

PROPUBLICA

Unplugged

It Will Cost Up to \$21.5 Billion to Clean Up California's Oil Sites. The Industry Won't Make Enough Money to Pay for It.



An oil pumpjack stands idle near homes in Signal Hill, California, on Feb. 9. MARIO TAMA/GETTY IMAGES

An expert used California regulators' methodology to estimate the cost of cleaning up the state's onshore oil and gas industry. The study found that cleanup costs will be triple the industry's projected profits.



by **Mark Olalde**

Co-published with [KVPR](#) and [LAist](#)

May 18, 2023, 6:00 am

ProPublica is a nonprofit newsroom that investigates abuses of power. [Sign up for Dispatches](#), a newsletter that spotlights wrongdoing around the country, to receive our stories in your inbox every week.

For well over a century, the oil and gas industry has drilled holes across California in search of black gold and a lucrative payday. But with production falling steadily, the time has come to clean up many of the nearly quarter-million wells scattered from downtown Los Angeles to western Kern County and across the state.

The bill for that work, however, will vastly exceed all the industry's future profits in the state, according to [a first-of-its-kind study published Thursday](#) and shared with ProPublica.

"This major issue has sneaked up on us," said [Dwayne Purvis](#), a Texas-based petroleum reservoir engineer who analyzed profits and cleanup costs for

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.

you@example.com

Get the Newsletter

The report broke down the costs into several categories. Plugging wells, dismantling surface infrastructure and decontaminating polluted drill sites would cost at least \$13.2 billion, based on publicly available data. Adding in factors with slightly more uncertainty, like inflation rates and the price of decommissioning miles of pipeline, could bring the total cleanup bill for California's onshore oil and gas industry to \$21.5 billion.

Meanwhile, California oil and gas production will earn about \$6.3 billion in future profits over the remaining course of operations, Purvis estimated.

ADVERTISEMENT

Compounding the problem, the industry has set aside only about \$106 million that state regulators can use for cleanup when a company liquidates or otherwise walks away from its responsibilities, according to state data. That amount equals less than 1% of the estimated cost.

Taxpayers will likely have to cover much of the difference to ensure wells are plugged and not left to leak brine, toxic chemicals and climate-warming methane.

ProPublica is reporting on oil and gas, with a focus on decommissioning, asset retirement obligations, liability evasion and government oversight. Do you work for an oil and gas company, a state or federal regulator, an insurance company or a financial institution that interacts with the oil and gas industry? Reach out directly at mark.olalde@propublica.org, or find details on how to [send us tips securely here](#).

"These findings detail why the state must ensure this cost is not passed along to the California taxpayer," state Sen. Monique Limón, a Santa Barbara Democrat who has written legislation regulating oil, said in a statement. "It is important that the state collect funding to plug and abandon wells in a timely and expeditious manner."

Representatives of the state's oil regulatory agency, the California Geologic Energy Management Division, did not respond to ProPublica's request for comment on the report's findings.

Rock Zierman, CEO of the California Independent Petroleum Association, an industry trade group, said in a statement that companies spent more than \$400 million last year to plug and clean up thousands of oil and gas wells in the state. "This demonstrates their dedication to fulfilling their obligations and mitigating the environmental impact of their operations," he said.

Fees on current oil and gas production will offset some of the liabilities, but they're nowhere near enough to address the shortfall quantified by the new report.

"It really scares me," Kyle Ferrar, Western program coordinator with environmental and data transparency group FracTracker Alliance, said of the report's findings. "It's a lot for the state, even a state as big as California."

Industry in Decline

High oil prices have translated to huge profits for the industry in recent years, but Carbon Tracker's report found that's likely to be short-lived. Only

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.

internal combustion engine vehicles to electric. But, he said, Carbon Tracker's estimates for environmental liabilities track with his research.

"It's a state in the twilight of its production period, and that means big liabilities," Boomhower said. He added that now is the time for regulators to prevent companies from offloading their wells to "thinly capitalized firms" unable to shoulder the cleanup.

As ProPublica reported last year, the major oil companies that long dominated in California and have the deep pockets necessary to pay for environmental cleanup are selling their wells and leaving the state, handing the task to smaller and less well-financed companies.

Roughly half of the wells drilled in California have changed hands through sales and bankruptcies since 2010, according to data Ferrar analyzed.

ADVERTISEMENT

Smaller companies are often one bankruptcy away from their wells being orphaned, meaning they're left to taxpayers as companies dissolve. The Biden administration recently committed \$4.7 billion in taxpayer funds to plug orphan wells.

