders successfully tested the plan, from the initial safety briefing to the demobilization within five hours. Dayton said this area would be challenging during a real spill due to the dynamics of the changing landscape and water levels.

The Klamath estuary is vital to the Yurok Tribe's history, culture, and economy. It is also important habitat for countless species of mammals, fish, and waterfowl. These continued exercises in preparedness are one of the ways OSPR works with locals to safeguard pristine habitat from oil spills.



Senior Environmental Scientist Jeff Dayton oversees a boom deployment, testing response plans at the Klamath River estuary.



Yurok brush dance ceremonial site, a significant cultural resource at the mouth of the river. Sister Rocks is the rock formation between the boom sets.



Aerial view of the boom deployment at the mouth of the Klamath Estuary.



Koiya Tuttle, Yurok Tribe's environmental program assistant director, observes the boom deployment.

OSPR staff observe deployment of new oil spill response equipment

Marine Spill Response Corporation (MSRC) recently demonstrated new oil spill response technology for OSPR at Yolo County's Putah Creek. The Water-Gate by Megasecur is a portable, lightweight, reusable underflow dam for spill containment on small creeks and waterways. The dam can be quickly and easily deployed and allows water to pass through the bottom while trapping floating oil behind for recovery.

OSPR continually works with industry and the oil spill response community to ensure best possible readiness for an oil spill to water in California. Senior Environmental Scientist Annie Nelson introduced the portable dam technology as part of her response technology update at the Prevention First Symposium in September.

"The ability to quickly contain spilled oil is key to limiting the environmental impacts, and this portable underflow dam could be a valuable tool for rapid response," said Nelson. "We appreciate the opportunity to observe MSRC's deployment."



OSPR and NOAA host 2018 EROS training

Experts from OSPR and NOAA led the annual Environmental Response to Oil Spills (EROS) training this past fall in Bishop.

The class is offered annually to local, state and federal agencies, tribes, oil and railroad industry, and NGO partners. It provides basic training for first-time spill responders, with topics that include Shoreline Cleanup Assessment Technique (SCAT), oil recovery, petroleum fingerprinting (identification), toxicology and ecological effects of oil and wildlife response.

In addition, the training reviewed many of the unique response resources available in California.

If you're interested in attending the next class in 2019, contact [Lea Gibson](#).



Environmental Scientist Mia Roberts show class participants a map of the area where they would do the hands-on shoreline assessment.



*Stephen David Ricks
Sept. 24, 1948 - Nov. 15, 2018*

Chairman of OSPR's Technical Advisory Committee passes on

Steve Ricks, a longtime leader in the San Francisco Bay Area oil spill response community and Chairman of OSPR's Technical Advisory Committee (TAC), passed away this past November. Governor Gray Davis appointed Ricks to the TAC in 2001. He served most of that time as Chairman until his passing. Steve retired from Marine Spill Response Corporation (MSRC) in 2016 and continued to lead the TAC efforts.

Many OSPRians know Steve as one of the heroic figures in the early hours following the COSCO BUSAN oil spill. He immediately dispatched MSRC personnel and recovery vessels to the San Francisco

Bay where there were reports of strong oil odors. Steve and his team subsequently recovered more than 8,000 gallons of oil that first day.

OSPR will sorely miss Steve's calm demeanor and dedication to protecting the environment. Steve is survived by his wife, Gail, and their two sons.

A celebration of life and gathering of family and friends took place near Rick's home in the Bay Area in early December.

Steve's widow Gail has offered these two organizations for your consideration if you are interested in making a donation in memory of Steve:

The Myelodysplastic Syndromes Foundation (<https://www.mds-foundation.org/donate/>)

or

The Leukemia & Lymphoma Society (<https://www.lls.org>)

Steve Ricks' professional work history

Pacific Refinery Company – Hercules, CA
1985 - 1990, Operations Manager

Clean Bay, Incorporated - Concord, CA
1990 – 2004, President

Marine Spill Response Corporation
– Concord/Richmond, CA
2004 – 2016, Vice President, California

Steve Rick's participation in major responses

1995 Chevron Pipeline Spill
1996 Cape Mohican
2002 S. S. Jacob Luckenbach Oil Spill Leak
2004 Kinder Morgan Pipeline Suisun Marsh Spill
2007 Cosco Busan
2009 Dubai Star
2010 Deepwater Horizon

Spill response drone, compact boom tested against natural seep



Boom developed by Harbo Technologies can serve as a first defense against spills. Each box contains 25m of boom.

Natural oil seepage off the coast of Santa Barbara recently proved helpful for observing new oil spill technology from around the world.

