

FEBRUARY 11, 2021

The 2021-22 Budget: Department of Conservation



LEGISLATIVE ANALYST'S OFFICE

Department Overview

Department of Conservation Budget Summary

(In Millions)

	2019-20 Actual	2020-21 Estimated	2021-22 Proposed	Change From 2020-21	
				Amount	Percent
Program					
Geologic Energy Management Division	\$84.3	\$82.6	\$87.5	\$4.9	6%
Division of Land Resource Protection	11.4	93.6	67.3	-26.3	-28
California Geologic Survey	31.2	30.8	33.1	2.3	7
Division of Mine Reclamation	8.4	9.2	9.7	0.5	5
State Mining and Geology Board	1.8	1.5	1.6	0.1	4
Total	\$137.1	\$217.8	\$199.2	-\$18.6	-9%

Proposed Budget Includes \$199 Million for Department of Conservation (DOC). This total reflects an \$18.6 million (9 percent) decrease compared to estimated current-year expenditures, mainly in the Division of Land Resource Protection. This net decrease is mainly due to how certain appropriations are accounted for in the budget. Specifically, DOC's budget reflects some bond and special funds that were appropriated but not spent in prior years, which are carried over to the current year. These decreases are partially offset by an increase in General Fund support for the Wildfire and Forest Resiliency Strategy proposal.



Department Overview

(Continued)

New Budget Proposals. The Governor's budget includes the following changes.

- **Wildfire and Forest Resiliency Strategy (\$85 Million).** The Governor's budget proposes General Fund augmentations of \$25 million for early action in the current year and \$60 million in the budget year to expand the Regional Forest and Fire Capacity program.
- **Continuation of Funding for Regulatory Field Inspection (\$3.9 Million).** The Governor's budget includes \$3.9 million from the Oil, Gas, and Geothermal Administrative Fund (OGGAF) to make previously limited-term resources for increased field presence ongoing.
- **California Geologic Energy Management (CalGEM) Oversight (\$2.4 Million).** The proposed funding from OGGAF would support 12 positions in 2021-22 (increasing to 26 positions and \$4.8 million upon full implementation in 2023-24) for the CalGEM Division to strengthen regulatory enforcement, improve public transparency, and implement legislative mandates.
- **Multi-Benefit 3D Geologic Framework Mapping (\$1 Million).** The Governor's budget proposes \$1 million annually for three years from the Strong-Motion Instrumentation and Seismic Hazards Mapping Fund to plan and develop a three dimensional (3D) geologic framework mapping program and implement a pilot project.



CalGEM Oversight

Background

CalGEM Regulates Oil and Natural Gas Production. CalGEM regulates onshore and offshore oil, natural gas, and geothermal wells. The division is responsible for ensuring the safe development of oil, natural gas, and geothermal resources in the state through utilization of sound engineering practices that protect the environment, prevent pollution, and ensure public safety. In order to fulfill its mandate to regulate oil and natural gas operators, the division performs various regulatory activities.

- **Reviews and Approves or Denies Permits.** Oil and natural gas operators must obtain permits from the division in order to perform a variety of common activities including (1) drilling new wells, (2) reworking or deepening existing wells, and (3) plugging and abandoning wells. The division typically evaluates 7,000 to 10,000 permit applications per year.
- **Witnesses Field Operations.** State law and regulations require division staff to witness about 30 different oil and natural gas production operations and the testing of certain equipment (referred to as “shall-witness” operations). For example, the plugging and abandonment of a well encompasses numerous steps that are required to be witnessed by field inspectors. State law and regulations also allow the division to witness certain oil and natural gas production operations and testing of equipment (referred to as “may-witness” operations). In 2019, there were 50,080 shall- and may-witness operations.



