STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF JUNE 19-20, 2025
Prepared on March 20, 2025

ITEM NUMBER: **8**

SUBJECT: **Active Oilfield Program Update**

STAFF CONTACTS: **Megan Mortimer-Lamb, 805-549-3395, Megan.Mortimer-lamb@waterboards.ca.gov**
Joey Sisk, 805-542-4638, Joey.Sisk@waterboards.ca.gov

KEY INFORMATION

Location: Region-Wide

Type of Discharge: Underground Injection and Waste Discharge to Land

ACTION: **Information/Discussion**

SUMMARY

This is an informational item to provide a general update on activities related to the Active Oilfield Program in the Central Coast Region. The Active Oilfield Program regulates oilfield activities that have the potential to impact surface or groundwater. The Active Oilfield Program includes one Senior Water Resource Control Engineer and four Engineering Geologists.[1] Active Oilfield Program staff are responsible for providing technical and regulatory oversight for Underground Injection Control (UIC) Class II projects and aquifer exemption proposals to ensure protection of drinking water in close coordination with State Water Resources Control Board (State Water Board), California Geologic Energy Management Division (CalGEM)[2] and the United States Environmental Protection Agency (USEPA). Class II projects refer to wells that are utilized for oil and gas disposal or enhanced oil recovery. Staff administer waste discharge requirements for the management and beneficial reuse for petroleum-impacted soil produced at active oilfield facilities. Staff also regulate oilfield-related ponds and sumps, oversee the cleanup of petroleum-impacted sites, assist with orphaned oilfield asset abandonment and site restoration, and implement Senate Bill 1137 (SB 1137[3]) to protect sensitive receptors in specific health protection zones, among other tasks.

---

[1] As a result of the Budget Letter 24-25 Government Efficiencies Reductions, the Central Coast Water Board eliminated one technical position within the Active Oilfield Program. Budget Letter 24-25 full text: https://dof.ca.gov/wp-content/uploads/sites/352/2024/08/BL-24-25.pdf
[2] California Geologic Energy Management Division (CalGEM): https://www.conservation.ca.gov/calgem
[3] Senate Bill 1137 Full Text: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1137

This staff report discusses the water quality issues associated with the Active Oilfield Program, along with an overview of the governing regulatory requirements including recent legislation, and current and pending actions, with an emphasis on Active Oilfield Program priorities and the roles of CalGEM, and the State Water Board and Regional Water Quality Control Boards (collectively the Water Boards). A map displaying the active oilfields within the Central Coast Water Board's jurisdiction is included in Figure 1.

DISCUSSION

Active Oilfields in the Central Coast Region

Oil production began in the state in the early 1900s, and California is currently the seventh-largest producer of crude oil in the United States. There are 22 active onshore oilfields in the Central Coast Region. Production of oil and gas has occurred across the Central Coast region, from Santa Clara County, south to the Santa Barbara coast, and east to the Cuyama Valley. Oilfields in the Central Coast Region range in size from thirty-eight thousand-acres with hundreds of wells, to one thousand acres with only a few wells. The largest oilfields by production volume in the region are San Ardo (Monterey County) and Cat Canyon (Santa Barbara County) oilfields. Numerous operators are active within the region, and it is common for multiple operators to own and operate wells and facilities within the same oilfield.

Active Oilfield Program Background

Oilfield activities have the potential to impact groundwater and surface water. Some of the ways groundwater may be impacted are from discharges to groundwater associated with improperly operating oilfield injection projects, infiltration from surface impoundments, or oil spills. Surface water impacts are primarily associated with discharges of oil and/or produced water.[4]

In recent years, oil and gas production in California has received increased interest from the state legislature, USEPA, state and local agencies, and the public. This increased interest is a result of heightened concern about the impact of oil and gas production and associated water disposal practices on groundwater quality. Additionally, there are concerns about the impact of oilfield operations on public health in communities adjacent to oilfields. Consequently, California has enacted various regulations for the oversight of oil and gas production with an emphasis on protecting groundwater.

Active Oilfield Program Priorities

As described in the Central Coast Water Board's Strategic Plan and further detailed in this staff report, the general program priorities for the Active Oilfield Program include the following:

[4] Produced water is the formation water that is pumped from geologic formations along with hydrocarbons.

