

California Water Boards 2015

Accomplishments Report

MISSION STATEMENT: TO PRESERVE, ENHANCE, AND RESTORE THE QUALITY OF CALIFORNIA'S WATER RESOURCES AND DRINKING WATER FOR THE PROTECTION OF THE ENVIRONMENT, PUBLIC HEALTH, AND ALL BENEFICIAL USES, AND TO ENSURE PROPER WATER RESOURCE ALLOCATION AND EFFICIENT USE, FOR THE BENEFIT OF PRESENT AND FUTURE GENERATIONS.

VHO WE ARE

The California Water Boards protect and enhance the quality of our waters for present and future generations. We are made up of the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards). The State Water Board develops statewide policy and

regulations for water quality control, regulates drinking water, and allocates water rights. The Regional Water Boards provide local implementation of policy and regulations, develop long-range plans, issue waste discharge permits, and take enforcement actions against violators. We also monitor and report on the quality of surface water and groundwater throughout the State, develop and implement plans to restore impaired waters, and fund restoration and capital improvement projects

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aimed at protecting public health and the environment. While some of these activities are more well-known than others, all are essential to providing California individuals, families, farmers, cities, industry, and the environment with water needed to keep our State healthy and productive.

For more information, please see our website: www.waterboards.ca.gov, or follow us on Twitter: https:// twitter.com/CaWaterBoards



FAST FACTS

California's Water Environment

211,000 miles of rivers and streams.

9,000 lakes, totaling over 1.6 million acres.

1,100 miles of coastline.

433 coastal beaches, totaling over 630 miles.

200 million acre-feet of precipitation in an average water year.

55,000 acre-feet of groundwater used per day by Californians, more than any other state in the nation.

Water Boards' Workload Highlights (Fiscal Year 2014/2015)

Almost 31,000 facilities regulated.

Almost 7,000 inspections conducted.

More than 4,000 permits issued.

More than 4,000 enforcement

Almost \$800 million in Clean Water State Revolving Funds allocated.

Almost 31,000 water right holders regulated.



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KEY 2015 ACCOMPLISHMENTS

Water Boards Take Actions to Address Impacts of Severe Drought

Drought conditions persisted in 2015 as California entered its fourth consecutive year of below-average rainfall and record low snow pack, with the majority of the State experiencing exceptional drought conditions. The Water Boards took actions across all programs in response to historic drought conditions and Governor Edmund G. Brown Jr.'s April and November 2015 Executive Orders.

[References for drought actions provided on page 35.]

Drought Actions (Continued from page 2.)

The Water Boards Responded to the Drought Emergency Across All Programs:

- Emergency regulations were adopted to mandate a 25 percent reduction in urban water use statewide;
- Additional emergency regulations were passed to protect endangered and threatened fish in Sacramento and Russian river tributaries;
- To protect senior water rights and the environment, certain water right holders in the Scott, Sacramento, and San Joaquin river watersheds, and the San Francisco Bay/ Sacramento-San Joaquin Delta Estuary (Bay-Delta) were told that there was not enough water available to support their needs, and that they



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- would have to find another source of water, such as groundwater or purchased water;
- Emergency water supplies were provided to communities that saw their groundwater wells and surface water sources dry up;
- Permitting processes were expedited to accelerate the availability of alternative water supplies, such as recycled water and desalinated seawater; and
- Technical and financial assistance was targeted at communities with threatened water supplies.

Emergency Water Conservation Regulations Adopted and Enforced

The State Water Board adopted its initial emergency water conservation regulation in July 2014. The regulations were expanded in March 2015 to include water conservation measures that commercial businesses, such as restaurants and hotels, must implement. In May 2015, the State Water Board adopted an emergency conservation regulation in response to the Governor's April 2015 Executive Order, requiring a 25 percent reduction in overall urban water use statewide. The regulation, which took effect in June 2015, assigns each urban water supplier a conservation standard (between 4 and 36 percent), and requires monthly reporting on conservation achievements. Each month, the State Water Board determined if water suppliers were on track for meeting their conservation standard, and took enforcement action on suppliers that did not meet their standard. Those actions will continue into 2016 to safeguard the State's remaining water supplies in preparation for a possible fifth year of drought.

<u>KEY FACT</u>: During 2015, Californians reduced their water use by 25.5 percent in the six months (June 1-Dec. 31) since the 2015 emergency conservation regulation took effect.

Emergency Conservation Regulations Adopted for Fish Protection

In 2015, the State Water Board adopted and implemented two emergency regulations to protect fish. In March 2015, the State Water Board readopted an emergency regulation that established drought emergency flows in Mill, Deer, and Antelope creeks (tributaries to the Sacramento River) to protect Chinook salmon and steelhead. In June 2015, the State Water Board adopted an emergency regulation for Dutch Bill Creek, Green Valley Creek, Mill Creek, and portions of Mark West Creek (tributaries to the Russian River) to protect Coho salmon and steelhead. In addition, the North Coast Regional Water Board streamlined the permitting process for several flow augmentation projects, such as the release of stored storm water, into those Russian River tributaries during the summer and fall of 2015. These water conservation efforts leave more water instream to protect threatened and endangered fish.

<u>KEY FACT</u>: The State Water Board conducted eight public outreach meetings and provided more than 45 public notifications to inform the public of the State Water Board's actions under the regulations. During 2015, the State Water Board responded to more than 1,600 emails, more than 3,000 phone calls, and provided 18 days of in-person assistance in the City of Santa Rosa.

Drought Actions (Continued from page 3.)

Water Shortage Notices Issued to Curtail Some Diversions

Diversion of water is always subject to water availability. When there is not enough water for all, junior water rights holders are not authorized to divert water and the water must remain instream to serve more senior water rights holders. During 2015, the State Water Board issued curtailment notices to junior, and some senior, water rights holders announcing that water was unavailable for their priority of right in the Scott, Sacramento, and San Joaquin river watersheds, and the Bay-Delta.

<u>KEY FACT</u>: During 2015, more than 9,000 curtailment notices were issued to water rights holders in the Scott, Sacramento, and San Joaquin river watersheds, and the Bay-Delta.



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Water Transfers Expedited

During 2015, the State Water Board continued to expedite temporary voluntary water transfers throughout the State to provide water from willing sellers to willing buyers, and to help move water to where it was needed most.

Approximately 95 percent of water transfers were either transfers of water between State Water Project contractors, or transfers of water between federal Central Valley Project contractors. Temporary water transfers offer flexibility in the allocation and use of water, and may provide a solution for certain drought-related water needs.

<u>KEY FACT</u>: During 2015, a total of 376,760 acre-feet of water was approved for transfer or exchange.

Hydropower and Barrier Projects Conserve Water

Hydropower projects throughout the State continued to be impacted by reduced water supplies and, in some cases, could not meet the water quality requirements included in their Federal Energy Regulatory Commission (FERC) license and associated Clean Water Act Section 401 water quality certifications. During 2015, the State Water Board approved temporary changes to their certifications, including requirements for reduced minimum instream flows, water releases, and reservoir levels. The State Water Board worked with FERC and licensees to

conserve water at hydropower facilities, and also participated on the Governor's Hydropower Workgroup, which assesses and monitors the impact of the drought on California's electrical power grid.

In May 2015, the State Water Board issued a 401 water quality certification for CA Department of Water Resource's (DWR) 2015 Emergency Drought Barrier Project. The project involved the installation of a temporary rock barrier at West False River from May to November 2015 to conserve water supplies needed to control salinity in the Bay-Delta.

<u>KEY FACT</u>: During 2015, the rock barrier at West False River prevented high-salinity waters from reaching the central Delta, and conserved approximately 90,000 acre-feet of water.



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Drought Actions (Continued from page 4.)

Federal and State Water Project Change Petitions Approved to Conserve Water

The State Water Board issued an Order in February 2015 approving petitions from the DWR for the State Water Project, and from the U.S. Bureau of Reclamation (Reclamation) for the Central Valley Project, to adjust water quality and flow requirements in the Bay-Delta. Under the Order, which was modified several times throughout the year, adjustments were made to conserve stored water for other uses, including salinity control, export of water north and south of the Delta, and cold water for fish.

KEY FACT: The State Water Board's February 2015 Order conserved more than 900,000 acre-feet of water during 2015.



Grants Awarded Through Drought Response Outreach Program for Schools (DROPS)

In May 2015, the State Water Board approved the funding list for projects that will combine storm water capture features with education and outreach at schools. The funding is administered as grants through the State Water Board's Drought Response Outreach Program for Schools (DROPS). Thirty school districts and institutions throughout California will receive more than \$30 million in funds. The projects will focus on: water conservation; storm water pollution reduction, retention, and use; and recharge of aquifers by implementing low impact development.

KEY FACT: Over \$30 million dollars in grants was approved for funding 29 DROPS projects statewide.

Local Water Supply Augmentation

In January 2015, the Central Coast Regional Water Board approved a permit allowing the City of Santa Barbara to restart its desalination facility to produce drinking water. The desalination facility had been put on standby after the City's drought condition was relieved by abundant rainfall in 1991-1992 and subsequent winters. However, emergency drought conditions warranted that the facility be restarted. The City agreed to perform mitigation measures, including replacing the open-ocean intake with intakes installed beneath the ocean bottom, which could decrease harmful effects on marine life. The City also agreed to apply \$500,000 toward a coastal restoration project prior to reactivating the facility.

KEY FACT: The City of Santa Barbara desalination facility can produce up to 10,000 acre-feet of water per year, thereby reducing the need for surface water and groundwater supplies.



KEY 2015 ACCOMPLISHMENTS (CONTINUED)

Policy and Planning

2015 Accomplishments



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Statewide Trash Limits Adopted

In April 2015, the State Water Board adopted a statewide water quality objective aimed at reducing the amount of trash that finds its way into rivers, lakes, and the ocean, threatening aquatic life and public health. The objective was adopted as an amendment for both the Water Quality Control Plan for Ocean Waters of California (California Ocean Plan) and the forthcoming Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. Efforts to address trash in the San Francisco Bay and Los Angeles regions by the San Francisco Bay and Los Angeles Regional Water Boards significantly influenced the development of this statewide objective. The amendment provides statewide consistency for the Water Boards' regulatory approach to protect aquatic life and public health

beneficial uses through reducing trash in State waters, while focusing limited resources on high trash-generating areas. Aquatic life and wildlife can be endangered from ingestion, entanglement, and habitat degradation from trash. Trash can also jeopardize public health and safety, and poses a hindrance to recreational, navigational, and commercial activities. Additionally, trash can serve as a transport medium for pollutants, and act as a hiding place and breeding ground for invasive species. California was first in the nation to establish regulatory controls to reduce trash into State water bodies; now federal and other State agencies are modeling the same approach. For more information: http://www.waterboards.ca.gov/water_issues/programs/trash_control/index.shtml

Uniform Statewide Desalination Rules Adopted

In May 2015, the State Water Board adopted an amendment to the California Ocean Plan to address adverse effects associated with the construction and operation of seawater desalination facilities. The amendment supports the use of ocean water as a reliable supplement to traditional water supplies while protecting marine life and water quality. The operation and construction of seawater

desalination facilities can result in harm and mortality to marine life. During the desalination process, aquatic organisms may be drawn in with the source water and enter the facility's water processing system, resulting in marine life mortality. The salt, minerals, and other compounds produced as a by-product of desalination (e.g., brine) can also affect marine life depending on the disposal method. The amendment requires new or expanded seawater desalination plants to use the best available site, design, technology, and mitigation measures feasible to minimize intake and mortality of all forms of marine life. The amendment establishes, for the first time, a uniform and consistent statewide approach for permitting seawater desalination facilities in a manner to protect the beneficial uses of California's ocean waters from both seawater intakes and discharges of brine wastes.