And the industry's environmental liabilities in California are far bigger than Carbon Tracker's report quantifies.

Purvis only included environmental liabilities associated with onshore oil and gas production. Billions of dollars more will be needed to plug offshore wells, remove rigs and reclaim artificial islands used for drilling off the coast of Long Beach, Ventura and Santa Barbara.

Additionally, the report did not quantify the emerging risk of "zombie wells," which were plugged years ago to weaker standards and are likely to leak if they aren't replugged. That's an expensive endeavor, as the average cost to plug one well in California — to say nothing of cleaning up surface contamination — is \$69,000, according to Purvis' research. But some California wells have already begun failing, including in neighborhoods in Los Angeles.

"They're Not Going to Have Money to Do It Later"

Time is running out to rectify the funding shortfall, for example by increasing the money companies must set aside for well plugging.

Carbon Tracker's report — using state production data and financial futures contracts on the New York Mercantile Exchange — estimated that as production declines, 58% of all future profits from drilling oil and gas in the state are likely to come over the next two years.

"We have our backs up against the wall in California right now," Ferrar said. "If companies don't put money towards it now, they're not going to have money to do it later."

Environmental policies could accelerate the industry's decline. California voters will decide on a ballot initiative in 2024 that would reinstate large buffer zones between communities and oil wells, limiting drilling.

Purvis said acting quickly to plug wells would also "stimulate economic activity" and help smooth the transition for oil and gas workers who stand to lose well-paying jobs in the shift away from climate-warming fossil fuels. Spending large sums to plug old wells would create short-term employment

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.

"California's going to be a test case or the leading edge of this," Boomhower said. "This same problem is eventually going to manifest everywhere."



Mark Olalde

I cover the environment, natural resources and public health around the Southwest.

[Have a Tip for a Story?](#)

Have you been affected by oil field wastewater, known as "produced water," or otherwise have information to share? I want to hear from you.

Filed under — [Climate and Environment](#)

[Republish This Story](#)

More in Climate and Environment >



How the Planet-Altering Disaster of "Forever Chemicals" Was Kept Secret



Hurricane Helene Killed His Wife and Destroyed His Mobile Home. New Tenants Are Now Renting the Same Flood-Prone Land.



The Flo

Most Read

- 1 **Regulators Knew This Marijuana Product Was Harming People. It Stayed on Shelves for More Than a Year.**
- 2 **The Scientist Trying to Keep Kratom Legal Has Not Disclosed Longstanding Ties to Kratom Lobbyists**
- 3 **Ken Paxton's Financial Disclosures Appear to Violate Federal Ethics Law, Experts Say**
- 4 **"Just Let Me Die": After Insurance Repeatedly Denied a Couple's Claims, One Psychiatrist Was Their Last**
- 6 **These Judges Take Months to Decide If Immigrants Have Been Unlawfully Detained**
- 7 **Trump's DOJ Blocked Serious ICE Shooting Charge Over Federal Prosecutor's "Strongest Possible" Objections**
- 8 **New Mail Voting Rules Moved Forward Despite USPS Officials' Concerns About Mass Disenfranchisement**
- 9 **8 Things You Should Know About Trump's Effort to "Take Over" the Midterm Elections**

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.

Support Independent Journalism:

As a nonprofit newsroom, we rely on donations from individuals like you to fuel our work. **Your support today will directly fund investigations that shine a light on urgent issues:** corporations prioritizing profits over public safety, health insurers denying coverage to patients, unintended consequences of new laws and more.

Donate

More Ways to Give

Go behind the scenes of ProPublica's biggest investigations.

Your email address

Get our weekly newsletter

INFO	⊕
COVERAGE	⊕
LOCAL	⊕
CONTACT	⊕
SUPPORT US	⊕

INFO	COVERAGE	LOCAL	CONTACT	SUPPORT US
About	Abortion	Midwest	General Inquiries	Donate
Impact	Civil Rights	Northwest	Send Us a Tip	More Ways To Give
Leadership	Courts	South	Corrections	
Staff	Criminal Justice	Southwest	Freelance Pitches	
Partners	Debt	Texas	Media Inquiries	
Awards	See All	Local Reporting Network		
Events				
Jobs				
Fellowships				

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.

Independent Journalism You Can Trust

No corporate owners, no paywall, no bullsh*t — just deeply researched reporting in a free newsletter more than 600,000 subscribers rely on.