1. Address potential water quality impacts from active oilfield activities that affect human health and minimize impacts to surface waters and groundwater, especially sources of drinking water.
2. Review all aquifer exemption applications (including associated conduit analyses) and UIC projects to evaluate the protection of sources of drinking water.
3. Review all injection well casing failures for potential impacts to groundwater and follow-up as needed.
4. Support oilfield lease restoration and decommissioning of orphaned oilfield assets.
5. Coordinate with State Water Board and CalGEM staff on all active oilfield projects and participate in public meetings.
6. Protect surface water and groundwater resources by regulating waste pile and produced water pond facilities and inspecting facilities regularly.

The Project/Task Specific Priorities for Fiscal Year 24-25 include the following:

1. Recruitment and retention of qualified, well trained staff.
2. Cat Canyon Aquifer Exemption (Santa Barbara County) – in conjunction with State Water Board and CalGEM staff, review and approve Conduit Remediation and Monitoring Plans and alternative demonstrations for potential conduit wells in the proposed Aquifer Exemption area.
3. Cat Canyon Resources Cyclic Steam UIC Project, Cat Canyon Oilfield (Santa Barbara County) – Evaluate Area of Review (AOR) submittals for proposed cyclic steam wells.
4. Aera Energy Water Disposal Project, Sections 17 & 30, San Ardo Oilfield (Monterey County) – Review UIC projects including potential release of produced water to groundwater.
5. Begin implementing SB 1137 primarily through review of sampling proposals and resultant data and supporting CalGEM with development of sampling guidance for operators.
6. Address active and historic produced water ponds.
7. Support CalGEM and other agencies with well abandonment, facility decommissioning, and lease restoration of former oilfield leases.
8. Review and provide feedback to CalGEM on new aquifer exemption applications, including the associated conduit analysis.

Regulatory Authority

The California Public Resources Code (commencing with section 3000)[5] governs oil and gas activities in California and establishes CalGEM as the principal state agency with the authority to regulate the drilling, operation, maintenance, and abandonment of oil and gas wells. CalGEM's regulatory authority includes, but is not limited to: (1)

[5] California Public Resources Code commencing with Section 3000: https://www.conservation.ca.gov/index/Documents/CALGEM-SR-1%20Web%20Copy.pdf

issuing permits or approvals for oil and gas activities, such as the drilling or abandonment of wells; (2) investigating the environmental conditions and inspecting facilities associated with oil and gas production activities and preparing related reports; (3) ordering and/or undertaking tests or remedial work; and (4) issuing enforcement orders for violations of applicable oil and gas law, permits, or approvals.

In September 1982, CalGEM's regulatory authority expanded when the US EPA granted California primacy for Class II UIC wells under the federal Safe Drinking Water Act (SDWA). The UIC Program is intended to protect underground sources of drinking water (USDW) from impacts resulting from the injection of fluids, including wastewater, brine, and other substances. Class II wells are used to inject oil and gas related production fluids into the subsurface (40 Code of Federal Regulations (CFR) §144.6(b)).[6] Under the 1988 and 2018 memorandum of agreement (MOA) between CalGEM and the State Water Board, CalGEM and the Water Boards coordinate to oversee Class II UIC projects. The Water Boards review aspects of UIC projects pertaining to the protection of groundwater quality and beneficial uses. The state UIC regulations[7] were most recently updated and revised in 2019.

Underground Sources of Drinking Water

The SDWA protects public health by regulating the nation's public drinking water supplies. To protect drinking water resources, SDWA prohibits injection of fluids into a USDW. USDW is defined in 40 CFR §144.3,[8] as an aquifer or its portion that meets the following criteria:

a) Supplies any public water system; or
b) Contains a sufficient quantity of groundwater to supply a public water system, and:
    1) Currently supplies drinking water for human consumption; or
    2) Contains less than 10,000 mg/L TDS; and
c) Is not an exempted aquifer.

Underground Injection of Produced Water

One of the main challenges associated with oil and gas production is how to manage produced water. Produced water is the term used for formation water that is extracted along with oil. The amount of water produced per well varies. On average in California, 8-10 barrels of water are produced for every barrel (42 gallons) of oil that is produced.

---

[6] 40 Code of Federal Regulations (CFR) §144.6(b): https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-144/subpart-A/section-144.6
[7] Updated Underground Injection Control Regulations Final Text: https://www.conservation.ca.gov/calgem/general_information/Documents/UIC_regs_workshop/Final%20Text%20of%20the%20UIC%20Regulations%20(Clean).pdf
[8] 40 CFR §144.3: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-144/subpart-A/section-144.3

Once separated from the oil, produced water typically contains elevated concentrations of total dissolved solids (TDS), metals, and residual hydrocarbons.