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San Diego Water Board Endorses Five-Year Action Plan for the Tijuana River Valley Recovery Team



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In March 2015, the San Diego Regional Water Board adopted a resolution endorsing a Five-Year Action Plan that outlines projects that the multi-party Tijuana River Valley Recovery Team (TRVRT) will implement to address water quality problems in the Tijuana River Valley. The Tijuana River Estuary is the largest functioning wetland in Southern California and is designated as a wetland of international importance by the International Ramsar Convention on Wetlands. The TRVRT is a large bi-national effort between the United States and Mexico to address pollutant impairments (including trash and sediment) in the Tijuana River Valley, with the goal of restoring the Tijuana River floodplain to a balanced wetland ecosystem. The lower six miles of the Tijuana River and the Tijuana River Estuary (collectively, the Tijuana River Valley) are degraded due to excessive sedimentation and trash, as well as numerous other pollutants originating primarily from Mexico and, to a

lesser extent, from sources in the United States. The Regional Water Board is one of many public non-profit entities that have worked tirelessly on both sides of the California-Mexico border to resolve the Valley's water quality issues. The Five-Year Action Plan focuses the many partners on measurable water quality improvements, and serves as an alternative to a traditional water quality restoration strategy (known as a Total Maximum Daily Load, or TMDL) for achieving load reductions of trash and sediment into the Tijuana River Estuary. Reducing discharges, and cleaning up sediment and trash, in the Tijuana River Valley are among the highest priorities of the Regional Water Board. Because many of the sources of sediment and trash are outside of the jurisdiction of the agencies that the Regional Water Board regulates, the Regional Water Board convened a collaborative, stakeholder-led approach to address these problems in creating the TRVRT.

For more information: http://www.waterboards.ca.gov/sandiego/water_issues/tijuana_river_valley_strategy/index.shtml

Low Stream Flow Impacts on Water Quality Addressed in the North Coast Region

The North Coast Regional Water Board took actions to address low stream flows in 2015. In March 2015, the Regional Water Board hosted a workshop, titled "Consideration of Flow in the Water Quality Regulatory Process", to promote discussions on options to address low flows in the Region. At the workshop, the Regional Water Board and invited speakers presented information on flow conditions and efforts to address low flows, the legal nexus between water quality and quantity, opportunities and hurdles in addressing low flows in the context of water quality, and scientific methods for establishing flow criteria. In addition, the Regional Water Board identified, through its adopted 2014 Triennial Review, several high-priority basin planning projects, including three related to flow: the development of numeric flow criteria to evaluate low-flow conditions in the Eel River; the related development of criteria to allow the discharge of highly-treated wastewater for flow augmentation to the



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Eel River; and the development of instream flow objectives for the Navarro River Basin and corresponding implementation methods. The designation and focus on these basin planning projects as high priorities reflects the Regional Water Board's increasing focus on the impacts of low flows on water quality and beneficial uses in the Region.

For more information: http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/triennial_review.shtml and http://www.waterboards.ca.gov/northcoast/water_issues/programs/flow_riparian/pdf/Item_1-Consideration_of_Flow.pdf

Water Boards Assist in California Wildfires Response and Recovery Efforts

In the midst of a prolonged drought, California experiences significant wildfires in 2015. The Butte Fire started on September 9, 2015 in Calaveras County, east of the town of Jackson, and reached 70,868 acres in size, destroyed 475 residences, and claimed two lives

before it was fully contained on October 1, 2015. The Valley Fire erupted on September 12, 2015 in southern Lake County, and quickly spread to encompass 76,067 acres in Napa, Lake, and Sonoma counties, destroying nearly 2,000 structures and claiming four lives before being contained on October 6, 2015. In mid-September, Governor Brown declared a State of Emergency for both fires, and later that month, President Obama signed a major disaster declaration to release federal funds to help with recovery from the Valley Fire. In response to the Governor's declaration, the Governor's Office of Emergency Services organized a multiple agency, dualphased, post-fire emergency assessment effort for each fire. In October, the Central Valley Regional Water Board participated in various evaluation, mitigation development, and reporting efforts for both fires. The Regional Water Board participated in the first phase of risk assessment, which included field reviews to identify high risk areas, and the



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development of emergency watershed protection measures. The Regional Water Board also worked to streamline its permitting process to ensure compliance while providing timely permit coverage for recovery activities with the potential to impact water quality.

The State Water Board's Division of Drinking Water assisted various Lake County water systems in responding to and recovering from the Valley Fire. By the second day of the fire, the service areas for 32 water systems had been evacuated as the fire continued to rapidly spread. Ultimately, the Valley Fire damaged or destroyed facilities at 14 public water systems and burned more than 1,300 residences. Owing to longstanding, collaborative relationships, the Division was able to establish contact almost immediately with those water systems, even when the system's offices had burned down (as was the case for Callayomi County Water District, which serves the town of Middletown). Starting on September 13, 2015 and continuing into October, Division staff was on the scene in Lake County almost daily. The Division worked with the Lake County Emergency Operations Center, providing status updates,



coordinating on repopulation efforts, and facilitating technical and financial assistance for affected water systems. Division staff also performed onsite damage assessments, attended community meetings, implemented unsafe water alerts, and assisted with bacteriological sampling efforts. The State Water Board continues to work closely with those water systems as they rebuild, ensuring that new facilities meet all applicable standards and that State Water Board funding is available, where appropriate. For more information:

http://calfire.ca.gov/fire_protection/fire_protection_firereports and https://www.facebook.com/LakeCountyOES

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Drinking Water Quality 2015 Accomplishments

State Water Board Presents Safe Drinking Water Plan to California Legislature

The State Water Board delivered a document, titled the Safe Drinking Water Plan for California, to the CA State Legislature in June 2015. The plan states the Water Board's blueprint for supplying safe drinking water to all Californians, and outlines how the State Water Board proposes to improve access to reliable and healthy drinking water for communities throughout the State. The plan focuses on the nearly 8,000 public water systems that are regulated by the State Water Board's Division of Drinking Water. The plan does not address private wells and facilities that are not public water systems. At any given time, more than 98 percent of the State's inhabitants served by public



December 2014 Safe Drinking Water Plan Public Workshop, State Water Board

water systems receive drinking water that meets federal and State drinking water standards. However, still too many Californians do not receive safe drinking water. The plan includes a five-year implementation program to provide support and resources to the water systems that serve those State consumers who do not receive safe drinking water. The plan serves as a roadmap to help bring safe and sustainable water supplies to all Californians.

For more information: http://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan/

Water Service Extended to Santa Rosa Disadvantaged Communities

In 2015, the State Water Board executed projects to extend water service from the City of Santa Rosa to five small disadvantaged community water systems. Four small disadvantaged community water systems near the City of Santa Rosa (Rancho Santa Rosa Mobile Home Park, Moorland Avenue Apartments, Sequoia Gardens Mobile Home Park, and West Field Community) have wells



contaminated with arsenic above the maximum contaminant level for drinking water. These systems have been working with the State Water Board since 2008 to obtain funding to build interconnections with the City of Santa Rosa water system. The State Water Board is providing grant funding through Proposition 84 for the design and construction of four pipelines to connect these small water systems to the City water system. Construction on the project, which began in December 2015, will provide safe drinking water to more than 600 people. In late-2014, the State Water Board approved a Public Water System Drought Emergency Response (PWSDER) grant to the Mount Taylor Mobile Home Park, a small disadvantaged community water system serving approximately 60 residents near the City of Santa Rosa. Due to the ongoing drought, the water system's only well could no longer support that population. The grant allowed the water system to connect to the City of Santa Rosa for domestic water in early 2015.

For more information: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DroughtPreparedness.shtml

Comprehensive Cleanup and Abatement Order to PG&E Issued and Residential Water Supply **Wells Evaluated**

In November 2015, the Lahontan Regional Water Board adopted a comprehensive Cleanup and Abatement Order (Order) against Pacific Gas and Electric Company (PG&E), ordering the State's largest utility to continue its cleanup of chromium-contaminated groundwater in the town of Hinkley. The Order directs PG&E to aggressively remediate the contaminated groundwater within set



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deadlines, protect nearby drinking water wells, provide monitoring reports consistent with State and federal standards, and comply with plume capture requirements and targets to clean up the contamination. The Order consolidates the requirements from 18 previous orders into a single order. Since 1987, the Regional Water Board has been requiring PG&E to locate and remediate chromium contamination in groundwater beneath its Compressor Station in Hinkley. The new streamlined Order sets a clear path toward final remediation. It is anticipated that, in 17 years, nearly 80 percent of the contaminated water will be cleaned up to drinking water standards.

When the drinking water standard for hexavalent chromium became effective in July 2014, PG&E was no longer required to provide replacement drinking water to residents in Hinkley because

private water supply wells met the standard. However, due to concerns that private wells may not meet other drinking water standards and pose a health risk, the Regional Water Board completed residential well sampling at 41 locations in the Hinkley area. The area contains current and historical irrigated agriculture and confined animal operations that contribute to nitrate pollution. Only 15 of the 41 locations sampled met all drinking water standards. Twenty-six locations did not meet one or more drinking water standards. The Regional Water Board has existing orders in place for three dairies and confined animal operations requiring they provide replacement drinking water to eight residences whose wells exceed the nitrate drinking water standard. One of these orders is being revised to incorporate a larger area for sampling and replacement water. The remaining eighteen locations do not meet drinking water standards for one or more of the following constituents: arsenic, nitrate, salts, and uranium. The Regional Water Board is evaluating pollutant sources for the remaining contaminated wells and may impose additional replacement water requirements where a responsible party can be identified. For more information: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr11915_pge_cao.pdf and http://www.waterboards.ca.gov/lahontan/water_issues/projects/pge/index.shtml

Drought Assistance Funding Eligibility Expanded to Provide Emergency Drinking Water to Disadvantaged Communities

In 2015, funding eligibility under the Cleanup and Abatement Account (CAA) was expanded to capture community water systems, non-profit organizations, and tribal governments serving disadvantaged communities and individuals suffering from water shortages or contaminated water supplies due to the drought. Working with those entities, the State Water Board funded \$5,753,875 in projects during 2015 to provide interim emergency drinking water solutions to communities, schools, and residences suffering from the lack of safe drinking water. Projects funded through the CAA included providing bottled water and vending machines, drilling/repairing wells, installing tanks for hauled water, and point-of-use treatment devices, such as under-the-sink water filters. Additionally, the State Water Board allocated \$5 million for interim



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or permanent solutions assisting small community water systems and individual households suffering from drought-related drinking water emergencies. This funding program is under development and the funds are expected to be awarded in 2016. For more information: http://www.swrcb.ca.gov/water_issues/programs/grants_loans/caa/dw_droughtfund/

Efforts Continue to Protect Groundwater Resources and Assist Communities Reliant on Nitrate-Impacted Drinking Water in the Central Coast Region

During 2015, the Central Coast Regional Water Board's Irrigated Lands Regulatory Program (ILRP) received groundwater data for approximately 4,000 private domestic drinking water wells and irrigation wells. Those groundwater data, which are managed in the

Water Boards' groundwater information data management system (GeoTracker-GAMA), indicate significant pollution of drinking water throughout portions of the Central Coast Region. Approximately 25 percent of the drinking water and irrigation wells sampled region-wide during 2015 (approximately 1,000 wells) exceeded the drinking water standard for nitrate. Some of the groundwater data were received from the Central Coast Groundwater Coalition (CCGC), a non-profit entity that represents landowners and growers in Monterey, San Benito, Santa Clara, and Santa Cruz counties. The CCGC fulfills groundwater monitoring and reporting regulatory requirements for the ILRP on behalf of landowners and growers. During 2015, the CCGC sampled approximately 1,191 private domestic drinking water wells and irrigation wells, and is on track to successfully complete comprehensive groundwater quality



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characterization reports for agricultural areas of the Central Coast Region (including the Salinas Valley, the Pajaro Valley, the Gilroy-Hollister area, and the counties of San Luis Obispo, Santa Barbara, and Ventura). The groundwater characterization reports are available to the public on the Regional Water Board's website.

