

The 2022-23 Budget:

Oil Well Abandonment and Remediation

JANUARY 2022

Summary. The Governor's budget proposes \$200 million General Fund over two years for the California Geologic Energy Management Division (CalGEM) within the Department of Conservation (DOC) to plug deserted wells and decommission associated facilities. Although addressing deserted wells could have environmental, health, and safety benefits, this proposal represents a significant expansion of current well remediation activities. In addition, federal funding for well remediation activities will soon be available. Furthermore, it may be appropriate for the current oil and gas operators to bear at least some of the cost of remediating the environmental damages from these wells—rather than the general taxpayer through the state General Fund. We recommend the Legislature consider reducing the amount of state funding proposed, consider using alternative sources of funding to support well remediation, and require reporting on key program outcomes to inform future funding decisions.

Background

California Has Over 5,000 Deserted Oil and Gas Wells. Oil and gas production in California has decreased over the past several decades. As a result, an increasing number of wells are no longer used for extraction of oil and gas. When a well reaches the end of its productive life, operators are required to plug the well and decommission associated production facilities (also known as remediation). However, there are over 5,000 deserted wells with no responsible solvent operator to appropriately remediate the well and the associated production facilities.

Deserted Wells Have Environmental, Health, and Safety Impacts. Deserted wells without proper remediation can result in negative environmental, health, and safety impacts.

For example, deserted wells can leak oil and other injected fluids used for oil and gas extraction, which can contaminate nearby sources of water. In addition, deserted wells can release benzene and methane, among other air pollutants, degrading local air quality. These environmental impacts can pose health hazards, such as harm to respiratory health, to residents in nearby communities. Deserted wells can also present physical safety concerns, potentially endangering unsuspecting people and wildlife.

State Remediates About 11 Wells Annually.

CalGEM is responsible for the oversight of the oil, natural gas, and geothermal industries. In the last five years, CalGEM has expended, on average, \$2 million annually from the Oil, Gas, and Geothermal Administrative Fund and the Hazardous and Idle-Deserted Well Abatement Fund to remediate roughly 11 deserted wells per year. The division identifies deserted wells to remediate by prioritizing wells that pose the highest relative risk to public health, safety, and the environment. State staff issue permits and oversee the plugging and decommissioning activities, but the division uses external contractors to implement the remediation projects.

Governor's Proposal

Provides \$200 Million Over Two Years for Well Remediation. The Governor's budget proposes \$100 million from the General Fund in 2022-23 and \$100 million in 2023-24—total of \$200 million over two years—for CalGEM to plug wells and decommission facilities. The cost to plug a deserted well varies widely, but CalGEM's most recent analysis found the average cost to be about \$111,000 per well. Based on this average cost, the division would be able to remediate roughly 1,800 deserted wells with the proposed funding.

Uses Contractors to Manage Projects, Investigate, and Implement Projects.

CalGEM would use the total proposed funding to hire three types of external contractors:

(1) \$10 million for a construction management contractor to manage the remediation projects, (2) \$20 million for a contractor to conduct financial obligations and land ownership research, and (3) \$160 million for contractors to plug wells and decommission facilities. In addition, the division will use \$10 million for department administrative costs. Existing CalGEM staff would provide oversight by issuing permits, witnessing different stages of the project, and managing contracts.

Assessment

Addressing Deserted Wells Has Merit.

As discussed above, deserted wells have significant negative environmental, health, and safety impacts. Well remediation projects could provide important water and air quality improvements, as well as health and safety benefits. In particular, communities near these deserted wells would benefit from these projects. Because deserted wells are concentrated in specific parts of the state, such as Los Angeles, Santa Barbara, and Ventura Counties, benefits would likely be concentrated in these geographic regions.

Request Represents a Significant Expansion of Current Well Remediation Activities Without Additional State Staff. The proposed funding is 20 times greater than the existing annual funding dedicated to well remediation and does not include additional positions for CalGEM. Furthermore, as discussed in more detail below, the state is expecting to receive a significant amount of funding from the federal government for well remediation activities. The proposal includes \$10 million for department administrative costs, but no additional positions. It is unclear how these funds will be spent and whether the funds will adequately support administration of the additional funding.

Federal Funds Available for Well Remediation, but Details Are Unclear.