Historically, operators discharged produced water to surface waters, ponds, or sumps. Beginning in the 1930s, underground injection wells became commonly used to dispose of produced water, injecting it back into deep subsurface formations for disposal or for enhanced oil recovery. There are six classes of UIC wells, however the focus of the Active Oilfield Program is Class II wells. Class II wells can be subdivided into three general categories:

- Enhanced oil recovery wells, which inject steam or water with the goal of mobilizing and enhancing oil recovery.
- Water disposal wells, which inject produced water into subsurface formations for the purposes of disposal.
- Hydrocarbon storage wells, which inject liquid hydrocarbons into the subsurface for storage.

Before a new UIC project is approved, or a new injection well can receive fluids, state and federal regulations require that CalGEM conduct an Area of Review (AOR), in coordination with the Water Boards. The AOR is a technical report submitted by the operator that applies petroleum geology and engineering assessments to evaluate whether fluid injection could affect a USDW. The AOR process evaluates the proposed injection fluid, volumes and pressures of injectate, and the mechanical integrity of the proposed injection well and nearby wells that might be conduits for injected fluids to migrate into a USDW.

Over the past five years, Active Oilfield Program staff have coordinated with CalGEM to review 245 individual AORs in the Central Coast Region. The majority of these reviews have been for non-expansion wells, which are injection wells located within the boundary of a previously approved UIC project. Furthermore, the majority of the AORs are for cyclic-steam injection, which involves the cyclical injection of steam into oil-bearing zones for the purpose of heating the reservoir, followed by oil extraction utilizing the same wells.

Aquifer Exemptions

The USDW definition is conservative in protecting groundwater. Therefore, operators seeking to operate Class II injection wells typically need to have the proposed injection zone designated as an exempted aquifer. Under 40 CFR §146.4,[9] an aquifer can be granted an aquifer exemption by the US EPA when the following criteria are met:

a) It does not currently serve as a source of drinking water; and
b) It cannot now and will not in the future serve as a source of drinking water because:

[9] 40 CFR §146.4 Criteria for Exempted Aquifers: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-146

1) It is mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated by permit application to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible;
2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;
3) It is so contaminated that it would be economically impractical to render it fit for human consumption;
4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse; or

c) The TDS content of the groundwater is more than 3,000 and less than 10,000 mg/L and it is not reasonably expected to supply a public water system.

In addition, California Public Resources Code 3131(a)[10] requires that, for an aquifer exemption:

1. The injection of fluids will not affect the quality of water that is, or may reasonably be, used for any beneficial use.
2. The injected fluid will remain in the aquifer or portion of the aquifer that would be exempted.

A 1982 MOA between the US EPA and CalGEM[11] contained a list of exempted aquifers, which are often referred to as primacy-era exemptions.

Water Boards' Role in Aquifer Exemptions

Historically, the Water Boards had limited involvement and coordination with CalGEM for the oversight of UIC projects and aquifer exemptions. In 2011, the US EPA audited California's Class II UIC Program and identified substantial deficiencies. The US EPA audit[12] identified a significant number of CalGEM-approved projects injecting into zones without approved aquifer exemptions, and therefore were not in compliance with the SDWA or applicable California water quality statutes and policies.

The results of the audit prompted two significant responses:

- In 2015 California enacted new legislation (Senate Bill 83)[13] that required, among other things, that CalGEM coordinate with the Water Boards on the technical review of aquifer exemption applications.

---

[10] California Public Resources Code 3131(a):
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=3131
[11] 1982 MOA between the US EPA and CalGEM:
https://www.conservation.ca.gov/calgem/for_operators/Documents/MOU-MOA/MOA_EPA_UIC_1982.pdf
[12] US EPA Audit of the Underground Injection Control Program:
https://www.conservation.ca.gov/index/Documents/DOGGR%20USEPA%20consultant%27s%20report%20on%20CA%20underground%20injection%20program.pdf
[13] Senate Bill 83 Full Text:
http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_0051-0100/sb_83_bill_20150624_chaptered.html

- In response to the new legislation, CalGEM and the State Water Board submitted a proposal to the US EPA to bring the UIC Program into compliance with the SDWA and to jointly review proposed aquifer exemptions and UIC projects. That plan is still being implemented, and there is ongoing regular communication and coordination between CalGEM, the Water Boards, and the US EPA.