CalGEM Oversight

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- **Evaluates Aquifer Exemptions.** An operator is required to secure an aquifer exemption before injecting oil and natural gas production fluids into the ground. This is allowed if the aquifer is not a current or future source of drinking water. The approval of an aquifer exemption consists of six sequential review and approval steps by multiple agencies—including CalGEM, State Water Resources Control Board, and U.S. Environmental Protection Agency—and takes at least one year to complete. The division is currently involved in 17 aquifer exemption package reviews that are at various stages in the approval process.
- **Regulates Underground Injection Control (UIC).** The UIC program regulates the permitting, drilling, inspecting, testing, and sealing of about 55,000 UIC wells in California that fall into two categories: (1) wells that inject water or steam for enhanced oil recovery and (2) wells that return briny water—typically unusable for drinking or irrigation—from oil and natural gas production back underground. According to the division, there are over 850 UIC projects statewide that require review. These projects are generally defined by a geological zone or area and can be as small as a few wells or as large as thousands of wells that inject fluids.
- **Performs Construction Site Well Reviews.** The division developed the construction site well review program to assist local permitting agencies in identifying and reviewing the location and condition of oil or natural gas wells located near or beneath proposed construction sites. According to the division, this function is important in urban areas, such as Los Angeles, where oil fields are typically older—sometimes more than 100 years old—and urbanization is rapidly occurring. In 2019-20, the division processed 238 construction site reviews which take from days to months to complete depending on the size and complexity of the review and the availability of data on the wells at or near the construction site.



CalGEM Oversight

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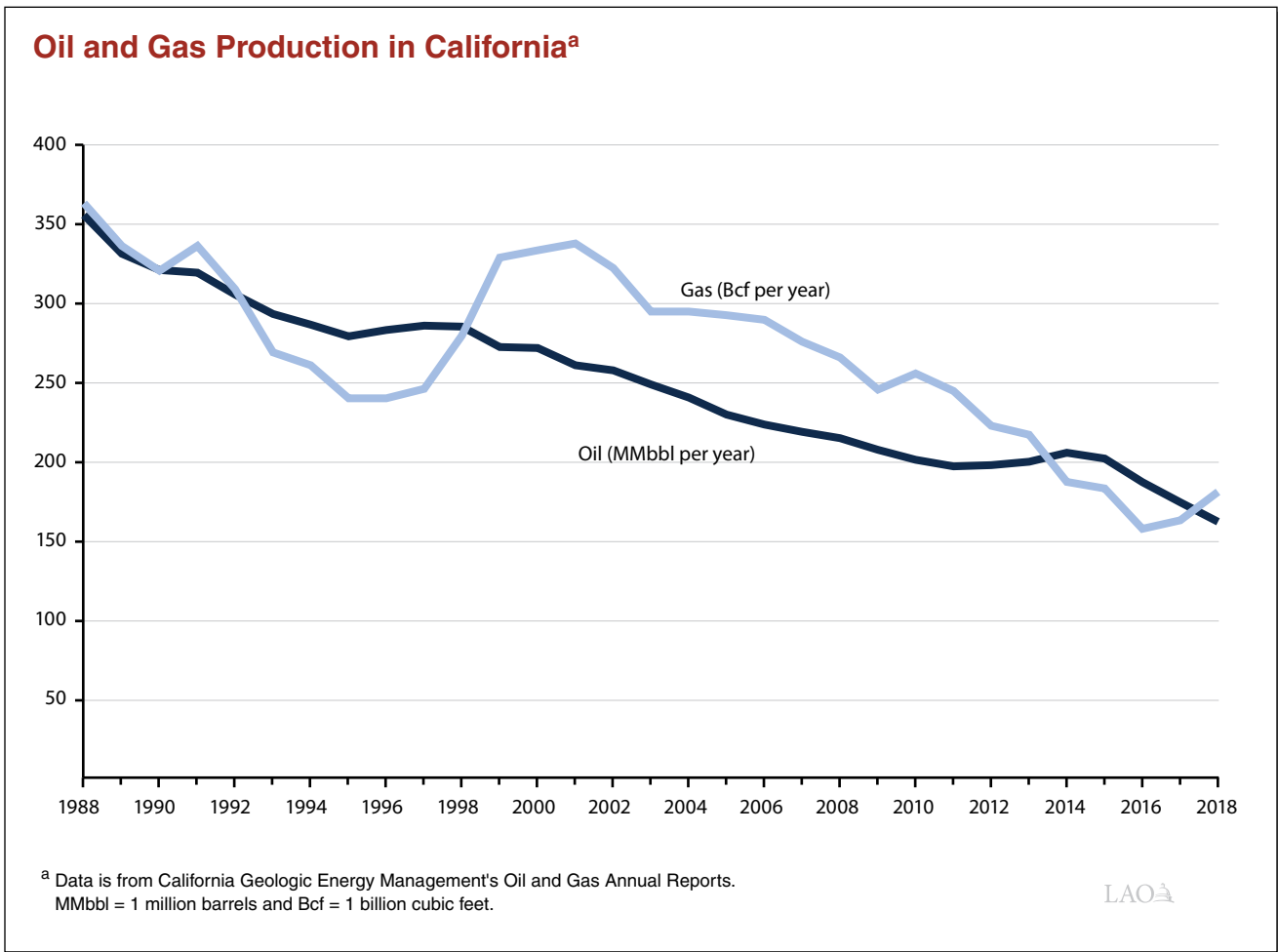
- **Regulates Pipelines and Facilities.** After oil and natural gas is pumped from the ground, it goes through a production facility that prepares it for sale to refineries or gas utilities. The division's pipelines and facilities unit oversees these facilities and regulates all oil and natural gas production equipment between the wellhead, where oil and natural gas leaves the ground, and the sales meter, where ownership or custody changes hands.
- **Issues Notices of Violation (NOV) and Enforcement Orders.** The division's enforcement program was established in 2018-19 to centralize and standardize the division's statewide enforcement efforts. Field inspectors issue NOVs to operators who are out of compliance with state laws or regulations. If a noncompliant operator refuses to voluntarily take action to remedy a violation, enforcement staff can draft orders to comply in coordination with the department's legal staff.
- **Regulates Idle Wells.** Idle wells are wells that have not produced for two years or more and have not yet been properly plugged and abandoned. They can leak oil or natural gas, which can pose risks to life, health, property, and natural resources if they are not adequately monitored and tested regularly. The division manages plans for the elimination and testing of idle wells, which require division staff to monitor to ensure all work is being completed by operators in a timely manner. In addition, staff witness well testing to ensure it is done appropriately. New idle well regulations that went into effect April 1, 2019 are expected to increase the number of idle wells tested per month from about 200 in 2020 to over 700 in 2023.



