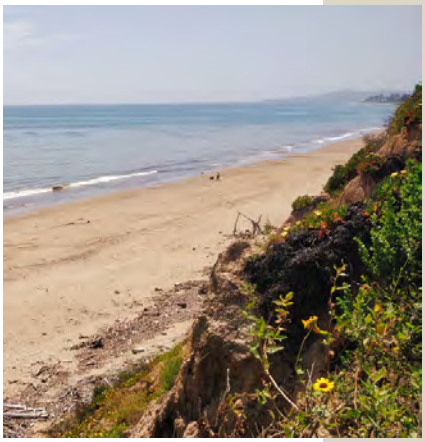
CALIFORNIA
STATE LANDS
COMMISSION



2025 PROGRESS REPORT

Coastal Hazards and Legacy Oil & Gas Well Removal and Remediation Program

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Introduction

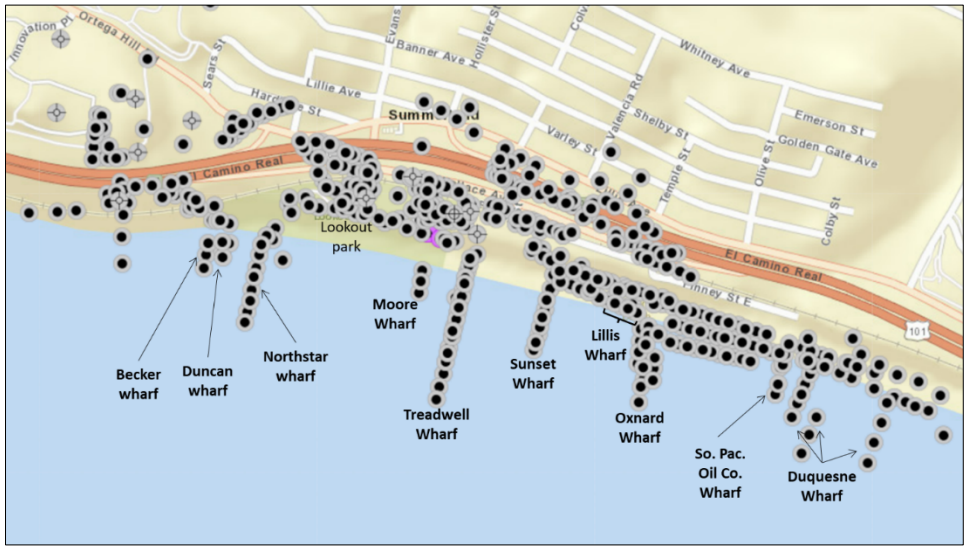
The California State Lands Commission (Commission) manages roughly four million acres of tide and submerged lands and the beds of natural and navigable rivers, streams, lakes, bays, estuaries, inlets, and straits. These lands, often referred to as sovereign or public trust lands, stretch from the Klamath River and Goose Lake in the north to the Tijuana Estuary in the south, and the Colorado River in the southeast. These lands encompass the Pacific Coast from 3 miles offshore to world-famous Lake Tahoe, and include California's two longest rivers, the Sacramento and San Joaquin. The Commission protects and enhances these lands and natural resources by issuing leases for use or development, providing and preserving public access, resolving boundaries between public and private lands, and implementing regulatory programs to protect state waters from oil spills and invasive species introductions. The Commission secures and safeguards the public's access rights to waterways and the coastline and preserves irreplaceable natural habitats for wildlife, vegetation, and biological communities.

The Commission oversees sovereign lands granted by the Legislature in trust to approximately 70 local jurisdictions. These lands generally consist of prime waterfront lands and coastal waters and include the land underlying California's five major ports. The Commission also mitigates legacy oil and gas development on state tide and submerged lands, including remnant coastal hazards and oil and gas wells.

Development of the Summerland Oil Field in Santa Barbara County began in the 1890s in an area of naturally occurring oil and gas seeps. Wells were first drilled on the beach and then from piers that extended into the Pacific Ocean. The operators drilled, produced, and plugged and abandoned wells without regulation. Production ceased in the early 1900s. Virtually no records exist about the drilling or abandonment of the hundreds of wells in the Summerland Oil Field. Oil leaks and sheens are regularly observed on the beach and in the water near Summerland Beach. Some oil is from natural seeps, and some is from improperly plugged and abandoned legacy wells. Legacy oil and gas wells are wells that were drilled before current abandonment standards, where there is scant information on the well's abandonment procedure, and there is no viable company with the responsibility to re-abandon the well should it start leaking or threaten the environment or public health and safety. Based on the Commission's research, there are 200 high-priority legacy oil and gas wells that

could, depending on their condition, leak oil into the marine environment, negatively affecting swimmers, surfers, recreational users, marine and coastal wildlife, as well as causing environmental degradation and public health and safety hazards.