Since 2015, CalGEM and the Water Boards have worked together to review and comment on aquifer exemption applications. In general, these applications seek to expand existing primacy-era exemptions. CalGEM and the Water Boards have reviewed aquifer exemption applications for eleven applications in the Central Coast Region. Of these, five have been forwarded to the US EPA for review with three subsequently approved by the US EPA.

The aquifer exemption applications are large and complex documents, and in most instances, the applications undergo substantial revisions based on feedback from the Water Boards and CalGEM through multiple review cycles. This iterative review process is a substantial portion of the Active Oilfield Program staff workload.

Beginning in 2021, the State Water Board determined that a conduit analysis must accompany all aquifer exemption applications, if the proposed exempted zone is overlain by a USDW. A conduit analysis involves reviewing well bores in the proposed exemption area to identify potential conduits that could allow fluid to migrate out of the exempted aquifer and into a USDW.

The aquifer exemption applications and supporting documents are publicly available on CalGEM's website[14] as part of CalGEM's and the State Water Board's public hearing process. Responses to public comments and interagency letters are also available on CalGEM's website. Additionally, the Water Board's aquifer exemption-related correspondence is available on GeoTracker.[15]

Well Stimulation and Hydraulic Fracturing

Well stimulation is the practice of injecting fluids and additives at extremely high pressures to improve oil recovery. The pressures are sufficient to fracture the reservoir rock, and thus the practice is commonly called hydraulic fracturing or "fracking." Well stimulation is regulated by CalGEM and the State Water Board under regulations strengthened in 2013 with the Governor's approval of Senate Bill 4.[16] Injection of acidic fluids into oil-bearing formations to increase hydrocarbon production also falls under these regulations. It should be noted that there is a clear regulatory distinction between well stimulation (hydraulic fracturing and acid stimulation) and other more common

[14] Aquifer Exemptions, CalGEM Website: https://www.conservation.ca.gov/calgem/Pages/Aquifer_Exemptions.aspx
[15] GeoTracker: https://geotracker.waterboards.ca.gov/
[16] Senate Bill 4 Full Text: http://www.leginfo.ca.gov/pub/13-14/bill/sen/sb_0001-0050/sb_4_cfa_20130628_114518_asm_comm.html

enhanced oil recovery techniques (i.e., water flood, steam flood, and cyclic steam injection).

Well stimulation was developed in the 1950s and in recent years the practice has generated increased public interest. However, well stimulation has never been widely employed in the Central Coast region and is not anticipated to be used in the region in the future. Furthermore, in 2021 Governor Newsom directed CalGEM to phase out hydraulic fracturing in California by January 2024.

Management & Beneficial Reuse of Petroleum-Impacted Soils

On May 28, 2020, the Central Coast Water Board adopted General Order No. R3-2020-0006[17] (General Order) to regulate the management and beneficial reuse of petroleum-impacted soils in active oilfields in the Central Coast Region. The General Order establishes requirements for the discharge of crude oil impacted soils to waste pile management facilities and the beneficial reuse of these soils for the construction of oilfield infrastructure, such as access roads and berms.

Waste soils are defined as all crude oil impacted soils generated on active oilfield leases. Sources of waste soils include, but are not limited to tank bottom sludges, soils impacted by spills, and produced sands. To manage waste soils, operators often use waste pile management facilities for the temporary storage of waste soils prior to beneficial reuse or disposal. Beneficial reuse projects are defined as the practice of using waste soils in the construction of oilfield infrastructure such as, but not limited to, road pavement, berms, and well pads. If waste pile management facilities and beneficial reuse projects are constructed and managed properly, with comprehensive and clearly defined management practices to contain wastes and minimize erosion, they do not pose a significant threat to water quality.

Currently there are seven operating waste pile management facilities enrolled in the General Order operated by five oilfield operators. Active Oilfield Program staff continue to administer the program which includes the review of technical reports and annual monitoring reports, engaging with enrollees, and conducting regular site inspections.