CalGEM Oversight

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Trends in Oil and Gas Production in California. Overall oil and gas production in the state has declined in the past several decades, as shown in the figure below, but varies depending on market factors.



CalGEM Oversight

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Recent Legislation Expanded the Division's Regulatory Role. In 2019, the Legislature passed and the Governor signed several pieces of legislation that increased the division's regulatory authority and required the division to perform additional evaluations. The key pieces of legislation—and some of their major provisions—are as follows:

- **Chapter 771 of 2019 (AB 1057, Limón).** Chapter 771 authorizes the division to require increased financial assurances from an operator and mandates that operators provide additional documentation when ownership of wells or facilities changes.
- **Chapter 773 of 2019 (SB 463, Stern).** Chapter 773 requires operators of natural gas storage wells to apply for a permit to perform a well stimulation treatment and to provide the division with a complete inventory of materials that could be emitted from the well in the event of a leak. In addition, the division is required to review and, if necessary, revise its natural gas storage well policy and regulations.
- **Chapter 774 of 2019 (AB 551, Jackson).** Chapter 774 requires each operator of an oil or natural gas well to submit a report that estimates the operator's total costs to plug and abandon all of its wells and to decommission all attendant production facilities, including site remediation. The division is also required to conduct inspections of certain idle wells and deserted production facilities and to report its findings from these inspections to the Legislature.



CalGEM Oversight

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2020-21 Budget Included Some Resources to Address Increased Workload. In 2020-21, CalGEM received \$7 million ongoing from OGGAF and 25 permanent positions to support the increased workload associated with the implementation of Chapters 771, 773, and 774, as well as other improvements for greater regulatory enforcement, increased oversight of gas and oil production, and improved public transparency.

2020-21 Resources for CalGEM Oversight

(Dollars in Millions)

	Funding	Positions
Implement legislation		
Chapter 771 of 2019 (AB 1057, Limón)	\$3.1	4
Chapter 773 of 2019 (SB 463, Stern)	0.4	2
Chapter 774 of 2019 (AB 551, Jackson)	1.8	10
Field operations	1.2	5
Enforcement	0.4	2
Public transparency	0.4	2
Total	\$7.2	25

CalGEM = California Geologic Energy Management.



