STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF AUGUST 22-23, 2024
Prepared on July 23, 2024

ITEM NUMBER: **8**

SUBJECT: **Stormwater Program Update**

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KEY INFORMATION: **This item provides an overview of efforts currently in progress by the Central Coast Water Board to regulate stormwater discharges.**

ACTION: **Information/Discussion**

SUMMARY

This item provides an update on the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) stormwater program. This staff report provides an overview of the stormwater program and current program priorities.

DISCUSSION

Background

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) stormwater program regulates stormwater discharges with the primary goals to reduce discharges of pollutants in stormwater; preserve, restore, and enhance natural watershed processes; and to facilitate the use of stormwater capture and reuse. Stormwater runoff can be a significant contributor to water quality impacts, but it is also a resource to increase local water supplies, repair natural ecosystems, and replenish depleted groundwater supplies.

The 1972 federal Clean Water Act generally prohibits the discharge of pollutants into navigable waters from point sources[1] unless the discharge is authorized by a National Pollutant Discharge Elimination Permit System (NPDES) permit. The original scope of the Clean Water Act generally exempted stormwater discharges from permitting requirements except in cases where discharges were identified as significant contributors of pollution (e.g., major manufacturing facilities with discharges that included the potential for contaminated stormwater runoff). Stormwater regulations, as

[1] The U.S. Environmental Protection Agency (EPA) defines point source pollution as "any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack."

they exist today, were put in place nearly 35 years ago with the Water Quality Act of 1987, an amendment to the Clean Water Act that required NPDES permits for previously exempted activities, including discharges associated with industrial activity and discharges from municipal separate storm sewer systems[2] (MS4s) serving a population of 100,000 or more.

The 1987 stormwater Clean Water Act amendments created a general framework for stormwater regulation, but the method to accomplish those objectives was established in 1990 with USEPA's NPDES Phase I Final Rule, which required NPDES permit coverage for MS4s generally serving populations of 100,000 or greater, construction activity disturbing five acres of land or greater, and ten categories of industrial activity. In 1999, the NPDES Stormwater Phase II Final Rule required additional small MS4s in urbanized areas and operators of small construction sites to obtain NPDES permits and implement programs and practices to control stormwater runoff

The Central Coast Water Board stormwater program currently implements four general NPDES permits and one individual NPDES permit to regulate MS4s, construction activities, and industrial activities. The Central Coast Water Board's stormwater program currently has four full-time technical positions (one of which is vacant) and one program manager.

Municipal Stormwater Program

Impervious surfaces and associated stormwater runoff from urbanized areas have the potential to impact natural hydrology and stream channel morphology, increase sediment loading and delivery of pollutants into surface water, and increase stream temperatures. Federal regulations allow two permitting options for stormwater discharges: individual permits and general permits. The Central Coast Water Board regulates discharges of stormwater from MS4s to waters of the United States through two general permits, one for small MS4s and a second for Caltrans owned and operated facilities, and an individual permit for the city of Salinas.

Regulation of Small MS4s (Phase II Communities)

The State Water Resources Control Board (State Water Board) has adopted a statewide general permit for small MS4s to efficiently regulate numerous dischargers under a single permit. Order 2013-0001-DWQ, *Statewide General Permit for the Discharge of Storm Water from Small MS4s*[3] (Phase II General Permit) regulates traditional MS4s, which are generally municipalities, and non-traditional MS4s such as public universities, departments of transportation, military bases, hospitals, and

[2] Municipal separate storm sewer system includes ditches, curbs, gutters, storm sewers, and similar means of collecting or conveying runoff that do not connect with a domestic wastewater collection system or treatment plant and that are owned or operated by a public agency.
[3] The Phase II General Permit can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html

prisons.[4] There are 55 entities enrolled in the Phase II General Permit in the Central Coast Region. The State Water Board, in coordination with the regional water quality control boards (Regional Water Boards), is currently working to revise the Phase II General Permit with anticipated adoption in spring 2025.

Phase II General Permit requirements include discharge prohibitions, effluent limitations, receiving water limitations, provisions encompassing the six federally required minimum control measures (discussed in detail below), and requirements related to post-construction runoff management and Total Maximum Daily Load (TMDL) compliance. On March 6, 2014, the Central Coast Water Board adopted Resolution R3-2013-0032, *Central Coast Post-Construction Stormwater Requirements*[5] (Central Coast PCRs), replacing the Phase II General Permit's post-construction requirements within the Central Coast Region. The Central Coast PCRs place emphasis on protecting and, where degraded, restoring key watershed processes necessary to create and sustain linkages between hydrology, channel geomorphology, and biological health. The Central Coast PCRs include requirements for site design and runoff reduction, water quality treatment, runoff retention, and peak flow management and allow for alternative compliance through developer fee-in-lieu programs or use of regional facilities when onsite compliance is technically infeasible or if an approved watershed plan is in place.