The response technology prototypes included a Norwegian-crafted remote-controlled vessel that uses powerful water jets to break up floating oil into tiny droplets that disperse into the water and biodegrade, and a lightweight oil containment boom that comes in small cartridges easily stored aboard and deployed from small or large vessels.

“OSPR is always looking for new technologies to help deal with oil spills, so we saw this as a great opportunity to see the equipment perform under naturally-occurring conditions.” said Program Manager Greg McGowan.

The unmanned vessel was developed by Blue Impact Technologies. The concept involves the vessel powering its way over floating oil, while the operator is safely aboard a vessel away from the fumes. High-powered water jets break up the oil into tiny droplets that mix into the water where they can be degraded by naturally occurring bacteria, rather than floating as a slick on the surface. This process

(called dispersion) does not require the addition of a chemical dispersant.

The lightweight, compact T-Fence boom, developed by Harbo Technologies in Israel, is meant to facilitate an early defense against the spread of oil spills. The boom can quickly and easily be deployed by local personnel from vessels, harbors, or facilities immediately upon discovery of a spill, before professional spill response crews can reach the scene.

The technology demonstration provided a great opportunity to observe these new tools at work and was also a good networking opportunity for oil spill responders.



This unmanned drone (Vorax) cruises the surface over an oil slick, using powerful water jets to break up floating oil.

“It was unique in that we had a whole range of participants including state and federal government agencies, scientific researchers, and industry developers of new technologies, all working together as a response community to improve our ability to deal with oil spills,” McGowan added.

Remote sensing from manned aircraft, unmanned aircraft, and towed submersible units provided information to support and monitor the response technology.

OSPR sea otter scientists engage in capture effort with agency partners

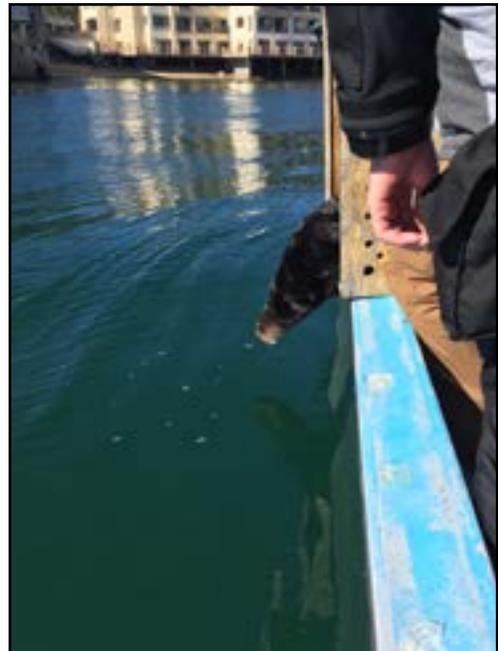
Scientists from federal, state and non-governmental agencies along the West Coast recently worked to capture and install tracking devices on southern sea otters along the Monterey Coast.

Sea otters are a keystone species, defined as one that other species depend upon in an ecosystem. The absence of a keystone species drastically changes an ecosystem.

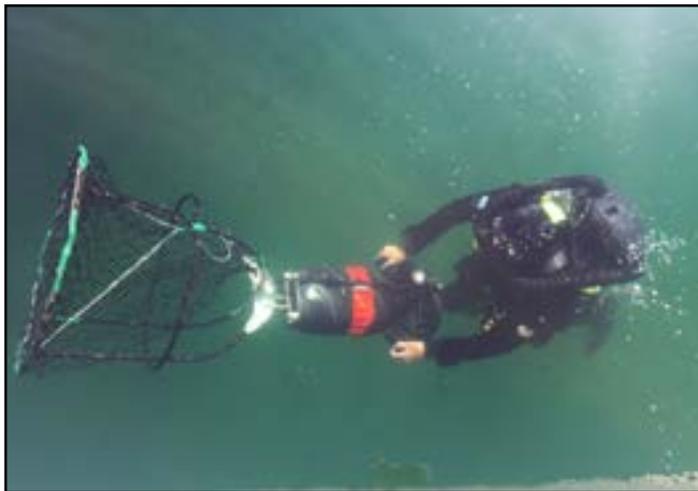
These skilled scientists involved in the effort make up a group known as the Sea Otter Alliance. The alliance works to carefully capture the otters, then provide them with medical care and input tracking devices so their daily health and habits can be observed.



OSPR Scientist Mike Harris prepares to dive into the water with specialized equipment to safely capture a sea otter.



Sea otter scientists release a sea otter near the spot it was captured, after providing medical care and inputting tracking devices to follow their health and habits.



(At left) A scientist from the Sea Otter Alliance use a Wilson Trap to safely capture a sea otter.