SB 44 (Jackson), Chapter 645, Statutes of 2017, provides the Commission up to $2 million annually through fiscal year 2027-2028 to administer a Coastal Hazards and Legacy Oil and Gas Well Removal and Remediation Program. Chapter 645 requires the Commission to provide an annual report to the Legislature on the activities and accomplishments of the Program from the prior year and requires the Commission, by January 2027, to submit a report to certain legislative committees that covers the life of the Program and includes information necessary to aid the Legislature in determining the effectiveness of the Program and whether funding should be reauthorized. Chapter 645 sunsets in July 2028. The purpose of this annual report is to provide information on the Commission's activities from December 2024 through December 2025.



Summerland Legacy Wells in Santa Barbara County.

Accomplishments

The Commission has re-abandoned eight wells since the Program's inception. In 2020, the Commission re-abandoned two legacy wells at Summerland Beach known as Treadwell-10 and NorthStar-815. In 2021, the Commission re-abandoned two more legacy wells known as Olsson-805 and Duquesne-910, then in 2023, re-abandoned two more legacy wells known as Treadwell-1 and Treadwell-5, and in 2025, re-abandoned two more wells known as well A and

well B. Staff have monitored the area in the vicinity of wells A & B since then and no new leaks have been observed. On October 10, 2025, oil was reported to be leaking in the vicinity of the Duquesne-910 well. Staff investigated possible causes, including a potential leak from a screw cap on the well or seepage from outside the casing, and potential remediation options. On November 6, 2025, our contractor, 2H, sent a team of technicians to the site. The crew assessed the area, identified the leak source, repaired it, and restored the area.

In 2026, staff intend to develop engineering plans and obtain permits to re-abandon two additional legacy wells at Summerland Beach known as wells C and D. These two wells are near each other, providing value and savings when designing and executing a multiple-well re-abandonment program. The wells are also in an area frequently used by the public and can be accessed from Lookout Park

Wells A and B Re-abandonment

On February 28, 2025, the Commission and 2H, the Commission's engineering contractor, completed the re-abandonments of wells A and B using heavy equipment on the beach. The abandonment plans were developed as a blueprint for future legacy wells in tidal and subtidal zones, including wells under consideration for re-abandonment. This re-abandonment work was an essential part of the Commission's efforts to permanently stop the hydrocarbon source from leaking into surrounding waters and onto the beach. The work was conducted on the beach with heavy equipment stationed in the parking lot of Lookout Park, moving back and forth via Finney Street. No spill response was activated during the re-abandonment operations, though spill response equipment and trained personnel were staged in the Lookout Park parking lot as a precaution.

The re-abandonment work was preceded by coordination with numerous agencies. Consulting and permitting agencies include:

- California Geologic Energy Management Division (CalGEM): permit to conduct well operations.
- Santa Barbara County Air Pollution Control District: written determination of permit exemption.
- California Coastal Commission: Coastal Development Permit.
- U.S. Army Corps of Engineers: nationwide permit verification.
- Central Coast Regional Water Quality Control Board: water quality certification.

- Santa Barbara County Planning and Development: Lookout Park permit.
- U.S. Coast Guard: pre-work notification.
- California Department of Fish and Wildlife Office of Spill Prevention and Response: pre-work notification.
- Santa Barbara County Parks: pre-work notification.
- Joint Oil Fisheries Liaison Office: pre-work notification.

The initial work to re-abandon wells A and B started on February 22, 2025, with the mobilization of track carriers equipped with a vibro-hammer and power unit, pipe pile, excavator, loader, and crane to Lookout Park. Two days later, a surveyor marked the well locations in preparation for the excavation work required to uncover the wells.