The federal Infrastructure Investment and Jobs Act (IIJA) includes \$4.7 billion nationwide over a five-year period for well plugging, remediation, and restoration. At the time of this analysis, the federal

government had not yet issued detailed guidance about how this funding can be used. However, based on our initial understanding, the funding would go to three types of grants:

- ***Initial Grants.*** Initial grants provide states up to \$25 million to accelerate well remediation work. This funding has not yet been allocated, but the federal government will accept applications later this spring.
- ***Formula Grants.*** Formula grants provide a larger amount of funding, to be allocated on a formula basis, based on the number of job losses in the state’s oil and gas industry, the number of documented deserted wells, and the projected cost to remediate these wells. This funding is intended for well remediation projects. It is unclear how much funding will be available nationwide through the formula grants. Although CalGEM submitted a notice of intent for the formula grant in December 2021, the federal government has not yet provided an estimate of how much the state is expected to be eligible for. Depending on the number of states that apply for this funding, California could receive up to hundreds of millions of dollars over the next several years.
- ***Performance Grants.*** Performance grants include two types of funding categories. First, it includes regulatory improvement grants of up to \$20 million, which are intended to help support states in taking steps to strengthen their regulation and oversight of deserted wells. Second, it includes grants of up to \$30 million for states that can provide matching funds for remediation activities. Both performance grant types have not yet been allocated and it is unclear when the federal government will accept applications.

Other Ways to Pay Remediation Costs May Be More Appropriate.

Under the polluter pays principle, private parties who produce pollution (such as environmental damage associated with oil and gas wells) should bear the costs of managing it to prevent damage to human health or the environment. Deserted wells have no responsible solvent operator that can pay for mitigating the environmental damages. However, it may be

appropriate for the current oil and gas operators to bear at least some of the cost of remediating the environmental damages from these wells—rather than the general taxpayer through the state General Fund. In fact, as mentioned earlier, current well remediation work done by CalGEM is funded by the Oil, Gas, and Geothermal Administrative Fund and the Hazardous Idle Well Abatement Fund. The main source of revenue for both funds is fees on oil and gas operators.

Recommendations

Consider Proposal in Context of Additional Guidance on Federal Funds.

Additional information regarding available federal funds is expected to be available shortly. Specifically, further federal guidance regarding the amount of formula grants that the state is eligible for is expected to be available in the coming weeks. A better understanding of the total available federal funding for well remediation activities would help the Legislature determine the degree to which additional state funding for these activities (such as proposed by the Governor) is a priority.

Consider Reducing Amount of Proposed Funding. The Governor's proposal would significantly increase the current well remediation activities overseen by CalGEM. It is unclear whether the division has the capacity to administer such a large increase in state and federal funding within existing resources, given their numerous other responsibilities for the oversight of the oil and gas industries. In addition, a significant amount of federal funding for many of these activities is expected to be available over the next few years. As a result, the Legislature might want to consider reducing the amount of funding proposed by the Governor and targeting funds instead to:

- ***Well and Facility Research.*** Many deserted wells still need to be researched to verify well location, assess facilities, and seek ownership documentation. The Legislature could consider focusing funding exclusively on these research activities to have a better idea of the identification, scope, and cost of well remediation projects. Under this proposal, the administration requests about \$10 million annually for such research.
- ***Matching Funds for Federal Funding.*** Some of the federal funds are expected to require a state match. Specifically, under the current federal guidelines, states must provide matching funds to secure up to \$30 million in performance grants. The Legislature could reduce the proposed funding to only the amount necessary to secure these available federal funds. This approach could reduce near-term state fiscal costs, allow the state to maximize available federal funding, and give the Legislature an opportunity to better evaluate the benefits and costs of the remediation activities before allocating additional state funding.

Consider Alternative Sources of Funding.

Instead of funding these activities through the General Fund as proposed, the Legislature might want to consider raising fees on operators and use special funds, such as the Oil, Gas, and Geothermal Administrative Fund and the Hazardous Idle Well Abatement Fund, that are currently funding similar work. If state matching funds for federal funding is needed faster than can be generated through fee revenues, the Legislature can consider providing a General Fund loan, to be repaid by these special funds over a period of time. This would allow the state to maximize available federal funding for well remediation activities, but also ensure the polluting industry bears the cost of remediating deserted wells.

Require Reporting on Key Program

Outcomes. If funding is approved, we recommend the Legislature adopt budget bill language requiring DOC to report annually (until the funds have been fully expended) on expenditures, contracts awarded, number of wells identified and remediated, and quantifiable benefits of remediation activities (such as greenhouse gas reductions, water quality improvements, and health outcomes), as well as federal funds awarded. Additional information on costs and benefits of well remediation work done by CalGEM would be helpful to the Legislature in determining whether any additional funding for these activities is warranted in the future.

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This post was prepared by Eunice Roh, and reviewed by Ross Brown and Anthony Simbol. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.