Also during 2015, the Regional Water Board sent approximately 200 notification letters to users of private domestic drinking water wells with unsafe levels of nitrate, and aided disadvantaged communities in finding replacement drinking water through Water Board grant assistance and potential enforcement actions against responsible parties. The Regional Water Board is further analyzing the data to assess groundwater quality conditions and to inform ongoing implementation of the ILRP. This effort assists in implementation of California's historic Human Right to Water law, which declares that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. For more information: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/index.shtml and http://www.centralcoastgc.org/

Recycled Water Management

2015 Accomplishments

Increased Use of Recycled Water Promoted to Create Local, Sustainable Water Supplies in San Diego Region

The San Diego Regional Water Board took several actions in 2015 aimed at achieving a sustainable local water supply in the Region while also protecting water quality. Master Reclamation Permits, which allow for the use of treated wastewater, were issued for two important recycled water expansion projects, including the renewal of the Master Recycling Permit for the City of San Diego's North City Reclamation Facility. That facility produces 32 million gallons per day of tertiary-treated recycled water for non-potable



Recycled Water Fill Station, Olivenhain Municipal Water District, San Diego County

uses in the San Diego Region. Tertiary treatment of water is the final cleaning process that improves wastewater quality before it is reused, recycled, or discharged to the environment. The Regional Water Board's Water Quality Control Plan (Basin Plan) was amended on April 15, 2015 to facilitate greater use of recycled water in the Region, and to lower the cost of treating recycled water to meet nitrate water quality objectives. In response to the ongoing drought and mandatory water conservation targets, the Regional Water Board worked collaboratively with the State Water Board's Division of Drinking Water, and recycled water producers and distributors, to permit recycled water fill stations across the Region. Recycled water fill stations are designed to make recycled water more widely

available for non-potable uses by commercial users and residents. Local agencies are required to establish and implement rules and regulations for the fill stations based on recommendations from the Division of Drinking Water. During 2015, eight recycled water fill stations were enrolled in the statewide General Waste Discharge Requirements for Recycled Water Use (WDR).

For more information: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0090_dwq_revised.pdf; http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2015/R9-2015-0008.pdf; and

 $http://www.waterboards.ca.gov/sandiego/water_issues/programs/ground_water_basin/recycled_subsurface/recycledwater_subsurfacedisposal_programs.shtml$

Los Angeles Region Releases Climate Strategy and Expedites Recycled Water Projects

In July 2015, the Los Angeles Regional Water Board released the Los Angeles Region Framework for Climate Change Adaptation and Mitigation. This document takes a first look at the impacts of climate change on water supply and water quality in the Region, and begins a discussion on issues that will need to be considered and addressed over time in regard to the effects of climate change. The framework constitutes a first step in the development of a regional climate change action plan for the Regional Water Board. The Regional Water Board developed a website that contains the framework and other relevant information, including a link to a web page that summarizes work expedited by the Regional Water Board in response to the drought. The Regional Water Board took several actions to expedite recycled water projects in 2015. In July 2015, the Regional Water Board approved amendments to permits that will allow the use of the Calleguas Regional Salt Management Pipeline to temporarily convey high-quality recycled water from the City of Oxnard's water treatment facility to



City of Oxnard Recycled Water Irrigation Impoundment, WateReuse

agricultural growers in the Oxnard Plain while a permanent pipeline is being constructed. As much as 165 million gallons (608 acre-feet) of non-potable water each month will be provided to the growers. Also during 2015, the Regional Water Board approved recycled water fill stations for the distribution of tertiary-treated recycled water from the Tapia Water Reclamation Plant, the Burbank Water Reclamation Plant, and the Ventura Water Reclamation Plant. The recycled water fill stations enable local residents to reduce potable water use by using recycled water for non-potable uses, such as landscape irrigation.

For more information: http://www.waterboards.ca.gov/losangeles/water_issues/programs/drought/index.shtml and http://www.waterboards.ca.gov/losangeles/water_issues/programs/climate_change/index.shtml

Los Angeles Region Adopts Measures to Manage Salts and Nutrients in Key Groundwater Basins



The Los Angeles Regional Water Board adopted stakeholder-developed groundwater quality management measures for salts and nutrients in the Central and West Coast basins of Los Angeles County, and the Lower Santa Clara River Basin of Ventura County in February 2015 and July 2015, respectively. The management measures were part of basin-specific Salt and Nutrient Management Plans (SNMPs) that were developed by stakeholders in compliance with requirements of the State Water Board's Recycled Water Policy. In developing the policy, the State Water Board recognized that increased use of recycled water, in conjunction with other discharges, may result in salt and nutrient loads to groundwater basins that could result in the exceedance of groundwater quality objectives. Therefore, the policy contains a requirement that

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salts and nutrients from all sources be managed on a basin-wide or watershed scale through the development and implementation of SNMPs. The Central and West Coast basins of Los Angeles County meet approximately 40 percent of the overall water supply needs of nearly 4 million residents and businesses in the 43 cities overlying these basins. Most of the area overlying the Lower Santa Clara River Basin of Ventura County, which includes the cities of Fillmore, Santa Paula, and San Buenaventura, relies on groundwater for approximately 65 percent of its overall water supply. Adopted management measures are designed to promote the use of recycled water to support sustainable water supplies while maintaining water quality conditions in groundwater basins and protecting beneficial uses.

For more information: http://www.waterboards.ca.gov/losangeles/water_issues/programs/salt_and_nutrient_management/index.shtml

Wastewater Management

2015 Accomplishments

Wastewater Treatment Plant Permits Updated in Santa Ana Region

During 2015, the Santa Ana Regional Water Board addressed the backlog of wastewater treatment facility permit updates by adopting six major and two minor National Pollutant Discharge Elimination System (NPDES) permits. By completing the updates of the permits, the Regional Water Board can ensure that current regulatory requirements will help improve the protection of the Region's water resources. The six major NPDES permits also include water recycling requirements that implement salt and nitrogen management plans, which are adopted into the Regional Water Board's Water Quality Control Plan (Basin Plan) for groundwater quality protection. NPDES wastewater treatment facilities include municipal sewage treatment plants and industrial



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treatment facilities that discharge treated water to a surface water body of the United States. Updating these permits helps to ensure the protection of the beneficial uses of the receiving waters.

 $For more information: http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/2015_orders.shtml. A continuous and the continuous a$



Trash Along New River Near International Boundary, Colorado River Basin Regional Water Board

New River Pollution Cleanup Progress Continues

During 2015, the Colorado River Basin Regional Water Board continued to work cooperatively with the U.S. Environmental Protection Agency (USEPA), the International Boundary and Water Commission (IBWC), and Mexico to address New River pollution originating from Mexico, including emerging sewage infrastructure problems in Mexicali, located in Baja California. The Regional Water Board participated in bi-monthly Binational Technical Committee meetings and binational observations of the New River in Mexicali to assist Mexico with its sewage infrastructure problems. The Regional Water Board continued to implement its monthly water quality monitoring program for the New River at the international border with Mexico to track progress of the river's cleanup, compliance with California water quality standards, and emerging pollutants of concern. In March 2015, the Regional Water Board provided testimony before the State Assembly Committee on Environmental Safety and Toxic Materials regarding pollution

in the river and implementation of the New River Improvement Project Strategic Plan. The Regional Water Board continues to implement the plan's recommended regulatory actions under its jurisdiction to address impairments of the New River in California's Imperial Valley, including the January 2015 adoption of a Conditional Waiver of WDRs to address water quality impacts from agriculture in the Imperial Valley. At the request of the Regional Water Board, the U.S. members of the Binational Technical Committee (USEPA, U.S. component of the IBWC, Regional Water Board, Imperial Irrigation District, and Imperial County) held a policy meeting in Calexico, located in Imperial County, in May 2015 to establish priorities to address the emerging sewage infrastructure problems in Mexicali. To further address pollution in the New River, in November 2015, the Regional Water Board adopted a \$460,225 fine against the Date Gardens Mobile Home Park Wastewater Treatment Plant, located in the City of El Centro, for violating its permit for discharges to the New River.

For more information: http://aesm.assembly.ca.gov/sites/aesm.assembly.ca.gov/files/Jose_Angel_CESTM_3202015_Testimony.pdf and http://www.ibwc.state.gov/

Storm Water Management

2015 Accomplishments

Phase I MS4 Storm Water Permit Adopted in North Coast Region

In October 2015, the North Coast Regional Water Board adopted the Region's only Phase I municipal separate storm sewer system (MS4) permit. The adoption of the MS4 permit serves as a renewal permit for the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency. In addition, the permit names seven Phase II (small municipalities) MS4 dischargers as Phase I (large and medium municipalities) MS4 discharger co-permittees. The permit now identifies ten dischargers as Phase I co-permittees, all located within the Russian River watershed, through which urban runoff discharges into waters within the Region. The alignment of these ten co-permittees will enable a collaborative approach to municipal storm water management and permit compliance, and provide an overall cost savings to municipalities. The collaborative approach includes having consistent requirements for educating the public on pollution prevention measures, allowing for watershed-wide planning with implementing Best Management Practices (BMPs), such as storm water harvesting and low impact development, and implementing watershed-wide monitoring in the Laguna de Santa Rosa (a tributary to the Russian River). This approach also encourages co-permittees to seek collaborative opportunities to expand monitoring efforts while reducing related



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costs by participating in the Russian River watershed regional monitoring program, once the program is established. For more information: http://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/151008_0030_phaselpermitrenewal.pdf

Region-Wide Municipal Storm Water Permit Reissued for San Francisco Bay Region

In November 2015, the San Francisco Bay Regional Water Board adopted the region-wide Phase I MS4 storm water permit. The permit covers 76 municipalities, including Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Vallejo, Fairfield, and Suisun. The reissued permit includes requirements for significant progress in three areas. First, the permit establishes a green infrastructure planning process to facilitate a long-term transition from traditional impervious storm drain infrastructure to more sustainable "green" infrastructure systems; the process addresses infrastructure to control discharges of polychlorinated biphenyls (PCBs) and mercury, facilitates climate change adaptation, and prioritizes storm water runoff. Second, the permit establishes a framework for the control of PCB discharges from building materials during demolition. PCBs can be present in high

concentrations in materials like caulk, and control of such materials is an important component of the regional plan to reduce PCBs in San Francisco Bay. Finally, the permit requires municipalities to reduce trash discharges to creeks and the Bay by at least 80 percent from a 2009 baseline by 2019. It also includes support for municipalities to address "direct" discharges of trash to creeks and the Bay that do not go through storm drains, such as illicit dumping and discharges associated with homelessness. For more information: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/mrp_sw_reissuance.shtml

Phase I Municipal Storm Water Discharges Now Regulated Under One Permit in San Diego Region



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In 2015, the San Diego Regional Water Board completed the process to regulate all Phase I MS4 dischargers (co-permittees), for urban runoff discharges to waters in the San Diego Region, under one Regional MS4 Permit. The permit is a new approach, in that it is based on watersheds instead of political boundaries. The Regional MS4 Permit jointly covers 39 municipal and county governments, and special district entities located in southern Orange County, southwestern Riverside County, and San Diego County. The Regional MS4 Permit implements a new paradigm in storm water management that changes the focus from a basic program of implementation on a jurisdictional basis to achieving water quality improvement outcomes on a watershed scale. The new permitting approach employs adaptive management permit provisions that allow co-permittees more flexibility to deploy resources to achieve

goals that will yield the greatest water quality improvements. Implementation will be based on decisions made by the co-permittees in accordance with what they have identified as their highest priority water quality issues. This new approach to storm water management encourages the co-permittees to cooperate, collaborate, and innovate together with the public in a coordinated region-wide manner, and to use their resources in the most efficient manner possible. It also offers the opportunity to address existing and developing challenges to reducing pollutants in storm water discharges from MS4s, and restoring or protecting the beneficial uses of receiving waters in the San Diego Region.