When the tide conditions were right, a front loader and an excavator entered the beach using an access ramp off Finney Street and exposed the wells. A 24-inch pipe was then placed over the wellhead and with the aid of a portable diesel hydraulic power unit and a vibro hammer, the pipe was driven roughly 15 feet below the beach floor to a point of refusal, encapsulating the wellhead. The pipe pile was cut 1 foot above the exposed wellhead and sand and debris were cleaned out to approximately 5 feet below the top of the pipe pile. The pile was pumped full of cement to create a barrier to prevent the future migration of hydrocarbons to the surface. The last step was welding a steel plate onto the top of the pipe pile. This acts as a secondary barrier to the migration of hydrocarbons. Commission and CalGEM staff witnessed the work. Operations concluded on February 28, 2025, with final equipment demobilization and restoration of the area to its natural beach state.

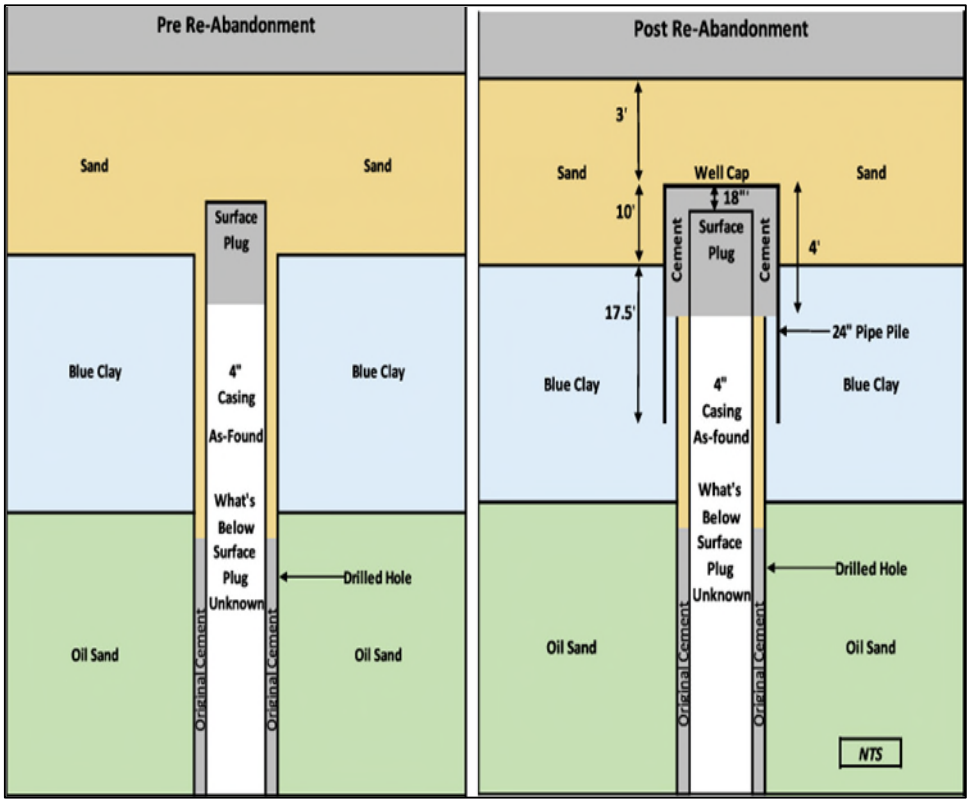


Illustration of Well Pre and Post Re-abandonment.

Location of Wells A and B.

Wells A and B location excavated with wells 3.5 feet below the surface.

Well A excavated, with oil in the excavated sump.

Well B wellhead being covered with 24-inch casing ready to be pile driven.

Well B 24-inch casing being pile driven to the blue clay depth.

Cutting off excess casing on both Wells A and B.

Well A 24-inch casing Installation.

An after excess casing is removed. Oil emulsion observed inside the 24-inch casing.

Well A suction operation in progress before installation of well cap.

Well location with no oil in sump.

Both well caps installed and wells ready for cementing operation.

Removing refuse from the wells' location.

Returning well location to its natural state.

Final well location condition.

Survey Assessment Recommendations

A previous survey split in two areas (Area 1 and Area 2) discovered evidence of minor hydrocarbon discharge directly from four well casings (wells A, B, C, D) into the surrounding environment at Summerland Beach in an area known as Area 1. Unlike some other legacy wells previously identified, there is no historical documentation for the location of wells A through D. These wells are not included in CalGEM's WellStar database. This indicates that there may be additional unidentified wells in the area. The Commission has prioritized re-abandonments in Area 1 because it experiences the most public traffic and because Area 2 had no visible oil leaking from any well casings. The Commission intends to perform additional legacy well surveys after the 2026 re-abandonments. Any legacy wells suspected of leaking hydrocarbons will be addressed in the future subject to available funding.

