

Southern California Oil Spill: Preparation, response, ongoing risks, and potential solutions

Thursday, October 28, 2021

12 noon

State Capitol, Room 4203

Overview

On the evening of Friday, October 1, 2021, the first reports of observed oil sheen in federal waters off the coast of Huntington Beach began to be reported. That sheen was subsequently verified as a major oil spill the morning of Saturday, October 2, 2021. This background paper provides an overview of the “Pipeline P00547” oil spill, the response to the spill, and relevant aspects of federal and state law and regulation related to oil spills and offshore oil and gas production in coastal California. Specific actions taken by the Legislature in recent years related to these matters are presented followed by potential questions for panelists. The material presented is within the oversight of the Senate Natural Resources and Water Committee. Due to the specific circumstances of this oil spill, the primary focus is on offshore oil and gas production in federal waters where state jurisdiction is limited.

The Southern California oil spill is the subject of multiple investigations currently underway, which, when completed, will likely yield a definitive, or at least agreed upon, description of the events that resulted in the spill. In addition, the response to the spill remains ongoing, and it will likely be years before all of the required elements of the response are completed. In view of this, the information provided here should be considered preliminary, and subject to change.

The Southern California oil spill and the status of the response

At 10:22 pm on Friday, October 1, 2021, Office of Spill Prevention and Response (OSPR) in the California Department of Fish and Wildlife (CDFW) received notification of an observed oil sheen in federal waters several miles off the coast of Huntington Beach. News reports indicate that there was an earlier report to authorities that evening of a sheen as well. By about 2 am on Saturday morning, the US Coast Guard (USCG) received satellite images consistent with an oil spill. Just after 9 am on Saturday morning, an oil pipeline operator reported an oil spill to the National Response Center, and the USCG had also obtained on-the-water confirmation of a spill at around the same time. USCG and OSPR began to deploy resources and activate a formal oil spill response. Extensive planning for oil spill response is required under federal and state

law and regulation, and the federal and state leads in this instance are the USCG and OSPR, respectively.

The oil pipeline operator that reported its leaking pipeline is Beta Offshore, a subsidiary of Amplify Energy. Beta Offshore operates the Elly, Ellen, and Eureka platforms in federal waters and the pipeline which runs about 18 miles from Platform Elly into state waters and then onshore. This pipeline, formally owned by the San Pedro Bay Pipeline Company and also owned by Amplify Energy, is used to bring produced oil from the Beta Unit oil field onshore. It is an interstate pipeline and under federal jurisdiction, although the State Lands Commission has issued a right-of-way lease for the pipeline for the portions on the state's tidelands.

Amplify Energy has owned this infrastructure for 9 years, although the platforms went into production originally approximately 40 years ago. In news reports, Amplify Energy is reported to have stated that there was a low pressure reading on the pipeline at 2:30 am on Saturday, October 2, the pipeline was shutdown at around 6 am the same day, and the pipeline was subsequently suctioned to remove any remaining oil. The operator reports being unaware of the oil spill until 8:09 am on Saturday morning when a sheen was observed on the water. A 13 inch long crack in the pipeline located about 5 miles offshore is presumed to be the source of the spill. This crack occurs in a 4,000 foot length of the pipeline that is displaced approximately 105 feet out of alignment with the rest of the pipeline. According to news reports, as of October 2020, the pipeline was intact and in alignment. The working hypothesis based upon these observations is that the anchor of a large vessel dragged the pipeline out of position. The specific sequence of events and when the anchor drag occurred remains under investigation. Recently an ocean-going vessel was identified as a "party of interest" in the spill.

On October 4, 2021, the federal Pipeline and Hazardous Material Safety Administration issued a Corrective Action Order (CAO) to Amplify Energy. This CAO requires the pipeline to be shut-in until a root cause failure analysis is conducted of the split in the pipeline and additional conditions are met. According to experts, federal pipeline regulations do not require more sophisticated leak detection systems that would facilitate the identification of small leaks which this leak may have started as. A recent US General Accountability Office report raised numerous concerns over the oversight of federal offshore oil pipelines. The federal regulator has acknowledged for years that its regulations are outdated, but little progress in updating them has been made.

Initial reports were that up to approximately 135,000 – 145,000 gallons of crude oil were released to the environment during the oil spill, although the amount released has since been narrowed to on the order of 25,000 gallons. Existing law and regulation requires the immediate reporting of an oil spill to appropriate parties.