CalGEM Oversight

(Continued)

Governor’s Proposal

Summary of CalGEM Oversight Proposal

(Dollars in Millions)

Components	2021-22		2022-23		2023-24 and Ongoing	
	Funding	Positions	Funding	Positions	Funding	Positions
Field presence	\$1.2	6	\$1.6	8	\$1.7	9
Enforcement program	0.4	2	0.9	5	0.9	5
Pipelines and facilities program	0.4	2	0.5	3	0.5	3
Public transparency	0.3	2	0.4	3	0.5	4
Flame resistant clothing	0.1	—	0.1	—	0.1	—
Legislation implementation	—	—	0.4	2	0.6	3
Idle wells program	—	—	0.2	1	0.5	2
Total	\$2.4	12	\$4.1	22	\$4.8	26

CalGEM = California Geologic Energy Management

Increased Staffing for Various Programs (\$2.4 Million). The administration proposes to add \$2.4 million in 2021-22 (growing to \$4.8 million upon full implementation in 2023-24) from OGGAF for CalGEM regulatory oversight and enforcement, increased public transparency, and implementation of legislation. This funding would support 12 positions in 2021-22, growing to 26 positions upon full implementation. Specifically, the funding would support the following activities.

- **Field Presence.** The proposal includes nine positions upon full implementation. The positions would perform the following regulatory functions: (1) witness field operations, (2) review UIC projects and applications, (3) review and manage the aquifer exemption approval packages, (4) process permit applications, and (5) perform construction site reviews.



CalGEM Oversight

(Continued)

- **Enforcement Program.** The proposed funding includes five positions upon full implementation to identify and implement enforcement actions. Enforcement staff would perform several functions including collecting and organizing evidence, gathering and evaluating well ownership and lease information, and identifying responsible parties to support the issuance of orders.
- **Pipelines and Facilities Program.** The proposal includes three positions upon full implementation to collect and analyze information that operators are required to provide, such as maps and data on oil and gas pipelines and tank facilities as well as pipeline management plans. The staff would utilize this data to identify, map, and categorize wells and facilities to guide regulatory activities. According to the division, this would allow it to better (1) plan for inspections; (2) identify hazards; (3) collect, manage, and analyze facility condition information; (4) retain data on abandonment costs; and (5) prioritize well abandonment projects.
- **Public Transparency.** The proposed funding includes four positions upon full implementation to (1) gather, analyze, and provide quality control checks on data to respond to the Legislature, public, and media in a more timely manner, and (2) lead public engagement with community organizations and local governments to update public safety and health rules designed to protect communities near oil and gas production operations.
- **Flame Resistant Clothing.** The proposal includes funding for personal protective equipment to protect field staff when entering oil operators' spaces.
- **Legislation Implementation.** The proposed funding includes three positions upon full implementation to (1) collect and review data on liability, cost estimates to plug and abandon wells, and financial viability from operators, as required by Chapter 774, and (2) perform risk assessments of operators' abilities to remediate wells and revise financial assurances, as required by Chapter 771.



CalGEM Oversight

(Continued)

- **Idle Wells Program.** The proposal includes two positions upon full implementation to meet requirements imposed by new idle well regulations. The staff would (1) centralize the idle wells program and standardize forms and processes used by division staff and operators, and (2) increase tracking of operator compliance.

Assessment

Proposal Addresses Growing Workload Associated With Regulatory Changes. We find that the positions and funding requested in the administration's proposal are reasonable based on the existing backlogs of field inspections, gap between enforcement action and capacity, and volume of information and data requests from the public. In addition, recent legislation has increased oversight requirements, which, in turn, has increased the division's workload. Some examples of the existing backlogs and increased oversight requirements include:

- **Field Presence.** The division currently has backlogs in several areas of field presence work due to limited staffing capacity, including 17 aquifer exemption applications, 80 UIC project reviews, and 3,384 well summary reviews. CalGEM estimates that the requested resources will allow it to clear these backlogs over several months for certain types of work, like well summary reviews, to a couple of years for aquifer exemption applications. These resources would also help prevent future backlogs.
- **Enforcement.** The department reports that in 2018-19, division staff recommended 87 enforcement actions, but limited staffing resulted in only 49 enforcement orders being issued. The department reports that the requested resources would allow the division to increase the issuance of enforcement orders from about half of the recommendations to roughly three-quarters.



