



Last Tuesday, a 24-inch underground oil pipeline on the beautiful Santa Barbara County coastline burst for reasons as of yet unknown. Over the course of several hours, an estimated 101,000 gallons of crude oil spilled down a storm drain, on the shoreline, and into the Pacific Ocean. As of [late last week](#), oil had spread over 9.5 square miles of ocean and almost 9 miles of shoreline, from Arroyo Hondo Beach to Refugio State beach.

Sadly, coastal and marine oil spills are an all too frequent reality in California. The Refugio Oil Spill is only the latest on a list of significant [pipeline spills in California's recent history](#), including an Exxon Mobil crude oil pipeline break in the Santa Clara River in 1991, a crude oil pipeline break on McGrath State Beach in 1993, and a Kinder-Morgan diesel pipeline break in Suisan Marsh in 2004. Other coastal and marine oil spills can be attributed to ships and tankers (such as *Cosco Busan* in 2007 and *American Trader* in 1990), oil fields, and other industrial sites. Looking further back in history, a [devastating spill on this same stretch of Santa Barbara coastline in 1969](#) galvanized a blossoming environmental movement, helped establish the first Earth Day, and inspired Congress and state legislatures to pass important environmental statutes (e.g., the Federal Coastal Zone Management Act and the California Coastal Act).

The Refugio Oil Spill is yet another reminder of the direct environmental risks that fossil-fuel production and transport pose. We desperately need stronger tools to prevent and mitigate oil spills like this one. But fortunately, when spills do occur, there is a suite of state and federal legal mechanisms in place to facilitate spill response, penalize the companies responsible, and compensate the public for the cost of cleaning up the oil and any environmental damages. **Below, I explore some of the potential legal responses to the Refugio Oil Spill, including possible penalties and damages.**

Clean-Up Efforts

Immediately following a spill, federal and state agencies engage in clean-up and containment efforts to remove as much oil from the environment as possible and limit harm

to natural resources. The costs of these efforts are referred to as **“removal costs.”** The federal **Oil Pollution Act of 1990** and California’s **Lempert-Keene-Seastrand Oil Spill Prevention and Response Act** hold the owner or operator of a ruptured pipeline strictly liable for removal costs so long as clean-up efforts are consistent with federal and state spill emergency response plans. States and the federal government have access to federal clean-up funds immediately, so that agencies do not have to wait for the owner or operator to provide funds.

In Santa Barbara County, under the command of the U.S. Coast Guard, the California Department of Fish and Wildlife, a commercial spill response company, local fire departments, volunteers, and other entities are currently engaged in [spill emergency response](#) to recover as much oil as possible as quickly as possible. Governor Brown swiftly [declared a state of emergency](#), enabling access to federal funds. The Refugio Oil Spill clean-up could last months. It is impossible at this time to estimate removal costs; but whatever the costs, the pipeline operator, [Plains All American Pipeline, L.P.](#), must reimburse them.

Natural Resource Damages

Coastlines are sensitive habitats. A coastal oil spill can degrade habitats, harm human health, kill or injure wildlife, and affect future generations of wildlife through reduced reproductive output, disease, and impacts to the marine food web. Despite our best efforts to clean up spills, spilled oil can persist in marine and coastal environments for a long time. Even a short spill can have harmful long-term impacts.

The stretch of Santa Barbara coastline where the Refugio Oil Spill occurred is [ecologically sensitive](#), rich in biodiversity, and relatively undeveloped. Kelp forests and productive coastal waters serve as habitat for dolphins, sea lions, shorebirds, fish, and other animals. Whales and migratory birds regularly travel through the region. The extent of ecological injuries remains unknown, but [early reports](#) of dead pelicans, a dead dolphin, injured sea lions, numerous dead invertebrates, and oiled beaches are troubling. Additionally, local state beaches are closed, restricting recreation and other public uses of natural resources.

During and following oil spill clean-up, state and federal government agencies must begin investigating whether the spill injured public natural resources, including beaches, water, habitats, and marine resources that governments manage on behalf of the public. Where a spill injures natural resources, government trustees can file legal claims, called **“Natural Resource Damages claims,”** on behalf of the public under the federal Oil Pollution Act and California’s Oil Spill Prevention and Response Act. All compensation recovered must be used exclusively to restore, replace, or acquire equivalent natural resources. Recoverable

damages include compensation for impacts to recreation.

The National Oceanic and Atmospheric Administration (NOAA) generally takes the lead on NRDA's involving marine and coastal resources. Currently, [a NOAA official is at the Refugio Oil Spill site](#) assessing whether the federal government has grounds to bring a Natural Resource Damages claim. If so, the federal and state government will commence a **Natural Resource Damage Assessment** (NRDA, pronounced “nerd-ah”) process. In a NRDA, government agencies attempt to document the nature and scale of natural resource injuries caused by the oil spill. This is typically a very data-intensive process, involving a team of scientific and economic experts, sample collection, and computer modeling. The agencies will then attempt to quantify natural resource injuries in dollars or restoration activities that will reimburse the public. The parties responsible for the spill are liable for costs of the NRDA as well as the costs of restoration. Additionally, responsible parties must compensate the public for any lost use of natural resources from the time of injury to the time of restoration. A NRDA can sometimes take years. Ultimately, damages may be resolved through settlement or trial. Typically, the agencies will develop a restoration plan for injured resources, and use recovered damages to implement the plan and monitor restoration progress.