For more information: http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/

Implementation of Watershed Management Programs Continues Under Los Angeles County Storm Water Permit

The Los Angeles Regional Water Board approved 10 Watershed Management Programs (WMP) and provided written comments on 12 Enhanced WMPs (EWMP) received from permittees in 2015. The Los Angeles County MS4 Storm Water Permit (LA County MS4 Permit) is an innovative approach to storm water management, which employs watershed-level planning and promotes storm water as a valuable resource. The LA County MS4 Permit reflects a new framework for storm water management through the development of WMPs and EWMPs. WMPs allow permittees to implement the requirements of the LA County MS4 Permit on a watershed scale through customized strategies, control measures, and BMPs. EWMPs focus on the implementation of large regional BMPs that provide multiple benefits, such as recreational opportunities, improved aesthetics, and groundwater replenishment. During 2015, the Regional Water Board



Malibu Legacy Park, Los Angeles Regional Water Board

also reviewed and approved 16 watershed-based MS4 monitoring programs. In addition, the State Water Board reviewed the LA County MS4 Permit and issued a water quality order that upheld the WMP provisions of the permit, and encouraged the use of similar approaches throughout the State, where appropriate. For more information:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/index.shtml

Tools and Training Developed to Reduce Storm Water Pollution in Central Coast Region

The Central Coast Regional Water Board contracted for the development of a comprehensive set of tools and training for MS4 permittees to improve storm water management decisions. The tools and training will assist permittees in spatially quantifying pollutant loading, prioritizing and evaluating storm water BMPs, facilitating improved compliance with permits, reducing pollutant loads from municipal storm water into receiving waters, and achieving waste load allocations in water quality restoration strategies (known as TMDLs). It also will assist permittees in prioritizing storm water management actions and tracking the effectiveness of storm water management decisions. Full development of the tools and training will be completed in late 2016. For more information: http://www.2ndnaturellc.com/client-access/central-coast-stormwater-ms4-support/

Construction Storm Water Enforcement Initiative Helps to Protect San Diego Region Waters

In 2015, the San Diego Regional Water Board launched a construction storm water program compliance assurance initiative to protect coastal and inland waters. Many of the Region's coastal lagoons are impaired due to excess sedimentation, predominantly from construction grading and land disturbance activities. In light of the anticipated storms from El Niño weather conditions for 2015/2016, the Regional Water Board embarked on the initiative to heighten awareness for the need to have construction storm



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water BMPs in place to minimize storm water sediment discharges from construction sites. Efforts under the initiative included a review of local agencies' construction storm water inspection programs (as required by municipal storm water permit requirements), targeted inspections of construction sites with high risk of discharge, outreach with local agencies and within the development community, and enforcement actions against private-sector operators and municipalities that failed to oversee effective local construction programs. The Regional Water Board also provided pre-rainy season outreach to each municipal storm water program, and participated in community and industry workshops. In addition, the Regional Water Board responded to storm water violations with penalties. In June 2015, the Regional Water Board approved a settlement agreement for \$430,851 with the City of Encinitas for violations of storm water

requirements that led to sediment pollution in Rossini Creek, a tributary to San Elijo Lagoon. Of the settled amount, \$206,393 will be directed to a local habitat improvement project in the San Elijo Lagoon Ecological Reserve. These efforts will help to prevent construction-related storm water sediment pollution.

For more information: http://www.waterboards.ca.gov/sandiego/water_issues/programs/compliance/index.shtml

Nonpoint Source Controls

2015 Accomplishments

Central Valley Salt and Nitrate Management Plan Development Continues

During 2015, the stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) continued developing a comprehensive, region-wide Central Valley Salt and Nitrate Management Plan (Central Valley SNMP), which is scheduled for completion in 2016. During 2015, the Central Valley Regional Water Board assisted in the development of CV-SALTS technical studies, including: a final draft study evaluating alternatives to transport salt away from sensitive areas; a Nitrate Implementation Measures Study to address impacted groundwater; and initial development of a surveillance and monitoring program designed to track progress. In addition, a case study evaluating the appropriate designation and level of protection of municipal beneficial uses in agricultural drains was completed. Work also neared completion on a 130,000-acre pilot study to evaluate salt and/or nitrate management options at a management zone scale. Management zones are portions of existing water bodies where implementation

plans will be developed to address salt and nitrate concerns within these zones. The completion of the Central Valley SNMP will address the slow and steady accumulation of salts and nitrates that threatens not only the long-term viability of agriculture and industry in the Central Valley, but also water supplies for millions of people. For more information: www.cvsalinity.org

Efforts Continue to Address Water Quality Impacts from Marijuana Cultivation



Marijuana Cultivation Site, State Water Board

In June 2014, the State Legislature approved funding for the Water Boards and the CA Department of Fish and Wildlife (CDFW) to work collaboratively to reduce environmental damage caused by the cultivation of marijuana (cannabis) through the initiation of the Marijuana Pilot Project. During 2015, the State Water Board, the North Coast Regional Water Board, the Central Valley Regional Water Board, and CDFW worked diligently to implement the primary goals of the pilot project: development of a regulatory permitting strategy; enforcement, education, and outreach; and agency and stakeholder coordination. During the year, the North Coast Regional Water Board and the Central Valley Regional Water Board adopted permitting programs to regulate discharges of waste resulting from cannabis cultivation sites. In addition, the State and Regional Water Boards, along with CDFW, conducted nearly 200 inspections of cannabis cultivation sites, pursued numerous enforcement actions, and worked with contractors to continue the development of the Cannabis Identification and

Prioritization System (CIPS), a state-of-the-art system that integrates remote sensing technology with a GIS platform to identify cannabis cultivation sites and rank them based on their threat to water quality. The CIPS is expected to be fully developed in early 2016. The joint agency effort between the Water Boards and CDFW has proven to be effective, and the Water Boards will continue to build on those efforts in 2016. For more information: http://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/ and http://www.waterboards.ca.gov/centralvalley/water_issues/cannabis/index.shtml

Permit Adopted to Regulate Nonpoint Source Discharges on National Forest System Lands in North Coast Region

In October 2015, the North Coast Regional Water Board adopted a Waiver of WDRs for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region (Waiver). The U.S. Forest Service (USFS) manages and administers over five million acres of land within the North Coast Region, accounting for approximately 41 percent of the Region's total land area. The Waiver addresses nonpoint source discharges of waste from specific activities conducted on those federal lands, including grazing, forestry, recreation, restoration, fire suppression, and fire recovery. Most potential water quality impacts from these activities are associated with erosion and sedimentation, and alterations to riparian systems that may affect water temperatures. The Waiver provides the implementation mechanism to address impairments in watersheds



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listed on the Clean Water Act Section 303(d) List (the State's list of impaired water bodies), and reasonable assurances for compliance with TMDLs for sediment, temperature, and nutrients on USFS lands. Further, the revised Waiver expands monitoring and reporting requirements associated with grazing activities, and establishes a framework to address emergency fire recovery projects.

For more information: http://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/15_0021_Waiver_USFS.pdf

Nearly All Irrigated Farmland in Colorado River Basin Region Being Regulated



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In January 2015, the Colorado River Basin Regional Water Board adopted a Conditional Waiver of WDRs (Waiver) for discharges of agricultural runoff, and for drain operation and maintenance (O&M) activities, in the Imperial Valley near the international boundary with Mexico. The Waiver brings approximately 450,000 acres of prime agricultural farmland under regulation of the Regional Water Board. It requires farmers in the Imperial Valley to submit and implement Water Quality Improvement Plans for their farm fields, and to implement management practices (MPs) to address pollutants of concern, including pesticides and nutrients. The Imperial Irrigation District (IID) and the Imperial County Farm Bureau (ICFB) formed a coalition to assist farmers with being in compliance with the Waiver. The

Waiver also requires the IID to implement MPs to address the water quality impacts of its O&M activities of the Imperial Valley drains. As excess agricultural irrigation flows from the Imperial Valley and Imperial Valley drains are the main source of flows into the Salton Sea, California's largest inland lake, pollution of the Salton Sea could increase and harm aquatic species. With the adoption of the Waiver, 98 percent of all irrigated farmland in the Region came under regulation.

For more information: http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/irrigated_lands/index.shtml

Surface Water Quality

2015 Accomplishments

Delta Regional Monitoring Program Being Implemented in Central Valley Region

In 2015, the Central Valley Regional Water Board's Delta Regional Monitoring Program (DRMP) approved a five-year monitoring design, an annual workplan, and funding mechanisms, while also implementing comprehensive regional sampling for pathogens, pesticides, and toxicity within the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta). The DRMP is a stakeholder-directed project formed to develop water quality data necessary for improving our understanding of Bay-Delta water quality issues. Better data are needed to inform policy and regulatory decisions of the Central Valley Regional Water Board as well as other State, federal, and local agencies and organizations. Currently, there are 30 entities taking part in the program. The Regional Water Board participates on the DRMP's Steering Committee, and has a leadership role in program planning, development, and implementation. Also, the Regional Water Board provides ongoing technical resources toward monitoring design, planning, and other program needs. Developing and implementing a sustainable DRMP is a priority project outlined in the Regional Water Board's Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (updated in 2014). Water diversions from the Bay-Delta supply millions of acres of farmland and a portion of the drinking water to over two-thirds of Californians. The Bay-Delta also provides essential habitat for many aquatic and terrestrial species. For more information:



Pathogen Sample Collecting in Rock Slough, CA Dept. of Water Resources

http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/comprehensive_monitoring_program/index.shtml

Policy Adopted to Promote Restoration Actions in the North Coast Region



Coho Salmon, North Coast Regional Water Board

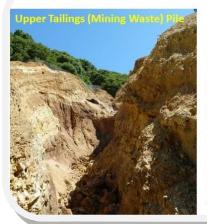
In January 2015, the North Coast Regional Water Board adopted the Policy in Support of Restoration in the North Coast Region (Policy) and the associated Water Quality Control Plan (Basin Plan) amendment. The Policy is primarily a narrative expressing support for restoration and similar type projects in the North Coast Region, recognizing that pollutant controls alone are not always sufficient to attain water quality standards. The Policy describes: the importance of restoration projects for the protection, enhancement, and recovery of beneficial uses; the obstacles that slow or preclude restoration actions; the legal and procedural requirements for permitting restoration projects; the ongoing Regional Water Board effort to provide support toward the implementation of restoration projects; and direction to staff to continue to support restoration in the future. The Regional

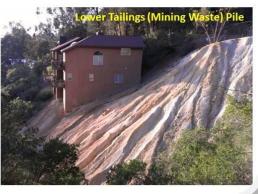
Water Board continued work to improve permitting pathways, and to secure public funding to increase the pace and scale of various restoration actions in the North Coast Region, including the following restoration projects: (1) construction of off-channel refugia for salmonids during high-winter flows; (2) eliminating barriers to fish migration; (3) improving groundwater infiltration and aquatic habitat through construction of experimental beaver dam analogues (i.e., human-made "beaver dams"); (4) reintroduction of large woody material (trees and root wads) to improve salmon and trout habitat across multiple watersheds; and (5) restoration of subsided, former tidal salt marsh by beneficial reuse of Humboldt Bay dredged material. For more information: http://www.waterboards.ca.gov/northcoast/board_decisions/water_quality_certification/pdf/2015/15_0028_TrinityRiver_ChannelRehab.pdf;

www.conservationgateway.org; and http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/restoration_policy.shtml

Leona Heights Sulfur Mine Remediation and Creek Restoration Completed

Remediation of the Leona Heights Sulfur Mine in the Oakland Hills, and restoration of the adjacent Leona Creek, were completed in March 2015. Cleanup of this former pyrite mine has been a priority for the San Francisco Bay Regional Water Board due to its generation of acid mine drainage, produced as Leona Creek came into contact with mining wastes that had been deposited within and along the creek's banks. The acidic runoff leached metals in high concentrations, severely impacting Leona Creek. After a long history of noncompliance, the Regional Water Board issued enforcement orders in 2013 that forced action from the responsible parties. Those parties worked with the Regional Water Board to complete remediation and restoration





Leona Heights Sulfur Mine Cleanup, San Francisco Bay Regional Water Board

designs so that construction could start in summer 2014. Design and construction was complicated by steep terrain and difficult access. Rather than trucking waste offsite, mining waste was isolated onsite by engineering stable slopes of waste, which involved covering the slopes with an impermeable membrane to prevent them from coming into contact with water, and then covering the slopes with soil and vegetation. Leona Creek was then restored by re-contouring the channel over the isolated remediated slopes of waste. Verification monitoring is underway to ensure that the slopes and the creek remain stable and that all wastes remain isolated.