It is not unusual for information at the start of an oil spill to be inconsistent or incomplete. A timeline of the rollout of information on Saturday, October 2, presented to the City of Huntington Beach (City) showed initial reports of a potential spill from the USCG at about 9 am with the spill declared a major spill with the activation of a formal incident management team at 11 am. By 12 noon, the City was told that the oil spill would reach Huntington Beach and City staff began planning for the deployment of their own spill response resources at sensitive environmental sites later that afternoon. At 2 pm on Saturday and again later that same day, the USCG told the City that oil would not reach Huntington Beach until Monday. As the afternoon progressed, reports started being received that oil was being observed in waters near Huntington Beach, and by 4 pm, the City started deploying its own resources at sensitive sites. In the late afternoon and early evening oil began to be observed onshore in Huntington Beach. Early boom deployment by the City mitigated and prevented oil from reaching some of the sensitive wetlands in Huntington Harbor, although Talbert Marsh was oiled in some locations.

Unified Command for the spill response was established between the USCG, OSPR, and Amplify Energy on Saturday afternoon, October 2, and efforts to skim oil from the water surface as well as deploy additional booms to protect further sites rapidly commenced – initially in Orange County. The Oiled Wildlife Care Network was also activated. As the response continued, additional personnel and resources were deployed to understand the size and scope of the spill and respond. Shoreline Cleanup Assessment Teams were deployed to assess sites, followed by work crews monitoring, inspecting and cleaning the beaches. As the days of the response progressed, oil and weathered oil in the form of “tar balls” began to come ashore further south into San Diego County. The first reports of oil and tar balls in San Diego County appear to be from October 6/7. Orange County was added to Unified Command on October 5 and San Diego County was added on October 8. Sensitive sites in San Diego County were protected by booms. There are reports of tar balls from the spill now reaching the Mexican coast, although all tar balls observed on the Pacific coast may not be from this spill. Booms are more effective for oil observed floating on the surface than tar balls, and were removed as tar balls became more prevalent as the spill and the response to the spill progressed.

Over 1,600 personnel were involved in response clean up at its peak, and personnel have been redeployed as the initial response winds down. Clean-up teams will remain available to respond to reports of tar balls by the public and the assessment of damages to natural resources from the spill – used to inform mitigation and penalties for the spill – has begun.

Totals as of October 25th for the spill response include:

- 5,544 collected gallons of crude oil (over half within the first 18 hours of the response) which is about 20% of the current estimate of the amount spilled and is consistent with the usual fraction of oil collected following a spill.
- 13.6 barrels of tar balls,
- Over 500,000 pounds of oily sand/debris,
- Cumulatively over 400 miles of shoreline have been cleaned (shorelines can be cleaned multiple times), and
- Approximately 13,550 feet of various forms of boom were deployed to protect sensitive sites.

Beaches and harbors, including Newport Harbor and Dana Point Harbor, were closed and then subsequently reopened when it became safe to do so following air and water quality and sediment sampling. State Park closures included the shoreline at Bolsa Chica State Beach and Crystal Cove State Park. As of October 25, there have been 234 claims reported of oiled recreational vessels and 50 have been cleaned at three decontamination stations established locally for these purposes.

Also as of October 25, 2012, the Oiled Wildlife Care Network reported the recovery of more than 30 species of birds, including western gulls, snowy plovers, and western grebes. Thirty-three oiled birds were recovered live of which 19 have been released. Seventy-eight dead birds were collected. Seven mammals were collected of which only one – a northern right whale dolphin – was collected live. That animal was subsequently euthanized due to its poor condition. Not all dead animals collected were visibly oiled. More than a dozen dead fish have also been reported. Onshore collection excludes any animals killed by the spill that remained offshore. Further, an animal's health could be adversely impacted by exposure to the spill but may not be readily observed.

The Unified Command has integrated Tribal Monitors and related personnel into the response. As of October 25, no known or newly discovered significant cultural resources have been impacted by either the oil or subsequent cleanup operations. No spill or operational impacts to historic resources have been observed, except for some light staining of some pier pilings near the release. Possible remediation measures are being evaluated.

A fishery closure was announced on October 3 from Sunset Beach to Dana Point and expanded in size to the south and west as the oil spill spread. While the fishery remains closed, nearshore sampling has commenced and offshore sampling will start soon to ensure that fish caught are safe to consume. Based on necessary sampling and processing time, it may be at least a few more weeks before the fishery is opened.