Disposal of Produced Water via Ponds and Sumps

As previously discussed, hydrocarbon production generates a significant quantity of produced water. The produced water is typically poor quality and unsuitable for other beneficial uses. Many oilfields in the Central Coast Region have surface impoundment features, primarily designated for emergency overflow conditions. These impoundments are almost all lined and used for temporary storage rather than disposal. If these facilities are properly operated and maintained, the risk to water quality from lined impoundments is not significant. Active Oilfield Program staff are currently evaluating the need for additional requirements to address risks to water quality associated with

[17] General Order No. R3-2020: https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2020/r3_2020_0006_general_order.pdf

produced water surface impoundments within the Central Coast Region. In considering potential requirements, the Central Coast Water Board will coordinate with oilfield operators to identify priority measures to minimize threats to water quality from surface impoundments.

Health Protection Zones (SB 1137) and Other Relevant Legislation

On September 16, 2022, Governor Newsom signed SB 1137 into law which added Article 4.6 (commencing with Section 3280) to Chapter 1 of Division 3 of the Public Resources Code, relating to oil and gas. This legislation generally prohibits CalGEM from issuing well permits within a health protection zone of 3,200 feet from a sensitive receptor. Certain exceptions are allowed, such as preventing or responding to a threat to public health, safety, or the environment, complying with a court order, or to plug and abandon a well.

Sensitive receptors are defined as:

1. A residence, including a private home, condominium, apartment, and living quarter.
2. An education resource, including a preschool, school maintaining transitional kindergarten, kindergarten, or any of grades 1 to 12, daycare center, park, playground, university, and college. Where a university or college is the only sensitive receptor within 3,200 feet of the operator's wellheads or production facilities, the university or college is not a sensitive receptor if the operator demonstrates to the division's satisfaction that no building with nominal daily occupancy on the university or college campus is located within 3,200 feet of the operator's wellheads or production facilities.
3. A community resource center, including a youth center.
4. A health care facility, including a hospital, retirement home, and nursing home.
5. Live-in housing, including a long-term care hospital, hospice, prison, detention center, and dormitory.
6. Any building housing a business that is open to the public.

SB 1137 also includes limits on disruptive noise and light, dust and particulate migration, and the release of gases from wells and storage tanks. Related to water quality, SB 1137 requires operators to contact property owners and tenants and offer to test water wells or surface water on their property, before commencing any work in a health protection zone that requires a CalGEM permit. The sampling will consist of a baseline sample before the work occurs, and a follow-up sample when the work is completed. Operators are also required to notify the Water Board before collecting a sample so that staff can witness the sampling. The results of any baseline and follow-up water quality testing shall be provided by the operator to the Water Boards, the property owner, and/or the requesting tenant. The requirements of SB 1137 became effective in June 2024.

On September 22, 2024, Governor Newsom signed Senate Bill 1304 (SB 1304)[18] into law which increased requirements for aquifer exemption proposals by amending both the Public Resources Code and the Water Code. SB 1304 requires that the State Water Board conduct an environmental review consistent with the California Environmental Quality Act[19] (CEQA; Public Resources Code, Division 13 (Commencing with Section 21000)) and hold one or more public hearings consistent with the public review process requirements of CEQA. Following the public hearing, if the State Water Board determines that the proposal meets all required criteria, the State Water Board must provide a second public comment period and public hearing. Following the second public comment period and public hearing, the State Water Board is authorized to submit the exemption proposal to the US EPA for a final decision.

Orphaned Assets

Active Oilfield Program staff provide input to CalGEM staff regarding water quality issues associated with the orphaned asset removal and management activities. Orphaned assets are oil and gas production infrastructure (wells, pipelines, facilities, berms, well pads, etc.) for which the operator is unknown or insolvent. Orphaned assets are expected to become a larger issue as the state transitions from fossil fuels towards clean energy.

In 2019, HVI Cat Canyon Inc. declared bankruptcy. In the ensuing bankruptcy proceedings, approximately 210 idle wells and associated facilities were orphaned in the Cat Canyon, Santa Maria Valley, and Casmalia oilfields in Santa Barbara County. These wells and associated facilities became the responsibility of the state. As a result, between 2022 and 2024, CalGEM was awarded $25 million from federal grants and set aside another $100 million in state funds to plug and abandon orphan and deserted wells. Additionally, the Oil, Gas, and Geothermal Administrative Fund and the Hazardous and Idle-Deserted Well Abatement Fund, both funded by operator fees, are authorized to contribute funds to plug and abandon orphaned wells.