For more information: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/hot_topics/Leona.shtml

Statewide General Permit Adopted for Composting Operations

In August 2015, the State Water Board approved an Environmental Impact Report and adopted statewide general WDRs for composting operations (General Order). Developed in collaboration with the nine Regional Water Boards, stakeholders, and other State agencies, including the CA Department of Resources Recycling and Recovery (CalRecycle) and the CA Air Resources Board (ARB), the General Order may apply to both new and existing composting facilities that collect certain organic material, such as leaves, grass, tree trimmings, manure, food scraps, and scrap paper products. Compost contains beneficial micro-organisms that break down organics into a stable humus-rich soil amendment. However, organic materials contain nutrients, metals, salts, and pathogens that can degrade water quality if allowed to migrate into groundwater or surface water. The General Order provides specific water quality protections, such as lined detention ponds and improved pad surfaces, to reduce infiltration and minimize water quality



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impacts. By keeping organic material out of landfills, composting operations are helping to achieve the State's diversion goal to recycle, compost, or reduce 75 percent of solid waste in landfills by 2020. In addition, the General Order will help streamline the permitting process by providing uniform and consistent requirements for composting operations.

For more information: http://www.waterboards.ca.gov/water_issues/programs/compost/ and http://www.calrecycle.ca.gov/75percent/

Order Adopted to Expedite Permits for Voluntary Habitat Restoration Activities in Alameda County

In May 2015, the San Francisco Bay Regional Water Board issued a General Order (Order) to efficiently permit voluntary habitat restoration activities by rural landowners, including ranchers and farmers, and the East Bay Regional Park District in Alameda County. The Order requires participation in the Local Voluntary Program, which is administered by the Alameda County Resource Conservation District in partnership with the CDFW, where rural landowners have an expedited permit process for completing voluntary habitat restoration activities such as the restoration and enhancement of creeks and existing stock ponds. The Order covers a specified range of activities, which are limited to agriculture-related wildlife and habitat restoration activities that are exempt from federal regulation under the Clean Water Act. Subsequent to Order adoption, six restoration projects were started by ranchers and the East Bay Regional Park District.

For more information: http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2015/R2-2015-0020.pdf



Bioassessment Monitoring, State Water Board

Thirteen Years of Stream Health Assessments Reported

In June 2015, the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) released their statewide report, "The Perennial Streams Assessment (PSA): An Assessment of Biological Condition using the new California Stream Condition Index (CSCI)". The PSA has been California's primary means of monitoring the health of its wadeable streams and rivers since 2000. Land use practices, such as urbanization, agriculture, logging, and mining, can have negative impacts on water and habitat quality, and continue to expand in California. Over 1,300 unique perennial stream sites throughout the State have been sampled by PSA and its partner programs, including the Southern Monitoring Coalition and the USFS. The PSA stream surveys found that the majority of wadeable streams in the Sierra Nevada and North Coast is in good biological condition, while the majority of wadeable streams in the South Coast, Chaparral, and Central Valley is in poor or very poor condition. Similarly, most wadeable streams draining forested watersheds are in good condition, while most draining watersheds dominated by agricultural and urban land use are in poor or

very poor condition. The PSA data have been used as the foundation for a wide range of environmental management and assessment efforts statewide, including: the State's Healthy Watersheds Partnership; the development of the Biological Integrity Assessment Implementation Plan for California; and the development of nutrient numeric endpoints, which serve as guidance for adopting numeric criteria for nutrients in estuaries.

For more information: http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/psa_memo_070615.pdf; http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/; and http://www.waterboards.ca.gov/plans_policies/biological_objective.shtml

New Habitat Assessment eTool for Citizen Monitoring Released



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In spring 2015, the State Water Board's citizen science program, the Clean Water Team (Team), released a new eTool to help evaluate stream habitat conditions. The Team has been assisting citizen water quality monitoring for over 15 years. Increasing the public's environmental literacy and watershed management engagement has been a big goal for the Team. Using USEPA methods for conducting visual habitat assessments, the Team created a free downloadable and easy-to-use form, complete with embedded instructions, training documents, and video tips, for conducting visual habitat assessments. Use of the USEPA assessment methods also produces a Habitat Condition Score that is useful for water quality management, habitat protection, or restoration needs, and helps ensure that the data collected are useable and can be used as part of citizen-science projects including Scientific, Technology, Engineering, and Mathematics (STEM) academic projects. Visual

assessments provide the first level of information about an environment and can serve as useful screening tools to help focus more detailed investigations.

For more information: www.waterboards.ca.gov/water_issues/programs/swamp/docs/cwt/guidance/vph2015.xlsx

Financial Assistance

2015 Accomplishments

More Than \$2 Billion in Proposition 1 Funds Made Available for Water Projects

Proposition 1 (Prop. 1), the Water Quality, Supply, and Infrastructure Improvement Act of 2014, authorized \$7.545 billion in general

obligation bonds for water projects, including surface water and groundwater storage, ecosystem and watershed protection and restoration, and drinking water protection. In 2015, the State Water Board was allocated \$2.145 billion in Prop. 1 funding for water projects in five areas managed at the Water Boards: Wastewater, Drinking Water, Water Recycling, Storm Water, and Groundwater. Prop. 1 funds will be administered through grants or affordable low-interest financing available to borrowers, depending on the program. The State Water Board expeditiously wrote and approved funding guidelines for four of the project types (Wastewater, Drinking Water, Water Recycling, and Storm Water) during 2015. Applications for the Wastewater, Drinking Water, and Water Recycling programs are being accepted on a continuous basis and eligible projects are funded as applications are



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approved. During 2015, the Wastewater and Drinking Water funding programs received \$260 million each in Prop. 1 funds, and those two programs together awarded over \$2 million to projects, with a focus on disadvantaged communities where the need for wastewater infrastructure and safe drinking water is greatest in the State. The Water Recycling Funding Program received \$625 million in funds and awarded \$85 million to projects that promote the beneficial use of treated municipal wastewater to augment fresh water supplies. The Storm Water Grant Program received \$200 million and will start to award grants for multi-benefit storm water management projects in 2016. The fifth program, the Groundwater Sustainability Funding Program, which is new to the State Water Board, received \$800 million in Prop. 1 funds. The development of funding guidelines for that program, which should be approved in early 2016, has required extensive public outreach throughout the State to ensure the program is designed appropriately.



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For more information: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1.shtml

Over \$227 Million in Loans and Grants Allocated to Water Recycling Projects

In 2015, the State Water Board funded more than \$227 million in water recycling projects using Clean Water State Revolving Fund (CWSRF) Program loans, and Proposition 1 (mentioned above) and Proposition 13 (Prop. 13) grant funds. The funded projects included water recycling treatment and distribution facilities that promote the beneficial use of treated municipal wastewater. The funding provided by the State Water Board included \$1,124,849 in planning grants from Prop. 13 to evaluate the feasibility of constructing additional water recycling facilities, over \$5 million in construction grants from Prop. 13, over \$46 million in construction grants from Prop. 1 (part of the \$85 million awarded mentioned in the accomplishment above), and approximately \$176 million in CWSRF loans. The State Water Board also provided technical assistance to agencies and other stakeholders in support of water recycling projects and research. Funding the projects will help reduce stress on limited water resources, augment local water supplies, provide relief to communities impacted by the drought, and increase local water supply reliability, a strategy critical to implementing the Governor's Water Action Plan, while ensuring the continued protection of public health and the environment from the use of recycled water. For more information: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/



More Than \$485 Million in Financing Made Available for Water Quality and Public Health Protection

The year 2015 was one of the CWSRF Program's most successful years. In addition to the funding of water recycling projects mentioned above, the CWSRF Program financed 20 projects worth more than \$485 million, providing affordable financing to protect the State's water resources, including the construction of sewage treatment plants, the elimination of nonpoint sources of pollution, and the development and implementation of plans to protect important estuaries. The CWSRF Program has protected and promoted the health, safety, and welfare of Californians since 1989, when the first projects were financed. Many funding recipients used CWSRF financing to address water quality violations at their facilities. In addition, during 2015,

approximately \$12.4 million was provided to disadvantaged communities in the form of loan principal forgiveness. Every project financed by the CWSRF Program is directly related to improving water quality and public health in the State.

For more information: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml

Statewide Actions Taken to Protect Water Resources from Oil and Gas Field Activities

In July 2015, pursuant to Senate Bill 4 (SB 4) (2013), the State Water Board adopted the Model Criteria for Groundwater Monitoring in Areas of Oil and Gas Well Stimulation (Model Criteria). The Model Criteria, the first of its kind in the nation, establishes methods and requirements for water quality monitoring in areas of oil and gas well stimulation activities, including hydraulic fracturing (also known as fracking). Developed in consultation with the CA Department of Conservation's Division of Oil, Gas and Geothermal

Resources (DOGGR), Regional Water Boards, public stakeholders, and technical experts, the Model Criteria requires oil and gas field operators to submit groundwater monitoring plans for approval by the State Water Board prior to conducting well stimulation activities. The State Water Board will conduct regional groundwater monitoring in addition to area-specific groundwater monitoring, producing data that will allow the Water Boards to assess potential negative effects of well stimulation activities on the State's groundwater, particularly drinking water sources. The Model Criteria will improve transparency on the quality of groundwater near well stimulation operations by making such information publicly-accessible.

"Produced water" is a by-product of oil production, and is managed through storage, disposal, or recycling. Produced water disposed to injection wells is permitted through DOGGR,



Disposal Pond, Central Valley Regional Water Board

under the authority of the USEPA Underground Injection Control (UIC) Program. The Regional Water Boards issue permits for produced water discharged to and stored in ponds (typically unlined). The Water Boards and DOGGR collaborate on the review of UIC well project proposals and groundwater monitoring work plans for well stimulation projects. In 2015, the State Water Board determined that 53 UIC wells were potentially impacting nearby water supply wells, including drinking water supply wells. Subsequently, DOGGR either issued orders to cease injection or the operator voluntarily ceased injection to those UIC wells. Also, during 2015, several Regional Water Boards addressed produced water discharges and their potential impact to groundwater. The Central Coast Regional Water Board identified 52 produced water disposal ponds and is evaluating potential enforcement actions for those ponds. The Los Angeles Regional Water Board focused on oil and gas field activities in Los Angeles and Ventura counties, and inspected 375 oil production sites, issued 220 investigative orders to oil and gas operators for information on existing and historical ponds, and issued seven information orders to UIC well operators that may be impacting groundwater. The Central Valley Regional Water Board conducted 195 inspections of oil production sites, issued 28 information orders to the operators of 156 UIC wells to determine if groundwater has been impacted, completed a survey of all produced water disposal ponds, issued 45 information orders to operators of 162 active ponds without permits, and issued 12 violation notices to operators for failing to submit (or submitting incomplete) work plans that detail how investigations will be conducted. The Central Valley Regional Water Board also convened an expert panel to review food safety issues related to produced water reuse for crop irrigation.

Under USEPA regulations, an aquifer, or portion of an aquifer, may be considered exempt for injection wells if it meets certain criteria (e.g., not a source of drinking water). Under new requirements, the State Water Board and DOGGR are jointly evaluating oil and gas field operators' aquifer exemption packages (based on geologic and hydrologic evaluations to determine if UIC well projects will adversely affect the beneficial uses of groundwater, particularly drinking water), and recommending exemptions for USEPA approval, where appropriate. In 2015, the Central Coast Regional Water Board recommended for approval the Arroyo Grande Oilfield aquifer exemption, which is under review by USEPA.