Over 10,000 members of the public volunteered to assist in the oil spill response. Training on the handling of hazardous waste was offered to 561 volunteers and four deployments of volunteers to clean up tar balls and debris were implemented. An average of 35 volunteers participated in each event.

The weekend of the oil spill was when the Pacific Airshow was scheduled for Huntington Beach with estimated attendance of more than one million each day. The Airshow was cancelled for Sunday as oil spill response operations continued. News reports that local surfing, vacation rentals, and other businesses experienced deep losses in business in the days after the spill. In addition, the surrounding community lost access to and the ability to recreate on the beach and the shoreline while response activities were underway. Multiple class-action lawsuits have already been filed against Amplify Energy.

Governor Newsom declared a State of Emergency on October 4. There have been multiple local states of emergency declared to assist in local response and coordinate communications. Impacted businesses, including fishers, may be eligible for US Small Business Administration loans.

The oil spill response framework in California

In response to the significant 1989 oil spill from the Exxon Valdez that fouled the waters of Prince William Sound, a series of federal laws were established or amended including the Oil Pollution Act of 1990 (OPA), the Clean Water Act and others. These laws established a national framework for addressing oil (and other hazardous waste) spills within the United States and its waters.

Federal regulations implementing these laws include those for the National Oil and Hazardous Substances Pollution Contingency Plan (national contingency plan, see 40 CFR §300). The national contingency plan established a structured planning and response framework for oil spills including the establishment of regional and area contingency plans. The regional contingency plan for California includes neighboring states. Within California, designated locations for area contingency planning include the ports of Los Angeles and Long Beach, Orange and San Diego Counties. Sensitive areas are identified in the area plans and information specific to the protection of these areas – such as the presence of endangered or threatened species – is provided to assist in response planning. The area contingency planning process is open to all stakeholders and includes agencies from all levels of government, industry and environmental groups.

The national contingency plan establishes that the basic framework for the response management structure is a system that brings together the functions of the federal government, the state (and local) government, and the responsible party to achieve “an

effective and efficient response, where the on-scene coordinator maintains authority.” (See 40 CFR §300.105 and 40 CFR §300.135). This is the “unified command” and no single agency has sole jurisdictional authority to direct all aspects of a major emergency.

For large oil spills, the unified command includes a federal on-scene coordinator (the USCG for marine spills), a state on-scene coordinator and the responsible party (for the spill). Unified command can be expanded to include local emergency response. The on-scene coordinator in charge, generally the federal coordinator, retains ultimate authority for decisions related to oil spill response.

At the state level, the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Act) established OSPR in CDFW. This Act helps to fulfill the state’s responsibilities for oil spill prevention and response as established at the federal level. Existing law generally requires the OSPR administrator to implement activities relating to oil spill prevention and response and to represent the state in any coordinated response efforts with the federal government. California has its own state-specific contingency plan that must be revised every 3 years (most recently in 2019).

Federal and state law and regulations require immediate notification of oil spills, and that vessels, pipelines and other potential responsible parties have oil spill contingency plans in place specific to their operations. OSPR’s activities include conducting regular drills and table top exercises for oil spill response. State law provides for the establishment and deployment of the Oiled Wildlife Care Network (OWCN) to assist in spill response by helping to recover and rehabilitate oiled wildlife.

OSPR is supported by two main funds. The Oil Spill Prevention and Administration Fund (OSPAF) and the Oil Spill Response Trust Fund (OSRTF). OSPAFA supports spill planning, readiness, and prevention activities statewide where spills may threaten state waters, and the OWCN. Its revenue comes primarily from a per barrel fee assessed on oil delivered to certain locations in the state and also from certain fees paid by non-tank vessels (large vessels that do not carry oil as cargo). Due to ongoing structural imbalance issues, the per barrel fee to support OSPAFA was recently raised to up to 8.5 cents with inflation indexing (see AB 148, Assembly Budget Committee, Chapter 115, Statutes of 2021). The OSRTF was initially funded by a per barrel fee on certain oil deliveries into the state to a cap of \$55 million (an equal amount of additional monies are also available). The OSRTF is used to support spill response, and costs can be recouped from the responsible party or from the federal Oil Spill Liability Trust Fund if the responsible party cannot pay.

According to information provided by CDFW, the San Pedro Bay Pipeline Company has a current Certificate of Financial Responsibility on file with OSPR for demonstrated insurance worth \$39,175,000.