CalGEM's Project Plug[20] website tracks plugging and abandonment operations. Eleven oilfields, mostly in the Los Angeles and Central Valley Water Board's, have orphaned well closures planned in the coming years. In the Central Coast Region, Cat Canyon and Santa Maria Valley oilfields were the first to undergo a two-phase abandonment process. To date, 171 wells have been plugged and abandoned, with the remaining 38 scheduled for plugging and abandonment between 2026 and 2027 due to their complexity. In April of 2024, Active Oilfield Program staff met CalGEM staff at the Santa Maria Valley Oilfield to witness plugging and abandonment operations for two orphaned oil wells as a training opportunity. Active Oilfield Program staff and Site Cleanup

---

[18] Senate Bill 1304 Full Text: https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=202320240SB1304&showamends=false

[19] California Environmental Quality Act (CEQA) Public Resources Code Division 13, commencing section 21000:https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=13.&title=&part=&chapter=1.&article=

[20] CalGEM's Project Plug Website: https://www.conservation.ca.gov/projectplug

Program staff are coordinating with CalGEM in a consulting capacity to oversee the assessment and remediation activities regarding the protection of water quality.

Inter-Agency Coordination and Public Participation

Active Oilfield Program staff work collaboratively with State Water Board and CalGEM staff in most aspects of their work, including reviewing aquifer exemption applications and UIC projects, orphaned asset management, and other oil production activities with a nexus to water quality. There are monthly standing meetings between Active Oilfield Program staff and staff from the State Water Board, CalGEM, and the US EPA. These meetings provide an interagency forum to discuss aquifer exemption applications and UIC projects. In addition to regularly scheduled interagency meetings, Active Oilfield Program staff engage with State Water Board and CalGEM staff on a near-daily basis in an exchange of UIC project-related information. Staff also work directly with oil operators and stakeholders when evaluating AORs and related UIC issues. Active Oilfield Program staff have established mutually beneficial working relationships with other partner agencies to facilitate oversight of oil and gas operations and to protect water quality.

Further strengthened by SB 1304, the aquifer exemption review process includes multiple opportunities for the public to provide comments on proposed aquifer exemptions. CalGEM conducts public hearings for each aquifer exemption, and representatives from the US EPA, State Water Board, and CalGEM participate. Agency representatives present findings and recommendations during the public hearing and at each hearing there is an opportunity for members of the public to submit verbal questions and comments. There is also a minimum 30-day comment period to allow the public to provide written comments. CalGEM staff, with support from Water Boards staff, respond to all public comments before an application is submitted to the US EPA.

Human Right to Water

California Water Code section 106.3, subdivision (a) states that it is the policy of the State of California "that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes." On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004,[21] which affirms the realization of the human right to water and the protection of human health as the Central Coast Water Board's top priorities.

As mentioned previously, recent legislation including SB 1137 provides additional requirements to ensure safe drinking water by requiring oilfield operators to contact property owners and tenants within a 3,200-foot radius of the wellhead to offer testing of wells or surface water on their property before and after drilling.

[21] Central Coast Water Board Resolution No. R3-2017-0004: https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2017/2017-0004_hrtw_fnl.pdf

Additionally, in coordination with the Water Boards, the United States Geological Survey (USGS) implements the Regional Groundwater Monitoring Program[22] to evaluate the impact of oilfield activities on beneficial uses. The program prioritizes the monitoring of groundwater that is or has the potential to be a source of drinking water. Active Oilfield Program staff support this effort and are actively following the results of the research. The results of this monitoring will help shape policy and inform decisions that ensure the human right to water for current and future generations of Californians, and residents of the Central Coast Region.

Environmental Justice

Environmental Justice principles call for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies that affect every community's natural resources and the places people live, work, play, and learn. The Central Coast Water Board implements regulatory activities and water quality projects in a manner that ensures the fair treatment of all people, including underrepresented communities. Underrepresented communities include but are not limited to Black, Asian, Hispanic/Latino/a/e, California Native American Tribes, Indigenous and other people of color, disadvantaged communities (DACs), severely disadvantaged communities (SDACs), economically distressed areas (EDAs), Tribes, environmentally disadvantaged communities (EnvDACs), and members of fringe communities.[23] Furthermore, the Central Coast Water Board is committed to providing all stakeholders the opportunity to participate in the public process and provide meaningful input to decisions that affect their communities.