These collective efforts allow the Water Boards to continue to ensure that oil and gas field discharges are properly regulated, and that water resources throughout the State are protected from contamination by oil and gas production.

For more information: http://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/;

http://www.waterboards.ca.gov/centralvalley/water_issues/oil_fields/index.shtml; and

http://www.waterboards.ca.gov/losangeles/water_issues/programs/Oil_and_Gas/index.shtml

Enforcement

2015 Accomplishments

Enforcement Taken on Water Suppliers Not Meeting Water Conservation Goals



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In early-2015, the State Water Board began investigating compliance with emergency water conservation regulations that were adopted by the State Water Board in July 2014. The regulations require urban water suppliers to carry out mandatory restrictions on outdoor urban water use. Initially, 37 of 400 urban water suppliers indicated that they were not in compliance with the emergency regulations. The State Water Board contacted those suppliers and most returned to compliance by adopting resolutions or ordinances that incorporated the required mandatory restrictions. In May 2015, the State Water Board adopted another emergency conservation regulation requiring a 25 percent statewide reduction in overall urban water use. The State Water Board again assessed compliance with the conservation regulations. During 2015, 82 warning letters, 108 Notices of Violation and Informational Orders, 11 Conservation Orders, and seven

Alternative Compliance Orders were issued. Additionally, four Administrative Civil Liability Orders of \$61,000 each were issued to the cities of Beverly Hills, Redlands, and Indio, and the Coachella Valley Water District, as these four urban water suppliers consistently failed to meet their water conservation goals. The penalties were based on the State Water Board's authority to issue fines of \$500 per day for violations of its emergency regulations.

For more information: http://www.waterboards.ca.gov/water_issues/programs/enforcement/orders_actions.shtml#a2015

First Enforcement Action Taken Under State Marijuana Pilot Project

In June 2015, the Central Valley Regional Water Board issued a \$297,400 Administrative Civil Liability (ACL) order on an out-of-State resident who purchased and developed property in the Baker Ridge area of Shasta County for the purpose of marijuana cultivation. The development of the property resulted in numerous discharges of sediment and the unauthorized placement of fill into tributaries of the north fork of Cottonwood Creek. A local contractor that was involved in developing a portion of the property without the necessary permits is also named as jointly liable for up to \$139,700 of the penalty. Both parties are under a Cleanup and Abatement Order, issued in March 2015, to remediate ongoing problems with the property. The ACL is the first penalty action from the multi-agency Marijuana Pilot Project (described on page 17) formed to address the adverse environmental impacts caused by marijuana cultivation. Assistance in the enforcement matter was provided by the Shasta County Department of Resource Management's Building



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Division. For more information: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr061215_marijuana_cultivation.pdf

Enforcement Penalty Used for Restoration in Owens River Watershed

During 2015, the Lahontan Regional Water Board continued implementing its Supplemental Environmental Project (SEP) Program (adopted in February 2014), which emphasizes developing Regional Water Board/stakeholder partnerships to identify and implement watershed restoration SEPs. In October 2015, the Regional Water Board and the Los Angeles Department of Water and Power (LADWP) signed a Settlement Agreement requiring LADWP to pay an Administrative Civil Liability of \$95,000 for failing to obtain a dredge and fill water quality permit. Of that amount, \$43,000 will go to the State Water Board's Cleanup and Abatement Account, and \$52,000 was dedicated to a SEP where LADWP funds will be used by the USFS to complete four restoration projects in the Owens River Watershed. The projects, scheduled for completion in 2016, include creek stabilization, seed collection, replanting areas affected by the Round Valley Wildfire in Southern Mono County, and creek stabilization and riparian habitat improvement on



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Mammoth Creek. For more information: http://www.waterboards.ca.gov/lahontan/water_issues/programs/enforcement/ladwp_sa.shtml

San Francisco Municipal Transportation Agency and Los Angeles World Airports Fined Nearly \$4 Million Combined for Petroleum Leaks

In July 2015, the State Water Board reached a \$1.35 million settlement with the San Francisco Municipal Transportation Agency (SFMTA) for violating leak prevention requirements for hazardous substances at four underground storage tank (UST) facilities in San Francisco. SFMTA's history of noncompliance resulted in two enforcement actions in the last decade. In 2005, a 39,000-gallon diesel fuel spill into San Francisco Bay at one of SFMTA's facilities resulted in a \$250,000 civil penalty imposed by USEPA. SFMTA's recent failure to comply with leak prevention requirements necessitated a more significant penalty. Under the terms of the settlement, SFMTA paid to the State Water Board \$425,000 in civil penalties and \$100,000 for the reimbursement of enforcement costs. The settlement suspended \$375,000 conditioned on SFMTA completing several actions that will enhance compliance at their UST facilities. The remaining \$450,000 was suspended conditioned on SFMTA maintaining compliance with the UST leak prevention requirements specified in the judgment, which go above and beyond the regulatory requirements, for a period of five years.



SFMTA Transit Garage, State Water Board

In December 2015, the State Water Board reached a \$2.4 million settlement with Los Angeles World Airports (LAWA) for violating leak prevention requirements for hazardous substances in USTs located at the Los Angeles International Airport, L.A./Ontario International Airport, and the Van Nuys Airport. The violations included the discovery of three unpermitted and unmonitored UST systems located at the Los Angeles International Airport "burn site", a facility used to simulate airplane crashes and fires by combusting dispersed aviation fuel under a steel mock-up of an airplane fuselage. Under the terms of the settlement, LAWA will pay to the State Water Board \$1.2 million in civil penalties and \$100,000 for the reimbursement of enforcement costs. The settlement suspended \$650,000 on the condition that LAWA completes several environmental improvements to enhance compliance at its facilities. The remaining \$450,000 of the

settlement was suspended as long as LAWA maintains compliance with the UST requirements specified in the judgment, which go above and beyond the regulatory requirements, for a period of five years. These settlements are the third and fourth enforcement actions by the State Water Board under the Government Owned and/or Operated Tanks (GOT) Initiative that began in 2010, which aims to alleviate the compliance and enforcement disparity between publicly- and privately-owned and operated UST facilities. For more information: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr072715_muni_enforcement.pdf and http://www.waterboards.ca.gov/press_room/press_releases/2015/pr12715_lawa_enforce.pdf

Settlement Agreement Reached for Leviathan Mine Superfund Site

In March 2015, the Lahontan Regional Water Board, other State agencies, and the Atlantic Richfield Company (ARCO) signed a Settlement Agreement to clean up pollutant discharges from the Leviathan Mine Superfund Site, an inactive open-pit sulfur mine in Alpine County. Major environmental problems arose during sulfur mining operations at the site during the 1950s and 1960s. ARCO was identified as a potentially responsible party, and in November 2000 was put under orders from USEPA to conduct certain cleanup activities to address acidic mine drainage at the site. The Regional Water Board has been working at the site since the State acquired it in 1984, and has overseen multiple projects intended to reduce acid mine drainage discharges and their impacts on local area surface waters. In 2015, the Regional Water Board's onsite treatment system neutralized and removed metals from approximately 2.5 million gallons of acid mine drainage. Due to drought conditions resulting in a low amount of acidic mine drainage from the site, 2015 was a light treatment year compared to the more than 20 million gallons treated in 2011, which was a significant wet year.



Leviathan Mine Sludge Clean Out, Lahontan Regional Water Board



Act (CERCLA) process, with ARCO conducting remedial investigation activities and developing a feasibility study. Ultimately, a final cleanup project addressing acid mine drainage discharges and their impacts will be selected and implemented for many decades, possibly centuries. The Regional Water Board will be responsible for designing, constructing, operating, and maintaining the final selected project, with ARCO paying the majority of construction and operations/ maintenance costs. To date, the Regional Water Board and ARCO have collectively spent approximately \$100 million on cleanup activities at the mine. Signing the Settlement Agreement also avoids additional litigation costs and sets up a cost-sharing system between the State of

California and ARCO moving into the future.

Since signing the settlement agreement, ARCO has joined Regional Water Board efforts, with both entities working under USEPA orders to clean up the site. Both parties are continuing to work through the Comprehensive Environmental Response, Compensation, and Liability

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For more information: http://www.waterboards.ca.gov/lahontan/water_issues/projects/leviathan_project/index.shtml

Large Penalty Assessed for Sewage Spills to Newport Bay

In December 2015, the Santa Ana Regional Water Board approved a \$364,130 fine imposed on the Costa Mesa Sanitary District for releases of raw sewage to Newport Bay. The fine is the largest penalty the Regional Water Board has assessed. Newport Bay is heavily used for recreation by tens of thousands of visitors each year. It is also a Marine Protected Area, and home to several rare and endangered species. Over Labor Day weekend in 2013, and then again over New Year's Day in 2015, due to equipment failures, Costa Mesa Sanitary District released raw sewage to Newport Bay, resulting in the closure of the bay to swimming for three days after each incident. The penalty amount reflects the Regional Water Board's acknowledgment of the seriousness of the raw sewage releases to Newport Bay, and the resulting significant impacts to the bay's beneficial uses. The beneficial uses impacted by these spills included water contact recreation,



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non-contact water recreation, commercial and sport fishing, wildlife habitat, and the preservation of biological habitats of special significance. Upper Newport Bay is listed on the Clean Water Act Section 303(d) List (California's list of impaired waters) due to a number of pollutants, including nutrients, bacterial indicators, metals, pesticides, and toxicity. Raw sewage can contain pathogenic organisms, as well as biosolids, heavy metals, pesticides, herbicides, and personal care products.

For more information: http://www.waterboards.ca.gov/santaana/board_info/agendas/2015/09_18/Item_11.pdf

British Petroleum Underground Storage Tank Sites Disqualified from Cleanup Fund Reimbursement



Underground Storage Tank Removal, Water Boards

In 2015, as part of a settlement agreement, the State Water Board permanently disqualified 90 of British Petroleum North America's (BPNA) UST cleanup sites from the UST Cleanup Fund (Cleanup Fund) for claiming reimbursement through false or misleading statements. The agreement significantly reduced BPNA's future claims against the Cleanup Fund, which is administered by the State Water Board. The Cleanup Fund assists small businesses and individuals by providing reimbursement for expenses associated with the cleanup of leaking USTs. The Cleanup Fund also provides money to the Regional Water Boards and local regulatory agencies to abate emergency situations, or to clean up abandoned sites that pose a threat to human health, safety, and the environment, as a result of a UST petroleum release. Disqualifying those 90 sites could save up to \$135 million that could be used for other contaminated sites. In addition, BPNA's 153 other

cleanup sites, which are eligible for reimbursement, will each have a \$25,400 offset levied against them, reducing future claims by nearly \$3.9 million. As part of the agreement, BPNA also agreed to pay \$7.9 million as part of a False Claims Act settlement with the State Water Board, the State Attorney General's Office, and a third-party plaintiff.

 $For \ more \ information: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr031915_bp_settlement.pdf$

Cleanup Fund Fraud Action Taken by State Water Board

In September 2015, due to grand theft related to overbilling of cleanup costs to the UST Cleanup Fund, a civil settlement prohibits Jordan-Botke Enterprises, Inc., also known as PW Environmental (PW), from doing business with the State Water Board. Under the terms of the civil judgment, all work performed by PW after October 31, 2014, whether submitted or not yet submitted to the Cleanup Fund, is deemed unreasonable and unnecessary. Therefore, that work would not be eligible for reimbursement by the Cleanup Fund, either through a claim or an appeal. The debarment is the first of its kind taken by the State Water Board and sends a strong message that fraud will not be tolerated.