The Commission continues to conduct land-based monitoring in the Summerland area, which involves weekly site visits by Commission inspectors to identify tar balls and record seep activity.

Beach Ramp Repair

During the 2025 well re-abandonment operations, the ramp leading from Finney Street to Summerland Beach was damaged by the movement of heavy machinery to and from the wells. The Commission planned and completed a ramp repair project in September 2025.

Damaged beach ramp after well re-abandonment work. Photo by 2H Offshore California Inc.

Beach Ramp after repair. Photo by 2H Offshore California Inc.

Coastal Hazards (legacy infrastructure, not including wells)

Coastal hazards are remnants of artificial coastal structures that have been abandoned and orphaned (i.e., there is no known responsible party). These hazards, typically buried in the coastal surf zone, include wood or steel pilings, H piles and H beams, railroad irons, cables, angle bars, ties, pipes, pipelines, seep tent-related structural remnants of rip rap structures, wood structures, groins, jetties, piers, and oil and gas-related infrastructure located along the California coastline. Hazard exposure depends on the tide and beach erosion. Many hazards are only exposed following the high tidal erosion that occurs in winter. The Commission responds to and removes hazards subject to a U.S. Army Corps of Engineers permit.

Exposed railroad irons near Goleta Beach. Photo by Padre Associates.

In February 2024, the Commission contracted with MP Environmental, an on-call coastal hazards removal contractor, to remove coastal hazards. Work to remove coastal hazards occurs when hazards become exposed by seasonal beach sand erosion, typically between September and March. Hazards are usually removed with small excavators or loaders. No coastal hazard removal work occurred in 2025 but is anticipated during the coming winter storm season.

In July 2024, the Commission also retained Beacon West Consulting to track coastal hazards, discoveries and updates, to provide support during project

planning for coastal hazard removal projects, and for environmental compliance, field monitoring, and reporting. In September 2025, Beacon West Consulting and their subconsultant, Applied Earthworks, completed an updated cultural records search and delivered a new cultural records report for the Coastal Hazards Program area for staff review.

The Commission also awarded Beacon West Consulting a contract in July 2025 to develop supporting studies that may be used to update the 2002 Santa Barbara Channel Coastal Hazards Removal Project Mitigated Negative Declaration (State Clearinghouse Number 2002071146). This contract identifies potential additional hazard locations, statutory and regulatory changes, and reviews and provides recommendations for incorporating updates to hazard removal technology.

A Look Ahead: 2026

Plug and Abandon Additional Summerland Beach Legacy Wells

The Commission anticipates plugging and abandoning two legacy wells in 2026, The plug and abandonment approach will likely mirror the approach used in the A and B well abandonments. The work will involve driving a pipe-pile around the well, like a sleeve, and filling the pipe with cement to entomb the legacy well.

Seep Studies

The Commission authorized its Executive Officer to retain a consultant to conduct seep studies in the Santa Barbara Channel. The studies will likely require historical research and an inventory of offshore natural tar, oil, and gas seeps. The survey to study and monitor tar, oil, and gas seepage in state waters will determine locations, rates, and fingerprinting techniques to characterize tar, oil, and gas samples originating from natural seeps, the geologic framework and other conditions controlling seeps, and their environmental impacts.

Legacy Wells Re-abandonment Contract Update

The Commission's legacy well re-abandonment contract with 2H Offshore California Inc. was renewed and will expire on June 30, 2028.

Additional Re-abandonments, Surveys, and Debris/Hazard Removal

The Commission plans to continue conducting surveys and removing debris along the beach and offshore. This will include:

1. Finish documenting well casings toward the shore, starting with Treadwell-11.
2. Continue to investigate the area around wells A through D (Area 1). Remove vertical timber piles and other debris around well casings proposed for future re-abandonment.
3. Recover and dispose of underwater oiled debris stockpiles.
4. Remove larger debris around future well casing targeted for re-abandonment. This project is in the early planning phase and is contingent on future budgeting and program priorities.
5. Remove coastal hazards along the coast in Santa Barbara County.