Based on 2016 census data, 61 DAC census block groups are within one-mile of an active oilfield lease or fee property. If oilfield activity results in impacts to surface water or groundwater quality, staff will help facilitate outreach and education to inform affected

---

[22] USGS Regional Groundwater Monitoring Program: https://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/regional_monitoring/

[23] Disadvantaged Community: a community with an annual median household income that is less than 80% of the statewide annual median household income (Public Resources Code section 80002(e)); Severely Disadvantaged Community: a community with a median household income of less than 60% of the statewide average. (Public Resources Code section 80002(n)); Economically Distressed Area: a municipality with a population of 20,000 persons or less, a rural county, or a reasonably isolated and divisible segment of a larger municipality where the segment of the population is 20,000 persons or less with an annual median household income that is less than 85% of the statewide median household income and with one or more of the following conditions as determined by the department: (1) financial hardship, (2) unemployment rate at least 2% higher than the statewide average, or (3) low population density. (Water Code section 79702(k)); Tribes: federally recognized Indian Tribes and California State Indian Tribes listed on the Native American Heritage Commission's California Tribal Consultation List; EnvDACs: CalEPA designates the top 25 percent scoring census tracts as DACs. Census tracts that score the highest five percent of pollution burden scores but do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data are also designated as DACs (refer to the CalEnviroScreen 3.0 Mapping Tool or Results Excel Sheet); Fringe Community: communities that do not meet the established DAC, SDAC, and EDA definitions but can show that they score in the top 25 percent of either the Pollution Burden or Population Characteristics score using the CalEnviroScreen 4.0.

parties and connect them with available resources, especially underrepresented communities. Active Oilfield staff are developing oil and gas public outreach materials (fact sheet and FAQ document) based on materials developed by the Los Angeles Regional Water Quality Control Board. Active Oilfield staff will update the materials as necessary to provide Central Coast Region specific information and will coordinate with State Water Board's Office of Public Participation to finalize the materials. The public outreach materials will be used to provide oil and gas related information to communities that could be impacted by oilfield activities.

Climate Change

The Central Coast faces the effects of climate change for the foreseeable and distant future. To proactively prepare and respond, the Central Coast Water Board has launched the Central Coast Water Board's Climate Action Initiative, which identifies how the Central Coast Water Board's work relates to climate change and prioritizes actions that improve water supply resiliency through water conservation and wastewater reuse and recycling; mitigate for and adapt to sea level rise and increased flooding; improve energy efficiency; and reduce greenhouse gas production. The Climate Action Initiative is consistent with the Governor's Executive Order B-30-15 and the State Water Board's Climate Change Resolution No. 2017-0012.

Climate change refers to observed changes in regional weather patterns such as temperature, precipitation, and storm frequency and size. At the local scale, within urbanized areas, climate change may directly impact groundwater and surface water supply; drainage, flooding, and erosion patterns; and ecosystems and habitat. The State Water Board's Resolution No. 2017-0012, "Comprehensive Response to Climate Change," requires a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities. Aligning with Resolution No. 2017-0012, General Order No. R3-2020-0006 regulates the discharge of waste related to beneficial reuse of waste soils on-site at active oilfields. Supporting the beneficial reuse of waste soils on-site will reduce carbon emissions by decreasing the volume of material and the fuel required to transport material off-site for disposal.

In 2020, Governor Newsom issued Executive Order N-79-20[24] requiring sales of all new passenger vehicles to be zero-emission by 2035. In 2022, recognizing the importance of supporting California's clean energy transition and protecting California communities, Governor Newsom partnered with the state legislature to pass a comprehensive package of legislation addressing climate change, including SB 1137 discussed previously. These actions by the Governor and the state legislature will help address climate change, as well as the regulatory framework which shapes the work of the Active Oilfield Program.

[24] State of California Executive Order N-79-20: https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf?emrc=9f8f26

CONCLUSION

The Central Coast Water Board's Active Oilfield Program regulates oilfield activities that have the potential to impact surface or groundwaters, in coordination with the State Water Board, CalGEM and USEPA. Consistent with the Strategic Plan, Active Oilfield Program staff will continue to implement the program priorities and integrate regional priorities including the human right to water, environmental justice, and climate change to protect water quality.

Active Oilfields in the Central Coast Region

California Regional Water Quality Control Board, Central Coast Region (R3)

Figure 1: Map of the active oilfields in the Central Coast Region. Prepared for June 19-20, 2025 Board Meeting.