For more information: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr092315_pw_release.pdf

Process Improvements

2015 Accomplishments

Water Boards Implement Processes to Improve Public Interaction

During 2015, the Central Valley Regional Water Board continued to improve and build upon its Portfolio Management process, which aims to increase efficiency, transparency, and accountability at all levels. In 2015, the Regional Water Board developed a detailed accounting of its programmatic resources to support the development of individual program budgets, incorporated program budgets into each program's annual work plan, and developed a framework that incorporates Regional Water Board priorities into each of the affected work plans. The process will prioritize and manage workload among the Regional Water Board's three offices, 18 programs, and nearly 250 employees.

The Governor's Office of Business and Economic Development (GO-Biz) and the Government Operations Agency (Gov/Ops) sponsor a Lean 6-Sigma implementation program to address process-based issues within State agencies that are causing delays in services to stakeholders. State Water Board and Central Valley Regional Water Board staff have received Lean-6 Sigma training since 2014 to identify waste and inefficiencies in processes, and apply tools to improve program and process efficiencies. The UST Cleanup Fund's Claim Eligibility Project was the first State Water Board project to participate in the program in 2014; the State Water Board continued to monitor and improve upon the project in 2015. Three additional projects participated in 2015: two by the State Water Board's Division of Water Quality (DWQ) and one by the Central Valley Regional Water Board. The two DWQ projects were in the WDR and the NPDES programs, and shared the goal of streamlining the development



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and adoption of statewide general orders/permits. Improvements implemented for those two projects included: early stakeholder engagement and collaboration; a standard operating procedure manual; templates to reduce processing time and increase consistency for permitted projects; and performance targets and ongoing monitoring. DWQ is piloting the improved process with the proposed Winery General Order.

The Central Valley Regional Water Board's Lean-6 Sigma project focused on its WDR Program. Improvement techniques implemented to streamline the processing of WDRs included: an updated Information Needs Sheet to assist dischargers in better understanding the information needed to develop WDR permits; a WDR review checklist; permit templates; and streamlined ways to address issues with permitted projects. The Regional Water Board made modifications to internal processes as a result of the Lean 6-Sigma process, and will continue to implement and monitor those changes.

For more information: http://business.ca.gov/Programs/Permits/Lean6SigmaTrainingProgram.aspx

Language Translation of Water Board Documents Promotes Environmental Justice

California residents must receive pertinent information in their own primary language to ensure that they have the opportunity to participate effectively in government processes and meetings. In recognition of this, and given California's large Spanish-speaking population, legislation signed by Governor Brown requires that Water Board meeting agendas be translated into Spanish. During 2015, the State Water Board translated approximately 12 multi-page Water Board agendas each month into Spanish, for a total of approximately 700 pages for the year. In addition, over 200 pages of other Water Board documents were translated into Spanish. The State Water Board also coordinated the translation of over 40 additional pages of Water Board documents into other languages, such as Korean, Vietnamese, Chinese, and Tagalog. The State Water Board also worked with the Regional Water Boards to translate other documents during the year.

For more information: http://www.waterboards.ca.gov/water_issues/programs/outreach/education/justice.shtml



Our Priorities For 2016

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Region 1 - North Coast Regional Water Board

- Adopt general WDRs for discharges of wine, beverage, and food processor waste to land.
- Adopt a Sediment TMDL Action Plan and a WDR for timber operations for Humboldt Redwood Company in the Elk River watershed.
- Adopt Russian River Watershed Pathogen Indicator Bacteria TMDL Action Plan.
- Adopt Outstanding National Resource Waters designation for the Smith River.
- Implement the Cannabis Cultivation Waste Discharge Regulatory Program.
- Implement the Russian River Watershed MS4 permit and develop the Russian River Regional Monitoring Program.

Region 2 - San Francisco Bay Regional Water Board

- Develop TMDLs for impaired waters while continuing to implement TMDLs by: developing a vineyard regulatory program to address sediment discharges in Napa and Sonoma valleys; updating permits for dairies and wineries; and working to divert more storm water to wastewater treatment plants to reduce the discharge of PCBs, pathogens, and pesticides in urban runoff.
- Develop and implement a nutrient management strategy for San Francisco Bay, focusing on the science to support nutrient objective development, monitoring, modeling, and load reductions.
- Identify, prioritize, and begin overseeing cleanup of under-funded dry cleaner pollution sites.
- Pursue aggressive enforcement with emphasis on sewage spills, trash and debris discharges, illegal fill of wetlands and streams, and polluted storm water discharges.

Region 3 - Central Coast Regional Water Board

- Continue to prioritize groundwater cleanup, drinking water replacement, and the protection of drinking water from nitrate in agricultural runoff, including the prevention of nitrate from agricultural runoff being discharged directly to groundwater.
- Approve the water quality certification for the Salinas River Maintenance Project to achieve flood control and environmental protection for the entire river.
- Evaluate groundwater quality impacts from Underground Injection Control (UIC) wells beyond aquifer exemption boundaries and produced water disposal ponds.
- Encourage water recycling projects by expediting permitting and assisting with funding.
- Initiate the Marijuana Regulatory Program.

Region 4 – Los Angeles Regional Water Board

- Develop a regional strategy to address the effects of climate change on water quality. The "Framework for Climate Change
 Adaptation and Mitigation" for the Los Angeles Region was released in July 2015, and a climate change web page was created.
 Further work will include: adding climate change considerations to the Basin Plan; continuing discussions on the regional strategy
 with the Regional Water Board programs; presenting information on this issue to the Board; and gathering input from
 stakeholders.
- Issue Waste Discharge Requirements and Water Reclamation Requirements (WDRs/Water Reuse Requirements) for Anheuser-Busch. Anheuser-Busch proposes to treat their wastewater by reverse osmosis and ultraviolet disinfection to meet recycled water standards, and by advanced oxidation process requirements set forth by the State Water Board's Division of Drinking of Water for direct injection to groundwater for replenishment. The WDRs/WRRs will be brought for Board consideration in late 2016.
- Continue to expedite and permit recycled water projects associated with publicly-owned treatment works, and update power
 plant permits based on the Once-Through Cooling Water Policy.
- Complete review and make final decisions on 12 Enhances Watershed Management Programs (EWMPs) submitted by Los Angeles (LA) County MS4 permittees to implement the LA County MS4 Permit. The 12 programs address the requirements of 33 TMDLs, along with permit requirements to control storm water and non-storm water discharges throughout LA County.
- Continue to work with groundwater basin groups to complete remaining SNMPs pursuant to the State Water Board's Recycled Water Policy. Two plans have been completed thus far, and management measures from these plans were incorporated into the Basin Plan.
- Conduct regulatory activities required under both SB 4 and the federal (USEPA) and State (DOGGR) UIC programs. Site
 inspections will be conducted on sumps, catch basins, and water ponds in oil and gas fields. Groundwater monitoring workplans
 will be reviewed and approved, and field inspections and monitoring will occur. Orders will be issued to obtain information related
 to production wells located in the areas of protected water aguifers.
- Renew the conditional waiver for irrigated agricultural lands, planned for adoption by the Regional Water Board in April 2016.
 Several meetings will be held with environmental organizations, discharger groups, and other stakeholders in early 2016 to discuss potential requirements.

- Focus on identifying, investigating, and remediating sites that impact, or could impact, water supply sources.
- Consider adoption of TMDLs for the USEPA-established Malibu Creek Nutrients Implementation Plan, and Malibu Creek and Lagoon Nutrients and Sedimentation Benthic Community Impairments.
- Decrease sewage spills by increasing permit compliance, rank and address permit violations, and take formal enforcement actions for spills over 50,000 gallons. The Regional Water Board is working in conjunction with USEPA and the State Water Board's Office of Enforcement to develop such cases for formal enforcement.
- Complete the administrative update of the Basin Plan, which will be completed with the revision of Chapter 4 "Strategic Planning and Implementation". Chapter 4 contains an overview of discharge permitting programs, surface water programs, groundwater programs, water recycling programs, funding for water quality improvement projects, enforcement, and climate change considerations.

Region 5 - Central Valley Regional Water Board

- Continue to implement the Delta Strategic Workplan. Priority projects include implementing the Mercury Control Program, developing a draft Nutrient Research Plan for the Delta, adopting Basin Plan amendments for the control of pyrethroid insecticides and diuron, evaluating control actions to address chronic low oxygen concentrations in the Old and Middle rivers, and full implementation of the Delta Regional Monitoring Program.
- Implement groundwater quality protection programs for agriculture, including continuing to implement the groundwater component of the Irrigated Lands Regulatory Program and the Dairy Program, and adopting general orders for the regulation of discharges from bovine and poultry operations.
- Fully implement the Unlined Sumps Work Plan. Use resources acquired through the Legislature to expand and improve oilfield
 regulatory oversight and enforcement. Coordinate with the State Water Board, CA Department of Conservation, and other
 agencies to evaluate potential water quality impacts from fluid injection, including fracking, and the disposal of drilling and
 production wastes in unlined surface sumps. Follow up on issued informational and enforcement orders, which may result in
 additional enforcement actions. Draft general WDRs for various categories of oilfield discharges to land.
- Develop a Watershed-Based Plan (WBP) to address both near- and long-term post-fire sediment issues in the Battle Creek
 watershed. This type of watershed plan provides an analytical framework for managing efforts to both restore water quality in
 impaired waters and to protect overall watershed health in threatened waters. The framework and "Nine Elements" that are
 included in a WBP have been developed by USEPA and are required for Clean Water Act Section 319 funding. The development
 of a WBP for the Battle Creek watershed is a unique opportunity to qualify for 319(h) funding that would otherwise not be
 available.
- Complete the stakeholder-led CV-SALTS effort to develop an SNMP for the Central Valley. Development of this plan will ensure
 future environmental and economic sustainability, satisfy the State Recycled Water Policy, streamline efforts to provide safe
 drinking water, and initiate long-term managed restoration in areas with legacy groundwater nitrate contamination. This effort will
 include the development of an amendment to the current Basin Plans to ensure that the Regional Water Board can fully
 implement the SNMP.

Region 6 - Lahontan Regional Water Board

- Form technical working groups with stakeholders to address the following issues related to the draft Lahontan Climate Change Adaptation Conceptual Model: protection and enhancement of wetlands and floodplains; protection of vital infrastructure; and increasing use of and better managing storm water.
- Develop a new general order (anticipated for adoption in early 2017) for dischargers with confined animal feeding operations
 (CAFOs). The CAFO General Order will focus on source control, such as lined wash water ponds, sloped corrals, and storm water
 best management practices, to reduce salt and nitrate loading to the closed basin aquifers in the southern part of the Region.
- Conduct groundwater monitoring activities during spring 2016 for perchlorate originating from an illegal perchlorate disposal site on the Mojave River floodplain. The water quality data will be used to develop a conceptual site model and remediation strategy for use in securing SB 445 funding, with an end goal of establishing hydraulic control of the perchlorate plume to prevent perchlorate from migrating and comingling with existing nitrate groundwater pollution.
- Renew the Lake Tahoe NPDES storm water permit to require municipalities to meet the second 5-year implementation load
 reduction targets established by the Lake Tahoe TMDL. The Lake Tahoe NPDES storm water permit is the Regional Water
 Board's primary regulatory tool requiring local municipalities to reduce pollutant loads to restore Lake Tahoe's historic clarity.