Mia Roberts spotlighted as Featured Scientist

CDFW's Science Institute recently featured OSPR's own Mia Roberts as the featured scientist. Click [here](#) to learn more about Mia and her career as an environmental scientist.

Unannounced drill conducted by OSPR



OSRO deploys 1000 ft. of boom during unannounced drill conducted by OSPR.

OSPR oil spill prevention specialists conducted an unannounced drill with an oil spill response organization (OSRO) in December. The responders deployed 1000 ft. of boom from the shore to the middle of Webb Lake in Kern County. The OSPR crew also required the responders to deploy a skimmer and have at least 34,000 gallons of storage on site for disposal. The OSRO successfully completed all tasks.

OSPR conducts these drills throughout the year, testing OSROs contracted by industry to respond quickly to spills. Spill responders need to maintain these ratings to stay eligible to work with industry and OSPR. The entire drill must be completed under six hours. The rating is good for a three-year period.

The Cocopah Indian Tribe receive Oil Spill Response Equipment Trailer



The Cocopah Indian Tribe received a new oil spill response equipment trailer, made possible by an OSPR grant. The grant program aims to help local jurisdictions protect their environmental and cultural resources in the initial phase of spill, before more cleanup crews can reach the scene. Part of the delivery involved training on how to use the equipment. The tribe is located along the Colorado River.

OSPR staff promotions, new hires and those on the move



Sonia Torres received a promotion to senior environmental scientist for the Southern Environmental Response branch of the Los Alamitos office.

Sonia came to OSPR from the Marine Region in October 2010, and started in the Drills and Exercises program. Shortly after, she moved to the Southern Environmental Response branch. Sonia brings an extensive skill set, attention to detail and experience.

Van Vu joined the Los Alamitos office as the newest oil spill prevention specialist.

Prior to coming to OSPR, Van completed a 26-year career with the U.S. Coast Guard working with the marine environmental protection group where he performed pollution prevention duties in the form of boarding, inspecting and monitoring of vessels, waterfront facilities and cargo facilities.



Beatriz (Bea) Jauregui Barron is our new employee services coordinator and your OSPR go-to person for human resources questions located at OSPR headquarters.

Bea started her state career in 2001 before taking some time off to raise her three girls. She returned to the State Controller's Office in 2008 where she resolved the more complex personnel issues impacting employees from all areas of state service. She is happy and grateful for the opportunity to work at OSPR.

Josh Brooks recently joined OSPR's legal unit with a significant interest and passion for environmental issues. He received a Bachelor of Arts degree in political science from the University of California, Berkeley and a joint Juris Doctor degree and Masters of Arts degree in East Asian studies from Washington University in St. Louis.

Josh worked in various places across the country to protect clean air and water, promote renewable energy and assist in federal administrative efforts to prevent companies and individuals that violate environmental laws from participating in government contracts and grants. Most recently, Josh worked as a staff attorney for San Diego Coastkeeper where he contributed to Coastkeeper's legal, policy and advocacy work and supported its mission to protect and restore San Diego County's waterways.



OSPR staff continued

Elliott Frodahl joined the Sacramento Information Technology (IT) unit as an associate. Elliott provides PC support, assisting with hardware/software issues, help tickets, and our Windows 10 rollout.

Elliott comes to OSPR from CalSTRS where he worked on their IT service desk and supported a variety of hardware and software systems. We are excited to have Elliott on the team and we welcome his technical and customer service skills.



Jenna Driscoll joined OSPR's Drills and Exercises unit as a drill coordinator in Sacramento. Jenna has a master's degree in Environmental Science and Management with specializations in Coastal Marine Resources and Conservation Planning from the University of California, Santa Barbara. She previously worked for Santa Barbara Channelkeeper as the Watershed and Marine Program Associate as their lead advocate on oil issues. She also completed a study abroad program in Mexico where she studied gray whales and sea turtles and an internship promoting sustainable tourism in Marine Protected Areas in South Korea.

Jenna was inspired to work for OSPR after the Refugio Oil Spill, during which she participated in tarball fingerprinting surveys as an NGO representative. She has since been working with the LA/LB Area Committee to incorporate lessons learned.

Last year, Jenna was appointed to OSPR's Technical Advisory Committee as an environmental representative.

Katherine Hummel has returned to OSPR as an environmental scientist with the southern field response team. Katherine has a Bachelor of Science degree in Public Health Science from the University of California, Irvine. She previously worked with OSPR's Law Enforcement Division as a wildlife officer covering the Los Angeles and Orange County areas.

Prior to returning to OSPR, she worked as a water quality analyst with Golden State Water Company, where she coordinated lab samples, analyzed lab results and data, and assisted with regulatory compliance.