Additionally, the Phase II General Permit requires dischargers to comply with all applicable TMDL-based requirements. TMDLs establish a maximum amount of a pollutant that a water body can assimilate, and municipal stormwater programs[6] are required to comply with all applicable TMDL-based requirements, which are developed in consultation with the permittees. These requirements are consistent with the assumptions and requirements of the wasteload allocations established in relevant TMDLs that have been developed by the State Water Board and the Regional Water Boards, in consultation with the permittees. The mechanism for ensuring compliance with TMDLs is through the Wasteload Allocation and Attainment Program (WAAP), through which permittees identify the necessary control measures to attain their waste load allocations. Finally, permittees are required to conduct monitoring and annual reporting with a summary of the past year's activities for each program element and certify compliance with all requirements of the permit.

The core program elements of stormwater programs, the six minimum control measures are described below:

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[4] A list of small MS4s on the Central Coast that are regulated by the Phase II General Permit can be accessed online: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/muni_phase2.html

[5] The Central Coast PCRs can be accessed online at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.html

[6] Construction General Permit and Industrial General Permit enrollees located within a watershed for which a TMDL has been approved by USEPA must also comply with applicable TMDL-specific permit requirements. These requirements are reflected in enrollees' numeric action limits and compliance is assessed through annual report review and compliance inspections.

- ***Public Outreach and Education***: The intent of a public education and outreach program is to reduce pollutant discharges in stormwater runoff and non-stormwater discharges to the MS4 through increased stormwater knowledge and awareness in target communities. The education and outreach program must be designed to measurably increase the knowledge and awareness of the targeted audience regarding the municipal storm drain system, impacts of urban runoff and non-stormwater discharges (including illicit discharges) on receiving waters, and potential best management practice[7] (BMP) solutions. Implementation might include surveys gaging level of awareness, stormwater messaging in local media or via social media, educational materials, public meetings, stormwater-related programming for school children, and business-specific outreach (e.g., mobile car washing, mobile dog grooming, or pressure washers).

- ***Public Involvement and Participation****:* The public participation and involvement program includes encouraging volunteerism, public comment and input on policy, activism in the community, and public involvement in Integrated Regional Water Management Plan (IRWMP) or other watershed-level planning efforts. Implementation might include development of a citizen advisory group, opportunities to participate in the implementation of BMPs through sponsoring activities (e.g., stream cleanups or storm drain stenciling) and making information about the stormwater program accessible to the public.

- ***Illicit Discharge Detection and Elimination****:* The purpose of the illicit discharge detection and elimination program is to detect, investigate, and eliminate illicit discharges, including illegal dumping, into the MS4. Implementation may include mapping of outfalls and priority areas, field sampling, source inventory, and spill response.

- ***Management of Construction Site Runoff****:* Dischargers must develop, implement, and enforce a program to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The program must include the development of an enforceable construction site stormwater runoff control ordinance for all projects that disturb less than one acre of soil. Projects that disturb one acre or more of soil or disturb less than one acre but are part of a larger common plan or development or sale are subject to the Construction General Permit in addition to the construction site stormwater runoff control ordinance. Implementation of this provision includes maintaining a construction site inventory, construction plan review and approval procedures, and construction site inspection and enforcement.

[7] A Best Management Practice (BMP) is defined by the USEPA as a technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff efficiently and cost-effectively.

- ***Pollution Prevention/Good Housekeeping for Permittee Operations****:* Dischargers must implement appropriate BMPs for preventing or reducing the amount of stormwater pollution generated by permittee operations (e.g., vehicle maintenance yards, municipal buildings, airports, fueling facilities, chemical storage facilities, etc.). Implementation of this provision includes maintaining an inventory and map of discharger-owned and operated facilities, facility and storm drain assessments, stormwater pollution prevention plans, inspections, remedial actions, and operations and maintenance.

- ***Post-Construction Stormwater Management***: Dischargers must address stormwater runoff from development and redevelopment projects through post-construction stormwater management requirements. This is implemented through the Central Coast PCRs.

Regulation of Medium/Large MS4s: City of Salinas Phase I Permit

The city of Salinas, the only Phase I community in the Central Coast Region, has been regulated by an individual permit since 2012. Salinas's current permit—Order R3-2019-0073, *Waste Discharge Requirements for City of Salinas Municipal Stormwater Discharges*[8] (Salinas Phase I Permit)—became effective in October 2019.The Salinas Phase I Permit generally mirrors the Phase II General Permit in that it includes discharge prohibitions, effluent limitations, receiving water limitations, and provisions encompassing the six federally required minimum control measures. Like the Phase II General Permit, Salinas's permit also includes requirements related to TMDL compliance, implements the Central Coast PCRs, and requires monitoring and annual reporting of program activities and certification of compliance with permit requirements.