In practice, nearly all Natural Resource Damages cases are resolved through **settlement**, which can speed up the restoration process. And in the case of spills of this nature, the settlement is often global, meaning it includes Natural Resource Damages as well as civil penalties under statutes like the Clean Water Act (see below).

It is impossible at this early stage to guess at the extent of natural resource injuries associated with the Refugio Oil Spill. Injuries are incident-specific; a small spill in a very sensitive environment during unfavorable wind and tide conditions can result in significant damages, whereas a larger spill in the open ocean may result in fewer injuries. As an illustration, here are a few examples of the NRDA portion of [past settlements](#) related to California coastal oil spills:

- **Exxon Mobil Santa Clara River (1991)**—74,000 gallons of crude oil spilled; \$2.7 million in NRDA compensation.
- **Arco Santa Clara River (1994)**—190,000 gallons of crude oil spilled; \$7.1 million in NRDA compensation.
- **Kinder Morgan Suisan Marsh (2004)**—over 100,000 gallons of diesel spilled; \$1.15 million in NRDA compensation.
- **Cosco Busan (2007)**—53,569 gallon of intermediate fuel oil spilled; \$32.3 million in NRDA compensation.

Economic Damages

The Oil Pollution Act also holds the responsible party liable for economic damages associated with an oil spill, such as property damage, profit loss, or lost earning capacity. By law, Plains must establish an extrajudicial claims administration process for economic damages claims. Individuals or businesses that feel they have been impacted by the Refugio Oil Spill can contact the [Refugio Incident Claims Process](#).

Pipeline Safety

The pipeline that ruptured in Santa Barbara County is designed to carry between 1,000-2,000 barrels of crude oil per hour from Exxon Mobil's storage tanks to a pump station in Gaviota. The U.S. Department of Transportation is responsible for regulating pipelines like this one to ensure safety and require routine maintenance.

The U.S. DOT's Pipeline and Hazardous Materials Safety Administration has already issued a [corrective action order](#) requiring Plains to shut down and empty the ruptured pipeline. The order also directs Plains to conduct tests to determine the cause of the rupture. Additionally, Plains must assess the effectiveness of its emergency response plan in the case of this spill and make any necessary amendments.

Notably, Plains has one of the [worst safety records](#) of any U.S. pipeline operator, with [175 federal safety and maintenance violations](#) over the past decade. Plains issued a [statement](#) on Friday touting recent investments in improving safety; but pending state, federal, and private investigations may nonetheless uncover evidence of federal pipeline safety regulation violations. If so, Plains may be liable for civil penalties under the Federal Pipeline Safety Act. The amount of any penalty related to safety violations is dependent on the type of violation as well as the violator's conduct, the gravity of the harm, and other considerations, up to a maximum of \$100,000 to \$200,000 per day.

Additionally, note that past global spill settlements, such as the [Kinder Morgan Suisan Marsh settlement](#), have included requirements that pipeline operators implement stricter pipeline safety and maintenance measures to reduce the risk of future spills.

Water Pollution

Section 311 of the Clean Water Act, which Congress added to the statute in response to the *Exxon Valdez* Disaster, prohibits harmful discharges of oil into U.S. navigable waters or on coastlines. The U.S. Department of Justice is permitted to recover penalties from a pipeline

owner or operator that violates section 311. Civil penalties may range from \$37,500 per day or \$1,100 per barrel of oil spilled up to \$4,300 per barrel spilled if the owner or operator acted with gross negligence or willful misconduct. Importantly, unlike compensatory NRDA damages, which are designed to make the public whole, Clean Water Act penalties are designed purely to punish the discharger and deter irresponsible conduct. By statute, recovered Clean Water Act penalties are deposited into a special account administered by the U.S. Coast Guard, called the [Oil Spill Liability Trust Fund \(OSLTF\)](#), that is used to pay the removal costs and damages associated with future oil spills where parties are insolvent or unidentifiable.

In the case of the Refugio Oil Spill, the worst-case release amount is an estimated 101,000 gallons (2,400 barrels). Based on a \$1,100/barrel penalty amount, Plains may be liable for over \$2.6 million in Clean Water Act penalties. Importantly, however, we do not yet know anything about Plains' standard of care. Additionally, as noted above, penalties are often resolved through settlement, typically for less than the maximum penalty amount in exchange for the certainty, speed, and reduced legal costs associated with a settlement outcome. Even if the case went to trial, a judge would have significant discretion to assess Clean Water Act penalties below the maximum penalty amount.

Impacts to Endangered Species

Section 9 of the federal Endangered Species Act prohibits the unauthorized "take" of protected species, defined to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." Violators may be liable for civil penalties. An oil spill such as the Refugio Oil Spill may result in an illegal take by harming endangered coastal or marine species and their habitats. In oil spill cases, Endangered Species Act penalties are often resolved through a global settlement together with Clean Water Act penalties and Natural Resource Damages.

The Refugio Oil Spill is a tragic, yet powerful reminder of the importance of strong spill prevention, response, and compensation regimes. I have reviewed just some of the possible penalties, damages, and legal processes that the spill may implicate. Over the coming months, the U.S. Department of Justice, the California Attorney General's office, and other federal, state, local, and private entities will continue to investigate the incident and explore possible legal claims.