Thank you for the memories, Randy Imai

It is a bit (a lot?) surreal – and bittersweet - for me to be writing a farewell to my colleague and good friend, Randy Imai. But the time has come for Randy to shift gears and take on some new adventures – ones that don't involve FRT's, ICP's, OSRO's, ACP's, ESI's, UAV's, and...well, you get the picture.

This man has earned his retirement in a way that few can claim. It is impossible to sum up the profound contribution of Randy to OSPR and the rest of DFW in this short space, but I think it's safe to say that everyone here has in some way (and mostly many ways) been the recipient of Randy's generosity and talent, be it assistance, advice, training, tech support ("why won't my iPad turn on?"), and, most of all, great servant leadership.

In every position he has held, Randy has been a model of organizational service and impeccable integrity for staff throughout OSPR. Regardless of who is asking, Randy is always willing to pitch in, work hard, encourage and innovate to help get the job done.

Because of his selfless and humble service, evidenced again and again, he has inspired all of us to be better, professionally and personally. And what I have always marveled at with Randy, who btw is one of the founding OSPR staff (since 1991!), is that he manages to do all of this and have a whole lot of FUN at the same time! Whether wrangling birds on the beach, dreaming up new iPad applications for response, or teaching an airboat class, Randy has always found such joy with his work – which, like his kindness and dedication, is totally infectious.

It is often said, about organizations, that no one is (or should be) irreplaceable, but I for one am having a very hard time imagining this place without Mr. Imai. I'm working on it. But, one thing I do know, when Randy is gone and off on new adventures, is that I need to honor his good work here, and keep striving to be more like him, as I always have.



So to Randy: THANK YOU, we will miss you, and it's been a true honor - and a lot of fun!

- Julie

Holiday Party Pics



OFFICE OF SPILL PREVENTION AND RESPONSE

THE INSIDER

CALIFORNIA COASTAL COMMISSION

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Date: January 17, 2019
To: Oil Spill Technical Advisory Committee (“TAC”) Members and Interested Parties
From: Jonathan Bishop - California Coastal Commission (“CCC”) Oil Spill Program Coordinator
RE: Update on the CCC Oil Spill Program’s Activities
October 3, 2018 to January 17, 2019

A summary of the CCC Oil Spill Program’s work activities since the last TAC meeting is provided below:

➤ **Meetings**

Commission Oil Spill Program staff attended the following meetings from October 3, 2018 to January 17, 2019:

- Five Harbor Safety Committee (“HSC”) meetings: one Humboldt HSC meetings (11/15); one Port Hueneme HSC meeting (11/1); two LA/LB HSC meeting (10/4 and 12/5); and one San Diego HSC meetings (11/28).

Updates to all Harbor Safety Plans are continuous and ongoing. Humboldt, Port Hueneme and San Diego HSC’s continue to work on SB 414 emergency tug/tow capability reports. Like the already complete SF/BD and LA/LB reports, these reports will be incorporated into the HSP’s. SB 414 reports and annual updates to HSP’s will be sent to the OSPR Administrator.

- Three Area Committee (“AC”) meetings: one North Coast AC meetings (11/15); one LA/LB AC meeting (10/9); and one Central Coast AC meeting (10/25).

For this reporting period, CCC OS Program staff has been working on updates to the LA/LB Area Plan and is currently signed up for working subgroups engaged in stakeholder engagement and outreach as well as the offshore workgroup looking at issues surrounding offshore pipelines and platforms.

- **Dispersant Use Plan for California.** On January 3, 2019, CCC Executive Director sent the USCG a Negative Declaration concurrence letter for the proposed updates to the 2008 CA Dispersant Plan. In the letter, CCC staff concurs that the proposed changes to the Dispersant Use Plan would not adversely affect coastal resources. This completes the CCC’s Federal consistency review process for the updated plan.

➤ **Coastal Development Permits and Projects:**

- **Pacific Quest Vessel Salvage.** On August 12th, the 56-foot commercial fishing vessel, *Pacific Quest*, ran aground near Natural Bridges State Beach, in Santa Cruz

County, with a maximum potential capacity of 1,200 gallons of diesel fuel aboard. The vessel immediately began breaking apart on the rocks, causing an estimated 200 gallons of diesel fuel to be released into the ocean. During the salvage, high tides and heavy surf continued to damage and break up the vessel. Debris from the wreck was extensive and expanded along the shoreline, intertidal zone, and into the nearshore kelp beds. Emergency offshore cleanup was performed by boats and swimmers in order to retrieve floating debris from the kelp beds, while crews walked the sandy beach and rocky reef picking up smaller pieces of debris using hand tools. A heavy equipment storage and staging area was established on the bluff above the wreck site for all pollution removal, salvage, and debris cleanup operations.