Of note, the OPA's goals include to make the environment and the public whole for injuries to natural resources and services resulting from an incident involving a discharge or substantial threat of discharge of oil (see 15 CFR 990.10). This goal is achieved through the Natural Resource Damage Assessment (NRDA) that follows any incident. The NRDA is intended to promote expeditious and cost-effective restoration of injured natural resources and services. The NRDA is distinct from immediate oil spill response efforts. NRDA's can take years to complete. For example, the NRDA for the 2015 Refugio beach spill was finalized in late 2020 following a settlement with the responsible party. Certain grant monies stemming from that NRDA are being distributed now. Critiques of the NRDA process include the length of time prior to monies being distributed and that difficult-to-quantify environmental impacts may not be adequately mitigated for.

Review of offshore oil and gas production and state jurisdiction

According to PPIC, a majority of Californians have been opposed to new offshore oil production for several years and approximately 72% were opposed in July 2021. After the recent spill, Huntington Beach's City Council approved support for a permanent ban on the new offshore oil drilling in state and federal waters.

In 2018, the state produced about 135M barrels of oil (excluding federal offshore production). Oil production statewide has been generally declining as, among other reasons, the state's existing fields' age and the remaining oil becomes more expensive to produce. Of the 2018 total, about 113M was produced onshore in Kern County, Los Angeles produced 18.6M (about 6.6M was offshore), and Orange County produced about 3.7M (2.6M onshore and 1.1M state offshore). All of the oil produced in the state is consumed in the state, and the state imports about three times more to satisfy demand.

Total state offshore oil production in state waters in 2018 was about 7.7M barrels, primarily from Los Angeles and Orange Counties. Offshore production in state waters has been declining for decades. Offshore production in federal waters peaked at more than 70M barrels in 1995 and has also sharply declined in recent years to 4.5M barrels in federal fiscal year 2019 from 30 federal offshore leases (the most recent data available). The rupture of Pipeline 901 causing the Refugio oil spill in 2015 effectively stopped production on many federal platforms off Santa Barbara.

There are 27 offshore platforms, of which 4 are in state waters. There are five artificial islands for oil production in state waters. According to news reports, a 2020 estimate of the cost of decommissioning the 23 platforms in federal waters will be on the order of \$1.6 billion. Most of that financial liability is on the original operators who built the platforms and related infrastructure. In the case of the Beta Unit oil field, the original operator was the Shell Oil Company. According to recent news reports,

decommissioning costs of the Platforms Elly, Eureka, and Ellen were recently estimated to be approximately \$215 million of which \$150 million has been set aside. According to news reports, Amplify Energy was recently recapitalized out of bankruptcy and its operations have been cited numerous times for violations by federal regulators.

For offshore wells in state waters, the state's oil and gas regulator, the Geologic Energy Management Division in the Department of Conservation (CalGEM) has authority to permit the drilling of wells. The State Lands Commission (or a grantee) has authority to issue a lease for use of the state's mineral rights in the tidelands. The State Lands Commission also has the authority to issue a right-of-way lease for any pipeline or utilities to come on shore from the offshore platform or island, as applicable. (The City of Long Beach and oil development in its harbor is unique in many aspects, and has a complicated history.) The state's portion of decommissioning costs associated with the City of Long Beach's oil and gas production leases is underfunded by about \$600 million according to recent estimates. The California Coastal Commission, Water Boards, local air district and others also have jurisdiction for applicable activities in state waters offshore.

For offshore wells and platforms in federal waters, the California Coastal Commission has jurisdiction, as applicable, under its delegated authority under the federal Coastal Zone Management Act (CZMA). In addition, the State Lands Commission has jurisdiction to issue a right-of-way lease for any state tidelands that a pipeline or utilities supporting the platform used. In 2019, in response to lack of production, non-payment of rent, and various other lease violations, the State Lands Commission terminated multiple state mineral rights and at least one right-of-way lease for a pipeline associated with Platforms Hogan and Houchin in federal waters.

An important caveat is that much of the offshore oil and gas development (whether in state or federal waters) is long-standing and the original leases may have been issued multiple decades ago. With specific reference to the California Coastal Commission, offshore oil development in a particular location may predate the Coastal Act (state law) and the CZMA. The California Coastal Commission's delegated authority to find consistency under federal law with its approved plan under the CZMA may not have always applied (although it may now).