Region 7 - Colorado River Basin Regional Water Board

- Coordinate with the Natural Resources Agency, the Salton Sea Authority, and other key federal and local stakeholders to assist
 in the implementation of the Governor's directive to implement immediate short-term measures to restore critical habit for the
 Salton Sea. Staff will also prepare a Basin Plan amendment to update the Basin Plan Salton Sea information, and will continue to
 promote and assist in the development of a comprehensive restoration effort.
- Continue to assist the California Environmental Protection Agency (Cal/EPA) with coordinating the implementation of the
 New River Improvement Project Strategic Plan. Continue implementing the plan's recommended water quality regulatory
 actions for the Imperial Valley and its water quality monitoring program for the New River at the international border with
 Mexico. Continue working with Mexico and the federal government through the Binational Technical Committee for the New
 River/Mexicali Sanitation Program to address current and emerging sewage infrastructure problems in Mexicali.
- Continue to work with stakeholders to ensure completion of SNMPs to protect drinking water sources in the Region. SNMPs are necessary to ensure wastewater recycling is maximized in the Region using a long-term planning water management approach.
- Continue to address the threat of septic systems in the Region.
- Continue to work with stakeholders, which include the Coachella Valley Water District, the Imperial Irrigation District, and Riverside and Imperial counties, as well as non-government organizations, to ensure that disadvantaged communities (DACs) in the Eastern Coachella Valley (ECV) and the Imperial Valley are not disproportionally impacted by environmental problems, and work with the State Water Board to prioritize financial assistance for these DACs. Identify, prioritize, develop, and implement strategies to address wastewater and other infrastructure needs for small trailer park homes (no more than 12 units) intended to house agricultural workers (known as Polancos), and other DACs in the ECV. Continue to co-chair the Environmental Justice Task Force (EJTF) for the Coachella Valley, and continue to participate in the EJTF for the Imperial Valley.

- Adopt an amendment to the Basin Plan Prohibition for Discharges of Waste from Septic Systems in Yucca Valley to establish
 revised deadlines to comply with the Prohibition and adjust internal boundaries of the Prohibition. Continue to work with
 Imperial, Riverside, and San Bernardino counties so they finish and implement their Local Area Management Plans for
 implementing the Onsite Wastewater Treatment Systems Policy.
- Continue to work with the City of Twentynine Palms and the Twentynine Palms Water District to phase out septic tank discharges that threaten groundwater. Continue to work with the City of Twentynine Palms and Joshua Basin Water District to eliminate the threat to water quality from septic systems in the City of Twentynine Palms and the community of Joshua Tree, respectively.
- Continue to address surface water quality impacts from agricultural waste discharges. Revise the Conditional Waiver of WDRs
 for Agricultural Runoff from the Imperial Valley to provide time extension to fully implement the Waiver, and to resolve
 applicability and fiduciary issues. Adopt General WDRs instead of renewing the Conditional Waivers for Agricultural Runoff in the
 Palo Verde Valley/Palo Verde Mesa and in Bard Valley to maximize limited resources and provide more long-term regulatory
 predictability and continuity to the farming communities in Blythe and Bard Valley.
- Consider delisting the Alamo River and New River as impaired by Diazinon.
- Work with the State Water Board to prioritize and issue outstanding Mandatory Minimum Penalties for NPDES facilities.
- Continue to provide oversight of and assistance to the CA Department of Toxic Substances Control for the Topock cleanup project near the Colorado River.

Region 8 - Santa Ana Regional Water Board

- Renew the storm water permits for Orange, Riverside, and San Bernardino counties. The existing permit for Orange County expired on April 1, 2014, and the Riverside County and San Bernardino County permits expired January 2015. Adoption of these permits is expected during 2016 (for Orange County) and in 2017 (for Riverside County and San Bernardino County).
- Adopt Selenium TMDLs for the Newport Bay watershed. Staff has been working with stakeholders to revise the draft TMDLs to address USEPA's July 2015 Draft Aquatic Life Ambient Water Quality Criterion for Selenium (Freshwater). Adoption of the TMDLs is expected in late-2016.
- Adopt controversial Metals TMDLs for Newport Bay, which focus on addressing copper stemming from anti-fouling boat hull
 paints. Two CEQA scoping meetings and a workshop were held in July 2015. Responses to those comments and revisions to the
 TMDLs are ongoing. Adoption of these TMDLs is expected to occur in late-2016.
- Adopt Conditional Waiver for Agricultural Discharges in the San Jacinto Watershed. The draft conditional waiver was released and discussed at a public workshop in 2015. Adoption of the conditional waiver is expected in mid-2016.
- Continue to participate in a multi-agency group (including Orange County Water District and the CA Department of Toxic Substances Control) that is working to develop a cleanup strategy for a regional groundwater contamination plume in the Orange County South Basin.
- Continue working with a group of responsible parties to develop a cleanup plan and alternate water supply plan to address the South Archibald groundwater contamination plume. Board approval of these plans is expected in mid-2016.
- Continue working with water supply and wastewater agencies to implement and refine the Region's Salt Management Plan, including updating salt and nitrogen permit limits for water recycling projects, and establishing total dissolved solids and nitrogen water quality objectives for certain groundwater management zones.

Region 9 - San Diego Regional Water Board

- Facilitate greater recycled water use by: prioritizing the permitting of recycled water projects; working with recycled water providers to develop new, innovative recycled water projects; and continuing outreach efforts to both producers and users of recycled water.
- Continue efforts to adopt a far-reaching General WDR to protect water quality and beneficial uses from pollutants originating from irrigated lands.
- Effectively communicate results of water quality assessments and the environmental outcomes of Regional Water Board actions using a variety of media to provide meaningful information to traditional and non-traditional audiences.
- Review the Regional MS4 Permit provisions pertaining to Water Quality Improvement Plans, conduct jurisdictional program
 inspections, and review annual reports to assess compliance. Prioritize inspections to determine compliance with the overirrigation prohibition in support of the Governor's mandated water conservation measures, and as a means of eliminating
 controllable discharges of pollutants to receiving waters region-wide.
- Continue the development of biological water quality objectives for the attainment of ecosystem-related beneficial uses in inland surface waters.
- Facilitate implementation of the Tijuana River Valley Recovery Team's Five-Year Action Plan to: protect the Tijuana River Valley from future accumulations of trash and sediment; identify, remove, recycle, or dispose of existing trash and sediment; and restore the Tijuana River floodplain to a balanced wetland ecosystem. Participate in the Treaty Minute 320 Binational Core Group to implement source control measures for trash and sediment.
- Improve fishable and aquatic-dependent wildlife beneficial uses in San Diego Bay through innovative discharge permits, investigation and cleanup orders, and a better understanding of the bioaccumulation of pollutants in the Bay.
- Oversee the prompt assessment and mitigation of vapor intrusion at cleanup sites for the protection of human health.

State Water Resources Control Board

- Complete the comprehensive update of the Bay-Delta Plan for San Joaquin River Flows and Southern Delta Salinity (Phase 1), and the Scientific Basis Report in support of the comprehensive update of the Bay-Delta Plan (Phase 2).
- Conduct the water right hearing to consider the California Water Fix Project.
- Continue implementation of 2014 and 2015 drought actions as appropriate, including adoption and implementation of updated water conservation regulations, and issuance of curtailment notices for drought-impacted water bodies.
- Develop and start implementing administrative actions for enhancing flows statewide in at least five stream systems that support critical habitat for anadromous fish.
- Substantially complete analyses, documentation, and reviews needed for establishing a Maximum Contaminant Level (MCL) for 1,2,3-Trichloropropane.
- Adopt regulations regarding surface water augmentation with recycled water and develop a feasibility report for the Legislature on direct potable reuse.

- Implement the Small Water Systems Program Plan, which identifies communities that do not provide safe drinking water, and prioritize them for receiving technical and financial assistance to return the systems to compliance.
- Oversee consolidation of small water systems that consistently fail to provide safe drinking water with other public water systems.
- Initiate new groundwater quality funding programs under Proposition 1 and SB 445 to accelerate clean up of contaminated groundwater and support sustainable groundwater management.
- Provide financial and technical assistance through the State Water Board's Office of Sustainable Water Solutions to small DACs to promote permanent and sustainable solutions that help ensure the effective and efficient provision of safe, affordable, and reliable drinking water and wastewater treatment services.
- Establish new fee schedules for both public water systems and the environmental laboratories regulated by the Division of Drinking Water to support State Water Board programs.
- Implement the recommendations suggested by the Expert Review Panel for California's Environmental Laboratory Accreditation Program (ELAP).
- Adopt Statewide procedures for regulation of dredged and fill material discharged to waters of the State.
- Adopt an amendment to the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to incorporate statewide toxicity provisions, which will establish a uniform statistical approach for data analysis and establish monitoring requirements for discharges.
- Continue enforcement efforts to address water conservation non-compliance, actions to address the drought, fraud against Water Board programs, and storm water non-compliance.
- Develop and implement a quality assurance (QA) program plan to guide the next six years of the Surface Water Ambient Monitoring Program (SWAMP).
- Implement the Constituents of Emerging Concern (CECs) strategy, which is aimed at setting up a monitoring framework to determine status and trends of CECs statewide and to coordinate actions needed to address CECs. To move forward with Phase I, a CEC committee (which will determine a charter) and a separate technical advisory group of SWAMP experts will be formed.

Water Boards Continue Actions to Address Impacts of Severe Drought (Pages 2-5)-References:

Governor Brown's Orders and Proclamations: https://www.gov.ca.gov/news.php?id=18913 and https://www.gov.ca.gov/docs/11.13.15_EO_B-36-15.pdf

Water Boards Drought Actions and Information: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/index.shtml and

http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/drought/ and

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/workshops.shtml Climate Change Workshops: http://www.waterboards.ca.gov/centralvalley/board_info/meetings/1503_climatechange_nopw.pdf and

http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/drought/#symposium

Federal and State Water Project Change Petitions: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/

Hydropower and Barrier Projects: http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/ceqa_projects.shtml and

http://www.water.ca.gov/waterconditions/emergencybarriers.cfm

Emergency Regulations for Fish Protection: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/milldeerantelope_curtailment_info.shtml and

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_action_russianriver.shtml

Water Shortage Notices: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_availability.shtml

Water Transfers: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_transfers.shtml

Water Conservation Regulations: http://www.waterboards.ca.gov/press_room/press_releases/2015/pr031715_renewed_emergency_wtr_regs.pdf and

http://www.waterboards.ca.gov/press_room/press_releases/2015/pr050515_water_conservation.pdf

 ${\hbox{\it DROPS: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/drops/index.shtml\#funding~and~branching.} \\$

http://www.waterboards.ca.gov/press_room/press_releases/2015/pr052915_drops.pdf

Water Supply Augmentation: http://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2015/el_estero/2010_011_amended.pdf and

http://www.waterboards.ca.gov/press_room/press_releases/2015/pr020215_desal.pdf

Frequently Used Acronyms

BMP – BEST MANAGEMENT PRACTICE

CDFW - CA DEPARTMENT OF FISH AND WILDLIFE

CWSRF— CLEAN WATER STATE REVOLVING FUND

DWR—CA DEPARTMENT OF WATER RESOURCES

FERC - FEDERAL ENERGY REGULATORY COMMISSION

MS4 - MUNICIPAL SEPARATE STORM SEWER SYSTEM

NPDES – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

PCBS – POLYCHLORINATED BIPHENYLS

POTW – PUBLICLY OWNED TREATMENT WORKS

SB - SENATE BILL

SNMP—SALT AND NUTRIENT MANAGEMENT PLAN

TMDL - TOTAL MAXIMUM DAILY LOAD

USEPA – U.S. ENVIRONMENTAL PROTECTION AGENCY

USFS - U.S. FOREST SERVICE

UST—UNDERGROUND STORAGE TANK

WDR - WASTE DISCHARGE REQUIREMENTS (TYPE OF PERMIT)

Our Mission

"To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

Our Vision

"A sustainable California made possible by clean water and water availability for both human uses and environmental protection."

EDMUND G. BROWN JR., GOVERNOR
STATE OF CALIFORNIA

MATTHEW RODRIQUEZ, SECRETARY

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FOR MORE INFORMATION ON THE CALIFORNIA WATER BOARDS

FOR MORE INFORMATION ON WHAT WE DO AND HOW WE ARE DOING, PLEASE SEE OUR WEBSITE AT WWW.WATERBOARDS.CA.GOV, OUR ANNUAL PERFORMANCE REPORT AT HTTP://WWW.WATERBOARDS.CA.GOV/ABOUT_US/PERFORMANCE_REPORT_1415/, AND FOLLOW US ON TWITTER: HTTPS://TWITTER.COM/CAWATERBOARDS