The CCC issued an emergency coastal development permit (ECDP) which authorized emergency development consisting of removal of diesel fuel and other pollutants from the wrecked vessel; removal of the remaining large/heavy pieces of the vessel (engines, generator, remaining hull, etc.) from the sandy beach; and small debris removal (fiberglass, wood, Styrofoam, plastic pieces, small electronics, etc.) from the sandy beach, intertidal zone, and offshore kelp beds. The emergency development was necessary to abate the threat of a significant oil spill and to minimize the release of hazardous debris from entering the ocean and Monterey Bay National Marine Sanctuary.

Emergency debris cleanup has been completed (12/19/18) and a follow-up regular Coastal Development Permit (CDP) is being coordinated to restore the upper bluff staging area to pre-development conditions and to mitigate for unavoidable impacts to coastal resources as a result of the wreck and salvage of the vessel.

- **Beach Oil Management Partners / Los Cerritos Wetland Authority (LCWA) Restoration and Well Consolidation Project, Long Beach.** On December 13, 2018, the CCC approved a Coastal Development Permit for the proposed wetland restoration and oil well consolidation project in Long Beach. The purpose of the project is to transition oil operations out of a 106-acre area of the Los Cerritos wetland complex over a 20-year period to make it available for wetland restoration and consolidate oil production operations on the Pumpkin Patch and LCWA sites (which together comprise a total of 12 acres).

The project includes the following five main components: 1) decommissioning and removing existing oil development operations on two sites within the Los Cerritos wetlands complex (the “Synergy” and “City” sites) and consolidate oil production operations on two smaller sites (the “Pumpkin Patch” and “LCWA” sites); 2) Cease oil production and remove existing oil operations (including permanent abandonment of about 74 wells, removal of tanks, pipelines and other equipment) at the Synergy and City sites. BOM proposes to cease oil production and abandon one-half of the existing wells within 10 years of the date it receives from the City of Long Beach a “certificate of occupancy” for a new office building to be constructed on the Pumpkin Patch site. The remaining oil operations on those two sites would cease fully within 20 years; 3) Construct and operate two new oil production facilities on the Pumpkin Patch and LCWA sites, including a new office building, new well cellars, storage tanks, and other associated equipment, and drill up to 120 new wells (for a maximum daily production of 24,000 barrels of oil); 4) Construct and operate an above-ground

oil pipeline connecting the Pumpkin Patch and LCWA sites; 5) Implement a 30-acre wetlands restoration project on the northern part of the Synergy site; and convert an existing office building on the Synergy site to a visitor's center for the Los Cerritos wetlands complex and build a pedestrian trail.



Exhibit A Location Map



January 17, 2019

**Activity Report to OSPR TAC
October 1, 2018 – January 10, 2019**

Harbor Safety Committee

BCDC participated in the October and November 2018, and the January 10, 2019 HSC meetings; no meeting was held in December. The next meeting is scheduled February 14 in San Francisco.

The Navigation work group, with USCG representation, met October 30 to discuss with Sail GP their plans for races and practices days off Crissy Field April 30 - May 5, 2019.

Spill Contingency Planning

Staff attended the joint SLC-USCG “Navigating the Future” Forum in Martinez October 31.

Staff was unable to join the November 13 Area Committee meeting in Oakland.

Coordinate with Agencies and Industry Regarding Oil Spill Response Drills

Spill staff participated in a Kinder Morgan pipeline drill in South San Francisco October 10 and the Richmond Inner Harbor Drill December 6.

BCDC Enforcement staff continues to participate in the Abandoned Vessels working group as well as the Richardson’s Bay Regional Authority and the City of Sausalito in their efforts to improve navigation and open waterways.

Sunken barge. A sunken dredge barge was reported to BCDC dredging staff midday November 9. Spill staff made certain formal notifications were made, followed up with the City of Belvedere property manager and with the OSPR biologist on call, providing photos of the scene. The barge was raised later that evening.