In March 1979, the State Lands Commission issued the first right-of-way lease to Shell Oil Company for the use of almost 11 acres of the state's tidelands for the pipeline serving the Beta Unit oil field. The lease was for 30 years. This lease was terminated in 2008 and a new lease issued as part of the settlement of various concerns regarding the assignment of the lease to another operator and other matters. The lease terms were for 20 years and authorized the State Lands Commission to revise the rent and bonding requirements periodically during the lease term. The lease terms required that the

initial rent was set at \$190,440 annually, and that a bond in the amount of \$3 million, maintenance of an existing sinking fund, and insurance of no less than \$10 million were also required. In August 2010, the State Lands Commission required that the minimum liability insurance be increased to \$50 million from \$10 million. In August 2019, the State Lands Commission reduced the rent from \$205,050 annually to \$104,958 to more accurately reflect actual use of the state's tidelands, while increasing the required surety bond from \$3 million to \$8.9 million with an additional guaranty required of Amplify Energy. The sinking fund had reached \$4.3 million in 2019, and the state's portion of that amount was insufficient to cover the state's estimated decommissioning costs.

Shell Oil's Plan of Development for the Beta Unit oil field predated the Coastal Commission's consistency review authority under the CZMA. The Coastal Commission has exercised its jurisdiction over the portions of the pipelines within state waters in the coastal zone (approximately 11 miles). The pipeline is buried to a depth of 10 feet, according to materials received from the Coastal Commission, in areas within the Long Beach breakwater where there are existing anchorages for ocean-going vessels serving the Ports of Long Beach and Los Angeles.

The California Coastal Sanctuary

Following the January 1969 blowout of a well on one of the federal platforms offshore Santa Barbara, new offshore oil leasing was generally suspended in both federal and state waters. The California Coastal Sanctuary Act of 1994 (Public Resources Code (PRC) §§6240 *et seq.*) removed the authority of the State Lands Commission to issue new oil and gas leases for unleased tide and submerged lands underlying the Pacific Ocean with limited exceptions. These exceptions include that state oil and gas resources are being drained by production on adjacent federal lands, the lease is in the state's interest, and there is a national emergency, as provided. Existing oil and gas leases are allowed to continue, but when a mineral lease is quitclaimed back to the state, the State Lands Commission cannot re-lease it.

Then-Senator Jackson (SB 1096, 2014) and Senator McGuire (SB 788, 2015) have both recently sought to further restrict the exemptions provided in the California Coastal Sanctuary without success. Proponents of offshore oil production from the Tranquillon Ridge field depend, for example, upon one of the existing exemptions to the California Coastal Sanctuary. Additionally, new restrictions that impact existing leases may interfere with the property rights of operators.

Although potential offshore oil fields are not necessarily well known, there is an oil field off of Vandenberg Air Force Base called Tranquillon Ridge that is under both federal and state waters. There have been periodic attempts – using the draining exemption in the California Coastal Sanctuary – to exploit that oil either from wells drilled from onshore to the oil field or from federal platforms. Recent significant efforts about 10

years ago to produce oil from Tranquillon Ridge failed at least in part due to concerns about enforceability of terms between federal, state and private interests.

Response to 2015 Refugio oil spill.

On May 19, 2015, Line 901 – the primary transportation pipeline for oil and gas products along the southern central coast of California – ruptured causing the Refugio oil spill. There were delays in reporting the onshore leak which substantially oiled Refugio beach and resulted in oil being released into the water. There were at least 3 bills passed by the Legislature in response to the spill to (1) improve inspections of intrastate pipelines (under the jurisdiction of the Office of the State Fire Marshal) (SB 295, Jackson, Chapter 607, Statutes of 2015), (2) make various changes to oil spill response by OSPR (SB 414, Jackson, Chapter 609, Statutes of 2015), and (3) make various changes to improve intrastate pipeline safety, including additional valves in sensitive areas (AB 864, Williams, Chapter 592, Statutes of 2015). In addition, subsequent changes to law included a more formal role for the Coastal Commission in the NRDA process (AB 2864, Limón, Chapter 311, Statutes of 2018), the codification of the use of spill management teams in oil spill response (AB 1197, Limón, Chapter 584, Statutes of 2017), and additional penalties for large oil spills due to negligence (AB 3214, Limón, Chapter 119, Statutes of 2020), among others.

Line 901 remains out of service, and, to the knowledge of Committee staff, is in the process of being replaced.