CalGEM Oversight

(Continued)

- **Pipelines and Facilities.** Although recent state regulations require operators to provide maps of pipelines and facilities to CalGEM, the division lacks the staffing capacity to process and use such geospatial data to identify and prioritize for inspection the areas that pose the greatest risk to the public and the environment. With the requested resources, the division projects to be able to process and inspect at least 40 percent of pipelines and facilities over the next couple of years.
- **Public Transparency.** In 2020, the department received an average of more than 50 inquiries from the Legislature, media, and public each month. The department has two dedicated positions to address these types of requests, and responses were often delayed due to lack of capacity.
- **Legislative Mandates.** Chapters 771 and 774 required the division to perform new activities previously not included in its workload. For example, the division is now required to develop cost estimates to plug wells and decommission facilities, evaluate and verify operators' financial security reporting for liability estimates, and conduct field inspections of facilities to validate operators' reporting. Although the 2020-21 budget provided additional funding and positions to begin these activities, the augmentations were not sufficient to address the full extent of the workload.
- **Idle Wells.** Recent idle well regulations expanded the division's responsibilities in inspecting, testing, and overseeing the plugging of idle wells. However, the department reports noncompliance with recent regulations has been an issue—about three-quarters of the recommended enforcement actions in the division are related to idle wells. According to the department, additional resources would improve compliance by standardizing communication with operators and proactively identifying and engaging with operators at risk of noncompliance.



CalGEM Oversight

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Division's Workload Could Vary Due to a Number of Factors.

CalGEM's annual field and oversight workload is somewhat uncertain and can change over time for a number of reasons. Factors that can affect the division's annual workload include:

- ***Market Factors.*** The amount of oil and gas produced in California varies depending on the price and demand for such goods. Generally, significant production slowdowns in California's oil and natural gas industry result in a decrease in certain types of field presence-related workload for the division.
- ***Geography of Production.*** Travel time associated with field inspections vary depending on the locations of gas and oil production activities, which can affect the number of activities staff can perform. For example, in the Southern district, traffic congestion in the Los Angeles metro area can increase the travel time from one activity to the next.
- ***Complexity of Reviews.*** Some project reviews—such as aquifer exemptions—require years to complete, whereas others—such as well summary reviews—take only hours. The types of project reviews included in the division's workload is highly dependent on the action of oil and gas operators, and could vary from year to year.
- ***New Programs.*** There is inherent uncertainty regarding workload associated with the implementation of any new regulation or legislation, as there is limited prior experience.



CalGEM Oversight

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Recommendations

Approve Proposal. We recommend the Legislature approve the budget request of \$2.4 million and 12 positions (growing to \$4.8 million and 26 positions over three years) to meet the increased workload associated with regulatory changes. We find that these resources are justified on a workload basis and are consistent with recent statutory requirements.

Require the Department to Provide Data on Key Performance Metrics. Although the division has justified its request for additional resources, the amount of field and oversight workload could vary depending on several factors. Accordingly, we recommend that the Legislature adopt supplemental reporting language that requires the department to provide an update on the division's performance in several areas of operations by January 1, 2025, after full implementation of this proposal. This reporting would provide accountability by requiring the department to show the degree to which it improved regulatory review and compliance, fully implemented legislation, and improved the timeliness of public information requests. This report could include annual data on key performance metrics including:

- Share of “shall” and “may” operations at critical and noncritical wells witnessed reported annually.
- Number of aquifer exemption applications, UIC project reviews, and well summary reviews unprocessed by the end of each year.
- Gap between the recommended and issued enforcement actions.
- Share of pipelines and facilities mapped and inspected.
- Progress implementing Chapters 771 and 774, including the number of financial assurances reviewed, information on well and facilities ownership changes, and the number of operator reports (that estimate the costs to plug all wells and decommission attendant facilities) received and verified by the department.
- Monthly average of legislative, public, and media requests received and average time involved in responding to such requests.