CAL FIRE – OFFICE OF THE STATE FIRE MARSHAL (OSFM) PIPELINE SAFETY DIVISION

TECHNICAL ADVISORY COMMITTEE BRIEFING

1. In 2018, CAL FIRE OSFM fully implemented annual inspections as required by Government Code (GC) Section 51015.1 on 47 pipeline operators.
2. CAL FIRE OSFM has completed draft regulatory language for any new, replacement, or retrofit pipeline near an Environmentally and Ecologically Sensitive Area in the Coastal Zone as required by GC Section 51013.1.
3. The Pipeline Safety Division employs 8 Pipeline Safety Engineers (PSE), 3 Supervising Pipeline Safety Engineers (SPSE) and 3 PSE Retired Annuitants as of December 31, 2018. The Division is expecting to increase staffing levels by 8 PSE's, 1 SPSE and 1 administrative staff.
4. Pipeline safety field inspections increased from 311 days in 2014 to 1,113 days in 2018.
5. Chief Thom Porter was appointed as CAL FIRE Director by Governor Gavin Newsom on January 8, 2019.
6. With the retirement of Chief Dennis Mathisen on December 28th, 2018, Governor Brown has named Chief Mike Richwine as Acting State Fire Marshal.
7. Chief James Hosler was appointed as Assistant Deputy Director, Chief of Pipeline Safety and CUPA Programs effective December 21, 2018.

Response to Non-Floating Oils in California

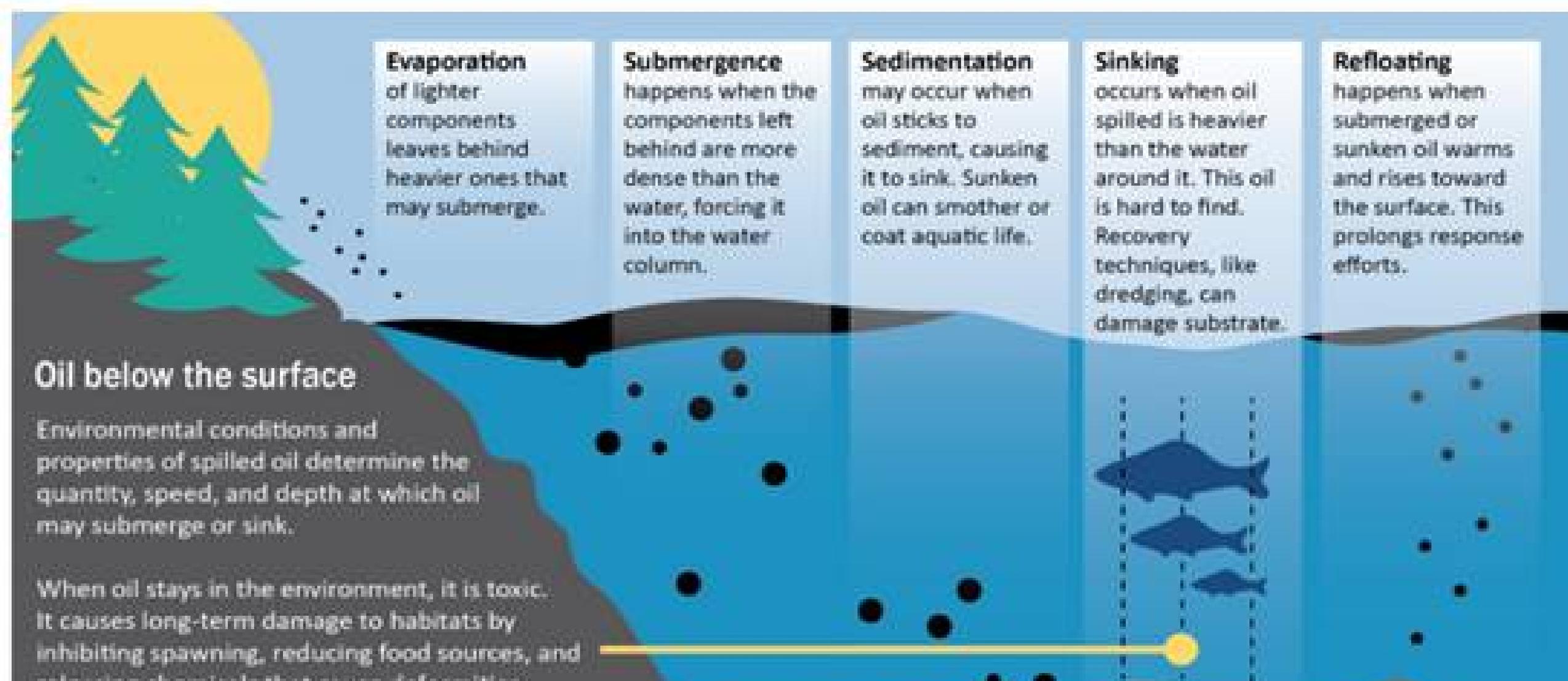
Office of Spill Prevention and Response
Technical Advisory Committee Meeting
January 17, 2019