However, the city's permit takes additional steps to improve water quality through the implementation of a Pollutant Load Reduction Plan (PLRP), consideration of water quality impacts of homelessness and climate change, and requirements for asset planning. The PLRP is the city's strategy for complying with water quality-based effluent limits and receiving water limitations. The PLRP includes a detailed description of the city's strategy for volume reduction or structural, non-structural, and source control BMP implementation to ensure that control measures will reduce pollutant loads and achieve target timeframes. The Salinas Phase I Permit also includes requirements to incorporate projections of climate change-induced alterations in storm hydrology in their program assessment, account for new and/or increased liabilities related to climate change in their asset management, and characterize areas with recurring transient encampments. In addition, the Salinas Phase I permit codified the State Water Board's 2015 *Trash Provisions for Inland Surface Waters, Enclosed Bays, and Estuaries*,[9] which established a statewide trash prohibition with goal of zero discharge by 2030.

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[8] Salinas's Phase I Permit can be accessed online at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/salinas.html

[9] *Trash Provisions for Inland Surface Waters, Enclosed Bays, and Estuaries* can be accessed online: https://www.waterboards.ca.gov/water_issues/programs/trash_control/docs/trash_appendix_e_121615.pdf

California Department of Transportation MS4 Permit

The California Department of Transportation (Caltrans) owns and operates the statewide transportation system that includes more than 3,000 miles of highway and freeway lanes and 130 miles of pedestrian and bike facilities in the Central Coast Region, as well as additional right-of-way, storm sewer systems, and maintenance facilities. On June 22, 2022, the State Water Board adopted the *Statewide Phase II NPDES Municipal Stormwater Permit for the California Department of Transportation*[10] (Caltrans Municipal Permit), which regulates stormwater discharges from Caltrans-owned MS4s and discharges from Caltrans-owned rights-of-way, parking, storage, and maintenance facilities. This current Caltrans Municipal Permit includes a reduced post-construction compliance threshold of 10,000 square feet or less than a quarter of an acre (as compared to the previous permit's threshold of one acre) and a more thorough description of how compliance credits apply. Discharge types prohibited by the Caltrans Municipal Permit include, in part, discharges that have not been reduced to the maximum extent practicable, trash, and wastes that cause or contribute to exceedances of a water quality objective or unreasonably affect beneficial uses. Caltrans must implement BMPs to reduce the discharge of pollutants in stormwater, to the maximum extent practicable, as necessary to comply with TMDL wasteload allocations and receiving water limits. Caltrans' permit-specific requirements include stormwater management plans, compliance with statewide trash provisions, and monitoring and reporting. Currently, Caltrans is finalizing trash and TMDL implementation plans as part of its permit compliance and is working with the State Water Board and the Regional Water Boards on treatment of transportation-related emergent chemicals in stormwater.

Industrial Stormwater Program

The Central Coast Water Board regulates discharges of stormwater from industrial activities to waters of the United States through Order 2014-0057-DWQ, *Statewide General Permit for Stormwater Discharges Associated with Industrial Activities*[11] (Industrial General Permit). Discharges associated with nine federally defined categories of industrial activities, including manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities, are required to obtain Industrial General Permit coverage. In general terms, NPDES permits for industrial activities include technology-based effluent limitations[12] and any more-stringent water quality-based limitations[13] necessary to meet water quality standards.

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[10] The Caltrans MS4 Permit can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.html

[11] The Industrial General Permit can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.html

[12] Technology-based effluent limitations are minimum levels of treatment for pollutants and are based on best available treatment technologies. If technology-based limitations are not sufficient to meet the water

[13] If technology-based limitations are not sufficient to meet the water quality standards in the receiving water, the CWA and NPDES regulations require more stringent, water quality-based effluent limits.

The Industrial Geneal Permit requires dischargers to implement a set of minimum BMPs, in combination with advanced BMPs as necessary, to reduce or prevent pollutants in industrial stormwater discharges. Implementation of these minimum BMPs, which represent common practices that can be implemented by most facilities, serves as the basis for compliance with the Industrial General Permit's technology-based effluent limits and water quality-based corrective action provisions, and receiving water limits. Dischargers must meet stormwater effluent limitation guidelines[14] and if the facility is located in a watershed for which a TMDL has been approved by USEPA, shall comply with any TMDL-specific requirements. There are 891 facilities in the Central Coast Region enrolled in the Industrial General Permit.

Construction Stormwater Program

Activities associated with active construction have the potential to contribute pollutants such as sediment, debris, chemicals, and trash into nearby storm sewer infrastructure or directly into surface water. The Central Coast Water Board regulates discharges of stormwater from construction activities to waters of the United States through Order 2022-0057-DWQ, *Statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities*[15] (Construction General Permit). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling and excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres are required to obtain coverage.