The Commission intends to develop a plan to investigate the Duncan Pier and Moore Pier locations. This will include:

1. A follow-up dive for the Duncan Pier and Moore Pier to locate and determine if there are leaking well(s) or natural seeps.
2. Extensive documentation and modeling of seepage area(s).
3. Map and tag the Moore and Duncan Piers.

More information about the Duncan and Moore piers is on Page 20 of the Commission's 2022 report.

The Commission intends to continue investigating seep sites for association with legacy wells and its coastal hazard removal program.

Fund Allocation

Contract No.	Contractor	Start	End	Contract Value
C2023039	MP Environmental	2/15/2024	2/14/2027	$450,000
C2023038	Beacon West	7/1/2024	12/31/2026	$250,000
C2019060 (Well plug and abandonment)	2H Offshore California Inc.	06/30/2020	06/30/2028	$11,206,175
C2025017 (Supporting studies to update a 2002 Santa Barbara Channel Coastal Hazards Removal Project Mitigated Negative Declaration)	Beacon West	7/1/2025	6/30/2027	$147,591
Seep Studies	Unknown	2/1/2026	1/31/2029	$600,000

Supplemental Background:

In the late 1800s, the area offshore of Summerland Beach in Santa Barbara County had hundreds of oil wells and related drilling infrastructure. Today, the coastline area retains the vestiges of that extensive and largely unregulated offshore oil production. These are the unfortunate legacies of the rapid and intensive offshore oil development along the coastline that began just before the turn of the twentieth century and primarily at Summerland Beach.

Most legacy oil and gas wells were abandoned in the early 1900s when regulatory oversight was nonexistent. Virtually no records exist about the drilling and abandonment of these wells. Removal, if any, varied from well to well and involved rudimentary procedures that fell far short of current health, safety, and environmental protection requirements. Based on the Commission's research, there are approximately 200 high priority legacy oil and gas wells (identified as Category 1 wells), that could, depending on their condition, leak oil into the marine environment, negatively affecting swimmers, surfers, recreational users,

and marine and coastal wildlife and fish and their habitats, as well as causing environmental degradation and public health and safety hazards. Legacy oil and gas wells are wells drilled before current abandonment standards. There is little or no information on the well's abandonment procedureand no viable company with the responsibility to re-abandon the well should it start leaking or pose a threat to the environment or to public health and safety. Other wells are categorized as medium (Category 2) to low (Category 3) priority wells because more information is available about the integrity and abandonment of these wells or because a responsible party is or may beavailable to address any leak that may occur.

The Legislature, when it passed SB 44, found that there is a critical need for funding to remove coastal hazards, to identify exact locations of legacy oil and gas wells that may be leaking, and to prioritize remediating wells with the highest risk. The funding enables the Commission to gather data to address the presence of oil along the coastline, determine where legacy wells are located and whether they are leaking oil, and prioritize remediation to address the highest risk wells first. The funding also enables the Commission to survey and monitor offshore oil seeps in state waters, to contract for studies to determine oil seepage locations, rates, and environmental impacts, and pursue innovative solutions to address natural seeps.

SB 44 requires the Commission to administer a coastal hazard and legacy oil and gas well removal and remediation program that does the following:

1. Complete an assessment of legacy oil and gas wells and other coastal hazards along theCalifornia coastline, including conducting aerial surveys and dives, and determine high- priority hazards and legacy oil and gas wells to remediate.
2. Survey, study, and monitor oil seepage in state waters and tidelands under the Commission's jurisdiction to determine oil seepage locations, rates, and environmental impacts; and partner with experts to facilitate innovative solutions.
3. In cooperation with the Department of Conservation's California Geologic Energy Management Division, begin remediating improperly abandoned legacy oil and gas wells that have a high risk of leaking oil and are hazardous to public health and safety and the environment.

SB 44 authorizes up to $2 million annually from the state's General Fund to the Commission's Kapiloff Land Bank Fund (www.slc.ca.gov/kapiloff) through fiscal year 2027-2028, to administer the program. In July 2018, the Commission received the first $2 million appropriation. SB 44 authorizes the transfer of an amount sufficient to bring the unencumbered balance of the program funds back up to $2 million annually through fiscal year 2027-2028.

Photos provided by Commission staff unless otherwise noted.