Non-floating Oils

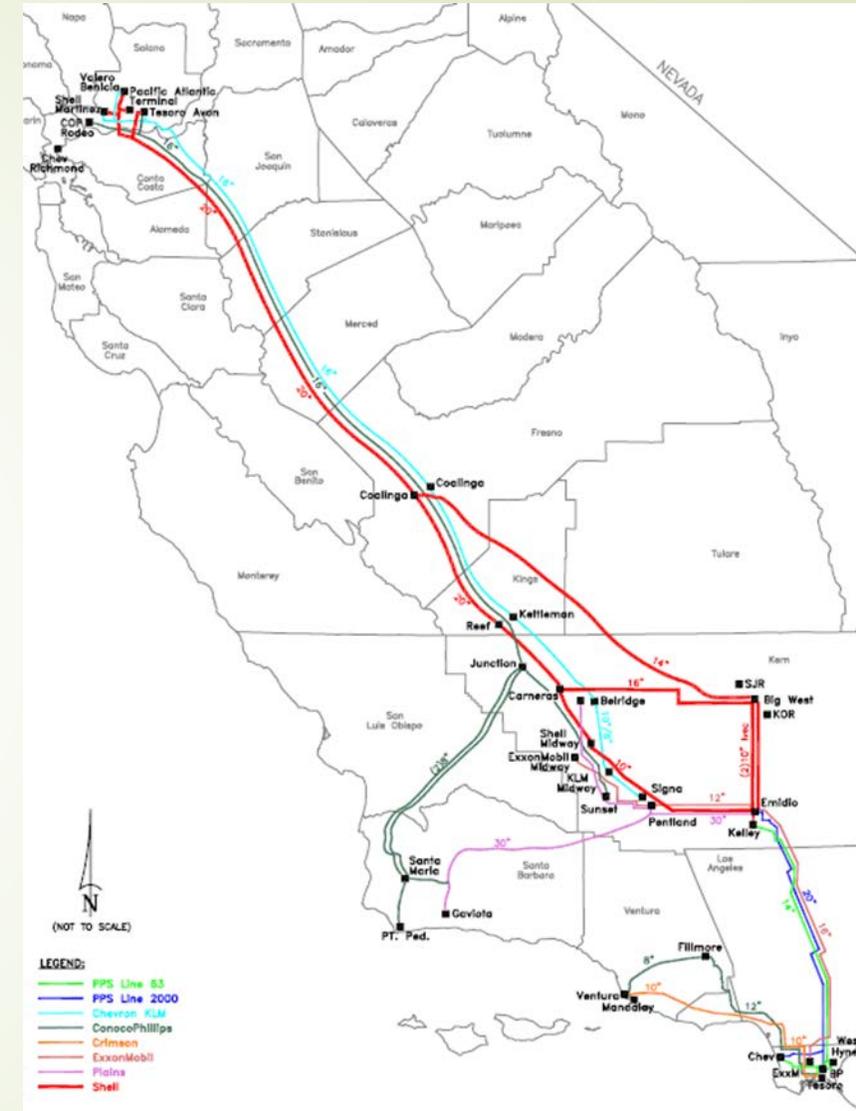
- ▶ “Very Heavy Oil”
 - ▶ Produced in Canada and California
 - ▶ USCG category “Group V”
 - ▶ Specific gravity greater than 1 (API gravity less than 10)
- ▶ Less acutely toxic but persistent with ‘physical impacts’ – coating and smothering
- ▶ Heated/Mixed with diluent for transport (eg, dilbit/Group IV?)
- ▶ Lighter oils can also sink/suspend through weathering (eg, oil particle aggregates).