Response to the Platform Holly and Rincon Island operator bankruptcies

In 2017, Venoco declared bankruptcy, quit-claimed its applicable leases back to the State Lands Commission and left Platform Holly (in state waters) to be decommissioned by the state. Later in 2017, another company responsible for the Rincon Island oil facility (also in state waters) also declared bankruptcy. Indemnification bonds – for the platform, island, and separately for the wells – were inadequate to fully fund decommissioning of the infrastructure, the plugging and abandonment of the wells, and site remediation. While the State Lands Commission negotiated with the earlier owners of the platform, island, and wells and obtained substantial funding from them, the state’s General Fund will likely ultimately fund hundreds of millions of dollars of decommissioning and related costs. State law has been changed to explicitly authorize the State Lands Commission and CalGEM to obtain additional bonds or other financial surety to indemnify the state from further bankruptcies (see, for example, SB 1147 (Hertzberg, Chapter 607, Statutes of 2018)), and there were legislative efforts to ensure explicitly under state law that if an operator transferred a lease to a new operator that it could still be held liable if the new operator did not fulfill all of the lease requirements. (Federal regulation is already explicit in this regard.)

The shift of oil development in certain locations from large major oil companies to smaller independent operators, and the significant risks posed by inadequate bonding/indemnification to the state’s taxpayers are recognized (potentially up to billions of dollars for onshore wells). While state law has been changed to specifically address this (see, for example, AB 1057 (Limón, Chapter 771, Statutes of 2019) and SB 551 (Jackson, Chapter 774, Statutes of 2019)) it remains unclear how well these changes have been or will be implemented and what additional measures may be needed.

Response to Trump Administration proposal to issue new federal offshore oil leases

In January 2018, the Trump Administration announced plans to reopen the current federal leasing plan and specifically included all of the California Outer Continental Shelf in its initial proposal. In response, the Legislature passed two identical bills in 2018 that modified the California Coastal Sanctuary Act to bar the State Lands Commission from entering into any new lease or similar to support new oil and gas development in new federal oil and gas leases (SB 834 (Jackson, Chapter 309, Statutes of 2018) and AB 1775 (Muratsuchi, Chapter 310, Statutes of 2018)).

There have been periodic moratoriums on new offshore leasing in federal waters off the California coast, and the Biden Administration has recently declared a “pause” on all further federal oil and gas leases. The Legislature has passed numerous resolutions to the federal government seeking to continue the moratorium on federal offshore oil and gas leasing.

Legacy offshore wells

While federal offshore oil royalties have declined with federal offshore production, the state receives this revenue. Historically, these revenues had in part been used to fund coastal environmental restoration and other things. More recently, these revenues have been largely deposited in the General Fund. A 10-year pilot program to clean up legacy oil and gas wells and related hazards in/around coastal waters off Santa Barbara was recently established (SB 44, Jackson, Chapter 645, Statutes of 2017). The State Lands Commission is authorized to spend up to \$2M annually of royalty revenue on the plugging and abandonment of legacy oil and gas wells and the mitigation/removal of related coastal hazards.

Questions for panelists

Oil spill prevention and response

- Given technological advances – such as private satellite networks or automated water quality sensing buoys that can detect oil – are there techniques or

instrumentation available to provide more rapid information about or confirmation of offshore spills, particularly those that occur at night, foggy or other conditions?

- How will OSPR review or evaluate its response to this spill? “Lessons learned” from the 2015 Refugio spill, particularly with respect to communication, appear to have been incorporated into this spill response.
- As there is tremendous uncertainty about volume and amount of oil at the beginning of a spill, would a more proactive stance, such as early notification of local emergency responders, regarding particularly the protection of sensitive areas be feasible?
- Would it have been possible to deploy more personnel more rapidly – particularly to protect sensitive sites? Was deployment of personnel based upon initial projections that suggested shoreline impacts would take longer to appear?
- Thousands of volunteers signed up to assist in the initial response and only dozens ultimately received the necessary training and were able to participate in the response. Any thoughts on how to improve upon utilizing this public interest?
- Should there be standing industry-supported funding to compensate fishers when oil spills close fisheries?
- Are OSPR’s local grant programs for equipment over-subscribed? Does OSPR have sufficient resources for its local and local grant programs?
- How can the NRDA process be more timely and improved upon?
- Do table top exercises and oil spill response drills ever address spills starting well in advance of spill notification?

Stakeholders

- In view of this spill, what are recommendations for improved spill prevention and response?
- Recommendations for changes to state law to address offshore oil?

State Lands Commission and California Coastal Commission

- What oversight will be conducted over pipeline repair, as applicable?
- Are there changes to state law that may help to facilitate state oversight over federal offshore infrastructure?
- Do the State Lands Commission and the California Coastal Commission have sufficient available resources to exercise oversight over federal offshore infrastructure? To participate in the NRDA process?