The Construction General Permit requires dischargers to identify construction materials handled at the site and describe all potential sources of pollutants that could be discharged from their site and describe the BMPs that will be implemented to control their discharges. Dischargers are required to conduct pre-, during-, and post-precipitation site visual inspections and, for high-risk sites, sampling during wet-weather in accordance with the Construction General Permit and any TMDL-specific requirements that apply. Receiving water monitoring may be required depending on the risk level. All sites are required to submit sampling results, inspection records, and annual reports. There are 721 Central Coast Region construction projects currently enrolled in the Construction General Permit.

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[14] U.S. EPA regulations at 40 Code of Federal Regulations Chapter I Subchapter N (Subchapter N) establish technology-based Effluent Limitation Guidelines and New Source Performance Standards (ELGs) for industrial stormwater discharges from facilities in specific industrial categories. For these facilities, compliance with the BAT/BCT and ELG requirements constitutes compliance with technology-based requirements of the Industrial General Permit.

[15] The Construction General Permit can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html

Program Priorities

The stormwater program's key performance target is the number of completed compliance inspections and municipal program audits. This target is consistent with USEPA's Clean Water Act Compliance Monitoring Strategy (dated July 21, 2014), which sets forth national inspection frequency goals for core NPDES programs.

For industrial sites, staff plan to inspect at least 10 percent of industrial stormwater permittees throughout the region each year. A majority of such inspections are permitted facilities; however, inspections of potential industrial stormwater non-filers are also used toward meeting a portion of this commitment. Staff prioritizes industrial inspection targets using numeric action level exceedances, SIC code, proximity to water body, and compliance with sampling and annual reporting requirements; thus inspection efforts are focused on sites with a relatively higher threat to water quality.

For the Construction General Permit, each year staff plan to inspect at least 10 percent of permitted construction sites covering more than five acres and at least five percent of permitted construction sites covering less than five acres. Staff prioritizes construction inspection targets each year based on size, risk level, compliance with reporting requirements, and numeric action level exceedances.

For municipal dischargers, staff plan to perform an on-site programmatic audit for all Phase I and II permittees at least once every ten years. This equates to five to six audits per year for the Central Coast Region. These audits focus on those Phase I and Phase II MS4s that discharge into waters not achieving water quality standards and where an inspection or audit has not been performed within the past five years. Because stormwater programs are multifaceted, staff typically limits the scope of the audits to two or three of the six minimum control measures (public outreach and education, public participation, illicit discharge detection and elimination, oversight of the Construction General Permit, implementation of Central Coast PCRs, runoff, and good housekeeping). In fiscal year 23/24, program staff developed and implemented a method to assess municipalities' compliance with TMDL implementation as part of the stormwater program assessment.

The final stormwater program priority is to provide incentives for municipal implementation of stormwater compliance projects that provide multiple benefits (water quality protection, watershed process protection, water conservation, water supply augmentation, etc.). Program staff works with municipalities to review and, when necessary, approve alternative watershed plans that provide an opportunity for regional BMPs that realize multiple benefits related to watershed processes and water supply, while achieving stormwater permit compliance.

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 R3-2017-0004, 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. The Stormwater Program is an important tool used by the Central Coast Water Board to implement the Human Right to Water, as programmatic efforts directly reduce pollutant loads into the environment and stormwater capture efforts can be used to augment domestic groundwater supplies.

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 DACs, SDACs, Economically Distressed Areas (EDAs), Tribes, Environmentally Disadvantaged Communities (EnvDACs), and members of Fringe Communities.[16] 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.

Climate Change

The Central Coast faces the threat and 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

[16] 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 3.0.

Initiative is consistent with the Governor's Executive Order B-30-15 and the State Water Board's Climate Change Resolution 2017-0012.

Although the stormwater program has been in place for several decades, in recent years the State Water Board and Regional Water Boards have recognized a need to integrate management of water quality, water supply, and flood control across regulatory programs. Stormwater capture and use are essential parts of California's 2022 Water Supply Strategy[17], which addresses future water shortages caused by decades of water overuse and intensified by climate change. Programs like the State Water Board's Strategy to Optimize Resource Management of Stormwater (STORMS)[18] and the recycled water program[19] are working towards plans and policies that leverage existing stormwater regulations to better focus on incentive-driven multiple benefit approaches that improve California's water supply resiliency.

CONCLUSION

The Central Coast Water Board stormwater program's highest priority is to protect surface water resources and beneficial uses. Staff will continue to prioritize resources to focus on the highest priority industrial and construction sites and MS4s with the goal of achieving water quality objectives and protecting and restoring natural watershed processes.

[17] California's Water Supply Strategy can be accessed online at: https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf
[18] The SWB's STORMS program webpage can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/storms/
[19] The SWB's Recycled Water program's webpage can be accessed online at: https://www.waterboards.ca.gov/water_issues/programs/recycled_water/