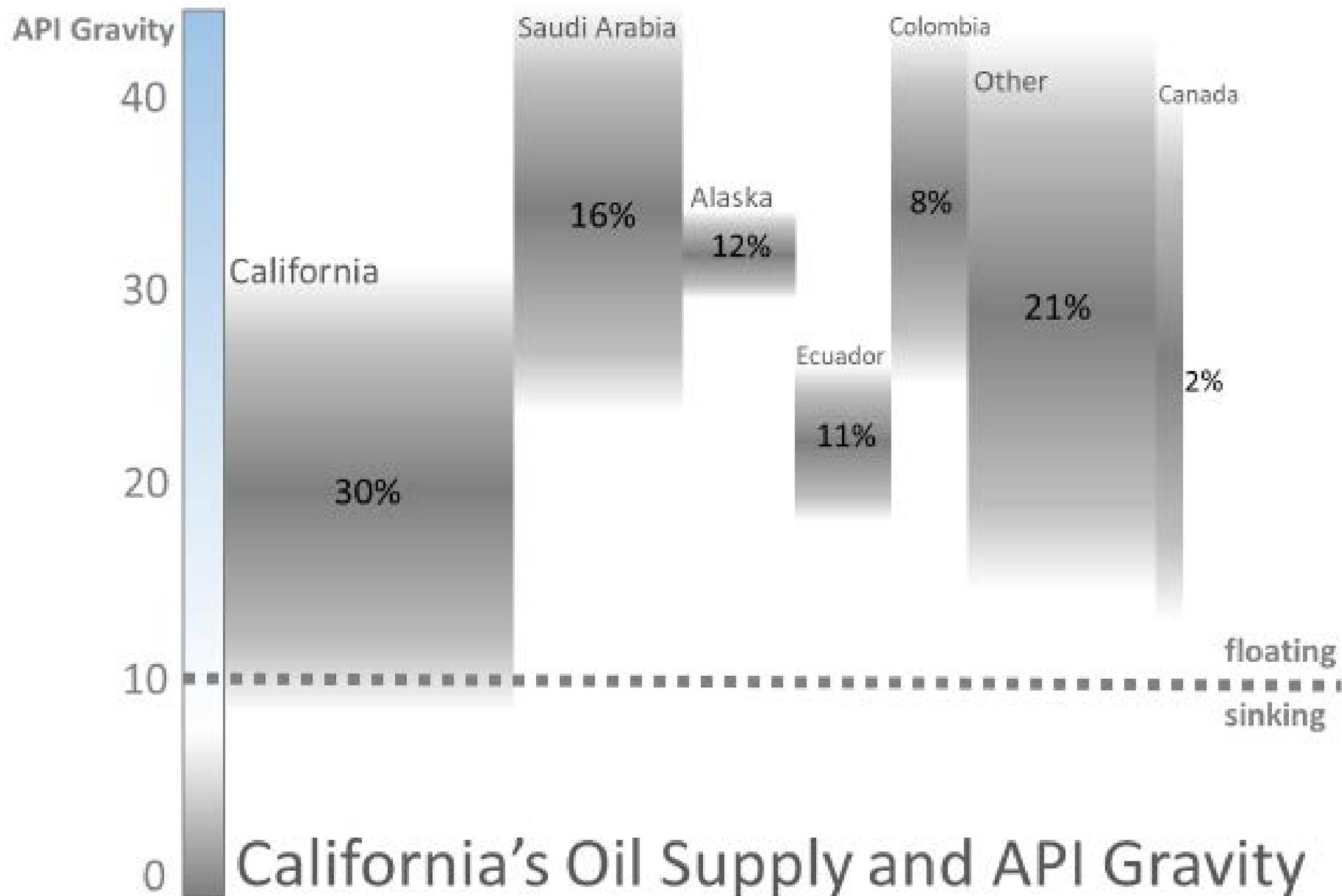




Heavy Oil Spill Risk

- CA Energy Commission: no API gravity <10 products being imported
- Most CA imports are \geq API gravity 20 (avg=29)
- Canadian oil is 2% or 12 M bbls annually, and blended (with lighter ends/diluent) (avg=30).
- CA produces some very heavy oil, heated/mixed
- Tracking specific oil movements is challenging – limited reporting requirements (but full data is available after 4 months)





CA Spills Involving Sunken Oil

- ▶ 2000: Carson River, Tanker truck spilled heavy oil (API ~12); sub-zero temperatures plus turbulence, caused some of the oil to sink.
 - ▶ 2007, *Cosco Busan* oil spill in San Francisco Bay (API ~15), nearly all oil floated, but mixing and sinking documented at high energy sandy beaches.
- ❖ Sunken oil spills are rare in CA



Detection

Detecting submerged oil:

- Acoustic sensors
- Fluorometry
- Optical scattering
- Induced polarization
- Water column sampling



Detecting sunken oil:

- Sonar
- Visualization
- Sorbents
- Bottom Sampling
- Underwater Laser Fluorescence
- Divers





Sunken Oil Containment

- ▶ Bottom-half curtain for shallow depths
- ▶ Full-height curtain for low energy environments
- ▶ Bottom filter fence
- ▶ Berms and trenching
- ▶ Natural collection areas

Bottom Filter Fence



Sunken Oil Recovery

- Suction dredges ($\leq 40'$ depth)
- Excavators ($\leq 20'$ depth)
- Manual recovery
- Refloating – agitation or air bubbles



Summary

- ▶ CA Transport of oil with API < 10 is minimal (if at all)
- ▶ Spills where oil sinks are rare
- ▶ Sunken oil detection and cleanup has unique challenges
- ▶ We have capabilities to address sunken oil – OSROs





For Consideration

- ▶ Improve availability of shipping information
- ▶ Sunken oil exercises
- ▶ Encourage spill technology development
- ▶ Group V oil required response time (see WA State)



MORE INFORMATION

<https://www.wildlife.ca.gov/OSPR/Public-Meetings/Technical-Advisory-Committee/Non-Floating-Oils>

